Ville Sarpo

Architecture of Dissonance

A Study on the Strategic Management Process of Higher Education Internationalization

JYVÄSKYLÄ UNIVERSITY
SCHOOL OF BUSINESS AND ECONOMICS

Ville Sarpo

Architecture of Dissonance

A Study on the Strategic Management Process of Higher Education Internationalization

JYVÄSKYLÄN YLIOPISTO
UNIVERSITY OF JYVÄSKYLÄ

Cover picture by Mikko Kuhna

ABSTRACT

In this study I analyze the neglected notion of organizational architecture in the strategic process of internationalization in the context of higher education. I examine the internationalization process through the development and management of international master's degree programmes and their relation to the broader strategy of one particular Finnish university. I interviewed acting coordinators and directors of the programmes regarding their view on the administrative work, as well as the structures and resources, related to the programmes. Strategy documents, internal evaluations, and statistics were also analyzed.

The omission of an explicit strategy and strategic program for internationalization led to the marginalization of the international programmes. The strategic ambiguity contributed to a weak division of labor between the central administration and the faculties (and the respective programmes). Research and teaching staff assumed the coordinative responsibility and operational management. These individuals did not possess formal incentives to develop the programmes further. Championing activities within programmes were minimal due to deficiencies in the organization's architecture. The analysis emphasizes the importance of identifying and supporting championing activities within the organization. These activities have the potential of pinpoint development areas and further enhance the emergence of new strategies and architecture. The findings suggest that the organization's architecture and strategy failed to integrate international education into the traditional activities of the organization.

This study contributes to the existing literature on organizational architecture by expanding the notion of emergent architecture and how championing can influence the architecture. The study also adds to the research on higher education internationalization and its ramifications to the organization's architecture.

Keywords: internationalization; organizational architecture; organizational design; strategy process; emergent strategy; higher education internationalization

TIIVISTELMÄ

Tämän väitöskirjatutkimuksen analysoinnin kohteena on organisaation arkkitehtuurin vaikutus strategiseen prosessiin. Strategisena prosessina käsitellään korkeakoulutuksen kansainvälistymistä, eritoten kansainvälisten maisteriohjelmien johtamista ja kehittämistä yhdessä yliopistossa. Tutkimus käsittelee myös maisteriohjelmien suhdetta yliopiston strategiaan. Haastatteluaineistoon perustuvassa tutkimuksessa haastateltiin kansainvälisten maisteriohjelmien koordinaattoreita ja johtajia. Analyysi keskittyi heidän näkemyksiin ohjelmien hallinnoimisesta, resursseista ja rakenteista. Aineistona käytettiin myös yliopiston strategioihin liittyviä dokumentteja, sisäisiä arviointeja ja tilastoja.

Vajavainen strategia ja puuttuva toimenpideohjelma koulutuksen kansainvälisyyteen johtivat kansainvälisyyden syrjäytymiseen. Strategian epäselvyys johti heikkoon työnjakoon yliopistohallinnon ja tiedekuntien sekä maisteriohjelmien välillä. Vastuu koordinaatiosta ja operatiivisesta johtamisesta asetettiin opetus- ja tutkimushenkilöstölle, joilla ei ole mitään kannustinta kehittää ohjelmia eteenpäin. He kokivat, että heidän työnsä arviointi painottuu vahvasti tutkimukseen. Puutteet organisaation arkkitehtuurissa johtivat siihen, että maisteriohjelmien sisällä ei tapahtunut kehittämistä tai ohjelmien asioiden ajamista. Organisaatio voisi hyödyntää näitä päivittäisessä toiminnassa havaittuja asioita joiden avulla on mahdollista kehittää ja edistää organisaation toimintaa. Ohjelmien toimijoiden kehittämistoimenpiteet eivät saaneet tarvittavaa tukea ja täten niitä ei hyödynnetty. Tutkimuksen johtopäätöksenä on se, että organisaation strategia ja arkkitehtuuri eivät onnistuneet integroimaan kansainvälistä koulutusta osaksi vakiintuneita toimintoja.

Tämä tutkimus lisää aikaisempiin organisaation arkkitehtuurin tutkimuksiin ottamalla huomioon esiin nousevan arkkitehtuurin. Lisäksi, tämä väitöskirja linkittyy korkeakoulutuksen kansainvälistymisen tutkimuksiin. Tähän tutkimusalaan tämä väitöskirja tuo uuden näkökulman ottamalla huomioon organisaation arkkitehtuurin koulutuksen kansainvälistämisessä.

Avainsanat: kansainvälistyminen, korkeakoulutus, organisaatiotutkimus, organisaatioarkkitehtuuri, strategiaprosessi

Author

Ville Sarpo
ville.sarpo@jamk.fi

Supervisors

Professor Juha-Antti Lamberg
School of Business and Economics
University of Jyväskylä
Jyväskylä, Finland

Professor Kalle Pajunen
School of Business and Economics
University of Jyväskylä
Jyväskylä, Finland

Reviewers

Professor Janne Tienari
Hanken Svenska Handelshögskolan
Helsinki, Finland

Academic Director Mikko Laukkanen
Aalto University Executive Education
Helsinki, Finland

Opponents

Professor Janne Tienari
Hanken Svenska Handelshögskolan
Helsinki, Finland

Academic Director Mikko Laukkanen
Aalto University Executive Education
Helsinki, Finland

FOREWORD

cannot express how much you mean to me. Thank you for everything. To my sister Sari and brother Jaakko, you have been the best sister and brother a little brother could have. You have been role models in many ways and always ready to help. I feel honored to have a close group of friends. Even though we do not see each other as often as we should, the time spent together is one of the things I value most in life. To my amazing daughters, you have brought more love and happiness into my life than I ever thought possible. While my mind might have been at times preoccupied by this process, it has never been a priority for me. You will always be my highest priority. Looking at you reminds me of what really matters in life. Finally, to my extraordinary wife Vicky. I could not have done this without you. No words can describe how much you mean to me. My life changed for the better when I met you and I cannot wait to continue our journey as this process is now over.

Jyväskylä 10.11.2018
Ville Sarpo

FIGURES

TABLES

CONTENTS

1   INTRODUCTION

1.1   Motivation and background for the study

Internationalization in higher education institutions (HEIs) is a matter of institutional and individual importance. If an institution claims that internationalization is a top priority, the claims need to be backed by actions, and the institution needs to provide the required resources, support, and coordination for the internationalization (Dewey and Duff 2009). This issue has been a staple in organizational literature: organizations design and provide structures for their internal components and connections into a specific form. Ideally, this form is based on the strategies and tactics of the organization. The architecture of an organization provides internal structures and coordination to help attain the maximum benefit of the organizational capabilities (Nadler and Tushman 1997). An organization's architecture must also be in line with its top priorities. Therefore, if an HEI claims that maintaining an international profile is its priority, the institution's architecture must be designed accordingly. Universities have been known for benefiting society regarding creating and applying knowledge, and this societal relevance is considered the third task of the university, with the first two being education and research. Nevertheless, universities have also been known to not act in a similar vein for their benefit (Garvin 1993; Dill 1999). The challenges in basic operations, accompanied by multiple stakeholders and the political climate, make the management of universities very complex (Teece 2018). Garvin (1993) even argues that universities are unable to learn. The criticisms raised by scholars such as Garvin (1993) and Dill (1999) toward universities are aimed especially at their capabilities for internal improvement.

Globalization creates new strains for nations, industries, and institutions. The increased mobility of individuals and the proliferation of trade between nations provide tremendous opportunities. Countries may engage in multilateral agreements to promote relations among one another, and industries can experience tremendous expansion in market shares and geographical influence.

Individuals have more possibilities to seek education or employment beyond national borders than ever before. Therefore, institutions can compete for talent with a broad, international reach, and these fundamental changes spread their influence to all sides of our societies. The current century has seen the advent of new challenges in education and higher education in particular. The issues of reductions in government funding for public universities and trials in conducting basic research have been carried over from the previous era, but novel issues that are potential game-changers for higher education are virtual learning and new methods of delivering education (Stohl 2007). The responses to these changes in the landscape are as varied as the number of affected organizations. A typical response is to embrace the ensuing diversity and attempt to adapt to it, striving to turn it into an advantage. However, turning the diversified climate into an advantage requires significant modifications within an organization.

1.2 Neo-liberalization of academia and New Public Management

Academia experienced profound changes as part of the broader public sector changes in the 1980s. Budget cuts in education, among other areas, resulted in an emphasis placed on efficiency (Lorenz 2012). Free market principles and management control practices entered the universities (Schimank 2005). The new policies that were introduced to the public sector were known as the New Public Management (NPM) (Schimank 2005). NPM places academia under a lens to ensure accountability. Trust in academia has deteriorated as the profession of academics has been overpowered by formal control and bureaucratic structures (Lorenz 2012). The changes were opposite forces to the professionalism and autonomy of the faculties and faculty members (Roberts and Donahue 2000). The standards of the professionals (academics) were no longer sufficient, and management control was employed to ensure the accountability of academics (Lorenz 2012). Education was turning into a commodity that should be quantified and viewed as a process of converting inputs into outputs (Lorenz 2012).

The introduction of NPM and new policies have created new types of universities. Current universities are platforms of knowledge production (Czarniawska and Genell 2002). Competition and short-term results have replaced academic discussion and collegial relations (Kallio et al. 2016). Churning out standardized outputs is favorable towards the funding of the university (Lorenz 2012). For the university to meet their quota of standardized outputs, they need to steer the individual members towards doing their work in a favorable direction. Incentivizing and measuring the performance of academics thus replaces the inner motivation of the professionals (Lorenz 2012).

1.3 International higher education

The topic of internationalization within higher education provides a platform on which to study internal and structural development in HEIs. Firstly, universities are heralded as the most international organizations in history (Teichler 2004). Universities have long transcended national borders and continue to in the present day. These organizations have long created knowledge and transmitted it on a broad scale, as this sharing of knowledge was considered to be of high esteem (Teichler 2004). From the perspective of student mobility, higher education internationalization is indeed not a novel idea. At the beginning of the 21st century, students studying abroad in Europe was estimated to be two or three percent of the entire continent's student population (Teichler 2004). In the 1600s, the corresponding figure was estimated to be 10 percent (Neave 2002). However, despite being an early manifestation of higher education internationalization, student mobility is not its only component. According to Söderqvist (2002), some practitioners even equate mobility with higher education internationalization. It is useful to acknowledge mobility as an important vessel but also to understand that it is but one of multiple vessels (Söderqvist 2002). Nevertheless, it is safe to assert that internationalization and international activities are tightly sown into the fabric of universities and other higher education organizations, as internationality has already long been associated with academia (Engwall 2016). Furthermore, any self-conscious HEI touts its internationality concerning both research and teaching. The factor of internationalization is seen as a vessel for organizational prestige and is preferably translated into more international students, staff, and collaboration. The challenge lies in transforming this strategic pursuit into reality via appropriate organizational arrangements.

A significant number of studies have been conducted on the rationales for higher education internationalization, as well as on the outcomes of these efforts. An omission in the prior literature, however, has been the impact of the internal organization on internationalization. Universities and other HEIs are organizations, and organizations develop by following a broader purpose stated in their mission statements and accompanying strategies. This broad purpose tends to revolve around the core activities of the organization, which, in the case of universities, are conducting research and providing education. These two functions have been the bedrock of universities since their inception. In modern times, changes have come and gone, but these foundations remain. Nowadays, a third function has also entered the discussion: universities' societal role. Universities are expected to engage more with their surrounding environment and community. Even during times when information, which is increasing exponentially, is available to everyone, universities still enjoy a sense of respect in terms of expertise and knowledge.

One of the fundamental questions in organizational design and strategy is the correspondence between an organization's structures and its environment; a correspondence often referred to as "fit." Discussion regarding universities'

internal structures usually revolves around two major components: scholarship and bureaucracy. Scholarship and academic freedom are ideals that researchers wish to protect at all costs because they provide the basis for conducting research. From an organizational perspective, this desire translates to autonomy and minimal interference of bureaucratic procedures. At the same time, universities tend to be large, administratively complicated organizations. Striking a balance between these two aspects is thus a critical point of concern.

The amount of scholarly research on the internationalization of HEIs does not adequately reflect the importance of the phenomenon. The area only began to gain momentum in the final years of the 20th century (Kehm and Teichler 2007), and the number of scholars who are actively engaging in research on higher education internationalization is limited. Moreover, there seems to be lack of consensus among the scholars regarding what internationalization is in this context. Some definitions from notable scholars in the field are in Table 1. The multifactor influences affecting higher education and the high-velocity changes in the surrounding world result in highly diverse definitions (Knight 2004).

For example, Schoorman's (1999) definition of the internationalization process includes a program of action assimilated into all parts of education. This conceptualization, along with Jane Knight's (1999, 2003) definitions of internationalization, addresses a fundamental reorientation of HEIs. On the other hand, a definition provided by van Damme (2001) refers to border-crossing activities driven by agreements. In no way is this definition false, but it does fail to address any ramifications the process may have on the institution's internal composition. I view internationalization as a strategic process that requires modifications and rearrangements within the respective organization. Therefore, the definition that this thesis adopts to provide the context is that of Jane Knight (1999, 2003).

In the modern age, an extraordinary number of HEIs around the world compete to be more international. INSEAD, one of the premier business schools in the world, profiles itself as a "business school for the world" and a "global educational institution" (INSEAD 2015). Competing for international talent is commonplace in today's higher education landscape, and as is always the case in competitive environments, some institutions perform better than others, and some are more international than others (Times Higher Education 2015). It is indicative of a phenomenon's importance when it becomes a ranking category of its own. The internationalization of higher education cannot only be viewed as a measure to increase competitiveness but can also entail a broad societal impact. Globalization and the resulting imbalances between countries force HEIs, especially those in developed countries, to take into consideration the social effects of their operations (van der Wende 2007). Higher education internationalization links to policy-making at the national level (de Wit 1999).

Table 1   Definitions of higher education internationalization

Author	Definition
Knight (1999)	"Internationalisation of higher education is the process of integrating an international/intercultural dimension into the teaching, research and service functions of the institution."
Schoorman (1999)	"Internationalization is an ongoing, counterhegemonic educational process that occurs in an international context of knowledge and practice where societies are viewed as subsystems of a larger, inclusive world. The process of internationalization at an educational institution entails a comprehensive, multifaceted program of action that is integrated into all aspects of education."
Van Damme (2001)	"Put rather simply, the term ´internationalisation´ refers to the activities of higher education institutions, often supported by multilateral agreements of programs, to expand their reach over national borders."
Bartell (2003)	It is proposed here that internationalization may be viewed as occurring on a continuum. At one end, internationalization is limited and essentially symbolic, for example, internationalization may be reflected, in this case, by a relative handful of students from several distant countries having a presence on a campus. At the other end of the continuum, the process of internationalization is conceptualized as a synergistic, transformative process, involving the curriculum and the research programs, that influences the role and activities of all stakeholders including faculty, students, administrators, and the community-at-large."
Knight (2003)	"Internationalization at the national, sector, and institutional levels is defined as the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of postsecondary education."
Teichler (2004)	"Internationalisation tends to address an increase of border-crossing activities amidst a more or less persistence of national systems of higher education."
Svensson and Wihlborg (2010)	" …internationalisation as an opportunity to develop curriculum objectives informed by intercultural knowledge, and providing learning opportunities in line with those objectives. We are particularly interested in cultural flows that transcend borders and that open up for a deeper understanding between cultures and are intrinsically linked to universities' commitment to advance human knowledge."
Altbach and de Wit (2017)	"One must keep in mind that higher education internationalization is a set of concepts and a series of operational programs. The concepts include a recognition of the positive elements of globalization and an understanding that it is a permanent element of the world economy; a commitment to global understanding; respect for diverse cultures; and an open society welcoming cooperation between different political, cultural, and economic partners. Internationalization is also often seen as part of a nation's "soft power" influence."

As with any strategic process in an organization, the journey to becoming more international is riddled with challenges and obstacles. Previously identified factors inhibiting internationalization in higher education are a lack of financial resources, a lack of coherent strategies, policy restrictions, and poor institutional commitment (van Damme 2001). The lack of financial resources and policy restrictions emanate from the macro level, whereas incoherent strategies and underdeveloped institutional commitment are organization-specific factors. The internal factors need to be taken into consideration, and the focus needs to be extended beyond strategies and institutional commitment. The internationalization of higher education is contingent on the successful integration of internationality into policies and programs within the institution, which ensures that the internationality is constructed sustainably and comprises an enduring focal point within the institution, rather than sitting on the sidelines (Knight 2004).

The political drive toward more internationalization within higher education has forced the Nordic countries to re-evaluate their nationally driven view of higher education (Saarinen and Taalas 2017). The internationalization of higher education in Finland has followed a trajectory of its own: Because the Ministry of Education and Culture guides the publicly funded universities, the uniformity of international activities has been remarkable (Laitinen 2015). Indeed, the effect of national governments on the internationalization of their HEIs has been widely acknowledged (Knight 2004; Luijten-Lub et al. 2005). The first comprehensive national strategy for higher education internationalization in Finland was published in 2009, and the rationale was straightforward: Internationalization helps address limitations in resources, both mental and financial (Ministry of Education 2009). The strategy also contained an understanding of some of the requirements at the organizational level: Administrative structure, communication, and other organizational services were to be developed in a manner that supported the creation of an international environment (Ministry of Education 2009). Quantitative goals, such as international student mobility and the number of international degree students, were prevalent in the strategy (Ministry of Education 2009).

Goals related to an increased international student presence commonly appear in the internationalization repertoire of HEIs (Kondakci and van den Broeck 2009). From a formalized strategy perspective, internationality is a common one: "Internationalization of higher education is the process of integrating an international/intercultural dimension into the teaching, research and service functions of the institution" (Knight 1999:16). Knight (1999) astutely acknowledges the processual nature of internationalization. In the higher education context, internationalization is gradual because it involves an internal reorientation: The transition toward a more international HEI involves a restructuring of teaching approaches, administrative functions, and support functions. Ultimately, the internationalization of an HEI is the transformation of a national institution into an international one (Söderqvist 2002). Knight's (1999) definition also paints this transformation as a necessity for the integration process.

This requirement for integration implies the presence of other activities that also enable the process of integration. Lawrence and Lorsch (1967a:4) define integration as "the process of achieving unity of effort among the various subsystems in the accomplishment of the organization's task." In other terms, carrying out an organization's task requires a unified effort from various subsystems. Therefore, the internationalization of higher education cannot be viewed as a separate entity, nor can it be departmentalized.

Dewey and Duff (2009) discuss the importance of including faculty members in the process of internationalization, defining an important level of responsibility in the process at the levels of initiatives, programs, and strategies. The authors contribute the fourth level of responsibility, offering a novel approach to the process of internationalization: one that has been absent in the literature on higher education internationalization and that consists of so-called champions (Dewey and Duff 2009). The term "championing activities" refers to an individual's efforts to influence issues that extend beyond his or her primary tasks (Mantere 2005), which, in an organizational context, are delineated in the organization's formal structures (Nadler and Tushman 1997). Therefore, issues that extend beyond an individual's primary tasks are, from the outset, outside of the purview of the formal structures. The informal structures that emerge in daily operations thus come to inhabit a crucial role in the process, but this factor has been overlooked in previous research. The effect of intraorganizational championing activities on the internationalization process of an HEI has garnered minimal interest so far.

I approach this phenomenon as it occurs within a single higher education organization by viewing it as a strategic process. As a strategic process unfolds, the process itself affects and is affected by, the organization's structures. Adjusting organization's structures according to its strategy is essential for the further development of the organization (Chandler 1962). I adopt a broad view on the structuring of an organization—namely, organizational architecture—because the concept of organizational architecture encapsulates the interplay between formal and informal structures as well as the coordination within the organization. What is the impact of internal structures and processes on the internationalization of an institution of higher education? What are the implications when structures and services do not support internationalization and its integration into the institution? These questions serve as the impetus for this study.

This doctoral thesis deals with the internationalization process within a Finnish university and its integration through the university's structural and coordinative factors referred to as the organization's architecture. Empirically, this thesis studies the organization and structuring of international master's degree programmes (IMDPs)[1] regarding the division of relevant tasks among

---

[1]   The term "programme" was employed in the decree by the Ministry of Education (Opetusministeriön asetus yliopistojen maisteriohjelmista 569/2005) when referring to international master's degree programmes. For clarity and consistency, I will also be using this form when referring to these types of programmes.

administrative and academic staff. These programmes provide an exciting setting, as they are often a part of a strategic endeavor. Moreover, they present challenges for the organization's structures, as they require a certain degree of integration with the established domestic programs.

- Field of contribution
- Methodological approach

Internationalization of higher education

Qualitative research methods

Strategy process

Organizational architecture

- Main theoretical concept
- Main theoretical concept
- Field of contribution
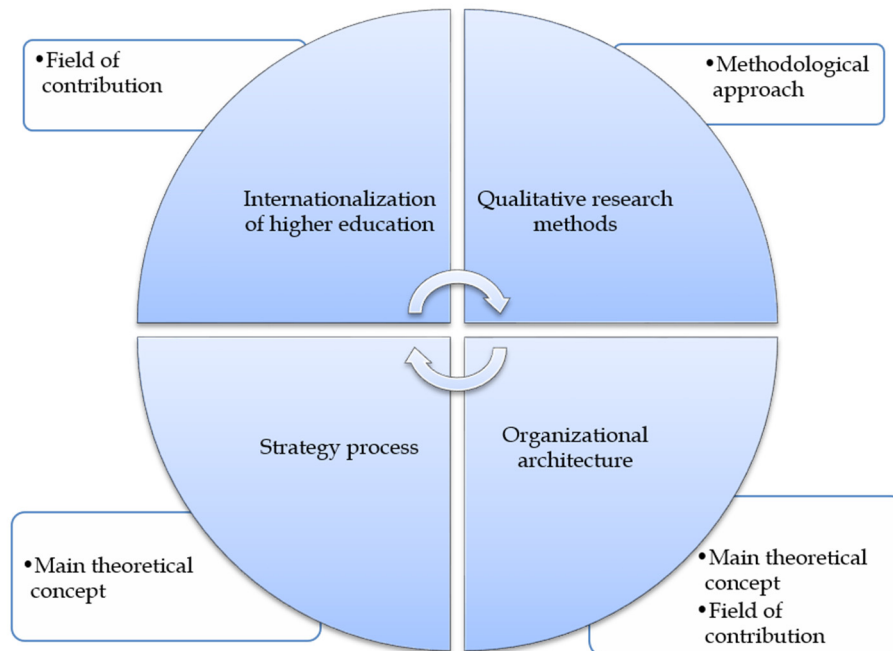
Figure 1   Overview of the study

I propose that an organizational architecture perspective is most suitable to provide an understanding of how the internationalization process develops in an organization. The theoretical framework integrates strategy process literature, especially emergent strategy literature, with research on organizational architecture and design as well as the stream of research in HEIs. These institutions, or, more precisely, universities, constitute an interesting avenue where flexibility and bureaucracy converge and compete. Scholarship requires flexibility and autonomy on behalf of the researchers, and the administrative needs of HEIs necessitate bureaucratic mechanisms to ensure a level of organizational efficiency (Blau 1973). To summarize the prior research and the identified research gap, I propose the following justification for this research. The organizational aspects of higher education internationalization have received very little scholarly attention. Internationalization strategies should connect to the internal organization (Taylor 2004). Faculty members play a role in internationalization efforts, and championing those efforts is paramount (Dewey and Duff 2009). Prior research does not provide an understanding of how the organizational architecture affects the perceptions and championing activities of organizational members. Therefore, this thesis takes into account the possibility of championing as mentioned by Dewey and Duff (2009). I also investigate whether or not an organization's architecture affects championing efforts.

1.4   Objectives and research questions

The objective of this doctoral thesis is to investigate the organizational architecture in the internationalization of higher education. From an empirical standpoint, this study aims to determine the architectural arrangements of international education programs in a university setting. Second, this study's objective is to uncover the relationship between an organization's strategy and its architecture relating to international degree education.

Research question 1: How is the strategic process of internationalization enveloped within an HEI?

Research question 2: What role does the organization's internal architecture play in the process of higher education internationalization?

Research question 3: Does the organization's architecture enable the emergence of championing activities?

Research question 1 has been set up to explore how internationalization develops from a strategy and progresses onwards to the operational level. It entails notions of a strategy program, as well as subsequent architectural arrangements. The second research question focuses on the reciprocal nature of the strategy and architecture. More specifically, the focus is on how the architecture both affects and is affected by the strategy. The third and final research question examines the notion of championing activities and champions, which are known to affect the strategy of an organization. Therefore, knowing whether an organization's architecture enables these activities and actors to surface is essential.

1.5   Structure of the thesis

This thesis consists of eight sections. The first chapter introduces the background of the study and the impetus for the research. This chapter also contains a description of the broad research context and then moves to a more specific setting.

Chapter 2 contains a discussion of the literature on higher education internationalization. I review previous studies to develop an understanding of the current body of knowledge. Furthermore, I identify thematic demarcations of prior research and present them accordingly. This chapter concludes with the presentation of the gap in the literature on higher education internationalization that I aim to rectify with this doctoral dissertation.

Chapter 3 discusses the theoretical framework of the study. I review the strategy process research, with a focus on emergent strategy and autonomous

strategic behavior. The second major component in the framework is organizational architecture, and since it is a relatively new theoretical concept, it is introduced along with a categorization of prior studies in the field. The discussion on organizational architecture also extends to examples from the field of higher education research and their findings.

Chapter 4 presents the research methodology and methods employed in this study, discussing the grounded theory and inductive case analysis. This chapter also includes descriptions of the data collection process and the development of the data structure. It examines the architecture of the IMDP broadly and attempts to provide an overall view of the architecture in terms of the categorization presented in chapter 3.

Chapter 5 contains the data analysis. The first-order categories emerging from the interviewees are introduced and then combined into second-order themes, which arise from the theoretical framework. Furthermore, the aggregate dimensions are introduced. The chapter contains a wide range of informative quotes from interviewees.

Chapter 6 introduces the developed theoretical model on the architectural reasoning of the internationalization efforts. The key concepts and their interrelationships are presented.

Chapter 7 offers a discussion of the study. I present the theoretical contributions and practical implications and provide some suggestions for future research in the same area. The section concludes with a brief discussion of the limitations of the study.

The eighth and final chapter concludes the doctoral thesis.

2 HIGHER EDUCATION INTERNATIONALIZATION

The internationalization of higher education is a phenomenon that occurs on several different levels of analysis, ranging from supranational policies to staff and students within higher education organizations. New challenges and possibilities related to the internationalization of higher education arise systematically, precipitated by changes in the political, social, and economic spheres (Stohl 2007). Technological and communicational advances accompany the changes, and the joint effect enables the development of new education approaches (Stohl 2007). In essence, the process of globalization affects the process of higher education internationalization (van der Wende 2007). Therefore, the internationalization of higher education is an issue relevant to policy-makers. According to Kehm and Teichler (2007), policy issues and research agendas related to this area are intertwined. The number of studies driven by the policy issues is ascending, and research on higher education internationalization has generally oriented more toward policy and practice (Kehm and Teichler 2007). As a field of inquiry, international higher education is a thematically blurry area that does not provide easy access to prior research. This inaccessibility relates to the close linkages of the field with other topics, such as policy and management, and the subsequent lack of a clear demarcation of what constitutes research on higher education internationalization. Furthermore, reports and other documents on the subject have been published in ways not easily accessible to readers, and the lack of research institutions and other similar institutions that house the accumulated knowledge makes the retrieval of publications difficult (Kehm and Teichler 2007).

The plethora of studies on higher education internationalization can, however, be commended for their variety in both the levels of analysis and thematic categories. Most studies so far have focused on nations, institutions, staff, and students as the levels of analysis. Kehm and Teichler (2007) analyzed prior studies in the field and identified seven thematically different groups: student and staff mobility; mutual influences of higher education systems on one another; internationalization of the substance of teaching, learning, and research; institutional strategies of internationalization; knowledge transfer; cooperation

and competition; and national and supranational policies regarding international higher education. This thematic differentiation is illustrative in its attempt to distinguish separate categories. Some of these categories do overlap with one another: therefore, the following section demarcates the prior studies in a way that, mostly, does not produce overlap. The concept of the internationalization of HEI is approached from four different perspectives. The first perspective focuses on the underlying motives, or rationales, of the internationalization. The second perspective, which is prevalent in the prior studies, is the process of internationalizing the curriculum of HEI. The third perspective focuses on the mobility issues of both students and staff. Finally, the fourth perspective emphasizes the policy issues related to internationalization occurring on both the national and institutional levels.

2.1 Rationales for internationalization

The discussion on rationale encompasses several different levels of analysis, ranging from the national to the individual institution level. At the national level, the focus is on the goals of internationalization, which include the enhancement of a country's higher education status within the global arena (Yonezawa et al. 2009) and higher education as a component of broader national development (Yang and Welch 2012). Higher education in China, for example, plays a pivotal role in strengthening the national status, as confirmed by Yang and Welch (2012) in their analysis of a top Chinese university. This university was among a select few Chinese universities included in a national program that provided substantial investments to the institutions. The program aimed to raise the universities to world-class status, as such a designation would reflect broader national strength. While this goal is not yet reached, Chinese HEIs are making giant leaps in enhancing the nation's presence in the global arena (Yang and Welch 2012).

Higher education has a tremendous capacity to foster the development of innovations and economic prosperity, and thus internationalization is employed as a strategy toward these ends (Urbanovic and Wilkins 2013). The issue is also of utmost importance in building national competitiveness, which is especially important for countries with small populations and deficiencies in natural resources (Urbanovic and Wilkins 2013). The internationalization of higher education in Lithuania has had positive effects on the nation's higher education in general in terms of quality enhancement, increased government funding, and infrastructure improvements (Urbanovic and Wilkins 2013). Prior studies in higher education internationalization that have discussed the rationale from a national perspective view internationalization as a vessel for national improvement. They purport that it can be viewed solely as an internal improvement or through the perspectives of other countries.

Researchers are also interested in how the internationalization of higher education contributes to a knowledge economy (Yonezawa et al. 2009; Lee 2014).

A knowledge economy, or a knowledge-based economy, can be defined as "production and services based on knowledge-intensive activities that contribute to an accelerated pace of technological and scientific advance as well as equally rapid obsolescence" (Powell and Snellman 2004:201). Knowledge economies rely heavily on intellectual resources and improvements to the production process (Powell and Snellman 2004). This intellectual emphasis on economic development also requires input from universities. The development of a knowledge economy relies heavily on the rankings of universities and the recruitment of international students, as these factors harness the potential to generate revenue for HEIs (Svensson and Wihlborg 2010). Therein lies an essential rationale for higher education internationalization: the economic component. Traditionally, this component is seen as a response to globalization and its effects on economic and political interdependencies (Bartell 2003). The economics and politics inherently related to globalization enhance the notion of a competitive market in higher education (Svensson and Wihlborg 2010). Furthermore, in some contexts, international or transnational higher education is considered a vessel for revenue generation (Fang 2012), but its central role is also questioned (Hudson 2015). Hudson (2015) analyzed the findings of the 4th Global Survey on Internationalization of Higher Education by the International Association of Universities. With a focus on European data, he discovered that, currently, internationalization does not prioritize economic objectives. The lack of funding is seen as a challenge in reaching internationalization targets. Nevertheless, there are more important drivers—ones based on values—for internationalization within institutions. The top-ranking drivers in European universities are the enhancement of the intercultural or international substance of the curricula, international research collaboration, and the outbound mobility of students (Hudson 2015).

The internationalization of HEIs always serves an ulterior motive or objective of the respective institution, perhaps be motivated by revenue diversification via the fee-paying international students or by quality enhancement via the enabling of international competition for students and staff (van Damme 2001). In a broad study of English-taught programs (ETPs) in Europe, Maiworm and Wächter (2014) found that the removal of language obstacles, the enhancement of international capabilities among domestic students, and the strengthening of the institution's international profile were among the top reasons for introducing these types of programs. Seeber et al. (2016) also conducted a multilevel study on the rationales for internationalization based on an analysis of a large-scale survey conducted by the International Association of Universities accompanied by two massive European datasets on HEIs. The findings revealed that the levels related to the rationale emanated from the environment, the organization, and the internal dynamics of the organization (Seeber et al. 2016). The study discovered that multilevel factors influence any given rationale an HEI adopts: For example, an HEI considered a world-class institution is likely to pursue internationality as a vessel for prestige, whereas research-oriented institutions are more likely to view internationalization with

an emphasis on research. Similarly, institutions that are more oriented toward teaching are likely to consider internationalization beneficial for the students and curricula (Seeber et al. 2016).

As this doctoral thesis focuses on the internationalization process within a single HEI, the institutional rationales are the most pressing. Naturally, national-level interests affect institutions via decisions made by relevant ministries, and thus, these decisions also need to be taken into consideration. When this study was conducted in 2014 and 2015, Finnish universities did not charge tuition fees from students. Therefore, the economic rationale of fee-paying international students will not appear in the limelight of this study. Nevertheless, it must be noted that the Finnish university system is government-funded and one of the factors in the provision of funding is the number of master's degrees completed. Furthermore, additional weight is given to the number of master's degrees completed by international students, and thus, an economic rationale for internationalization can be identified. A more detailed discussion on the research context and the Finnish university system is provided in chapter 4. What was important was the perceived enhancement of quality that was achieved through research and teaching: International student bodies and staff were thought to raise the profile of the university. Uncovering the plethora of actions and the overall organizational commitment toward these endeavors will reveal intricate details about the relationship between strategy and structure. Furthermore, identifying the varying levels associated with forming or formulating strategies and operationalizing the strategy is essential.

2.2 Policy-making and strategies in higher education internationalization

Earlier research on higher education internationalization has made several references to policies and policy-making. National-level strategies for higher education internationalization can entail a straightforward enhancement of a nation's higher education system through investments (Urbanovic and Wilkins 2013) or the development of collaborative efforts (Pfotenhauer et al. 2012). The proliferation of statements referring to internationalization is present in different organizations at the national level. For universities, perceiving the benefits of these statements seems to be a challenge (Berry and Taylor 2014). For example, the misfit between policies and practices is present in the adoption of English-medium instruction. Hu and Lei (2014) have published a case study of an English-medium undergraduate program in a Chinese university, in which the intentions laid out in the policy did not translate into practice in the teaching setting. Furthermore, the support available at the institutional level is insufficient and is mostly rhetorical (Hu and Lei 2014). The presence of a policy, regardless of its content and impact, does not guarantee a favorable result if organizational initiatives do not properly support it. The absence of policies can, in some

instances, be a disruptive factor. Researchers at the beginning of their careers would benefit greatly from policies that enable them to create a stable position for themselves (Eigi et al. 2014).

By analyzing the internationalization strategies of four universities, Taylor (2004) discovered that internationalization strategies for HEIs do not exist in a vacuum. Higher education institutions need to take into consideration both the external environment and the internal structures, or architecture, of the organization (Taylor 2004). Changes in the external environment reinforce universities' role as leaders of change. Taylor (2004) also discovered that another university's strategy stressed the importance of adapting to change. In both cases, the strategies explicitly acknowledge the environmental effects on internationalization strategies. In addition to exogenous influence, however, internationalization strategies must also take into account endogenous factors. The commitment of a university to internationalization is paramount due to the accrued costs as well as the long-term investment. (Taylor 2004.) A typical reaction to new internationalization strategies is a structural reorganization, which often entails an assignment of an additional resource to a high level within the university hierarchy. In the cases studied, this additional resource was an appointed senior academic (international) or an associate provost, among others (Taylor 2004). These appointments are, of course, centralized via formal connections to the faculties and relevant committees, as there remains the need for local input (Taylor 2004). The balance between centralization and decentralization concerning input and decision-making is crucial, as the academic staff is paramount in the process.

Difficulties translating policies and strategies into concrete actions are common within any organization, and previous research has shown that HEIs are no different (Taylor 2004; Hu and Lei 2014). For an internationalization strategy to be strong, it must bear a clear connection to the broader mission of the university and the goals of its internationalization efforts (Van der Wende 1999). Internationalization strategies require constant development, as they are works in progress (Taylor 2004), which implies a notable amount of planning, evaluation, and adjustments in order for the organization to adapt and develop itself as necessary. Taylor (2004) identifies shortcomings in implementing and following up on international strategies as one of the major roadblocks. Targets for the activities and an adequately supported allocation of resources, as well as the designation of responsibilities for key entities and individuals, are paramount in the implementation process (Taylor 2004). In other words, the lack of a program to operationalize and monitor the internationalization strategy endangers the entire endeavor. The state of current research in higher education internationalization provides very little insight into the organizational structures related to the process, and moreover, although the importance of academic staff's input is acknowledged, we still do not know how to engage staff members and integrate them into the process.

Dewey and Duff (2009) have released a report on an ongoing internationalization process within one school at an American university.

Internationalization within both the school and the entire university is considered a priority of strategic importance, and as a response to the strategic importance, a committee led by faculty members was formed within the school. The committee was assigned the task of evaluating available international opportunities for students and faculty, identifying university support structures for international initiatives, and assessing the school's new initiatives and prioritizing them according to the school's goals. Ultimately, the committee was to provide recommendations on new initiatives. After analyzing strategies for internationalization and ongoing activities, the committee discovered that program-level strategies were superior to those at the organizational level. The committee also concluded that the school was already international: Faculties engaged in international activities in their research and teaching, and nearly a tenth of the students participated in a study-abroad program. These feats were all accomplished under the circumstances characterized by insufficient oversight and development on the school's behalf. The committee's review of the data uncovered barriers to internationalization. The first barrier was the absence of coordinative and information processing capabilities of the engaged international initiatives. The second was funding limitations, which constrained international initiatives. Administrative procedures creating disincentives to participate in international work constituted the third barrier, and finally, the fourth barrier was a deficient support staff that hindered the facilitation of international initiatives.[2]

According to Dewey and Duff (2009), the next step for the committee was to develop an approach to initiate the removal of barriers and the creation of efficient structures for internationalization. One recommendation was the continuation of the committee, and another was the creation of a new international initiatives director position within the school. The committee would be mandated to advise the deans of the school in internationalization priorities, provide advice and assistance to the possible new director, and cooperate with the university's Office of International Affairs to gather information and enhance the inclusion of international programs. The new director would rectify the lack of oversight by acting as a liaison connecting students, staff, and the university administration. Additionally, this role is instrumental from an information processing perspective, as it gathers pertinent information and ensures the information reaches the right targets.[3] Dewey and Duff (2009) conclude that if a university considers internationalization a strategic priority, it must provide the necessary support, resources, and coordination. Also, all concerned parties must reach an understanding regarding the drivers and goals. Finally, a reciprocal partnership between the university administration and its faculties is necessary, as neither of these groups has the capabilities to take charge of a university-wide process (Dewey and Duff 2009). Dewey and Duff's 2009 study is one of the rare

---

[2]   The barriers to internationalization, as identified by Dewey and Duff (2009), resemble the ones suggested by van Damme (2001).

[3]   The committee stressed the need for faculty assistance in making sense of policies, establishing international networks, and gathering funding, shedding light on the necessity of a liaison role between relevant parties (Dewey and Duff 2009).

acknowledgments of the importance of faculty in the internationalization process. Their study is commendable, but the discussion of faculty engagement is restricted to participation. Faculty, along with students and temporary teaching staff, are essential in the generation and development of change within universities (Hayter and Cahoy 2018). Dewey and Duff's 2009 article presents a balance of responsibilities for internationalization (see Table 2 below). Centralization and decentralization refer to the degree of authority and capacity regarding internationalization. Individual and institutional levels exhibit varying degrees of competencies and activities. These factors need to be balanced to achieve comprehensive internationalization (Dewey and Duff 2009).

Table 2   Balance of responsibilities for internationalization (source: Dewey and Duff 2009)

	Centralized	Decentralized
Individual	Champions	Initiatives
Institutional	Strategies	Programs

Dewey and Duff (2009) emphasize the importance of faculty participation in the internationalization process without delving into the character of the involvement. The authors' balance of responsibilities does provide a template for the different responsibilities related to internationalization. Three of the quadrants (strategies, programs, and initiatives) can be, and more often than not are, formalized. Champions, however, cannot be formally created: they emerge. The challenge is to formalize the positive effects of the championing efforts.

2.3   Internationalization of curricula

A highly prevalent topic in internationalization literature is the development of curricula. This process is achieved by incorporating a study abroad period into the existing curricula or by modifying the curriculum of the institution (de Haan and Sherry 2012). The rationales for the process of curriculum internationalization reside in the construction of intercultural competencies and skills (Sample 2012; Barker and Mak 2013). By engaging students in multicultural classrooms and incorporating possible internationalization periods into their studies, HEIs can educate students in different cultural and social aspects (Sample 2012; Barker and Mak 2013). Curriculum internationalization is also a key component in enabling students to enter the workforce with broader capabilities for the global setting (Stutz et al. 2015). Those mentioned above can link to a nation's desire to develop these skills in students.

    Leask (2013) approaches the internationalization of curricula through an interactive process, having conducted a research project that encouraged

academic staff to deliberate on the meaning of curriculum internationalization in various disciplines. Furthermore, the project sought out to enable staff from various disciplines and institutions to carry out internationalization in a more efficient manner (Leask 2013). The findings suggest that teams within a discipline should conduct the main work in internationalizing a curriculum. Leask (2013) states that academic personnel are acclimated to their particular disciplinary community and are thus specialists in its conventions. Therefore, they are equipped to make the most suitable decisions regarding learning and teaching in their respective programs. Another finding suggests that university policies cannot be the sole driver of curriculum internationalization (Leask 2013). Continuous strategic support for academic personnel is an essential factor. This type of support manifests itself as either financial or moral, where financial support enables the academics to attend meetings, and moral support provides them with a sense of importance, as the internationalization is deemed valuable by both colleagues and the university (Leask 2013). The author also identifies certain elements that act either as enablers or as blockers of the internationalization process. The dominant blocker is the absence of sufficient support in linking the curriculum to university-level policy and generic statements related to the internationalization of curricula are difficult to incorporate into the disciplines and optimize for detailed learning tasks (Leask 2013). She concludes by stating that successful curriculum internationalization requires support and plans at both the university and the faculty level (Leask 2013).

One form of higher education internationalization is the development of English-medium degree programs: programs taught in English that aim to attract international degree-seeking students. English-medium programs, also known as English-taught programs, have increased tremendously in number across Europe (Lam and Wächter 2014). Lam and Wächter demonstrate this phenomenon via their series of studies published in 2002, 2008, and 2014. The number of English-taught programs identified in these studies increased from 725 in the first study to 8,089 in the third study. Significant growth was witnessed over a little more than a decade, with the number of bachelor- and master-level programs rising by nearly 1,000% (Lam and Wächter 2014). From these results, one can conclude that HEIs see value in English-taught programs.

While the quantitative growth of these programs has been proven, I emphasize that the understanding of the strategic, structural, and quality dimensions of these programs is underdeveloped. Kuroda (2014) conducted a multiple-case study of English-medium master's degree programs exclusively for international students in four top Chinese universities. The underlying objective of these programs was to raise awareness of Chinese excellence in intelligence and bring it to a broad, global arena (Kuroda 2014). As the programs do not include local students, however, they raise the issues of segregation and quality assurance. The author calls for more studies on the process of integrating such programs into the general higher education system in China (Kuroda 2014). Master's programs can also be a vessel for formalized collaboration in the form

of joint programs, a type of program that has raised interest after the Bologna Process. Papatsiba (2014) looks at the policy papers related to the Bologna Process, as well as the European Union's Erasmus Mundus program. The view adopted in the paper is supranational and focuses on the effects of the policies on European higher education. The concepts of integration and competitiveness are recognized as residing in the background of the policies and as categories of a higher order. While these are not the sole policies that affect the creation of joint programs, they are essential (Papatsiba 2014). However, joint programs can also become vessels for the furthering of supranational agendas, as they have the capacity to attract attention (Papatsiba 2014).

Table 3   Descriptions of internationalization perspectives

Rationales for internationalization	- the enhancement of a country's higher education within the global arena - the role of higher education as a component of broader national development - the development of innovations and economic prosperity - the enhancement of the intercultural or international substance of the curricula, international research collaboration, and the outbound mobility of students	Yang and Welch (2012); Urbanovic and Wilkins (2013); Maiworm and Wächter (2014); Hudson 2015; Seeber et al. (2016)
Policies and strategies in higher education internationalization	- the strategy must be clearly connected to the broader mission of the university and the goals for its internationalization efforts - international strategies need to seriously take into consideration both the external environment and the internal structures, or architecture, of the organization - the policy must translate into practice in the teaching setting - if a university considers internationalization a strategic priority, it must provide the necessary support, resources, and coordination, and all concerned parties must reach a mutual understanding of the drivers and goals	Van der Wende (1999); Taylor (2004); Dewey and Duff (2009); Hu and Lei (2014);
Internationalization of curricula	- the incorporation of a study abroad period into the existing curricula - the construction of intercultural competencies and skills - the facilitation of students' entry into the workforce with broader capabilities for the global setting	de Haan and Sherry (2012); Barker and Mak (2013); Sample (2012); Leask (2013); Kuroda (2014); Stutz et al. (2015)
Student and staff mobility	- determinants of mobility among students - mobility as a method toward enhanced global awareness - the career benefits of studying abroad	Wiers-Jenssen (2007); Horta (2009); Karky (2013); Caruso and de Wit (2015)

Curriculum internationalization retains its relevancy in the discussion on broader higher education internationalization. As a form of curriculum internationalization, English-taught programs are employed to combat the dominance of English-speaking countries in the HEI sphere (Saarinen and Taalas 2017). The rationales for this type of internationalization and its popularity are present in the research literature. The amount of attention paid to the organizational implications and the unfolding of this process is, however, low. In other words, researchers have dealt with the preceding and succeeding factors of the process, but the process itself has been neglected.

2.4   Student and staff mobility

The third category of studies in higher education internationalization focuses on the mobility of both students and staff, which is also one indicator for internationalization (Ma and Yue 2015). Student mobility encompasses students engaging in study-abroad periods, such as exchange students and international degree-seeking students. Prior studies in this area have dealt with determinants of mobility among students (Caruso and de Wit 2015), mobility as a method toward enhanced global awareness (Killick 2012), the career benefits of studying abroad (Wiers-Jenssen 2007; Potts 2015), and the relationship dynamics between national and international students (Jon 2012). As a component of internationalization strategies, student mobility presents itself as a popular choice among HEIs. Increasing the number of outbound and inbound students enhances the perception of an international HEI. Nevertheless, the interest in student mobility can be vicarious. Tham (2013) found that government policies related to higher education in Malaysia began to favor research and knowledge-creation initiatives, but at the same time, inbound students were primarily regarded as revenue streams. This thought process is especially applicable to institutions that rely heavily on international fee-paying students for revenue (Tham 2013). The findings of Tham's 2013 study echo the study by Knight and Morshidi in 2011, which determined that Malaysia's pursuit to position itself as an education hub was changing. Malaysia is on the cusp of a transformation from a student hub into a knowledge hub in order to compete with Singapore (Knight and Morshidi 2011). Governmental roles in higher education policies and the subsequent actions taken by the institutions are thus essential.

A respectable number of studies deal with the rationales and benefits of mobility, particularly student mobility, but less attention is paid to the management of this mobility. In one of the few recent studies on the topic, Karky (2013) investigates the management of inbound student mobility at a technical university in India. At this university, faculty members engage as counselors with international students. While the number of international students, in this case is low, the study uncovers the lack of preparedness of the university to properly manage a larger number of inbound international students (Karky 2013). Faculty mobility can manifest in two different ways, divided into teaching-

oriented and research-oriented approaches. Career benefits of faculty mobility are as evident as the benefits of student mobility. For example, Horta (2009) claims that pursuing post-doctoral studies abroad enhances the exchange of information among international colleagues. Faculty mobility enables the emergence of issues related to intercultural pedagogy, an issue that becomes essential in multicultural teaching settings. As international faculty members are teaching in a new international setting, different teaching approaches must be accommodated (Ghazarian and Youhne 2015).

NATIONAL LEVEL

Rationales for internationalization

- national development
- international competitiveness

ORGANIZATIONAL LEVEL

Policies and strategies in higher education internationalization

- strategy connected to the mission
- structures incorporated
- necessary support provided

ORGANIZATIONAL-INDIVIDUAL LEVEL

Student and staff mobility

- study abroad period
- intercultural competence
- globally aware graduates

ORGANIZATIONAL-INDIVIDUAL LEVEL

Internationalization of curricula

- determinants of mobility
- career benefits

Figure 2   Higher education internationalization on different levels

The mobility of students and staff implies the notion of moving to other HEIs. The effect that this phenomenon has on university-specific degree programs, such as the ones studied in this thesis, is, of course, limited. These programs include the concept of student mobility, as they house international students, but the programs are not exclusive to international students. Nevertheless, certain issues are applicable to these programs as well. The benefits associated with student mobility (global awareness, career enhancement) can also be associated with international degree programs through dynamics between international and national students. Issues related to faculty mobility can be associated with these programs, as the multicultural composition of the student body brings the

notions of intercultural communication and intercultural pedagogy to the stage. These issues affect the way international degree programs are structured.

To summarize, the internationalization of higher education can be triggered by several different factors at various levels. Following these triggers, suitable strategies and policies are formulated to set out a path toward the preferred ends. Figure 2 shows the presence of internationalization as presented in the research literature. An important motivation to increase the internationalization of a country's HEIs originates at the national level. A rationale can also emanate from within the organization, but research suggests that such rationales are less frequent than national-level ones. The next stage in the internationalization process is policy-making and strategizing, which occurs mainly at the organizational level. National-level strategies are usually also in place and can be influential, but prior research has focused more on the organizational level. The types of policies and strategies that the organization develops dictate the next stage of the internationalization process. The final stage concerns the organization and the individuals, and some scholars (Knight 2004) assert that this is the level where the internationalization actually occurs. Previous studies have extensively discussed the issues of mobility and curriculum internationalization. My research focus lays between stages two and three: the translation of organizational internationalization strategies into practice.

Internationalizing higher education within an organization is a strategic effort. Furthermore, the processual nature of internationalization is present in the earlier research, but the process perspective is not a persistent feature in the field. Jones and Brown (2007) list key factors in higher education internationalization that they claim characterize organizations welcoming of internationalization. Among these factors are enthusiasts: Jones and Brown (2007:197) state that "not all staff will share equally the enthusiasm and the capability necessary for taking the international agenda forward, so it is crucial to identify, support and make good use of internationalization champions across the institution." What Jones and Brown (2007) call enthusiasts are synonymous with the "champions" found in strategy literature. Championing for internationalization was also brought up Dewey and Duff (2009). I will discuss the notion of championing in the next chapter. I propose that the role of the faculties in higher education internationalization needs to extend beyond participation and into championing. Furthermore, I suggest that this engagement depends on the organization's architecture. A glaring gap in prior studies is the role of structural arrangements related to the internationalization process. To launch a comprehensive study on this process, the field of strategy process research is visited. Researchers of strategy processes are interested in the activities that lead to strategy and those that support it (Huff and Reger 1987); therefore, attention must be paid to the strategy itself and its formation. The literature on strategy formation and formulation is quite varied. In this section, I present some of the landmark writings on the formation of strategy and the interaction between an organization's strategy and its structure.

3 THEORETICAL BACKGROUND

The premise of this study was implicitly process-driven, as the objective was to describe the execution of an internationalization effort and the actions initiated in its support. The review of higher education internationalization in the previous section also brought the notion of the process view into the discussion. Therefore, the following discussion on the theoretical background of this study begins with an overview of the previous strategy process research. This chapter begins with a discussion on strategy process research and subsequently introduces strategy formation. The concept of organizational architecture is then presented in greater detail. Finally, at the end of the chapter is a discussion on prior research that has combined the fields of organizational architecture and higher education.

3.1 Strategy process research

Strategy process research is implicitly interested in strategy as an animated rather than a static object (Pettigrew 1992). Therefore, scholars should be interested in the process of becoming rather than that of being (Pettigrew 1992). I would characterize this process as the attempt to describe movement with a still photo: The photo would show that the object is in motion, but it would not reveal anything about the actual movement. The changes and decisions related to the strategies are of interest to process scholars, and these two concepts separate from the mainstream research on the content of strategy (Pettigrew 1992). The analysis of strategic-level decisions and their themes falls under the category of content research (Huff and Reger 1987), which furthermore focuses on processes in which strategic decisions affect performance (Huff and Reger 1987). However, research on strategy processes is more concerned with the activities that initiate strategy, as well as the support available for its execution (Huff and Reger 1987). Strategy process research portrays the diversity in the paradigms under which it has been studied, and it is complicated in empirical settings (Pettigrew 1992).

Hutzschenreuter and Kleindienst's (2006) extensive literature review is an attempt to take stock of the body of strategy process research. They aim to provide guidance on what strategy process research has already determined and what is yet to be uncovered (Hutzschenreuter and Kleindienst 2006). Although planning was a predominant topic in strategy process research in earlier decades (as reviewed by Huff and Reger [1987]), more recent studies have delved deeper into the connection between planning and performance. Furthermore, the review by Huff and Reger (1987) showed a strong tendency toward prescriptive planning research. Among the suggestions for future research was to step away from normative studies and conduct more descriptive research (Huff and Reger 1987). According to Hutzschenreuter and Kleindienst (2006), strategy process researchers have taken this advice to heart, as there has been a shift in the number of studies on planning in organizations. Hutzschenreuter and Kleindienst (2006) also identified three categories of factors essential in the field of strategy process studies: antecedents, processes, and outcomes. In other words, prior studies have investigated the process, what instigated it, and what the effects were. Instigators of the process emanate from the environmental context (such as uncertainty and dynamism) and the organizational context (including static characteristics, such as size and structure, as well as dynamic characteristics, such as culture and values) (Hutzschenreuter and Kleindienst 2006). The authors also delineate the primary aspects found in strategy processes: strategists, the issue, and the sequence of actions (Hutzschenreuter and Kleindienst 2006). The fact that individuals are a part of the decision-making process renders features related to individuals a key component in the strategy process. The matter under review in the decision-making process is often unique and thereby creates variety in the process (Hutzschenreuter and Kleindienst 2006). Finally, Hutzschenreuter and Kleindienst (2006) describe the features of the sequence of action as related to the process itself and the outcomes of the process.

Adopting a process view in the study of strategic decisions expands the study focus to cover the path from the impetus to the solution (Mintzberg et al. 1976). The processes leading to strategic decisions are rife with complex, new, and virtually unlimited alternatives. To combat these challenges, an organization must engage in an exploratory process to discover a solution (Mintzberg et al. 1976). The setting for this decision-making is characterized by ambiguity (Mintzberg et al. 1976) and not by uncertainty, as has been proposed (Cyert and March 1992; March and Simon 1993). Mintzberg et al. (1976) also state that there exists an essential gap in the literature on organizational decision-making in terms of the relationship between the process of decision-making and organizational structures. The conjoined relationship between an organization's strategy and its structure has been present in strategy literature ever since Chandler (1962), and the relationship between an organization's structure and its performance has been well established in the literature (Pennings 1975; Caves 1980). The role and purpose of the structural arrangements in the strategy process remain very much underexplored. The early research on this topic was mostly normative research and failed to focus on descriptive studies (Huff and Reger

1987). The influence of organizational structures, such as formal structures and incentives, on the implementation of the strategy is marginal in the strategy literature (Huff and Reger 1987). Wooldridge and Floyd (1990) take the issue further than pinpointing a mere omission in the literature and challenge the established notion that top management dictates an organization's strategy. Top management should provide the context and create structures that enable middle management to act in a more strategic manner (Wooldridge and Floyd 1990), which would enable the emergence of strategy from the parts of the organization highly knowledgeable in the operations. I discuss the concept of emergent strategy in the next section.

Fredrickson (1986) integrates the literature on strategic decision processes with the literature on organizational structures. In order to comprehend the effects of organizational structures on strategic decision processes, one must initially understand the relationship between organizational structures and decision-making (Fredrickson 1986). Centralization, formalization, and complexity are presented as the essential dimensions of structures. Appointing a centralized decision-making authority is an effective manner of coordinating decision-making, but due to the cognitive limitations of individuals, it can be too demanding (Fredrickson 1986). Herein resides a reference to the absence of middle management participation in strategic decision process as presented by Wooldridge and Floyd (1990): Centralizing decision-making authority to a limited group of top-level managers both creates a burden for the top managers (Fredrickson 1986) and increases the likelihood of overlooking important stimuli (Fredrickson 1986; Wooldridge and Floyd 1990). The level of formalization refers to the overall division of labor, as it delineates the details of task execution (Fredrickson 1986). The complexity dimension of organizational structures relates to the presence of multiple components within an organization that are often interrelated with one another (Fredrickson 1986). Therefore, the actions of one component cannot be treated in isolation, as they either directly or vicariously affect other components of the organization. Fredrickson (1986) concludes by suggesting that organizational structures are likely to assume control in organizations where the broad strategies are not properly articulated.

In his paper on the development of a framework for strategy-making processes, Hart (1992) charts out the historical progress of the field. Within that progress, he identifies three broad emergent themes: rationality, vision, and involvement (Hart 1992). Rationality refers to the degree of comprehensiveness and analytical approach in the strategy process. As previously mentioned, the level of rationality is affected by cognitive limitations, among others, and thus, bounded rationality enters the discussion. The discussion on rationality then leads to the top management's position in the strategy process (Hart 1992). This area of the literature is interested in the ability of top management to present a clear vision and to encourage other members of the organization to embrace that vision. This theme implies a sense of involvement from the organizational members, which constitutes the third theme in literature (Hart 1992), and other authors also make references to this direction. The integrated framework is

developed according to organizational members, top management, and the roles they occupy in the strategy process (Hart 1992). Top management roles range from commanders to sponsors, based on the degree of centralization of decision-making (Hart 1992). Organization members can occupy roles ranging from good soldiers to entrepreneurs (Hart 1992). This distinction can be made based on the possibilities of championing novel initiatives. The notion of championing is highly relevant in the context of emergent strategies and the employment of a broad range of organizational members.

3.1.1   Emergent and deliberate strategies

Strategies are often the end products of careful deliberation that explicitly and purposefully lay out the long-term goals and relevant plans of an organization (Mintzberg 1978; Mintzberg and Waters 1985). These types of deliberate strategies are often colloquially referred to as plans (Mintzberg 1978). Most organizations have a strategy in place, articulated or not, to provide a direction and vessels with which to move forward. This type of strategy is dubbed "the intended strategy" (Mintzberg 1978; Mintzberg and Waters 1985). An organization's intended strategy articulates its intentions—whether or not those intentions are fulfilled is subject to ex post facto deliberation. The intended strategy can either be realized or unrealized (Mintzberg 1978: Mintzberg and Waters 1985). This type of strategic formulation is a top-down approach that relies on the unequivocal expertise of an organization's top management. The success of the deliberate strategy is reliant on the capacity of the top management to account for all possible contingencies the organization faces (Mintzberg 1978; Mintzberg and Waters 1985). Due to the finite amount of information available to top management, as well as the limitations of human cognition, pure forms of deliberate strategy are extremely rare (Mintzberg 1978; Mintzberg and Waters 1985).

The formation of strategies is not solely the purview of top management: A tremendous amount of insight resides at the operational and middle levels of an organization. Middle-level management can be particularly essential in identifying strategically important shifts in the environment. (Burgelman 1994.) Furthermore, the involvement of middle management should be geared toward the enhancement of the relevant decisions (Wooldridge and Floyd 1990). Nevertheless, the acceptance of the idea that top management dictates strategic decisions is commonplace within organizations. As Mantere and Vaara (2008) state, this type of exclusivity is acceptable, but it places restrictions on the available know-how and insight for strategic decision-making. A strategy that forms as a response to occurrences at the operational level is called an emergent strategy (Mintzberg 1978; Mintzberg and Waters 1985). For a strategy to be considered emergent, it must display some degree of consistency in its actions. Emergent strategies are characterized by a pattern in a series of actions that transpire in the presence—or absence—of intentions toward other goals (Mintzberg 1978; Mintzberg and Waters 1985). Rather than following a predetermined sequence of actions, an emergent strategy envisages a path one

step at a time. Herein resides the most notable distinguishing feature of an emergent strategy: the notion of learning. When the operational and middle-level management encounter novel occurrences that cannot be adequately managed via the intended strategy, they can respond by devising new initiatives (Mintzberg and Waters 1985). With consistent effort, they may be able to find a coherent set of actions. Mintzberg and Waters (1985) also state that feedback from the novel set of actions must be routed back to management and leadership. Optimally, the leadership should take note of others' efforts and act accordingly. Strategic learning occurs when an organization's leadership heeds the advice of other members of the organization (Mintzberg and Waters 1985).

Mirabeau and Maguire (2014) discussed an absence of studies explicitly focusing on the empirical study of emergent strategy. The process of learning in a social dynamic has been presented in strategy research, but all homage to emergent strategy has been implicit (Wooldridge et al. 2008). Mirabeau and Maguire (2014) develop the theoretical framework of their study by integrating three established streams into their field strategy process research: strategy as patterned action, strategy as iterated resource allocation, and strategy as practice. The integration of these streams enables a refined theoretical view on the formation of emergent strategy. Mirabeau and Maguire (2014) introduce their findings from a 10-year-long case study of a multinational telecommunications company. The authors report on individual projects and their vertical development starting from the bottom, showing how autonomous strategic behavior functions as an antecedent to emergent strategy. Mirabeau and Maguire (2014) identify autonomous strategic behavior as emanating from localized problems and being realized through several multilevel stages. The initial mobilization of support is succeeded by legitimization through the manipulation of the strategic context (Mirabeau and Maguire 2014). The authors define strategic context similarly to Burgelman (1983a; 1983b): as a vessel to influence the interests of the organization and its members. Structural context refers to the administrative apparatus controlled by top management to influence the perceived interests of the members (Mirabeau and Maguire 2014). Projects are developed to be consistent with the current strategy, and readjustments to the structural context enable projects to be embedded in varying facets of the organization (Mirabeau and Maguire 2014). Projects are spearheaded by a so-called champion and the preferred trajectory of championing these projects ends in their legitimatization (Mirabeau and Maguire 2014). A legitimized bottom-up project has the potential to break its dissonance with the prevailing strategy.[4]

---

[4] Mirabeau and Maguire (2014) view legitimation as occurring via discursive construction and expansion of strategic categories. The autonomous project can thus move closer to the prevailing strategy and fit into in the stretched categories.

3.1.2 Championing activities

Mantere (2005) discusses the importance of the neglected strategic champions in the strategy process, also questioning the exclusivity of strategy in the hands of top management. A champion is an individual who attempts to exert influence on matters larger than the individual's primary tasks, and the practices that influence champions and their ability to act appropriately can be labeled recursive or adaptive (Mantere 2005). Recursive practices are practices recreated by social structures in action, whereas adaptive practices are subject to transformation in social action (Mantere 2005). Mantere (2005) further distinguishes practices according to their effects on championing activities, the distinction being between those that enable and disable the activities. The practices in question are strategy formation practices, organizing practices, and control practices (Mantere 2005). Practices of strategy formation follow the emergent strategy discussion presented in the previous paragraph by taking into consideration more than just top management (Mintzberg 1978; Mintzberg and Waters 1985). Next, Mantere (2005) labels organizing practices as legitimatizing vessels for activities, delineating the correspondence of individual tasks and units to the overall strategy as well as the distribution of responsibilities. Finally, organizing practices provide a template for organizational members to act upon (Mantere 2005). Based on this description, legitimization activities are closely related to organizational architecture, which will be presented later in this paper.

Control practices are also heavily incorporated into the concept of organizational architecture. These practices delineate the resources available for the execution of tasks within the organization (Mantere 2005). The recursive and adaptive approaches naturally vary greatly between these practices. Furthermore, their relationship is tense, as they often exhibit high degrees of incompatibility. The recursive approach in strategy formation relies on pre-planning and formalizing objectives and targets in order to facilitate the execution of the preferred strategies (Mantere 2005). The adaptive approach, conversely, is more interested in understanding the dynamics of strategy, as this approach constructs through interpretations and discussions between those who strategize and those who implement (Mantere 2005). Organizing practices from a recursive perspective are examples of the more classical notion of organization design, as they are the successors of strategy, designed to support the implementation of strategy specifically. The adaptive approach places the organizing practices under a negotiation process where responsibility is assigned flexibly. In Mantere's 2005 study, the absence of the adaptive approach was seen as detrimental in instances where a novel strategy was put in place but where current designs were deemed obsolete. Regarding control practices, a recursive approach prevails because champions praise explicitness in the available resources and embrace formalized performance measurement systems (Mantere 2005). The adaptive approach is not without its merits, however, even though it is secondary to the recursive approach. Champions outside the formalized control channels can exert their influence through social networks or informal

structures, which is particularly poignant for senior champions, as they have cultivated their networks over a prolonged period (Mantere 2005).

The preceding discussion illustrates the intricacies of the strategy process. The dynamics between those who plan and those who implement strategy are commonplace in the strategy literature. The discussion also raised questions regarding the necessity of this dichotomy, as the importance of the so-called "middle management level" has been presented. Finding a balance in the issue may prove to be a key component in strategic endeavors. It must be noted, however, that neither deliberate nor emergent strategy can be effective on its own over a prolonged period of time. A deliberate strategy that neglects any notion of emerging strategic initiatives can become obsolete, as it fails to adapt to changes in its environment. In contrast, an organization relying on emergent strategy can cripple its operations through the increased improvisation that occurs when no formal controls or standardization are in place. All occurrences are handled reactively to the detriment of consistency. In order to ensure a more consistent approach toward strategically beneficial behavior, programs that support strategic endeavors are an important inclusion.

3.1.3 Programs and coordination

A planned strategy entails a formulated intention of what the organization strives toward. Furthermore, programs must be inherent in the plan to steer the behavior of organizational members toward attaining the goals (Mintzberg and Waters 1985). Communicating plans in the form of programs are considered an effective medium when the unified direction of the organization is more important than the discretion of the organizational members (Mintzberg 1994).

Successful execution of strategy is contingent on two factors: decision rights and flow of information (Neilson et al. 2008). Assignment of decision-making rights assigns responsibilities to the relevant individuals and reduces stalling due to extensive negotiating (Neilson et al. 2008). This is similar to the minimizing of disruptions by formal controls (Mintzberg and Waters 1985). In strategy execution, information needs two traits: information must reach organizational headquarters and information must transcend organizational boundaries (Neilson et al. 2008). Headquarters and top management need information about the organization's environment. Information mobility enhances the distribution of best practices and enables collaboration between departments and divisions (Neilson et al. 2008).

Formal controls such as scheduling and budgeting of related activities enable the attainment of set goals (Mintzberg and Waters 1985). The controls provide clarity about the planned strategy and its activities. The formal controls also minimize potential disruptions to the plan as it leaves little room for discretion (Mintzberg and Waters 1985). A strategy program can be viewed as a somewhat rigid construct that leaves little room for improvisation from members outside of those planning it. Strategy operationalization is about decomposing the strategy (Mintzberg et al. 2009). The decomposition is about articulating the outcomes of the strategy (Mintzberg 1994). The strategic plan decomposes into

subdivisions (Mintzberg et al. 2009). Planned strategies go through a process of conversion into programs. According to Mintzberg (1994), a program is related to capital or operations. Programs with an emphasis on capital lay out the procedures for capital-intensive actions such as factory expansion (Mintzberg 1994). Operating programs focus on operational activities such as staffing (Mintzberg 1994).

March and Simon (1993) discussed performance programs as organized responses to a stimulus emanating from within the organization's environment. While the response may form a complicated set, the trigger itself may be quite simple, connoting the potential for relatively frequent program-based activities (March and Simon 1993). The majority of behaviors in organizations fall under the governance of these types of programs. This extends primarily to individuals in positions that involve relatively routine activities (March and Simon 1993). Practically, programs can be used to operationalize strategic endeavors, as the programs facilitate patterns of behavior. In essence, a strategic program is, then, a question of organization design. The arrangements of an organization can motivate, facilitate, or constrain behavior (Nadler and Tushman 1988). Programs are also beneficial for coordination (Mintzberg 1994) in terms of their capability to bring activities together for consistency in operations (Nadler and Tushman 1988).

One can describe coordination as a processual view of directing interdependencies among organizational activities (Malone and Crowston 1994: Crowston 1997). When the coordinative efforts involve several individuals within a group, the objective is to get all the individuals to accept the mutual decisions of the group (Simon 1997). The actions of the group can be dissected by focusing on four factors: actors, interdependent activities, goals, and resources (Malone and Crowston 1994; Crowston 1997). Problems in coordination can occur when the interdependencies among the activities create hindrances ceoncerning task performance (Crowston 1997). Furthermore, the necessity of coordinative efforts is negated if there are no interdependencies (Malone and Crowston 1994).

Herbert Simon (1997) distinguishes between procedural and substantive coordination in situations characterized by a general plan for operations. Procedural coordination attempts to manage the group's behavior by providing specifications for the organization of the group (Simon 1997). Substantive coordination refers to the details of the work carried out by the individuals (Simon 1997). The presence of roles is closely related to the process of coordination within an organization. Individuals assume or are appointed certain roles—ones that are highly specified for communicative purposes—within an organization (March and Simon 1993).

3.1.4 Autonomous and induced strategic behavior

Robert Burgelman's tenets regarding strategy and strategic behavior echo the thoughts of Henry Mintzberg, which I introduced in the earlier section. Burgelman (1983b; 1983c) proposes a division of an organization's strategic

behavior into two categories: autonomous and induced. This division shares similarities with those of his contemporaries (c.f. Mintzberg 1978; Mintzberg and Waters 1985). Induced strategic behavior is suitable for the pre-existing frameworks in an organization's strategic planning and occurs in relatively familiar environments (Burgelman 1983b; 1983c). The current concept of corporate strategy induces strategic behavior that is in line with the organization's strategy, and that is considered variance-reducing and suitable for predictable environments (Burgelman 2002). The advantages associated with strategic behavior induced by corporate strategies are the possibilities of continuity and coherence (Burgelman 1983a). The inherent stability strategic behavior provides, however, can become an impediment to exploratory activities that have the potential to renew the organization's strategy.

Autonomous strategic behavior, on the other hand, is optimal for increasing variance and thus not the most obvious alternative for pre-existing frameworks (Burgelman 1983b; 1983c). This type of autonomous behavior can benefit an organization by engaging middle- and operational-level actors to explore novel approaches to their operations. A rational toleration of autonomous strategic behavior is essential for exploration and the possible utilization of new capabilities for the organization (Burgelman 2002). An organization cannot plan for autonomous strategic behavior: nevertheless, if top management deems the new initiatives viable for the organization, they must be supported by the design of the organization (Burgelman 1983b). The strategic context of an organization consists of the political machinery that allows middle management to challenge the current concept of strategy (Burgelman 1983b; 1983c). Furthermore, this context enables top management to rationalize autonomous strategic behavior after its implementation (Burgelman 1983b; 1983c).

Burgelman (1983b; 1983c) also incorporated a structural component into the equation. An organization aims to have its strategy followed at the level of operation, which requires the inclusion of appropriate structural choices, also referred to as "the structural context" (Burgelman 1983b; Burgelman 1983c). Structural context refers to the organizational mechanisms that top management can manipulate to influence the interests of individuals at the middle and operational levels (Burgelman 1983b; Burgelman 1983c). It is a versatile concept that may include structural configuration, formal structures, project evaluation criteria, management performance measures, and managerial appointments (Burgelman 1983a). Structural context operates as a mechanism for the middle and operational levels to identify the desired behavior (Burgelman 1983b: Burgelman 1983c). Designing the structural context is the purview of top management, and the structural context is established with the intention of maintaining the desired strategic behavior at all levels of the organization. Over time, the context begins to hinder versatility in the induced strategic behavior and thus may have detrimental effects on strategic learning (Burgelman 1983a).

Burgelman's (1983a) model depicting the interaction between strategic behavior, corporate context, and the concept of corporate strategy (Figure 3) shows the intensity of the influence between these components. A strong

influence is illustrated by a solid line, whereas a dashed line represents a weak influence. While the model depicts some of the essential relationships, some omissions are also evident. The effect of structural context on autonomous strategic behavior seems to be minimal or even nonexistent. According to Burgelman's (1983a; 1983b; 1983c) definition of structural context, formal structures, along with other evaluation criteria, are the mechanisms at the disposal of top management. Furthermore, I present that autonomous strategic behavior affects the structural context directly or vicariously—or possibly both.
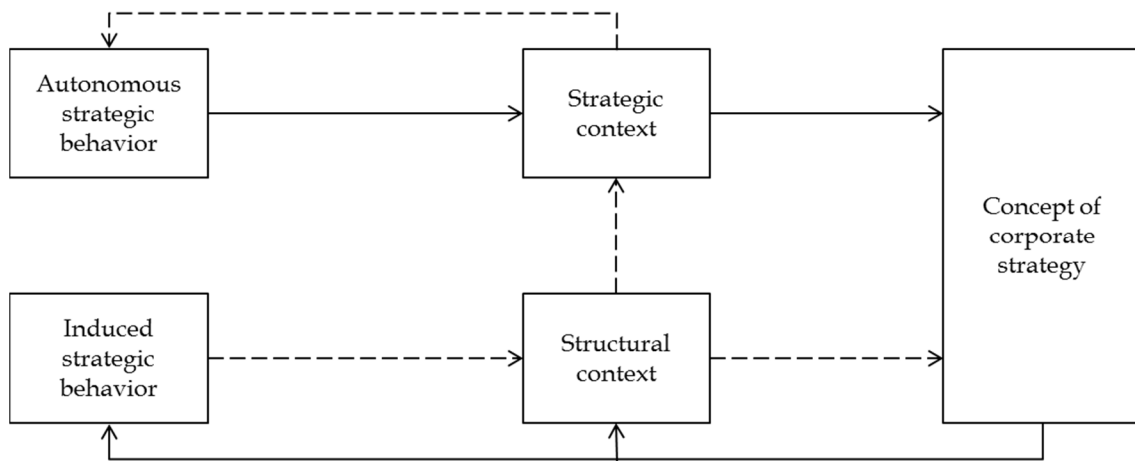
Figure 3   A model of the interaction of strategic behavior, corporate context, and the concept of strategy (Source: Burgelman 1983a)

Burgelman's (1983a; 1983b; 1983c) perspective on structural context constitutes a rather one-sided view, seeing it as a formal component subject to the manipulation of top management. At the same time, he views the formation of strategy as a process possibly developing at the middle and operational levels. The manipulation of structural context can be harnessed toward the promotion of autonomous strategic behavior, and the middle and operational levels enact this behavior and subsequent initiatives. A broader view of structural context should take into consideration the informal structures that emerge in day-to-day activities. To fully understand the structural elements accompanying the formation of strategy, a more comprehensive concept of the organizational aspects is necessary. For the reasons presented above, the concept of organizational architecture is employed in this study.

3.2   Designing organizations

Contingency theory suggests that organizational performance is the result of the fit between internal arrangements and the organization's environmental context (Van de Ven et al. 2013). Early work in the field of structural contingency theory

suggested that the context of the organization is related to the organizational structure (Drazin and Van de Ven 1985). An omission in the early stream of research was the effect of this relation to an organization's performance (Drazin van de Ven 1985). The notion of organizational structure does not take into account the social, economic, and political factors related to internal development in the form of changes in programs and routines (Van de Ven et al. 2013). Organization design has transitioned from exploring for the most suitable internal arrangements for the organization's current context into searching distinct ways to enable the potential for innovation throughout the organization and its environment (Van de Ven et al. 2013).

3.2.1 Configuration approach

A further stream of research does incorporate strategy and structure in an integrated manner: namely, in the form of the configuration approach. A configuration is the combined whole of an organization's strategy, structure, and environment (Miller 1986). A configuration is a representation of cohering elements (Miller 1996). These configurations, also known as archetypes or gestalts, are useful in their ability to predict and describe efficient organizations (Miller 1986). This approach is not a ground-breaking innovation, however, because the themes of strategy and structure and their correspondence have appeared as staples in earlier studies. The configuration approach integrates the previous work of strategy theorists and structural theorists, an integration that is necessary because earlier studies were superficial in their characterization of strategy and structure (Chandler 1962; Mintzberg 1973). Miller (1986) bases the utility of the configuration approach on three arguments. First, the presence of other organizations leads to a degree of isomorphism in the form of organizations. In any given environment, only a select number of structures and strategies are feasible (Miller 1986). Among these are a select few that are superior, and thus, organizations that apply them outperform their rivals. The second argument for configurations is the interrelatedness of the features of the organization. The linkages between structure, strategy, and context are complicated and quintessential (Miller 1986). Therefore, an equilibrium between these three features is desired, and an organization may gravitate toward a configuration that achieves this outcome. The third and final argument for configurations stems from organizational change. Organizations tend to engage in alterations that act to continue an existing configuration or to adopt an entirely new long-term configuration (Miller 1986). Due to the interrelatedness of organizational elements, gradual changes are likely to deconstruct the complementary effect of the elements (Miller 1986). The forces of structure, strategy, environment, and leadership steer configurational elements and are paramount in any important organizational change (Miller 1987).

Mintzberg (1979:2) defines the structure of an organization as simply "the sum total of the ways in which it divides its labor into distinct tasks and then achieves coordination among them." This definition implies a process of deconstruction and subsequent reconstruction. To understand the structure of an

organization, one must first delineate the basic components of the organization and its coordination mechanisms (Mintzberg 1979; 1980). Basic components include the operating core, strategic apex, middle line, technostructure, and support staff. An organization's operating core entails all the individuals whose work directly relates to the organization's end product or service. Strategic apex is the organizational component responsible for steering the organization in the right direction. The strategic apex is also in charge of accommodating stakeholders. The middle line serves as the mediator between the operating core and the strategic apex. The middle line has formal authority and is found in large organizations that rely on direct supervision. Next, the technostructure of an organization consists of analysts separate from the operating work. These analysts can influence the work by designing programs and training workers. Control analysts are interested in standardizing the operating work as much as possible. The final component is the support staff, which consists of specialized units that indirectly support other components of the organization.[5]

According to Mintzberg (1979; 1980), the essential coordinating mechanisms of an organization are mutual adjustment, direct supervision, and standardization. Mintzberg (1979) uses toy assembly instructions as an example: Coordination through the standardization of output is achieved by specifying the end result of the work. Performance is assessed through standardized measures, and the means by which these measures are reached is up to the discretion of the individual or organization. Finally, in cases where the work or output are immune to standardization, coordination is a necessity and the standardization of skills and knowledge is an alternative.[6] Here, a great deal of emphasis is placed on the training of the individual. The work requires a particular kind of training, and it must be internalized by the individual (Mintzberg 1979; 1980).

The contingency factor of the environment refers to the setting in which an organization exists and with which it must design its structures to correspond (Mintzberg 1979; 1980). Environmental characteristics can be grouped according to stability, complexity, market diversity, and hostility. The environment can be described along a continuum ranging from stable to dynamic-based in terms of the level of predictability. The competitors and stakeholders of an organization

---

[5] Mintzberg (1980) stated that his configurations are simplifications that do not capture the actual complexity of organizational structures. Rather, the configurations should be seen as conceptual frameworks that assist in understanding organizational behavior (Mintzberg 1980).

[6] Standardization as a coordination mechanism can take on three different forms: standardization of work, standardization of output, and standardization of skills. Mutual adjustment refers to the coordination of work through informal communication: the individuals doing the actual work communicate with one another to control the process. This is applicable to both the most rudimentary organizations and the most challenging tasks. In highly complex organizations that deal with highly sophisticated tasks, individuals must adapt to one another and explore alternatives to solve the problem. When the coordinating mechanism involves a supervisory role of one individual who claims responsibility for the work of others, the mechanism is called direct supervision. Supervisors can rely on other members to conduct their tasks, and thus, the supervisor only needs to give out orders. Standardization of work occurs when the instructions for conducting work are imposed through rules and regulations (Mintzberg 1979; 1980).

influence the atmosphere in which the organization operates. Furthermore, hostile environments are often unpredictable and thus affect the organization's structures.[7] Mintzberg's (1979; 1980) fourth contingency factor is power, which is manifested in control exerted from outside the organization, personal needs of organizational members, and social norms. External control groups, such as shareholders and the government, can force an organization to act pronouncedly cautiously, which often leads to increased formalization, as the organization should keep records of all of its actions in case they are ever brought into question (Mintzberg 1979). Centralized power at the societal level leads to centralized power at the organizational level and ultimately to more bureaucracy (Mintzberg 1979), and power relations within the organization also affect its structures because members of all the organizational components try to retain their power. Some wish to centralize power, and some wish to decentralize it.[8]

The configuration approach is an important feature of the developing convergence of the strategy and structure literature. Internal consistency among the design parameters is necessary to create structures in an efficient manner (Mintzberg 1979). Similarly, contingency factors also require internal consistency (Mintzberg 1979). Such a correlation is often referred to as "fit" in the literature on organizational structure. All components need to fit together to avoid discrepancies. While the configuration approach captures the interrelatedness of organizational characteristics, it does not take into account the presence and variance of informal structures. It is safe to assume that under different coordinating mechanisms, different forms of informal structures develop.

3.2.2 Star Model

Another framework for designing organizations is the Star Model developed by Galbraith (2002; 2012). The Star Model is made of five essential components for building organizations: strategy, structure, processes, rewards, people (Galbraith 2002; 2012). In the Star Model, strategy lays out the direction of the organization by specifying products/services, markets, and the competitive advantage (Galbraith 2002). Structure determines the where authority and power reside in the organization. Star Model divides the structure into specialization (type and number of specialties), shape (number of people in departments), distribution of power (the level of centralization), and departmentalization (formation of departments in organizational levels) (Galbraith 2002). Processes describe the

---

[7]   Mintzberg (1979; 1980) describes the environmental characteristics as dualities. Dualities are placed on opposite sides of a continuum and the characteristic can be placed anywhere in the continuum.

[8]   The influence of social norms in organizational structures is an interesting manifestation of power. As new structures and techniques are developed, it is tempting to jump on the bandwagon without performing due diligence on the suitability of the new structure. Adopting structures solely because of their popularity or novelty can be a successful approach, as the structures might be the result of the latest advances in the field. However, the effect of social norms on organizational structures proves that there is no such thing as a universally applicable structure (Mintzberg 1979).

vertical and lateral flows of information and decision making. Rewards enable the steering of employee actions towards the strategic direction (Galbraith 2002). Finally, people in Star Model refers to the human resource policies (recruitment rotation, training) of the organization. Organizational effectiveness requires that the components be aligned with one another as the interplay of the components direct behavior within the organization (Galbraith 2002). According to Galbraith (2002: 2012), managers can influence the performance and culture of the organization by affecting organizational behavior. Behavior can be influenced through the Star Model. Like many other frameworks for designing organizations, the Star Model is also influenced by contingency theory (Van de Ven et al. 2013). Similar to the configuration approach, Galbraith's (2002; 2012) Star Model does not fully capture the presence and relevance of informal structures. Culture is an outcome in the model, similar to performance. The presumption is not false, but it omits the effect of culture and informal structures in the organizational design process.
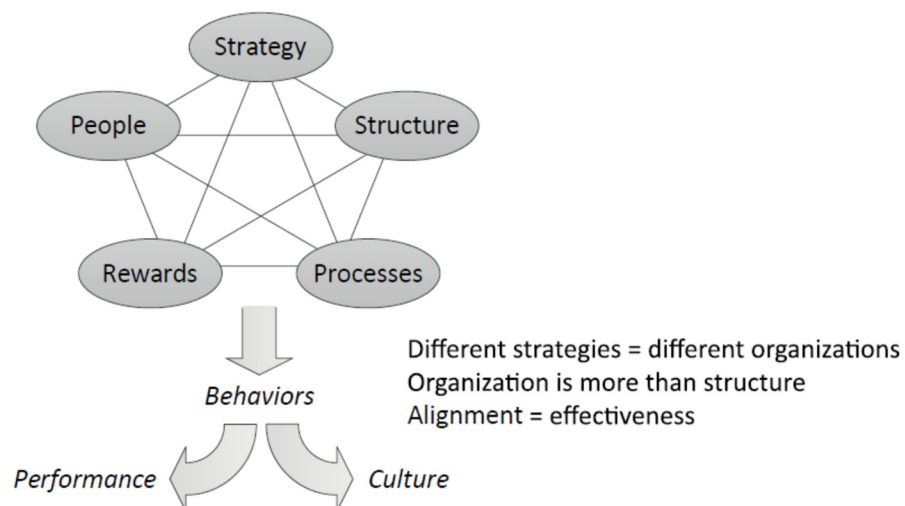
Figure 4   Star Model (Source: Galbraith 2012)

3.3   Organizational architecture

Organizations are social structures constructed by individuals to provide a support system for the pursuit of certain objectives (Scott 1987; Hitt et al., 2009; Daft 2013). They provide a means to an end, and it is important to note that the organization is not an end in itself. The division of labor and its subsequent coordination make up the essential foundation of all organizations (Gulick 1937; Burns and Stalker 1966). Therefore, the actual structures of an organization must take these fundamental premises into account in order to arrive at the preferred outcome (Mintzberg 1979). At this point, it must be stressed that when referring to a structure, the focus is not merely on the various entities in an organizational

chart: The term also entails the relationships among the entities and the coordination of activities within and among them. The social structures must be designed optimally to achieve the desired objectives. An elementary definition of structure describes it as a conduit for decision-making and the exchange of information (Burton and Obel 1980).

Organizational architecture combines both formal and informal structures. Formal structures include explicitly articulated structural components, such as reward systems and hierarchies (Nadler and Tushman 1997). Informal structures are more implicit in their articulation, but they are as prevalent as formal structures. The informal components are culture, community, and networks, and the inclusion of informal aspects implies the prevalence of behavioral aspects such as decision-making and politics (Nadler and Tushman 1997). Nadler and Tushman (1997) are proponents of the concept of organizational architecture. Through its architecture, an organization can exploit its core capabilities effectively and adapt them to accommodate changes happening both outside and inside the firm. Organizational architecture should be considered a holistic view of organizational design: It extends the thinking beyond the design of the organization and into its construction (Nadler et al. 1992). Nadler and Gerstein (1992) equate organizational architecture to the traditional concept of the architecture of physical constructs. It consists of four different aspects: purpose, structural materials, style, and collateral technologies (Nadler and Gerstein 1992). Purpose defines the basic function of the entity (Nadler and Tushman 1997). Structural materials refer to the available materials from which the designer or architect can draw upon and changes in the available materials lead to changes in the architecture (Nadler and Tushman 1997). The third factor, architectural style, results from the combination of structural materials and purpose. Collateral technology is not a necessary building block in the process, but it does play a vital role in the fulfillment of the actual purpose (Nadler and Tushman 1997).
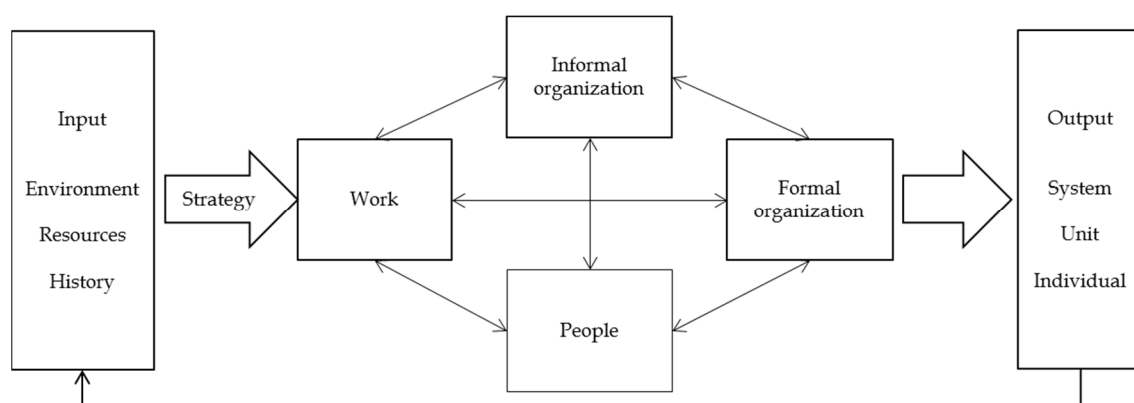
Figure 5   Congruence model (Source: Nadler and Tushman 1997)

Organizational architecture—the manner in which an organization provides structures and coordination for its members and processes, with the goal of maximizing its organizational capabilities over the long run (Nadler and Tushman 1997)—has become a critical component in organization studies. The

method of organization affects the performance of the organization (Miles et al. 1978; Mintzberg 1980; Sah and Stiglitz 1986; Nadler and Gerstein 1992), and the suitability and utility of a particular form of architecture is dependent on the environment (Burns and Stalker 1966; Lawrence and Lorsch 1967a; Mintzberg 1980). The concept of organizational architecture extends beyond structures, embracing principles and nonspecific structural alternatives to provide platforms on which organizations can share resources, exchange ideas, and communicate directly (Ciborra 1996; Fjeldstad et al. 2012). The current literature examines how formal and informal structures shape organizational architecture (Gulati and Puranam 2009; Soda and Zaheer 2012), the process of manipulating the architecture to achieve organizational goals (Burns and Stalker 1966; Siggelkow and Levinthal 2003; Boumgarden et al. 2012; Csaszar 2013), and the manifestation of power in architectures, including decision-making (Sah and Stiglitz 1986; Christensen and Knudsen 2010; Csaszar 2012) and information processing (Tushman and Nadler 1978; Turner and Makhija 2012). Organizational architecture is a relevant topic for organizations and lies at the heart of organization theory. Although the literature on organizational architecture is expanding, the field is still fragmented and fuzzy in its categorizations.

Based on my reading of the organizational architecture literature, I have categorized the concept into three different streams: architecture as a structure, architecture as a process, and architecture as power. The structural perspective of organizational architecture answers the question of how an organization does what it does. It deals with the level of formally delineated tasks, standard operating procedures, groupings of individuals, reporting relationships, compensation, and distribution of responsibilities. In addition to these formal structures, architecture as a structure also encompasses the emergent, or informal, structures that deal with the social aspects of organizational activities. Culture, relationships, informal protocols, and networks are characteristics that shape the everyday functioning of organizations. The perspective of architecture as a structure does not focus on issues regarding change, fit, or performance: instead, its main contribution lies in the more profound understanding of organizational structuring. Studies in this stream have focused on the complementary effects between the formal and informal organization (Gulati and Puranam 2009), the boundary decisions of an organization (Jacobides and Billinger 2006), and nearly decomposable organizational systems (Simon 1962; Sanchez and Mahoney 1996).

The process view of organizational architecture delves into the architecture's characteristics as a change process. Organizational change occurs with a predetermined goal in mind, and the architectural actions associated with the goal are of critical relevance. Alfred Chandler (1962) introduced the structural composition of an organization and its reflection of its strategy. Whereas the perspective of architecture as a structure focuses on how the formally and informally expressed guidelines provide infrastructure for the work, the view of architecture as a process looks at how the organization pursues its strategic goals or other predetermined objectives. Furthermore, the organization's ability to adapt to its external environment affects performance (Burns and Stalker 1966).

Studies have devised conceptual frameworks to understand this complexity more profoundly (Miller 1986: Nadler and Tushman 1997).

The third stream looks at organizational architecture as an exercise of power. Power is required to instate structures and enact changes. Issues involving power are unavoidable, as people comprise the organizations, and power is a way to ensure that people work toward a specific goal (Daft 2013). Architecture as a structure functions as infrastructure for the execution of primary tasks and architecture as a process extends this idea by incorporating strategy, the environment, and change into a configuration or congruence. The power perspective sees architecture as a mediator among essential organizational components, such as strategy and technology (Sauer and Willcocks 2002). Furthermore, the dispersion of decision-making authority and the quality of the ultimate decisions come under scrutiny (Sah and Stiglitz 1986). A thorough presentation of the literature review on organizational architecture can be found in Appendix 1.

Although promising and operating at the very core of organization theory, organizational architecture must further solidify its footing. The concept of architecture needs to be revisited to ensure that it corresponds to the more recent forms of organizations. Whereas Daft and Lewin (1993) championed a midrange approach to the study of organizations, Greenwood and Miller (2010) identified this type of focus as one reason for the neglect of organizational design studies, instead proposing an approach that focuses on particular types of organizations in their entirety. This focus, of course, creates challenges concerning data collection and commitment and is thus very demanding. As the review shows, architecture as a process has been a popular perspective among scholars, which has been to the detriment of the other streams. Rather than focusing on change and the process of architecture, studies need to steer toward the structure and power perspectives of organizational architecture. The various emerging forms of organizations offer new views on how to structure an organization as well as on what manifestations of power organizations present. In modern, dynamic environments, organizational architecture is the final source of enduring competitive advantage (Nadler and Tushman 1997).

3.3.1 Organizational architecture as a structure

As per the definition by Nadler and Tushman (1997), structure in the current context incorporates both formal and informal structures. Herbert Simon's (1962) influential work on the architecture of complex systems provides a template for organizational architecture as a structure. His notions of hierarchy and nearly decomposable systems paved the way for subsequent studies in organizational architecture, especially in the field of modularity. Hierarchy refers to the internal composition of an organization, in which components belong to interrelated and hierarchically structured subsystems (Simon 1962). Nearly decomposable systems are comprised of subsystems characterized by weak but noticeable interactions among each other. Interactions within the subsystems are strong; hence, they are characterized as nearly decomposable systems. Simon (1962) also

hinted at the informal characteristics of formal organizations, which will be discussed in a later section. The structural perspective of organizational architecture is divided into formal and informal structures in accordance with the relevant literature.

Table 4   Samples of architecture as a structure

Architecture as a structure				
Formal			Informal	
Author(s)	Illustrative quotes	Author(s)	Illustrative quotes	
Sanchez and Mahoney (1996)	"Embedding coordination in fully specified and standardized component interfaces can reduce the need for much overt exercise of managerial authority across the interfaces of organizational units developing components, thereby reducing the intensity and complexity of a firm's managerial task in product development and giving it greater flexibility to take on a larger number and/or greater variety of product creation projects." p. 73	Galunic and Eisenhardt (2001)	"In particular, we emphasize a view of the corporation as a social community, where dynamic capabilities are based on communal imperatives (such as encouraging the weak, rewarding the loyal, adhering to conceptions of fairness even while tolerating competition and conflict, and rescuing the distressed) rather than on purely economic reasoning (such as optimizing the technical fit between markets and resources to ensure rent maximization) (cf. Goold, Campbell, and Alexander, 1994)." p. 1229	
Ethiraj and Levinthal (2004b)	"In terms of the chicken-and-egg dilemma that Simon posed, our analysis suggests that the underlying structure of complexity is an important arbiter of the success of human design efforts. Structures that are non-hierarchical and tightly coupled do not easily lend themselves to effective analysis and design efforts, while structures that are hierarchical (or if not hierarchical, loosely coupled) are amenable to boundedly rational design efforts. Even for non-hierarchical and tightly coupled structures, the product of design efforts is still better than random designs." p. 430	Gulati and Puranam (2009)	"Our study adds crucial texture to this general insight: the informal organization can enhance the effectiveness of the formal organization either by supplementing it—in effect acting as "the last mile" that connects the formal organization to employee actions—or by compensating for it, by motivating behaviors that are valuable but not adequately emphasized by the formal organization." p. 432	

TABLE 4 (continues)

Jacobides (2007)	"Organizational structure provides the frames through which individuals see their world. Thus, the way each organization is structured shapes an ecology of different, distinct frames that exist at the level of the organizational subunit. Organizational structure also affects organizational action through two distinct channels. First, it provides the templates on which SOPs and routines rest. Second, it determines which individuals participate in particular decision-making processes, and thus to what extent their views shape the organization's actions." p. 457	Soda and Zaheer (2012)	"The finding of a positive performance effect of consistency between the authority network and the informal advice and information network supports our logic that when hierarchically ordered coordination is involved, overlapping networks create value. We see this as pointing to the gain from the reinforcement or alignment of organizational elements. It suggests that when coordination needs are relatively straightforward, as in the one-way transmission of authority in a hierarchical structure, it is best to provide consistent, reinforcing signals to employees." p. 766
Dervitsiotis (2008)	"An organization's architecture specifies the business processes that form the building blocks of its key parts and relationships, coupled with assignment of accountability to each other for desirable outcomes. In addition to the architecture, the organizational design also includes the business model, which specifies the way leadership has chosen to conduct its business." p. 710	Fjeldstad et al. (2012)	"In this article, we develop the actor-oriented architectural scheme and argue that it better explains how newer organizational forms are controlled and coordinated. In actor-oriented organizations, efficiency and effectiveness in the interaction among actors increase by way of actor capabilities and values, commons, protocols, processes, and infrastructures." p. 735

3.3.1.1 Formal structures in organizational architecture

Organizational structure includes the internal activities that transform inputs into outputs (Mintzberg 1980; Scott and Davis 2007; Daft 2013), boiling down to how the organization brings its products or services to fruition. This architecture deals with the efficiency of the organization and how it orchestrates the transformation of inputs into outputs. Efficiency refers to the number of resources an organization uses to reach its objectives (Daft 2013). Research focusing purely on formal structures, the formal allocation of work roles and activities, is an established stream of organization studies. Additionally, administrative systems employed to integrate and control the aforementioned activities are also structural components (Mintzberg 1980). Alliances between organizations also involve architectural concerns: The questions of who does what and who gets what are often resolved through the hierarchical organization (Gulati and Singh 1998). Furthermore, researchers have found that the

differences between temporal and sequential interdependencies require different solutions. The concept of architecture as a structure functions as a continuation of studies on organizational structures. Furthermore, the formal organizational architecture includes aspects considered more bureaucratic, such as functional groupings, manuals, the division of labor, and standard operating procedures. Formal organization is seen as a permanent fixture in any organization, as it encapsulates all prior knowledge and experience within it. Moreover, formal organization remains even after employees change or leave.

The division of labor can minimize duplicated efforts and thus strengthen efficiency (Ethiraj and Levinthal 2004b), and embedded coordination is one method of assuring preferred behavior among organizational component. Embedded coordination is taken from modular product design. Embedded coordination extends the idea of decomposition to include organizational components by connecting them via standardized interfaces (Sanchez and Mahoney 1996). This connection, in turn, enables a reduction in managerial oversight and increased flexibility for units. Especially during times of organizational change and transformation, the arrangement of organizational components along functional lines and the supporting of those with information linkages play a crucial role (Barbaroux 2011).

Evaluations and rewards are also paramount in the formal architectures (Brickley et al. 1995). Traditionally, the level of formalization and bureaucratic procedures have been thought to increase as the size of the organization itself increases. Procedures, guidelines, and manuals are put in place to control a large number of employees in order to ensure that all employees work toward the desired goal. While this description is accurate, formalization is not a phenomenon restricted solely to larger organizations. Smaller and younger organizations are often more autonomous and flexible, since mere survival in the marketplace requires fast adaptation to changing conditions. Nevertheless, formalization can be exploited to generate an infrastructure that supports more autonomous activities. Somewhat looser guidelines and procedures create a playing field with clear boundaries, and employees can maneuver as they wish within the pre-established confines of the field. Naturally, the implementation of rewards and incentives is of particular importance in formalizing suitable behavior among employees and clearly articulated, and transparent incentive systems are an effective means of encouraging desired activities (Smith 2001).

3.3.1.2   Informal structures in organizational architecture

The following quote by Burns and Stalker (1966:258) offers a poignant point regarding the informal aspects of organizations: "Every firm is a community, with its own particular flavor, its own social structure, its own style of conduct." The social aspects of organizations, also known as the informal organization, deal with networks (Scott and Davis 2007), communities (Galunic and Eisenhardt 2001), and culture (Nadler and Tushman 1999). The social stream of organizational architecture is profoundly concerned with informal organization,

which includes the cultural aspects that stem from human interaction within organizations. Emphasis is placed on social dynamics (Galunic and Eisenhardt 2001), informal organization (Gulati and Puranam 2009), and networks (Soda and Zaheer 2012). Whereas formal organization delineates tangible rules and descriptions for the execution of tasks, informal organization deals with abstract guidelines that have become the accepted way of performing activities. Other manifestations of informal architecture are reputation, brands, and the customer base. These aspects become increasingly important when operating in a network of organizations (Gulati et al. 2012). As previously mentioned, the formal organization is an enduring fixture that provides stability for workers to execute their assigned tasks. Although official guidelines would provide clear directions on how to solve a particular problem, prior experience with an alternative approach can easily overpower official mandates.

A regrettably low number of studies have championed the complementary effects of interaction between formal and informal organizations (Gulati and Puranam 2009; Soda and Zaheer 2012). The realized effects of reorganization in both formal and informal organization need to be considered. Empirical support for this conclusion can be found in Gulati and Puranam's 2009 study on the restructuring of Cisco Systems. After studying the reorganization of the company, they developed the notion of compensatory fit. This type of fit between formal and informal organization occurs when the two organizational types compensate each other, which is achieved by encouraging different but collectively valued behaviors among employees (Gulati and Puranam 2009). These so-called dualities describe the dual objectives of organizations that are together attractive but exhibit organizational dissonance. Gulati and Puranam (2009) discovered that colleagues who, prior to the restructuring, were in the same unit but who were assigned to different units in the restructuring process maintained their ties with each other. The deep-rooted culture of customer service at Cisco continued after the changes in the formal organization. After the restructuring, the formal organization emphasized the cost-effectiveness of technology development. The strength of the informal organization allowed the company to maintain sensitivity toward the customer (Gulati and Puranam 2009). Furthermore, the existence of strong informal organization is a prerequisite for compensatory fit. In Cisco's case, the informal structures compensated the emergent shortcomings of the formal organization. Employees engaged in activities that extended beyond their mandated tasks but were regarded as essential to attain customer satisfaction. Furthermore, through the compensatory fit between the formal and informal organization, Cisco was able to pursue the dual goals of technology development in a cost-effective manner and customer advocacy (Gulati and Puranam 2009).

Studies on informal organization have taken a closer look at the emerging aspects of organizational arrangements. Organizational culture, internal networks, and dynamics are extensively studied, and in the current context, they are not considered in isolation but together with the overall organization and often with the formal structures of organizational architecture. According to

Galunic and Eisenhardt (2001), earlier approaches in complex and adaptive systems have ignored the social and even communal aspects of organizations. Members of an organization form a network that consists of patterns of interactions (Soda and Zaheer 2012). Traditionally, organizations have been controlled and coordinated by mechanisms based on hierarchy and control, and variance between organizational architectures determined by the number of units, levels, and superiors (Fjeldstad et al. 2012). With the advent of knowledge-based economies, organizational forms have had to adapt. Rigid and stable constructs do not champion fast responses and adaptation, and thus, novel architectures are feverishly steering away from hierarchical control and coordination mechanisms. Increased collaboration, networks, and communities of organizations have the potential to overpower centralized control (Galunic and Eisenhardt 2001). Architectures that rely on principles and not specific structural alternatives provide platforms on which organizations can share resources, exchange ideas, and communicate directly (Ciborra 1996; Fjeldstad et al. 2012). Concerning action, personal networks often supersede formal structures (Ciborra 1996).

3.3.2 Organizational architecture as a process

The process view of organizational architecture focuses on an organization's ability to function in a manner that serves its purpose or goals. The foundations of the stream can be traced back to a statement by Chandler (1962) that structure follows strategy. The appeal of Chandler's seminal work has resonated in the proliferation of studies concentrating on the relationship of architecture with strategic endeavors and goals. Organizational architecture as a process looks at organizations from the perspective of effectiveness and change. This stream has its foundations in the classic works in strategic management and organization design, such as contingency theory (Burns and Stalker 1966; Lawrence and Lorsch 1967b) and the relationship between structure and performance (Pennings 1975; Caves 1980). Perhaps the continued popularity of studies in this stream is the result of the tradition and continued resonance of Chandler's tenets. Furthermore, a tremendous amount of practical relevance lies in uncovering the mechanisms and connections between architecture and strategy. Issues related to organizational change are present in this stream, such as the transition between two types of architectures (Agarwal et al. 2012).

It is acknowledged that for an organization to be competitive and successful, it needs to pursue new opportunities vigorously and leverage its current capabilities (Miles et al. 1978; Brown 1991; Nadler et al. 1992; Nadler and Tushman 1997; O'Reilly and Tushman 2004). Many studies have thus been geared toward examining the exploitation and exploration of organizations and the choice of architectural elements supporting these activities (Burns and Stalker 1966; Siggelkow and Levinthal 2003; Boumgarden et al. 2012; Csaszar 2013). Whereas Alfred Chandler (1962) viewed organizational structure in divisions and departments, Burns and Stalker (1966) viewed structures as either mechanistic or organic. Mechanistic systems are relevant when the conditions are

stable, as the specialization of tasks, precisely defined rights and responsibilities, hierarchical authority, and communication relationships characterize the system (Burns and Stalker 1966). Organic systems, on the other hand, are most suitable when the conditions fluctuate and problems constantly arise. Key characteristics of organic systems include continually redefined tasks, network-like authority and communication, and specialized knowledge and experience contributing to broader tasks (Burns and Stalker 1966). The effectiveness of these structures depends on their consistency with the external environment (Burns and Stalker 1966). In terms of exploration and exploitation, organic systems enable the former, whereas mechanistic systems are more suitable for the latter (Burns and Stalker 1966; Boumgarden et al. 2012).

Architecture designed with the purpose of attaining both exploration and exploitation is often doomed to fail due to resulting inconsistencies within it (Boumgarden et al. 2012). Ambidexterity, or the separation of exploitative and exploratory functions and their integration at the managerial level, is one proposed solution to address this dilemma (O´Reilly and Tushman 2004). The units devoted to exploring new opportunities are kept separate from the traditional exploitative units. This arrangement enables the creation of a multitude of different structures, processes, and cultures. The resulting separation is administered by maintaining strong links at the executive level (O´Reilly and Tushman 2004). Long-term competitiveness is achieved by maintaining various degrees and types of innovations. When comparing different designs and their effectiveness in pursuing different degrees of innovation, the ambidextrous organization was found to outperform the other types (functional, cross-functional, unsupported team). An alternative to the ambidexterity approach is vacillation. According to this approach, high intensities of both exploration and exploitation are achieved by fluctuating between structures that enable either exploration or exploitation (Boumgarden et al. 2012). The fluctuation is characterized as being temporal and sequential (Siggelkow and Levinthal 2003; Boumgarden et al. 2012). Whereas ambidexterity pursues simultaneous exploration and exploitation through separation and distinct designs, vacillation aims to achieve the same outcome by manipulating structures temporally and sequentially. Temporary restructuring and sequential reintegration is an underdeveloped area in the literature (Siggelkow and Levinthal 2003).

In their longitudinal analysis of General Electric's organizational architectures between 1951 and 2001, Joseph and Ocasio (2012) study how managerial attention within an organization is distributed via the organization's structures. Joseph and Ocasio (2012) study governance channels (e.g., strategic reviews, audits, personnel reviews, budget forecasts) that coordinate the distribution of attention and, in turn, influence strategic adaptation. The authors draw from the information processing perspective (Tushman and Nadler 1978), but rather than focusing on the organization's capacity for information processing, they examine whether and how information is attended to at particular places and times. In the period of their study, Joseph and Ocasio (2012)

identified four individual architectures: decentralization, corporate planning, strategic planning, and the operating system. Despite possessing an elaborate architecture, certain periods in GE's history were characterized by a lack of coordination between corporate and business units. Furthermore, an architecture that is both differentiated and integrated is achieved by temporally coupling the specialized, cross-level channels (Joseph and Ocasio 2012).

Table 5   Samples of architecture as a process

Architecture as a process	
Author(s)	Illustrative quotes
Lawrence and Lorsch (1967b)	"In this study we have found an important relationship among external variables (the certainty and diversity of the environment, and the strategic environmental issue), internal states of differentiation and integration, and the process of conflict resolution. If an organization's internal states and processes are consistent with external demands, the findings of this study suggest that it will be effective in dealing with its environment." p. 157
Levinthal (1997)	"Tightly coupled organizations can not engage in exploration without foregoing the benefits of exploitation. For a tightly coupled organization, efforts at search and experimentation tend to negate the advantages and wisdom associated with established policies and thereby place the organization at risk of failure." p. 949
O'Reilly and Tushman (2004)	"At a theoretical level, it's easy to explain why ambidextrous organizations would outperform other organizational types. The structure of ambidextrous organizations allows cross-fertilization among units while preventing cross-contamination. The tight coordination at the managerial level enables the fledgling units to share important resources from the traditional units—cash, talent, expertise, customers, and so on—but the organizational separation ensures that the new units' distinctive processes, structures, and cultures are not overwhelmed by the forces of 'business as usual.'" p. 77
Joseph and Ocasio (2012)	"In essence, we find that the organizational architecture will be reflected in adaptive behavior insofar as it is first reflected in attentional integration and differentiation. Our key finding is that cross-level channels that are both cross-functional and specialized are particularly beneficial for focusing attention and, in turn, coordinating different functions that facilitate successful strategic adaptation." p. 654

3.3.3   Organizational architecture as power

The last stream of organizational architecture, which I define as power, is a manifestation of the features from the previous categorizations of organizational architecture. Issues of power are unavoidable when a congregation of individuals collaborates toward a predetermined goal. By exercising power, people can achieve desired outcomes (Daft 2013). A powerful individual can secure a favorable position more easily than an individual without power. The absence of power within an organization would not alter the organization's identity but would severely compromise its viability and utility. The power view of

organizational architecture includes highly essential organizational aspects that are not directly involved in the input–output transformation process but do have an effect on it. These aspects include decision-making, hierarchy, and knowledge, among others. Power cannot be entirely separated from any organization, and it can originate from formal positions or personal characteristics.

Organizational decision-making is one of the most enduring topics in organization studies. Sah and Stiglitz (1986) paved the way for future work with their model on hierarchies and polyarchies and their respective decisions. A hierarchy refers to a system in which the ability to make decisions is dominated by one or a few individuals, while other members provide support. A polyarchy, on the other hand, is a system in which several individuals can make decisions independently of each other. In both cases, errors in omissions and commissions can have different effects in different organizations Sah and Stiglitz 1986). Confirmation of these findings has been provided by other authors (Christensen and Knudsen 2010; Csaszar 2012; Csaszar 2013). Decision-making and the requirements that it places on information are fundamental in organizational architecture (Csaszar 2012). Organizations emerge to function as integrative and coordinative vessels for knowledge and talent as well as to compensate for the inadequacies of human capabilities (Garicano and Wu 2012).

Mendelson (2000) formulates an organizational architecture for, as he calls it, the information age, which is characterized by fast-paced and information-heavy environments. In the modern age, vastly different demands are placed on organizations, and thus, their architecture should be constructed accordingly. Organizational architecture for the information age is characterized by awareness, dissemination, and control of information, and also includes a decision-making structure that incorporates the required knowledge and incentives (Mendelson 2000). Furthermore, the architecture must extend beyond the organization's boundaries to the relevant external partners (Mendelson 2000). This form of architecture relies heavily on the utility of information and the subsequent decision-making capabilities of the organization (Mendelson 2000). What this view neglects, however, is the human element. The existence of formal structures for the handling and dissemination of information and decision-making does not guarantee effective information processing among individuals. As previously mentioned, formal structures and mechanisms can steer the behavior of organizational members in a preferred direction, but ultimately, the processing of information is executed by individuals. Structures provide the template for the process, and if they persist over time, they can mold the processing capabilities of the individuals. Nevertheless, as is the case in modern organizations, internal and external turbulences require adaptation. Therefore, persistent structures are few and far between (Turner and Makhija 2012).

Table 6   Samples of architecture as power

Architecture as power	
Author(s)	Illustrative quotes
Tushman and Nadler (1978)	"A subunit performing a task which is fairly autonomous has little need for information from or collaboration with other areas. If the subunit's task is changed so that it is dependent upon the work of other units, the need for joint coordination and effective problem-solving increases, and the subunit must cope with increased amounts of work related uncertainty." p. 616
Sah and Stiglitz (1986)	"The architecture (like that of a computer or electrical system) describes how the constituent decision-making units are arranged together in a system, how the decision-making authority and ability is distributed within a system, who gathers what information, and who communicates what with whom." p. 716
Brown and Duguid (1998)	"Organizational translators are individuals who can frame the interests of one community in terms of another community's perspective. The role of translator can be quite complex and the translator must be sufficiently knowledgeable about the work of both communities to be able to translate. The powerful position of translator requires trust, since translation is rarely entirely innocent (translators may favor the interests of one group over another deliberately or inadvertently)." p. 103
Garicano and Wu (2012)	"The division of labor allows an organization to acquire more knowledge than when communication is absent. This is precisely because more intensive use of knowledge increases the marginal benefits of acquiring knowledge. Moreover, the organizational knowledge and the degree of specialization increase with each other. This reinforcement effect is due to the implicit complementarities between each member's knowledge: the presence of other members' knowledge increases the value of one's knowledge." p. 1386

Power as a resource in an organization can be a divisive issue. Power can become a goal in itself (Simon 1997). Initially, it can be a tool to reach personal goals or even advance organizational endeavors. The attainment of power for its perceived value can affect both those who manage and those who are managed (Simon 1997). Power entangles with resistance in complicated ways (Fleming and Spicer 2008). Resistance in an organization can be easily interpreted as being opposition toward authority. The absence of opposition does not imply conformity or acceptance (Fleming and Spicer 2008). The status quo within any organization will have its proponents and opponents. The resistance can also manifest in actions like irony and complaining (Fleming and Spicer 2008). Power relations should be viewed as an ongoing interaction between the different organizational levels (Fleming and Spicer 2008). Resistance can also be embraced as it can be a component in creating a successful change effort in an organization (Thomas and Hardy 2011). Those affected by change can present their counter-offer to those enacting the change and thus creating an iterative process of organizational change (Thomas and Hardy 2011). The willingness of the change proponents to accept the counter-offer or counter the counter-offer dictates how and if the process will continue (Thomas and Hardy 2011).

3.3.3.1 Information processing

A prevailing theme in organizational design and architecture is information and its effective dissemination. As a primary resource in business, information is a vessel for power (Daft 2013). Organizations can make better decisions than single individuals due to an individual's limitations in information processing capabilities (Sah and Stiglitz 1986). The developments in information technology have created alternative solutions to the traditional hierarchy as a tool for information processing (Nadler 1992). Operating under the assumption that organizations are social systems that process information to deal with uncertainty, we also assume that the environment has an effect on the organization and that it is composed of subunits (Tushman and Nadler 1978). The processing of information consists of gathering information, interpreting it, and synthesizing it for decision-making (Tushman and Nadler 1978). Therefore, for a decision-maker to arrive at rational and educated decisions, the right information needs to reach the decision-maker in the proper form. According to Tushman and Nadler (1978), information processing can be manipulated by altering the structures and mechanisms of an organization. In order to do so, the organization must have objectives to help it achieve its goals. It can aim to reduce the amount of information necessary for the coordination of its activities (Tushman and Nadler 1978); alternatively, it can increase its organizational capacity for information processing (Galbraith 1973). Galbraith (1973, 1974) proposes these design strategies and the methods for the achievement of both. Changes in the environment lead to difficulties in responding to changes through the design variables (Tushman and Nadler 1978). Furthermore, altering design variables is a demanding task.

An essential factor when designing the information processing architecture of an organization is task uncertainty. This uncertainty resides in the difference between information that has already been possessed and information that is necessary for task completion (Galbraith 1973). The nature of information is also an influencing factor: If the information is easily quantifiable or formalized, then formal communication systems are effective (Tushman and Nadler 1978). On the other hand, if the information is not easily quantified, as in informal structures and communication, then lateral relations are more suitable than formalized communication (Galbraith 1973).

One design strategy geared toward increasing an organization's capacity to process information is the creation of lateral relations (Galbraith 1973; Galbraith 1974). The underlying premise of this strategy is the development of decision processes that are lateral rather than vertical and that cut authority lines, enabling the decision-making to take place where the information exists (Galbraith 1973; Galbraith 1974). Placing decision-making power in the lower levels, where the relevant information resides, reduces the number of decisions referred upward and thus frees the higher managerial levels from attending to these decisions. These decision-making processes include direct contact, liaison roles, task forces, teams, integrating roles, and managerial linking roles (Galbraith 1973; 1974).

Direct contact refers to direct communication among individuals at the same level (Galbraith 1973; 1974). When these types of communication patterns become more frequent, the creation of a liaison role is beneficial to streamline the communication among the respective departments. As the number of involved departments increases, it becomes more efficient to create a task force that crosses authority lines horizontally (Galbraith 1973; 1974). As the decisions deliberated by the task force become more permanent, teams are formed to handle them. Teams might experience difficulties in assigning leadership, and thus, an integrating role can be incorporated. This role might involve some amount of formal power, as it reports to a higher level (Galbraith 1973; 1974). Increased task uncertainty requires increased formal power in the form of a managerial linking role. This role coordinates the joint decisions occurring at lower levels (Galbraith 1973). Some of the aforementioned processes emerge naturally and form so-called informal structures. If they do not emerge spontaneously, however, designing them is also possible (Galbraith 1973). The ultimate form of a lateral process is the matrix organization (Galbraith 1973; Galbraith 1974).

What the traditional information processing perspective lacks, however, is the human element. Turner and Makhija (2012) complemented the traditional information processing view by incorporating the role of individuals into it. They found that choices in architecture affect individuals' information processing and problem-solving capabilities (Turner and Makhija 2012). Ultimately, the capacity of the individuals determines the information processing capacity of the organization; structures and mechanisms merely guide individuals' behavior in the preferred direction (Turner and Makhija 2012). As organizations must operate under conditions characterized by uncertainty, it is of critical importance that their information processing capacity is high. The level of uncertainty associated with a task correlates with its information processing requirements (Galbraith 1973). Therefore, the design of the organization must support this correlation (Galbraith 1974). Continued exposure to a particular type of organizational design will increase the information processing proficiency of individuals (Turner and Makhija 2012).

Lateral organizational capability, as presented by Galbraith (1994), is a mechanism meant to increase decentralization within an organization. Decentralization is achieved by recreating a miniature version of the organization for the specific issue at hand (Galbraith 1994). All relevant and concerned parties of the organization appoint a member to take part in resolving the issue (Galbraith 1994). Once all stakeholder units have appointed a member, a group is formed, and it possesses formal authority over the issue at hand. The ultimate measure of an effective laterally formed group is its ability to unite, engage in problem-solving, decide on a course of action, communicate results, and execute them (Galbraith 1994). This form of organization is akin to Grabher's (2004) notion of temporary architecture, which describes the layers of project-based learning. This architecture is composed of a core team, a firm, an epistemic community, and personal networks (Grabher 2004). Learning that occurs within projects varies among these different compositions. The major difference

between a lateral organization and a temporary architecture is temporal: A lateral organization has the potential to be sustainable (Galbraith 1994), whereas temporary architecture is, by default, temporary. Thus, the risk of losing knowledge accumulated during a project completed under temporary architecture is a major concern (Grabher 2004). The temporary nature of this approach does not fully capture the benefits of lateral organization, as it can develop into a competitively advantageous capability. The benefits of a lateral organization reside in its ability to enable effective decision-making and enhance the organization's division of labor (Galbraith 1994). Lateral organization enhances organizational decision-making by freeing the management to engage in other activities (Galbraith 1994), which, in turn, helps develop the division of labor, as the managerial focus is on more strategic issues and the middle-management level can focus on issues closer to the product and customer levels (Galbraith 1994). This form of division of labor, in which the middle levels of the organization can also influence matters, is also an optimal condition under which new strategies (Mintzberg 1978; Mintzberg and Waters 1985) and champions (Mantere 2005) can emerge.

Prior studies on information processing have had an underlying assumption regarding organizational tasks. Organizations are characterized as open systems dependent on their external environment. As has been established, high task uncertainty requires high information processing. If we assume that formal structures are created to induce organizational members to perform certain tasks, then the formal structures must also distribute attention. However, how informal structures affect information processing work remains unclear. Furthermore, different tasks have differing degrees of uncertainty. Variance in the amount of attention paid to different tasks has remained in the background of previous studies, and this notion of fluid participation is one of the general properties often associated with organized anarchies. Universities are a popular example of this type of organizational characterization (Cohen et al. 1972).

3.4 Organizational architecture in higher education

The following section looks at prior studies that have discussed organizational architecture or organizational structures in higher education organizations (specifically, universities). Universities are relatively easy to label as learning organizations. These organizations harbor and develop knowledge but, according to Garvin (1993), are surprisingly incapable of using that knowledge to develop their operations. He goes on to distinguish six main actions that learning organizations engage in: adopting a systematic approach to problem-solving, learning from personal experience, learning from others' experiences, experimenting with novel approaches, disseminating knowledge across the entire organization efficiently, and measuring learning (Garvin 1993). If the university in question does not engage in these actions, then another approach must be considered in its analysis. Universities warrant a fruitful platform to

study architectural aspects as they have complex goals. The starting point is the traditional views of education organizations.

3.4.1 Organized anarchies and coupled systems

Universities are treated as examples of organized anarchies (Cohen et al. 1972). The defining characteristics of these types of organizations are problematic preferences, unclear technology, and fluid participation (Cohen et al. 1972). The variety of preferences within an organization is vast, which inhibits the formation of a well-defined set of preferences. Therefore, operating in accordance with predefined preferences is challenging, and thus, preferences are formed primarily through action (Cohen et al. 1972). The connotations of the next characteristic of organized anarchy—unclear technology—extend to a broader view of the organization's internal processes. The internal technology, or the processes that enable the execution of tasks, is not clear to the members of the organization (Cohen et al. 1972). A lack of transparency and information leads to a learning-by-doing approach, and a prevailing sense of necessity dictates actions (Cohen et al. 1972). The notion of fluid participation also implies relevance to the division of labor and the work to be accomplished. This type of participation refers to the variations in time and effort that members of an organization invest in a particular task (Cohen et al. 1972). Organizational members are restricted in terms of the amount of time they can devote to a task. Furthermore, this affects the amount of attention placed on relevant issues (Cohen et al. 1972). In a recent article, David Teece (2018) stated that in the current climate, the organized anarchy perspective is no longer valid: The scarcity of resources, technological advancements, and versatile student demographics necessitate a more strategic approach to management. Reactionary actions must be replaced by proactive behavior (Teece 2018). The older management models are not effective anymore, and thus, novel models (for example, the dynamic capabilities framework [Teece 2018]) are needed to cope with change.

One of the most well-known characterizations of educational organizations is Karl Weick's notion of loosely coupled systems (Weick 1976). Loose coupling contradicts the more traditional view of organizations, which sees the actions of an organization as a series of rational plans and implementations. The reality is quite the contrary, as daily activities may not necessarily be explained through rational assumptions (Weick 1976). The actions carried out may not resemble the intended actions. The term loose coupling refers to the responsive nature between coupled events that also retain their identities (Weick 1976). This type of coupling entails connotations of temporary properties alongside the capacity for disintegration.

Lutz (1982) criticized the notion of loose coupling as attempting to serve as an all-encompassing explanation of organizational behavior. When a system faces an action or a novel situation that does not interrupt the prevailing state of affairs (i.e., the status quo), then tightly coupled elements are more convenient than loosely coupled ones (Lutz 1982). After analyzing a few episodes within universities, Lutz (1982) presents conclusions that favor seeing behavior within

universities as tightly coupled activities. Administrators in academia are seen as masters of formal structures and outsiders to informal structures, which implies that their capabilities to manipulate formal structures does not affect the emerging structures of the organization. As decisions are also made within informal structures, the administration's span of control is severely limited. Tight coupling favors bureaucracy, whereas loose coupling is more favorable in terms of scholarship and academic freedom (Lutz 1982). This dichotomy has long been a key issue among interested universities and scholars.

3.4.2 Organization of academic work

In one of the quintessential books on universities and their structures, Peter Blau (1973) discusses universities in relation to other forms of organizations found in government and business. He also focuses on the notion of bureaucracy within universities and how it affects academic work. Roughly, the organization of academic work deals with the relationship between scholarship and bureaucracy. Scholarship requires flexibility and freedom to allow the imagination to explore new avenues (Blau 1973). Bureaucracy, on the other hand, relies on protocols and procedures to control the organization and its task performance (Blau 1973). This dichotomy is a dilemma that universities must address. Universities tend to be large institutions that require complex administrative structures, and they are institutions in which research and teaching are conducted. These two activities require freedom and flexibility (Blau 1973). Universities do exhibit characteristics of a bureaucratic organization: There is a division of labor, an administrative hierarchy, and a clerical office (Blau 1973). Division of labor refers to the number of departments within a university; an explicit division of labor refers to the specialization of the departments. Subdividing work involves segregating tasks into consistent functions ranging from highly routine functions to more complex duties that require specialized expertise (Blau 1973).

The notion of specialization can easily be connected to the university context. As research within a particular field progresses, scholars naturally become interested in subtopics within the field. Often, scholars are not general practitioners of a field but rather experts of a certain topic (Blau 1973). For scholars to be able to proceed into a specialized field, universities must be able to adapt to possible changes structurally. This structural flexibility is strengthened by universities' decentralization, which is often considered a feature of the best universities (Blau 1973). Furthermore, decentralization refers to the allocation of decision-making authority to the faculties rather than the administration. In many organizations, decentralization and the deconstruction of a broad task into smaller subtasks serve as the foundation for integration (Blau 1973). Universities face a more a complex situation, however, as task specialization leads to highly segregated tasks that are not easily integrated. Scholars can maintain the autonomy of their own work, and this independence is protected. One of the most valued goals of universities is the preservation of academic freedom (Gross 1968).

The personal orientation of the research and teaching staff has a major impact on role performance and the distribution of attention. Blau (1973) points out that the competing demands of research and teaching place serious constraints on the time and effort of the staff. Emphasizing one over the other results in an uneven distribution of attention across the tasks, thereby affecting performance (Blau 1973). Depending on the university's strategic emphasis, formal incentives can potentially be employed to steer individual behavior in the preferred direction. The dilemma of the competing demands is also present at the organizational level, an emphasis on one task results in a decreased emphasis on the other (Blau 1973). Generally speaking, research is regarded as having stronger academic value than teaching. This distinction has even been formalized, as researchers receive better salaries and more possibilities for advancement than teachers. Moreover, one of Blau's (1973) conclusions posits that increased bureaucracy harms teaching more than research. Research can be conducted somewhat separately from the administrative apparatus, whereas teaching is entirely immersed in it (Blau 1973). Furthermore, research is considered more prestigious than teaching. Therefore, the most powerful members of the research and teaching staff tend to be researchers, and thus, opposing increased bureaucracy may not be a high priority for them (Blau 1973). Blau's work must be considered in its context, as the empirical data in his book consisted of American liberal arts colleges and universities in the early 1960s. Nevertheless, many of his findings still resonate today.

Another feature that distinguishes universities from other organizations is that the staff comprises the operating personnel, who are not hierarchically organized with the traditional distinction between supervisors and subordinates. As universities tend to be decentralized, employees with little or no training whatsoever may be placed in charge of complex projects (Hayter and Cahoy 2018). There is also a clear distinction in the tasks assigned to bureaucrats and those assigned to professionals, or, in the case of universities, administrators and research and teaching staff. The former is in charge of a plethora of activities considered support services, whereas the latter maintains professional autonomy regarding teaching materials and research methods (Blau 1973). There are instances in which the responsibilities, or jurisdictions, become entangled. Blau (1973) uses the appointment of research and teaching staff as an example of where budgetary requirements and professional judgment coincide. Another illustrative example of coinciding jurisdictions was prevalent in a study by Nyhagen and Baschung (2013), which is discussed in a later section.

3.4.3 Architecture of a learning organization

Dill (1999) extended Garvin's (1993) notion of learning organizations into universities. Dill aims to define the organizational attributes of an academic learning organization, using the notion of learning organizations as the framework for the analysis of the structure and governance in academia (Dill 1999). Universities are facing increasing demands for academic accountability in relation to broader requirements for quality assurance. The instated mechanisms

for ensuring academic accountability in various universities tend to revolve around similar premises. University behavior is characterized as follows: the assessment of academic quality by professors, the presence of processes to disseminate knowledge relevant to academic quality, and the utilization of this knowledge for the benefit of teaching and learning (Dill 1999). Dill (1999) also suggests that these assumptions of university behavior presuppose the potential of universities to develop into learning organizations. Dill's (1999) line of thinking emphasizes the importance of organizational architecture in learning organizations and especially in universities' adaptation to changing environments. Dill (1999) borrows the concept of architecture defined by Henderson and Clark (1990), they state that there are two types of knowledge: component and architectural. The former is the knowledge of the individual core design concepts and their implementation in a given component, whereas the latter refers to knowledge regarding how the individual components are integrated to form a coherent entity (Henderson and Clark 1990). The view of the architecture of Henderson and Clark (1990) is derived from the idea of product architecture, whereby the architecture is a representation of how the components of the product work together. Dill (1999) uses Garvin's (1993) actions of a learning organization to analyze a set of universities and pinpoint the emerging architecture of learning organizations in the academic setting. The mechanisms of the architecture are culture, structure, and processes. In Dill's 1999 study, several universities aimed to develop a culture that embraced systematic problem solving, but the approaches towards creating this type of culture were reliant on formal structures, with formal training on quality assurance techniques being initiated. Furthermore, an increase in self-evaluation–based on data was noted (Dill 1999). A further important observation by Dill (1999) was the role of organizational structures in systematic problem-solving: Faculty members needed to be able to coordinate these processes (Dill 1999). This notion of allowing organizational members to develop new initiatives was also mentioned by Mintzberg and Waters (1985). Traditionally, collaboration on the development of academic programs has been hindered by specialization and professionalism, and the cohesiveness of study programs was achieved by restructuring and through the initiation of committees and schools. Curriculum coordination was also achieved in some studied universities by appointing a curriculum director with a similar task as the committees: to monitor the cohesion of the curriculum (Dill 1999).

The study also uncovered elements of architecture specific to universities. These elements were a culture of evidence, improved coordination of teaching units, learning from others, university-wide coordination of learning, and knowledge transfer (Dill 1999). A culture of evidence implies the inclusion of evidence-based approaches in academic problem-solving. The academic culture related to the core processes of teaching and learning needs to rely on actual evidence, and there must be a shared understanding of this culture (Dill 1999). Improved coordination of teaching is essential for the improvement of the teaching and learning processes. Enhanced communication is achieved through

effective organizational structures for knowledge integration (Dill 1999). In the studied cases, this communication was achieved, to a degree, by instating coordinators, directors, or committees, and similar types of placements were found by Dewey and Duff (2009). The notion of coordination also extends to the university level, where structures for higher-level coordination and support are essential for systematic improvement. Examples include committees in all faculties of a university assigned to audit teaching and learning quality.

Dill's (1999) conclusions are a welcome contribution to the scarce literature on the organizational architecture of higher education organizations. His conclusions stress the importance of organizing certain processes and structures for the attainment of agreed-upon targets. The role of coordination is acknowledged at both the unit level and the managerial level. Dill's (1999) emphasis was on formal structures and processes within a university, and he referred to culture as an accepted code of conduct that is a consequence of certain formal restructuring. This reasoning leaves little to no room for the very essence of informal structures (i.e., the emergence of structures in daily operations). It is true that formal structures influence the nature of informal structures through hierarchical relationships and incentives: That is how a fundamental division of labor is achieved. Nevertheless, informal structures can emerge to override formal structures if the organizational members deem the emerging structures superior. Dill's (1999) analysis does not take into consideration the potential of emergent strategies and championing activities emanating from the operational and middle levels. As I have discussed earlier, these strategies and activities are critical for organizational development and renewal and therefore are an important inclusion in the discussion on organizational architecture.

3.4.4 New organizational structures and academic work

Roberts and Donahue (2000) write about their concern for the "McDonaldization of academia," focusing on an integral part of the ongoing attempts to rationalize higher education: the decreasing professionalism of faculty. Formal rationalization and, especially, the need for accountability of the faculty undermine the professionalism of the faculty (Roberts and Donahue 2000). The authors view formal rationalization as the antithesis to professionalism (Roberts and Donahue 2000). Furthermore, the rationalization of academia is deemed more detrimental to quality than professionalism. This is attributed to professionalism's superiority over rationalization in terms of motivating faculty (Roberts and Donahue 2000). Professions can be distinguished from occupations by six factors: mastery of specialized theory, the autonomy of work, motivation through intrinsic rewards and services to others, commitment to the profession, collegiality, and self-regulation and compliance with both ethical and professional standards (Roberts and Donahue 2000). These marks of professionalism are important for professors. Roberts and Donahue (2000) argue that bureaucracy is detrimental because of its disposition to favor the interests of the organization over the client, or in this case, the student. As was introduced earlier, structures are designed to steer the behavior of organizational members

in the preferred direction (Turner and Makhija 2012). The coordination of organizational activities is also an inescapable aspect of organizational reality. For service-providing organizations that rely on skilled workers, productivity increases as managerial oversight and control decreases (Roberts and Donahue 2000). This is in line with the marks of professionalism. Roberts and Donahue (2000) use doctors and lawyers as examples of professionals, equating higher education staff to them. I, however, posit that this simile is false. While the marks of professionalism can be attributed to all these professional groups, one significant distinction separates academic faculties from the rest: Their primary task is not to cater their customers (i.e., students). On the contrary, research and teaching staff members are measured by their track record in research. As was made clear by Blau (1973), researchers are more powerful faculty members than teachers because research is considered more esteemed than teaching. Both Blau (1973) and Roberts and Donahue (2000) point out that detrimental bureaucracy concerns teaching-oriented staff more than research-oriented staff and the proclivity of researchers to oppose bureaucracy that does not concern them greatly is minimal (Blau 1973). Roberts and Donahue (2000) also make some concessions in this direction. The lack of faculty proactivity in following professional standards is a possible cause for the McDonaldization of academia (Roberts and Donahue 2000); therefore, their logic entails a slight conundrum. Professionalism and conformity toward professional standards are offered as superior control mechanisms of academic staff. Bodies of academic staff consist of professionals in the given crafts, and these individuals are expected to always work in favor of the profession. As Roberts and Donahue (2000) point out, minimal proactivity on behalf of the faculty can have detrimental effects. The inactivity of the faculty toward professional standards counteracts the benefits of professionalism and opens the door to more formal structures and bureaucracy.

In their study on Norwegian higher education, Nyhagen and Baschung (2013) endeavored to find out whether academic work was under the influence of collectivization and specialization. Academic work in universities has seen new challenges through recent policy changes regarding university funding. Furthermore, the introduction of new management approaches in higher education has contributed to changes in the fundaments of academic work. In the higher education context, specialization is based on disciplines and functions and is characterized by interdisciplinarity, although specific disciplines within higher education still prevail. Collectivization refers to the increasing focus on publications written by several authors and expanded networks (Nyhagen and Baschung 2013). As a form of collectivization, the creation of research centers begs the question of whether formalized collectivization leads to actual collective practices. The creation of research centers and doctoral schools challenges the accepted notion of university structures, such as faculties (Nyhagen and Baschung 2013). The authors address the relationship between formal and informal organization, which they characterize as decoupled structures. The former refers to the adaptation of societally accepted institutionalized forms, whereas the latter describes activities for coordination (Nyhagen and Baschung

2013). Furthermore, Nyhagen and Baschung (2013) state that new organizational structures adopted by universities are more likely to be the result of societal demands than internal institutional norms. Nyhagen and Baschung's 2013 study is empirically based on one research center (with the status of a Center of Excellence) and two doctoral schools within one university in Norway. The authors discovered that the function of a doctoral school administrator was created to reduce the administrative burden for academics. This did not necessarily imply the creation of a new position but rather the informal distribution of the function and its related tasks among the existing staff (Nyhagen and Baschung 2013).

The findings also suggest decoupling of formal and informal activities related to the staff in the research center. Researchers in the center were formally employed in a purely research-oriented capacity (Nyhagen and Baschung 2013). The informal, or emerging, arrangements developed in a direction to include all personnel engaged in teaching, which was even more evident during times of increased demand for teaching staff. Furthermore, the research staff assumed additional responsibilities that they were not contractually obliged to take on. Thesis supervision, as well as additional teaching, was a common task for the researchers. This informal restructuring of tasks was a result of overload for some of the staff (Nyhagen and Baschung 2013). The regulations set out by the central administration of the university favored formal specialization toward pure researchers. However, the day-to-day operations and pragmatic actions superseded the regulatory policies of the central administration (Nyhagen and Baschung 2013). Therefore, the inefficiency of the formal structures was compensated for by the emerging informal structures. Furthermore, the despecialization of disciplines, or interdisciplinarity, also fell short. One possible reason for this is a conflict of goals among the participating parties. Ultimately, the research centers and doctoral schools changed their structures and altered their activities, which the authors see as solidifying the importance associated with research and teaching (Nyhagen and Baschung 2013). The findings suggest that the collectivization of doctoral education can only be achieved if academics consider it important. Therefore, in academia, the profession controls academic work by filtering changes emanating from the environment (Nyhagen and Baschung 2013).

3.4.5 Theoretical model

This chapter introduced the theoretical framework for this doctoral thesis. The literature on the strategy process was discussed, along with the literature on emergent strategy. This discussion allows for a better understanding of when and how strategy formation is a top-down process, as well as when and how to incorporate the middle levels of an organization into the process. The inclusion of the middle levels was identified as a poorly researched topic in the literature on higher education internationalization.
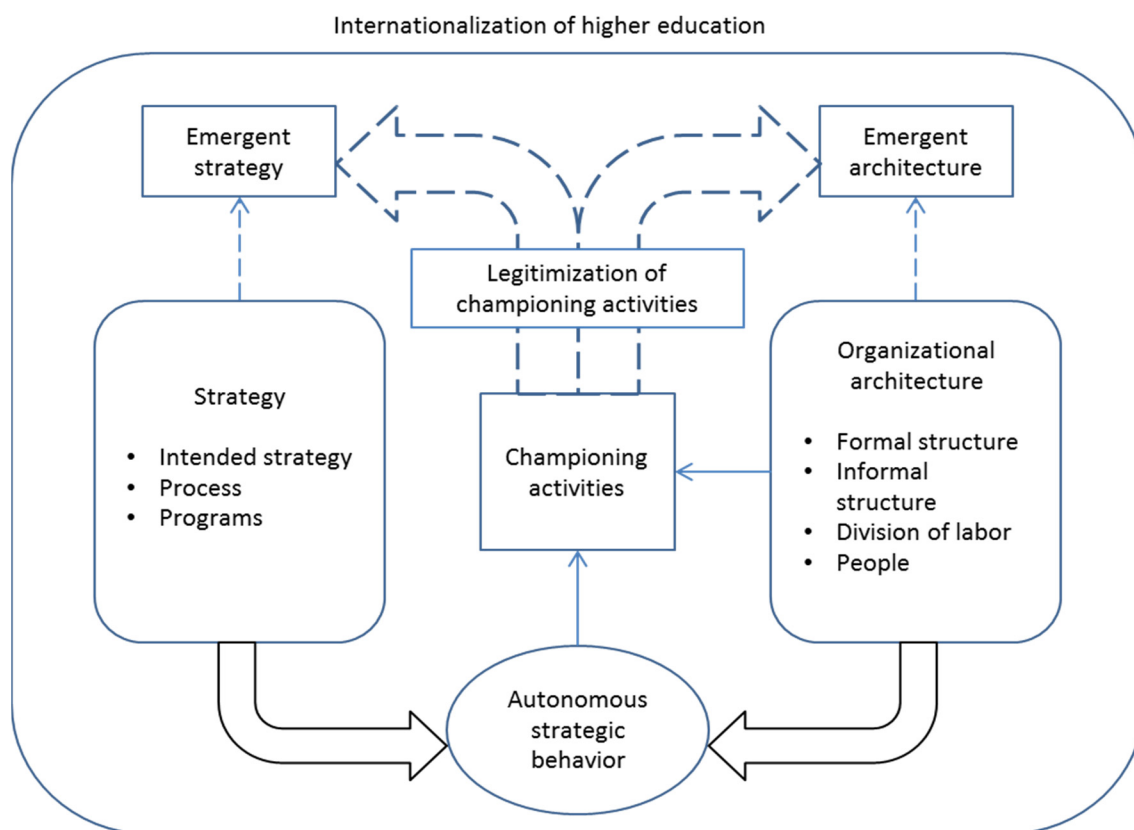
Figure 6   Visual representation of the theoretical framework

Figure 6 is a visual representation of the theoretical framework. The strategy and organizational architecture of the HEI play crucial roles in the wider phenomenon of internationalization. The strategy and architecture might not be specifically designed for the purposes of internationalization, but they nonetheless vicariously affect it. As was introduced in chapter 2, the internationalization of higher education is not a uniform concept. The policies and strategies in higher education internationalization are the issues discussed in this thesis, and thus, the formation of the theoretical framework is to be viewed under through lens. The effects of an organization's strategy and architecture, as well as its autonomous strategic behavior, on, for example, student and staff mobility would be clearly different.

4 RESEARCH METHODS AND DATA

This chapter presents the research context of this doctoral dissertation. I will briefly introduce the Finnish higher education system as well as describe international degree education in Finland. I will then move on to the University of Jyväskylä itself. The historical overview and general organizational composition are introduced. Then, I move on to the state of international degree education within the university at the time of data collection. This chapter also delineates the research approach adopted in this study. The collection of data and their subsequent analysis and related processes are also introduced.

4.1 Description of the research context

The government provides the basic funding for the Finnish university system. The Finnish Ministry of Education and Culture delineates the funding portions in its decrees, the two major funding portions being education and research. These are then further subdivided into categories with differently weighted percentages (Opetus- ja kulttuuriministeriö 2012; Opetus- ja kulttuuriministeriö 2016). The funding model for 2013–2016 provided a 14% weight for the number of completed higher-level degrees (master's degrees) within a university. Correspondingly, a 6% weight is the target for the number of completed lower-level degrees (bachelor degrees) within a university (Opetus- ja kulttuuriministeriö 2012). For research output, a 13% weight is given to the number of publications, with further weighted percentages given based on the quality of the publications. The number of completed doctoral degrees within a university should equal a 9% weight in the funding. Competitive research funding (6%) and international competitive research funding (3%) constitute additional factors. Degrees completed by international students provide additional weight in the funding: The number of completed higher-level degrees by international students accounts for an additional 1%, as does the number of

completed doctoral degrees by international students (Opetus- ja kulttuuriministeriö 2012).

International degree education in Finland was evaluated in a report written by Välimaa et al. for the Finnish Higher Education Evaluation Council in 2013. International degree programme (IDP) is a programme in which the instruction is given in a language that is not Finnish, Swedish or Sámi. Student recruitment for such programme is also done from outside of Finland (Välimaa et al. 2013). The number of programmes at the time was 399 and 262 responded to the initial survey for the report (Välimaa et al. 2013). In the report, international Bachelor and Master level degree programmes were evaluated as a component of the implementation of the national strategy (Välimaa et al. 2013). The evaluation by Välimaa et al. (2013) revolved around three themes: organization of the international programmes, their relation to their institution's strategies, and the integration of the international students into the institutions, society and the job market. The evaluation looked at both universities and universities of applied sciences. For the sake of this thesis, I omit any references or findings that were solely about universities of applied sciences. The findings presented that higher education institutions are able to provide a detailed description of how their strategies were related to the international degree programmes (Välimaa et al. 2013). This implies that the existence of these programmes serve a broader purpose within the institution. Furthermore, the justifications for having these programmes also included factors such as competitiveness, reputation, regional influence, and creation of an international campus (Välimaa et al. 2013). According to the findings, the organization of these programmes is not without challenges. For instance, due to the small size of these programmes they do not have a teaching staff of their own and teachers would teach in two programmes (Välimaa et al. 2013). What is more, programmes housing less than 40 students would benefit from calculating the economic stance of such programmes (Välimaa et al. 2013). In universities, the programme managers emphasized experience in research and subject knowledge as essential factors in those teaching in the programmes. Intercultural skills or multicultural skills in pedagogy were not highly appreciated (Välimaa et al. 2013). Participation in training in these matters was at the discretion of the teachers themselves. In relation to this, the report states the following:

> "In the universities, one factor discouraging teachers from developing their multicultural pedagogical skills is the fact that teaching and pedagogy in general are less valued than research. This is related to the career structure at universities, where normally a person's career depends mainly on the research activity." (Välimaa et al. 2013:50)

The report, thus, refers to the fundamental challenge in these programmes: the lack of incentives for programme development.

4.1.1 Strategic management in Finnish higher education

The start of the 21st century has seen major changes in Finnish higher education. The most important changes were the Universities Act (Ministry of Education and Culture 2009) and the Universities of Applied Sciences Act (Ministry of Education and Culture 2014). The Finnish government still provides basic funding for the country's HEIs, but institutional autonomy has increased. Through policies and funding models, the government has a remarkable influence on the future of the HEIs (Aula 2015). The manner in which the HEIs move toward their goals is at their discretion (Aula 2015; Kallio et al. 2016). The actions that the institutions take can conflict due to the influence of the wider society and the institutions' increased economic responsibility (Aula 2015). However, the changes generated by the aforementioned Acts are not the sole catalysts of changes: In 1995, Finnish universities began to adopt performance management as a managerial tool. The new approach focuses on metrics and looks at academic work as a quantifiable measure (Kallio et al. 2016). Here, an apparent conflict arises, as Blau (1973) pointed out that research and teaching require freedom and flexibility. Scholars see performance management as detrimental to academic work and academic collegiality. Applied research is seen as more desirable than ground-breaking academic research (Kallio et al. 2016).

In the past decade, one of the most discussed topics in Finnish higher education has been the creation of Aalto University. Aalto University was established at the beginning of 2010 when three existing universities—Helsinki School of Economics, School of Technology, and the School of Art and Design Helsinki—were merged into one. The new "top university" was a flagship in the renewal of the Finnish higher education sector (Aula 2015). The merger has been the focus of several studies and serves as a prime example of broader societal forces disrupting the operating logic of an HEI (Aspara et al. 2014). Aula et al. (2015) analyzed the branding dimensions of the merger. The impetus and support for the merger saw substantial influence from industry and other stakeholders. As branding was an important component of the identity of the institution, a degree of politics was also involved. The findings show that the political players who did not possess the necessary authority to influence the branding sought support from others, and those holding key positions within the institution and the most influential support strongly transmitted their messages (Aula et al. 2015).

While highly essential and subject to broad discussion, the Aalto merger was not the sole merger in Finnish academia at the time. After all, university mergers are strategic actions that seek synergy and enhanced resource utilization (Tienari et al. 2016). A merger can also inhibit competition between universities (Tirronen et al. 2016). Additionally, from the start of 2010, the University of Joensuu and the University of Kuopio merged to form the University of Eastern Finland (commonly referred to as UEF). In the fall of 2006, the Ministry of Education and Culture proposed that the two independent universities form a strategic alliance. During the following year, the universities themselves began

to contemplate the possibility of a merger. As the impetus came from the universities themselves, expectations of a manageable merger arose. The reality of the nuances of the merger was realized after the merger in 2010 (Tirronen et al. 2016).

Ranki (2016) conducted a study on strategic management within Finnish HEIs. She interviewed rectors, vice-rectors, executives, board chairpersons, board members, and officials from the Ministry of Education and Culture. The sporadic nature of the Finnish government's higher education policy and the recent cuts in government funding toward HEIs were pressing matters in the interviews (Ranki 2016). These somewhat exogenous forces placed increased pressure on the strategic management of these institutions. Furthermore, the perceived competitive environment was more on the national level than on the international level. For example, the competition for national funding is a competition for resources (Ranki 2016). Strategies and strategic management are not novelties in HEIs. Different types of strategy documents were commonplace, but the results did not extend beyond speeches and rhetoric (Ranki 2016). As the new status quo for Finnish higher education requires a managerial approach, strategies must lead to choices and systematic execution.

Another illustrative example of strategizing in Finnish higher education is Nokelainen's (2016) case study on the strategy buzz of a Finnish university. She tracked the strategy activities of the university across three decades. The common experience related to strategy buzz was the apparent conflict between the official strategy and its formalized values with the day-to-day values exercised in practice (Nokelainen 2016). Her findings emphasize the importance of middle-management participation in both the formal strategizing and the associated interpretation process. The role of middle managers as "messengers" and "interpreters" is sensitive, as they convey the strategy and its messages down the line (Nokelainen 2016). As the strategy process in HEIs is often massive and iterative (Ranki 2016), these institutions need to maintain an open line of communication and engage in multilevel discussion.

Pietilä (2018) argues that in the current decade, universities face pressures to present themselves as coherent and autonomous organizations. In Finnish universities, the transition to these coherent and autonomous organizations has been constructed by two different reforms. First, universities turned their priorities towards specific research areas that were particularly strong in that particular university (Pietilä 2018). These reforms were known as the development of research profiles (Pietilä 2018). The second reform was a common feature from other countries, the creation of the tenure track system (Pietilä 2018). Tenure track is a system in which an academic can progress to a full professorship (Pietilä 2018). Being awarded tenure is contingent on the academic's success in meeting certain criteria in a given period. Under the tenure track systems, employed academics could be granted tenure or otherwise promoted (Pietilä 2018). This differs from the established career model in academia where positions had to be made publicly open for applications (Pietilä 2018). Pietilä (2018) argues that the development of research profiles and tenure

track systems bear the hallmarks of organizational rationality that aims to provide collective goals and priorities within the organization. These two reforms are strategic tools in the attempts to create robust research universities (Pietilä 2018). The reforms were wrapped in challenges. The research profiles were, in several cases, excessively broad or a mere facade (Pietilä 2018). Therefore, the attempts at profiling were more pseudo-profiling than deliberate reforms. The introduction of the tenure track system created enormous pressures on the academics in the system. What is more, the centralized administrative processes that accompanied the tenure track system were often in conflict with the field-specific knowledge and traditions (Pietilä 2018). The university administration required a degree of standardization, but this approach neglected the idiosyncrasies of the departments and faculties (Pietilä 2018).

4.1.2 Historical overview of the University of Jyväskylä

The University of Jyväskylä is a multidisciplinary university consisting of seven different faculties. The university has a student body of 15,000 students, and the total number of staff members is 2,600. The foundation for the University of Jyväskylä was laid in 1863 when Uno Cygnaeus founded the first Finnish Teacher College. The university itself was born in 1934 with the creation of the Jyväskylä College of Education. The current form of the University of Jyväskylä was finalized in 1998 when the Faculty of Information Technology and the School of Business and Economics were founded. The School of Business and Economics took on the Finnish name of "Kauppakorkeakoulu" in 2011 to correspond to the widely acknowledged label of business school. In 2012, the Faculty of Sport and Health Sciences assumed the Finnish name of "Liikuntatieteellinen tiedekunta."

Table 7   Historical overview of the University of Jyväskylä (Source: www.jyu.fi)

1863	The first Finnish Teacher College (Seminary) is founded in Jyväskylä—16 personnel, 49 students
1934	The Teacher College becomes the Jyväskylä College of Education
1944	The College of Education is authorized to award master's degrees in education Doctoral dissertations are also made possible
1958	The Faculty of Philosophy is founded, which hosts the Department of Education and the Department of History and Linguistics Additionally, several new professorships in the humanities are founded
1963	The subject of physical education is launched in the Faculty of Philosophy
1965	The Faculty of Mathematics and Natural Science is founded
1966	The College of Education becomes a university with faculties in education and social sciences, humanities, mathematics and science, and sport sciences
1973	The Faculty of Education and Social Sciences is divided into two faculties: the Faculty of Education and the Faculty of Social Sciences
1998	The Faculty of Information Technology and the School of Business and Economics are founded
2003	The Ministry of Education designates the University of Jyväskylä as a University of Excellence in Adult Education
2004	The University of Jyväskylä's 70th anniversary
2009	The University of Jyväskylä's 75th anniversary
2013	The University of Jyväskylä celebrates the 150th anniversary of the formation of the Finnish Teacher College
2014	Open University's 40th anniversary, Avance Executive MBA's 30th anniversary, the University of Jyväskylä's 80th anniversary

4.1.3   Organization of the University of Jyväskylä

The broad organizational structure sees the university divided into faculties, separate institutions, and one subsidiary, all of which are directly under the rector and the board of the university. University services fall between the aforementioned categories, providing support services for both students and staff.
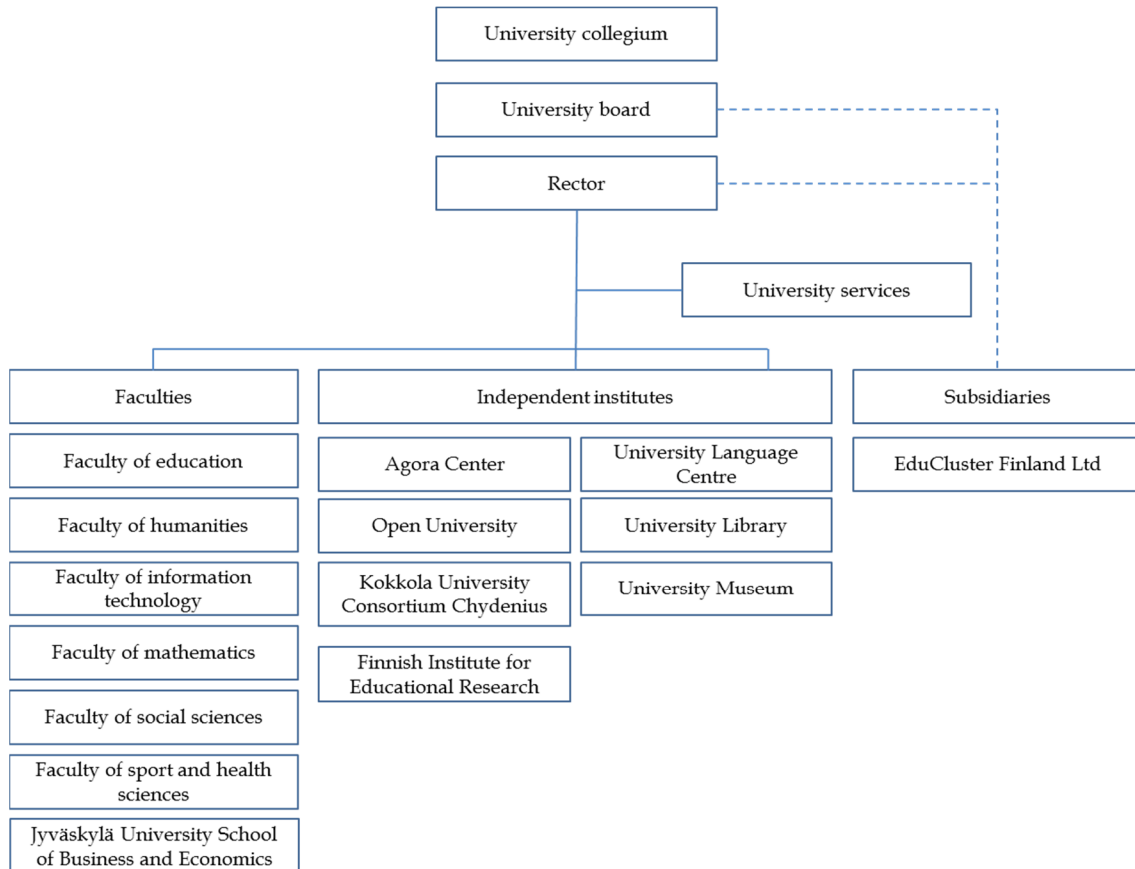
Figure 7   Organization of the University of Jyväskylä

University services are organized under the Director of Administration. The internationalization within the university penetrates all the divisions as an all-encompassing phenomenon (see Figure 8). The international office at the University of Jyväskylä handles a variety of issues related to student and staff mobility. The office is in charge of the mobility agreements with international partners as well as administering the grants for students going on exchange. The office is also responsible for the Erasmus charter and reporting the mobility statistics to the relevant authorities. Regarding the international master degree programmes, the role of the international office is minimal. One employee has an important role in the application process as this person acts as a liaison between the university and the centralized application service, University Admissions Finland.

Cooperation groups	Director of administration		Division of director of administration
	Management team of the university services		

Divisions						
Student and academic services	HR services	Financial services	Facility services	IT services	Division of strategic planning and development	Specialist services
Director of student and academic services	Director of HR	Director of financial services	Director of facility services	Director of IT services	Director of strategic planning and development	Director of relations

QUALITY MANAGEMENT PROCESS

PROJECT MANAGEMENT PROCESS

INTERNATIONALIZATION PROCESS

Figure 8   University services

4.1.4   International education within the University of Jyväskylä

The University of Jyväskylä houses approximately 15,000 students. Besides, the university also accepts exchange students: In 2014, the university welcomed a total of 418 exchange students for at least a three-month period. The internationalization of education in Finnish universities is heavily reliant on IMDPs, which bear a great responsibility in delivering international education. International education has social, economic, political, and academic importance, even on a national level (Knight, 2004). Despite their apparent impact, however, they operate under limited resources. In many cases, they are greatly dependent on the academic faculty to ensure that they are operational. The challenge for the academic faculty members is to maintain a balance between their primary tasks of research and teaching and their secondary task of ensuring that the programmes are operational from an administrative perspective. Paradoxically, although the programmes are somewhat separate, they can still act as instigators of broader initiatives. One member of the central administration stated that actions that began in the international programmes are often extended to various other activities of the university.

> "In a large number of issues I see that even if [actions] began from the development of the IMDP, they end up in a larger whole. It might concern educational programs broadly or educational activities or personnel development."

Like all other organizational components, IMDPs require resources, planning, structures, and evaluation. The distribution of responsibilities among individual programmes, departments, faculties, and the university, in general, is a significant factor.

The Finnish university system is government-funded, supporting education for both Finnish and international students. The high quality of education and the lack of tuition fees have made the Finnish education system highly attractive for international applicants. In the Finnish university context, degree-seeking international applicants gravitate toward IMDPs, which are predominantly two-year, degree-awarding programmes taught in English.

Table 8   International master's degree programmes at the University of Jyväskylä

Faculty	IMDP
Education	- Educational Leadership - Education
Humanities	- Intercultural Communication - Music, Mind, and Technology - Music Therapy
Information Technology	- Web Intelligence and Service Engineering - Service Innovation and Management
Mathematics and Science	- Sustainable Management of Inland Aquatic Resources - Master's Studies in Nuclear and Particle Physics - Nanoscience - Ecology and Evolutionary Biology
School of Business and Economics	- Corporate Environmental Management - International Business and Entrepreneurship
Social Sciences	- Development and International Cooperation - Cultural Policy
Sport and Health Sciences	- Biology of Physical Activity - Sport Management and Health Promotion - Sport and Exercise Psychology - European Master's in Sport and Exercise Psychology

IMDPs operate within their respective faculties and thus must conform to the overall mission and procedures of the faculty. At the same time, they are expected to adhere to the rules and regulations related to the centrally coordinated international student affairs. Due to the nature of IMDPs, they cannot be regarded as self-contained units: Each of them belongs to a particular faculty that provides resources for their operation. The administrative processes involved in the recruitment of international students to international programmes demand more effort than the recruitment of Finnish students into Finnish programmes. The programmes must be promoted to attract potential applicants; the administrators must evaluate applications and recruit the most suitable students for their programmes. Furthermore, student guidance and curriculum planning are of essential importance in ensuring acceptable

graduation rates. As students graduate and gain employment, they can act as a resource to promote the programme and attract more students. This issue extends beyond the University of Jyväskylä, as Finnish higher education institutions struggle with the utilization of their alumni (Välimaa et al. 2013). All processes mentioned above must happen in parallel with high-quality teaching, which is under continuous development. In order to ensure these processes and ultimately the viability of an IMDP, meticulously planned resources, a division of labor, structures, and communication are necessary. However, the reality is entirely different, as one interviewee rather poignantly states:

> "But we don't have an international strategy, even at the university level. Therefore, we are operating in a way that us resolving problems as they come, it's like the fire department putting out fires."

The complexity of administrative matters enables a wide variety of structural responses. Therefore, programme characteristics can differ significantly among programmes in terms of course structure, staff composition, and administration. A key factor in the integration of IMDPs is the programme curricula. Courses in the programmes range from being solely taught in the programme to being included in the broader spectrum of available courses. Several programmes offer a highly limited selection of courses specifically taught in the IMDP, and the majority of the remaining courses are taken from the available courses organized by the faculty. Another notable difference among programmes can be found in the allocation of resources and roles in the form of an assigned coordinator or director. This position can be held by a member of the faculty's study administration or by a member of the research and teaching staff. Research and teaching staff may only teach in an individual programme, or they can also be assigned to other teaching tasks within the department or faculty. The administration of programme affairs consists of student recruitment and student guidance, and additional tasks might include marketing, communication, and stakeholder management. Based on their characteristics, I delineate the programmes into three categories: stand-alone, semi-detached, and fully integrated. The curriculum of a stand-alone programme consists of courses devoted entirely to the IMDP. Aside from a few exceptions, these courses are not available to students outside the programme. The staff of a stand-alone programme consists of research and teaching staff with no other teaching engagements: They do not give courses outside of the programme. The majority of administrative matters are conducted internally, with minimal contribution from other parties. A programme characterized as semi-detached offers a select few exclusive courses, but the majority of the courses in its curriculum are from the wider course selection of the department or faculty.

Table 9   Characterization of international master's degree programmes

	Stand-alone	Semi-detached	Fully integrated
Programme courses	specifically for the IMDP	a limited selection of programme-specific courses, the majority of the courses from the faculty	no programme-specific courses, all courses from the faculty
Programme staff	solely for the IMDP	coordinator or director accompanied by 1-2 teaching staff	apart from the coordinator or director, no assigned programme-specific staff
Administration of programme-related affairs	the responsibility of the programme staff	coordinator or director bear some responsibility, faculty administration heavily involved	coordinator or director has minimal involvement, faculty administration handles most matters

IMDPs are currently in a challenging situation regarding their place in the university hierarchy. Whereas traditional disciplines within faculties operating under the same rubric, IMDPs operate under a more matrix-like structure. They adhere to the authority of their respective faculty and the university in general. Therefore, determining the boundaries of this particular organizational component is challenging. The boundary issue also affects the division of labor.
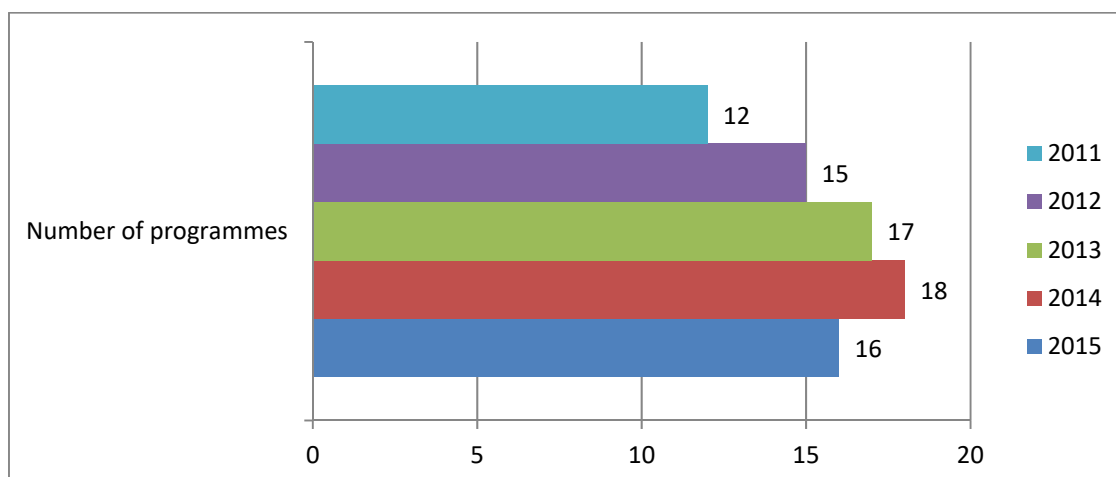
Figure 9   Number of programmes

4.1.4.1 The application process and University Admissions Finland

An essential feature of IMDPs in the Finnish context is the establishment of a separate entity to handle the application service. The issues of student selection and application processing are resource-heavy tasks. In the Finnish context, the majority of international master's degree programmes outsource the application processing to an entity called University Admissions Finland (UAF), which operates in Helsinki. It is a centralized application and processing service that was established by 10 Finnish universities, and all applications to the associated programmes must be submitted to this organization. UAF verifies the arrival of documents and confirms the validity of the documents as required by the particular programme. Eventually, all applications, complete or incomplete, are forwarded to the universities, where the programme faculty reviews them and makes decisions accordingly. The inspection of educational documents is a task that requires specialization and detailed knowledge of educational and governmental issues on an international scale. Furthermore, it is not an essential component in the primary task of a master's programme. For the programme, what matters in the applications is the quality of the applicants' relevant background information, not the validity of their documents. Regarding focusing on the most relevant tasks of an international master's programme, outsourcing the application processing seems to be a wise decision.[9]
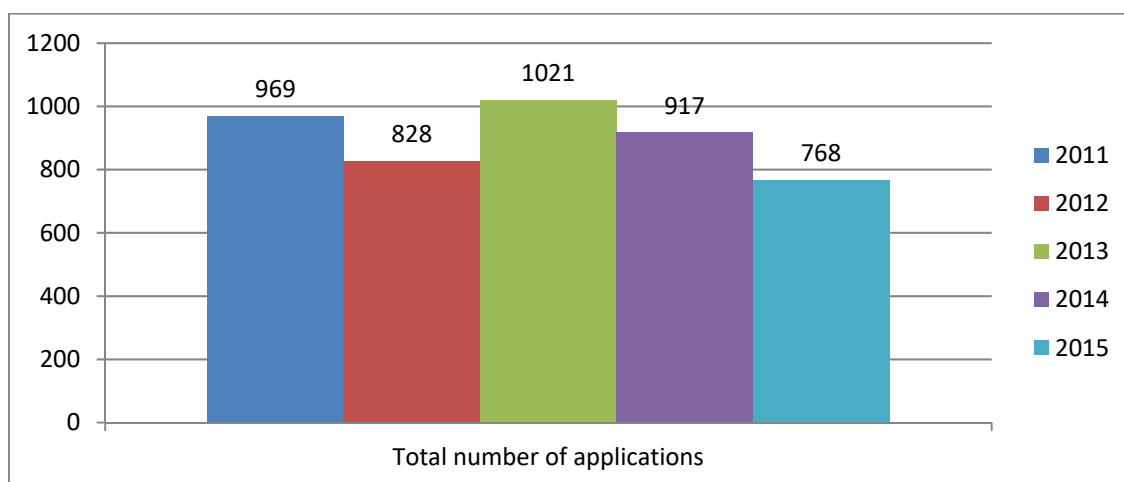
Figure 10   Total number of applications

---

[9]   University Admissions Finland closed down in 2018. The final application round was the intake for autumn 2018. From thereon, the application process will be administered by each university. (Source: www.universityadmissions.fi)
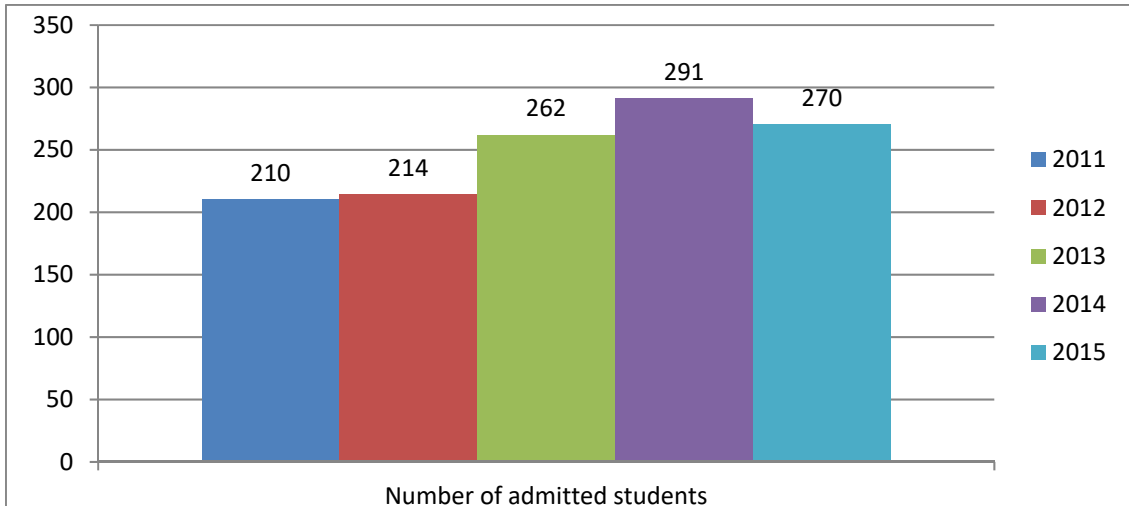
Figure 11   Number of admitted students
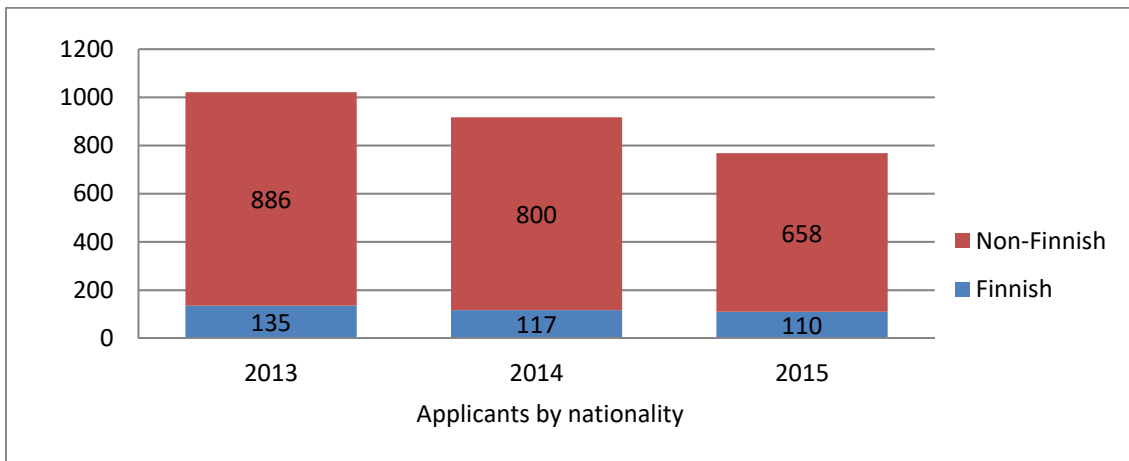
Figure 12   Applications by nationality
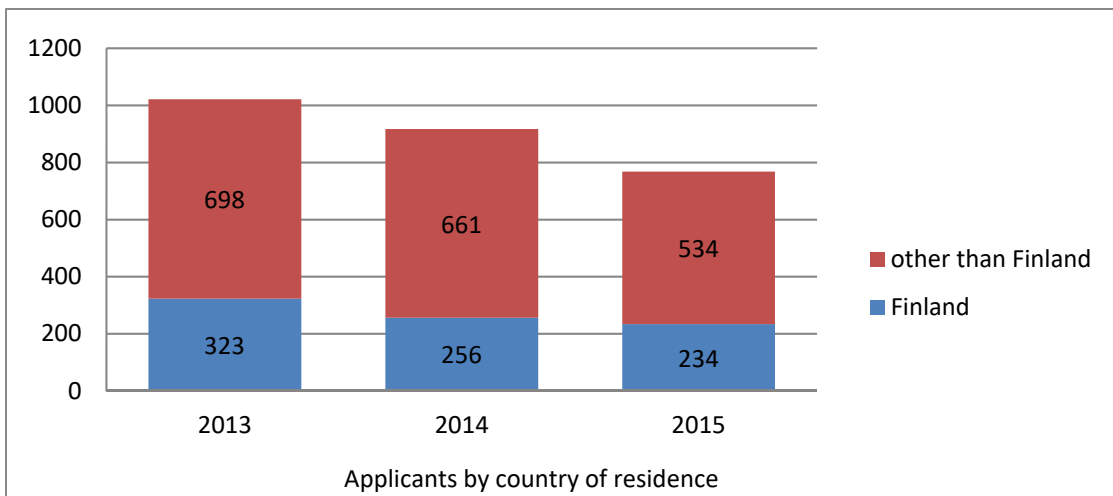
Figure 13   Applicants by country of residence

If we consider the value chain of international education, ranging from the individual student to a particular master's programme, we see that the chain is not entirely vertically integrated. This vertical architecture defines the complete structure of the value chain (Jacobides and Billinger 2006). The outsourcing of application processing adds a layer of bureaucracy to the procedure, which can be a source of confusion for the individual applicant. Confusion can arise because when an applicant has issues concerning the application process, he or she must contact UAF instead of the targeted programme.

The master's programmes have the liberty to define what types of educational backgrounds qualify for admission and what they consider sufficient proof of English language proficiency. These specifications are then communicated to UAF and included in the application database. Furthermore, communication between the programmes and UAF is conducted through an intermediary, as requested by UAF. The intermediary is an administrator within the respective university, which does not leave room for flexibility in situations in which leniency might be warranted. Due to the vast number of applications the UAF processes, the organization cannot deal swiftly with problem situations, especially in the final days of application periods, when there are dramatic peaks in the number of submissions. Often, the process is highly functional from the programme's perspective, as it frees the faculty from double-checking the validity of the submitted documents. Clearly documented and communicated procedures are put in place to ensure that the applicants succeed. Furthermore, this outsourcing also strengthens the entire application process, as all applicants are subject to the same procedure, regardless of their backgrounds and preferences.

Outsourcing the application process to an external entity is not a decision made solely by an individual programme. Instead, it is done at the university level. If a programme would like to exclude itself from the arrangement, it would be possible, but the ramifications could prove too costly since the required specialists would have to be hired externally or trained internally. Additionally, this solution assumes that the programme would assign a person to assume responsibility for the specialization rather than relying on existing personnel taking on application processing as an additional task. In practice, an additional staff member—or several—would have to be hired. The effective execution of the task would require knowledge of both educational administration and internal affairs, and thus, time and resources would be invested in cooperating with the proper authorities. The exploitation of crucial methods in boundary management, such as lobbying and alliances, would be warranted (Santos and Eisenhardt 2005).

From a power perspective, vertically integrating the application process into the corresponding units would increase the level of influence and control of the programmes. In this scenario, the next critical question would be the location of the application process in the wider organization. Incorporating the application process into the programme level would reduce possible information asymmetries since those processing the applications would be the most knowledgeable of the requirements of the programme. Furthermore, no

additional bureaucracy would be required. However, a disadvantage of this arrangement—and a severe one at that—is the resource requirement. As mentioned earlier, the associated tasks are highly specialized and thus require trained personnel to execute them. Another scenario would be for the application process to be arranged at the faculty level. If there are several programmes within the faculty and thus the workload of the programmes is borne at the faculty level, this reasoning is valid. The invested resources would be scaled for efficiency, and coordination and information flow would be relatively easily achieved, as all involved parties would reside in the same location. The final scenario, and possibly the most realistic solution, would be to conduct the application process at the university level. The number of IMDPs at Finnish universities is increasing, and they can be found in almost all faculties. For example, at the time of this research, the University of Jyväskylä has seven faculties and 18 IMDPs. The upsides of a university-specific application service would be increased flexibility for applicants, increased coordination, and reduced response and processing time. As the IMDPs would be able to directly communicate with the authority responsible for processing and evaluating applications, they may be able to voice their concerns and ideas more efficiently. The downsides in this scenario are familiar from the other scenarios: the resource requirements would be tremendous, and more bureaucracy would be generated. As the application periods occur only during a few months each year, there would be extensive periods during which the application service workers would have to be assigned other duties.

4.1.4.2 The current state of affairs and scenarios for the future of the IMDP

As with all HEIs in Finland, the University of Jyväskylä is being forced to re-evaluate its stance on international degree education, primarily because of the imminent introduction of tuition fees to non-EU/EEA students. The tuition fees were introduced for studies beginning in 2017. In practical terms, this implies that actions will need to be taken sooner, as the annual application period traditionally begins in November or December. Based on the experiences of other countries, the number of applications is expected to decrease with the introduction of tuition fees. Therefore, universities need to make preparations to combat the highly likely decrease in the number of applications. Furthermore, students who pay for their education have high expectations of the education, and thus, the importance of the quality of the programmes becomes even more pronounced.

Another important feature of the IMDPs within the University of Jyväskylä is the apparent dissatisfaction with their performance. Faculties and departments are evaluated according to their output. Concerning education, the most important output is the number of students, especially the number of graduates. Application figures should be higher, as some programmes only attract slightly over 10 applications (as was the case in the application period 2014–2015). The

university also monitors study time (i.e., how long a student takes to complete a degree).

The most recent development regarding IMDPs came in November 2015. According to the rector's decision, all master's degree programmes taught in English were to be re-established, which encourages the faculties to evaluate their English-taught education with the purpose of developing new, internationally attractive programmes. The faculties provided their propositions in early 2016 regarding the programmes they wish to offer in the future. Currently running programmes may be continued if the faculties provide rational justifications for their continued operations. These programmes would then be re-established. The impetus for this decision stems from the ongoing profiling of Finnish universities, which are expected to focus more on their core areas and enhance their research profiles. This development of profiles will affect the fields in which the universities operate. Since the IMDPs are important for the universities' internationalization, their existence is valid, but now, they must also be connected to the universities' core areas. Rector's decision on the re-establishment of the programmes was made in spring 2016.

Considering the current situation of IMDPs, the data show that efforts to internationalize education at the University of Jyväskylä have failed. Application numbers are unsatisfactory, the number of graduates is unsatisfactory, and the financial viability of the programmes is compromised. International students' primary reasons for applying to the University of Jyväskylä were the reputation of the Finnish education system and the lack of tuition fees (University of Jyväskylä 2014). These exogenous factors draw in most international applicants, and one of them is about to cease. This thesis points out, however, that the failure to internationalize can also be attributed to endogenous factors and, more specifically, structural factors. At the behest of the rector of the University of Jyväskylä, an internal evaluation of the university's IMDPs was conducted by its Language Center in 2007. Key issues in the evaluation were the integration of the programmes into their respective faculties; quality control; pedagogical issues; and formal documentation, especially in relation to student documentation (Räsänen 2007). In 2007, the development of the programmes was in its infancy, as the statute of the IMDPs was only instated in 2005. The separate funding for the initial development of the programmes enabled the employment of coordinators, which contributed to the different characteristics of the programmes. The evaluation stated that the lack of integration of the IMDPs was potentially a great risk for the future of the programmes (Räsänen 2007). The risk was realized in the years that followed the evaluation, and the programmes remained largely detached from the broader educational palate (University of Jyväskylä 2014). A member of the central administration also confirmed the realization of the professed risk:

> "As is often the case, when something is already in place, its existence is seen as justified. This whole has not been thought through. This is a kind of an eternal problem. The faculties have received the message that they should view their education as a whole and not consider these programmes as separately funded until the end of the world. There is still plenty of work to do here."

The above conclusions support what Garvin (1993) and Dill (1999) stated about the inability of universities to execute internal development. The deficiency in integration is a significant reason for the failure to internationalize. The integration itself was unsuccessful due to poor architectural arrangements. Van Damme (2001) attributed the failure to internationalize to a lack of financial resources, a lack of coherent strategies, policy restrictions, and poor institutional commitment. This thesis complements this list of factors with organizational architecture.

4.2   Research process

The current doctoral thesis aims to increase the understanding of organizational architecture in the context of higher education and, in particular, internationalization of higher education. At the initial stages of this research process, I embarked with an area of study in mind: internationalization of higher education. Upon more in-depth reading into the literature of internationalization of higher education, I was able to pinpoint a gap in the research field. The gap was the influence of internal structuring on the internationalization process. The concept through which the process was analyzed was organizational architecture. Collecting data and analyzing it while at the same time building on the theoretical base, I was able to develop a data-driven theoretical model (Strauss and Corbin 1998). This study also makes certain underlying assumptions that are in accordance with the traditions of grounded theory studies and inductive analysis. Before describing the analysis of the interview data, I would be remiss if I failed to acknowledge some fundamental assumptions regarding organizational research.

Thomas Kuhn (1970) defines paradigms as scientific practices and methods embraced by practitioners. Furthermore, they are the result of achievements that were unprecedented and undefined to the point of being attractive to practitioners due to their wide range of possibilities (Kuhn 1970). One of the most enduring and dominant paradigms is the positivist paradigm, whose early proponents regarded science's effect on a variety of areas as highly positivist (Lincoln and Guba 1985). The postpositivist paradigm is, by definition, a continuation of the dominant positivist paradigm, even referring to proper shifts from the positivist paradigm (Lincoln and Guba 1985).

Lincoln and Guba (1985) champion a particular postpositivist paradigm known as the naturalistic paradigm. The views of the naturalistic paradigm on the nature of reality—the ontological assumptions—are based on multiple realities that are constructions viewed only holistically (Lincoln and Guba 1985). Epistemologically, the naturalist paradigm adopts a perspective that sees the relationship between the knower and the known as an interaction wherein the two influence one another and the two are not separated (Lincoln and Guba 1985). The relationship is distinct from the positivist paradigm, which views the knower and the known as independent from one another: Their relationship is dualist by

nature. The inseparable relationship between the knower and the known in the naturalistic paradigm has sparked criticisms from the positivist movement (Lincoln and Guba 1985).

The fluid and dynamic nature of qualitative research is what draws researchers to it (Corbin and Strauss 2008). Furthermore, the efficiency of qualitative research in obtaining the necessary data is laudable (Glaser and Strauss 1967). The unlimited possibilities to discover new aspects of human beings are enjoyable to the qualitative researcher (Corbin and Strauss 2008). Qualitative research is applicable to all kinds of phenomena and aims to uncover the intricacies that comprise them. Qualitative data can generate grounded descriptions and explain processes in identified contexts (Miles and Huberman 1994). Furthermore, qualitative research can broadly encompass all types of research that do not resort to statistics or other forms of quantification (Strauss and Corbin 1998). However, conducting qualitative research does bring forth the question of the interpretation of data. One perspective is to refrain from intrusion upon the data and to provide an accurate account of the informants (Strauss and Corbin 1998). Another perspective focuses on being descriptively accurate. As it is impossible to present all data to the readers, the researcher must engage in the process of data reduction, which calls for the researcher to select from the entire data set the data he or she deems most relevant and to interpret those data (Strauss and Corbin 1998). As per Nag et al. (2007), the interpretive approach does not exclude the researcher's own interpretation. Instead, the researcher can further interpret the informants' interpretation with the aid of earlier research (Nag et al. 2007). Conversely, the unstructured and inductive nature of some qualitative research has a counterpart on the other end of the spectrum. Some qualitative researchers advocate for a more structured approach, as there always exist some preliminary ideas when engaging in fieldwork (Miles and Huberman 1994). Explicit conceptual frameworks and constructs are most suitable for studies that aim to further elaborate on a pre-existing concept (Miles and Huberman 1994). The potential for creativity and discovery comes from the unstructured aspect of the research, and the clarity and rigor come from the structured side. Striking a balance between the two, then, is the key to rigorous and creative qualitative research (Gioia et al. 2012).

Qualitative data can enable the derivation of rich explanations of the studied phenomena (Miles and Huberman 1994). The strength of this type of data lies in their concentration on natural occurrences in their natural settings. Before explanations can be derived, however, the data must be subjected to a robust form of analysis. Qualitative data is often presented in word form as opposed to the more numerical representation of quantitative data. In this thesis, the word form originates from interviews. This sort of data is not open to analysis directly from the outset of data collection due to the raw form of the data. Interviews need to be transcribed before one can analyze the data (Miles and Huberman 1994). Miles and Huberman (1994) provide an outline for the process of analyzing qualitative data. The outline is manifested through three concurrently occurring activities: data reduction, data display, and conclusion drawing and verification

(see Figure 14). The process of data reduction is ongoing throughout a qualitative research project. The data undergo a process of transformation by the researcher to organize and focus them into assemblies (Miles and Huberman 1994). The researcher then makes choices regarding the suitable conceptual framework for the study, as well as the inclusion and exclusion of particular data. Therefore, data reduction can be characterized as a part of the analysis process. Data display activities refer to the creation of organized assemblies of information that enable the receiver to make conclusions based on the presented data (Miles and Huberman 1994). A concise display of data provides greater accessibility than large amounts of information (Miles and Huberman 1994). Graphs, charts, and extended texts are examples of data displays. The third activity in qualitative data analysis is the drawing of conclusions and verification and while this activity involves conclusions, it does not necessarily constitute the final stage of an analysis process (Miles and Huberman 1994). Researchers already make decisions regarding what meaning they assign to various data right from the beginning of the data collection process. A variety of explanations, patterns, and even propositions can be drawn from the outset of the collection and acquaintance with prior research can affect the development of these initial conclusions (Miles and Huberman 1994). The ability to remain skeptical about these initial conclusions and retain an open mind toward their development is expected of a competent researcher. According to Miles and Huberman (1994), the verification of conclusions also occurs as the analysis develops: Constantly revisiting the data can verify the meanings that the researcher assigned to them at the outset of the analysis process. Proper documentation of the qualitative analysis process is essential for keeping track of the progression of events and for reflecting on and refining the methods employed (Miles and Huberman 1994).

The inductive analysis of qualitative data can develop grounded theory (Lincoln and Guba 1985; Strauss and Corbin 1998). The rigorous approaches of grounded theory provide researchers of qualitative studies with clear guidelines. At their core, methods in grounded theory studies consist of guidelines for the collection and analysis of data (Charmaz 2000). The systematic inductive nature of the methods enables the development of theoretical frameworks that explain the data that is collected (Charmaz 2000). Concepts and models are invented for the purposes of experiential sensemaking (Lincoln and Guba 2000). Pure grounded theory presupposes that theoretical frameworks originate from data and that the frameworks are also grounded in the data (Meyer 2001). In this vein, I stray from the pure grounded theory guidelines, leaving the door open for conceptual categories and theories to guide the study and data analysis (Meyer 2001). From a theoretical perspective, the inquiry itself gives birth to the theory, as the theory is not an a priori assumption (Lincoln and Guba 1985). This emergent nature defines the entire research design as the theory, procedures, and methodology all develop as the process unfolds (Lincoln and Guba 1985). However, this idea does not imply a lack of focus in the inquiry; rather, it enables the researcher to develop and adapt as an instrument (Lincoln and Guba 1985).

Because there is little prior knowledge regarding organizational structures in the internationalization of higher education, I conducted an inductive case study on the architecture of higher education internationalization within one Finnish university, employing a qualitative, interpretive approach. This approach enabled a rich, explorative inquiry (Nag et al. 2007). Qualitative analysis is a nonmathematical interpretive process that aims to uncover relationships and concepts in raw data. These emergent relationships and concepts are then organized into an explanatory scheme derived from theory (Strauss and Corbin 1998). Deriving theory from data is dependent on systematically gathered data (Glaser and Strauss 1967). The chosen area is relatively understudied, which influences the choices in research methods and strategies. The chosen research strategy is a case study focusing on creating a comprehensive view of single setting dynamics (Eisenhardt 1989). Case studies do not allow for representativeness in statistical terms (Easton 2010), but studies designed to create a deeper understanding of a chosen phenomenon do not attempt to be statistically representative. The main advantage of the case study is that it is in-depth and comprehensive (Easton 2010). The divergence of inquiries is likely, which implies that predictive and control outcomes are unlikely; a more likely outcome in a naturalist inquiry is the creation of some level of understanding of the studied phenomenon (Lincoln and Guba 1985). What Lincoln and Guba (1985) refer to as the conventional inquiry is usually associated with the deductive analysis. This type of analysis begins with theory-based hypotheses that are then subject to empirically-based confirmations of falsification (Lincoln and Guba 1985). As the name suggests, inductive analysis induces theoretical categories from the studied data, which serves as the starting point of the inquiry rather than a priori theoretical claims.

As the focus of this thesis is to study how organizational members construct their experiences within the organization, the view of the organization itself is also socially constructed (Gioia et al. 2012). Furthermore, individuals who create their own realities within the organizational domain are seen as being aware of their actions and are able to provide explanations of their actions and thoughts (Gioia et al. 2012). By acknowledging the informants' capabilities to express their thoughts and actions, the research itself is affected. By adopting this view, the informants and their accounts are given center stage in the research process. As a researcher, I was primarily tasked with providing a report of the informants' experiences (Gioia et al. 2012). Research design began with a well-defined phenomenon and research questions that attempted to bring into surface "how" specific concepts emerged (Gioia et al. 2012). Data collection is about allowing the interviewees the express their views. As the data collection progresses, previous interviews are revisited to shed more light on emerging ideas from later interviews (Gioia et al. 2012).

4.2.1 Interviews

The qualitative interview is unique in its sensitivity and power as a method of capturing the experiences and life of subjects (Kvale 1996). Semistructured interviews, or focused interviews, are a useful approach when the studied area is relatively uncharted and the study requires clarifications and deepened understanding (Hirsjärvi and Hurme 2001). This type of interview protocol approaches the interview from a thematic perspective. Rather than following strict guidelines or a predetermined sequence of questions, the theme-based interview focuses on certain topics. The sequence of questions can vary, and the interviewees can answer in their own words (Hirsjärvi and Hurme 2001). Furthermore, the focused interview can elicit a comprehensive report of a certain situation in two ways: First, it focuses on a particular array of experiences, and second, the interviewer is acutely aware of the experiences and is thus able to provide cues for the interviewee (Merton et al. 1990).
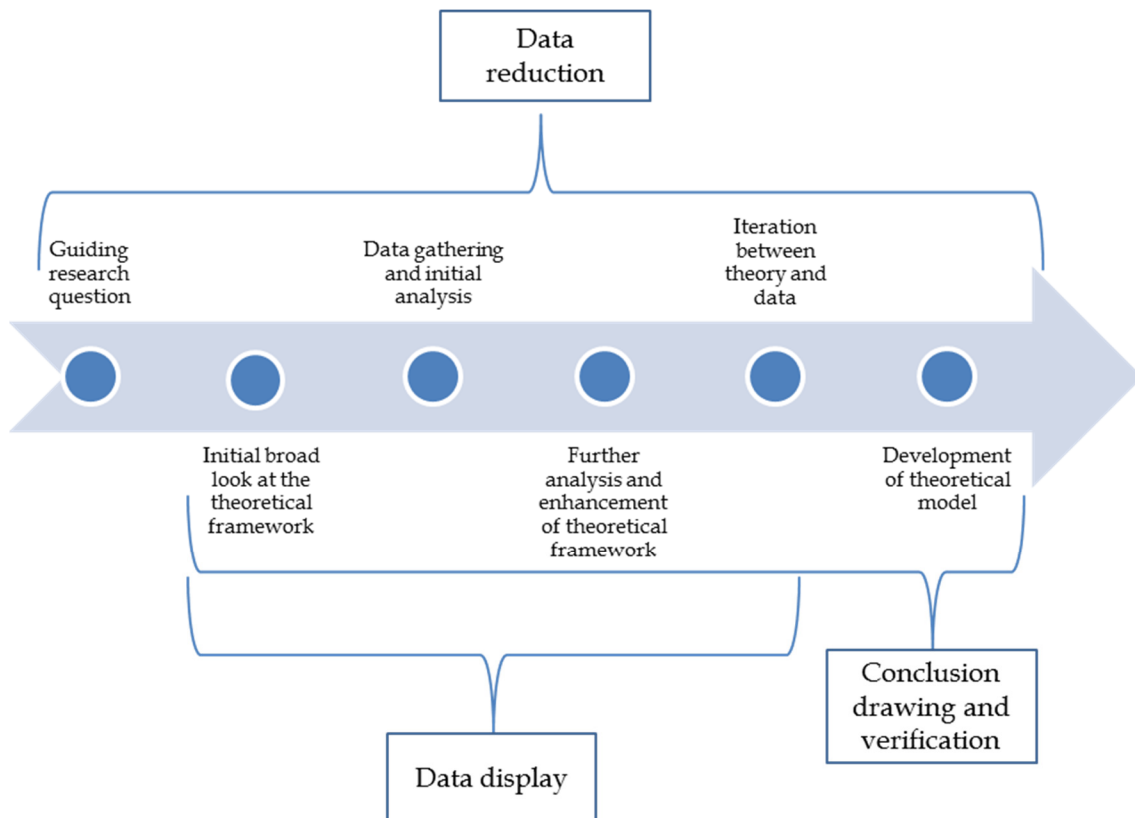
Figure 14   Research process

The semistructured interviews were conducted between June 2014 and February 2015. To ensure consistency, the author of this dissertation conducted all interviews himself. The total number of interviews was 37, and the average interview duration was 60 minutes. All interviews were recorded and transcribed verbatim. The interviewees ranged from departmental secretaries, university

teachers, and university researchers to tenured professors. Furthermore, additional interviews were conducted with members of the university's central administration who were closely involved with the IMDPs. The tenure of the interviewees ranged from one year to 29 years. Out of the 37 interviewees, 34 had been assigned as programme coordinators or directors, or at least they performed related tasks. The remaining three interviewees were members of the university's central administration who dealt closely with issues related to the IMDPs. All interviews began with questions related to the interviewee's job description, relevant tasks, and tenure within the university. As the interview progressed, the questions delved more deeply into general information regarding the programme, the division of labor regarding key tasks, and communication and decision-making and within the department or faculty. Table 10 shows the dispersion of IMDPs and interviewees across different faculties.

Purposive sampling was employed when selecting interviewees. This sampling strategy, also referred to as theoretical sampling, is beneficial for strengthening the scope of the data (Lincoln and Guba 1985). Theoretical sampling is a process in which data is collected for theory generation. The researcher engages in a concurrent process of data collection, coding, and analysis. As the process progresses, the researcher can decide where and how to collect more data to generate theory (Glaser and Strauss 1967). The benefit of theoretical sampling is that the emerging theory dictates the data collection (Glaser and Strauss 1967). Furthermore, purposive sampling increases the likelihood of uncovering a fuller picture of multiple realities. The essential purpose is to achieve the maximum amount of information, not to enable generalizations (Lincoln and Guba 1985). Based on the researcher's personal experience and the public information of the programmes, the initial interviewees were identified. In cases where additional interviewees were difficult or impossible to identify, the identified interviewees were asked to suggest individuals who could provide valuable insight into the respective programme. Through this process, I was able to identify, contact, and ultimately interview individuals highly knowledgeable of the individual programmes. All interviewees from the programmes were engaged in the daily activities. Table 11 shows more detailed information regarding the interviewees. The titles and faculty affiliations of the interviewees are not disclosed to ensure anonymity. They are differentiated by whether they are research and teaching staff or administrative personnel.

94

Table 10   Interviewees

Interviewee	Time of the interview	Duration	Research and teaching faculty	Administrative personnel	Years at the university a. 0-5 b. 6-10 c. 11-15 d. 16-20 e. 20 ->
1	June 2014	1h2min	X		c
2	June 2014	48min46sec	X		c
3	June 2014	1h2min	X		b
4	July 2014	1h15min	X		a
5	July 2014	1h20min	X		b
6	September 2014	1h04min		X	a
7	September 2014	1h07min		X	b
8	October 2014	1h04min	X		c
9	October 2014	1h10min	X		a
10	October 2014	1h2min	X		b
11	October 2014	1h4min		X	a
12	October 2014	50min57sec	X		b
13	October 2014	53min21sec	X		b
14	October 2014	1h03min	X		a
15	October 2014	1h06min	X		b
16	October 2014	56min27sec	X		c
17	October 2014	1h04min	X		a
18	October 2014	1h31min	X		c
19	October 2014	49min55sec	X		c
20	October 2014	1h8min	X		e
21	October 2014	49min35sec		X	b
22	October 2014	48min45sec	X		b
23	November 2014	55min56sec	X		e
24	November 2014	1h31min		X	b
25	November 2014	1h04min	X		d
26	November 2014	1h06min	X		a
27	November 2014	45min55sec	X		d
28	November 2014	32min50sec		X	e
29	November 2014	54min42sec	X		e
30	November 2014	40min00sec		X	b
31	December 2014	44min0sec	X		a
32	December 2014	43min48sec		X	b
33	December 2014	49min24sec	X		b
34	February 2015	44min26sec	X		a
35	February 2015	52min05sec	X		b
36	February 2015	48min35sec		X	e
37	February 2015	1h01min		X	b

4.2.2   Secondary data

Archival data from websites, internal memos, and meeting minutes were also analyzed to accompany the interview data. In addition, an internal evaluation of the IMDPs was carried out in late 2013. The evaluation report was published on the university intranet and was employed as a secondary material in the analysis. The report consisted of a detailed overview of the general situation of the IMDPs, as well as best practices and areas of potential development. Furthermore, all programmes that were operational at the time of the evaluation were analyzed separately, and a detailed analysis of each one was included. A large variety of internal reports, documents, and statements were made available by the university. Prior evaluation documents relating to the IMDPs and to teaching conducted in English served as precursors to the wider internal evaluation and were utilized in this study.

4.2.3   Analytical approach

Broadly following the guidelines for naturalistic inquiry specified by Lincoln and Guba (1985), I engaged in an inductive analysis of the data. A rudimentary characterization of inductive analysis is that it aims to make sense of data (Lincoln and Guba 1985). In contrast to the more traditional deductive analysis, inductive analysis derives theory and variables from the inquiry process itself. Working hypotheses are developed by moving from specific informational units to categories of incorporated information. In a naturalistic inquiry, inductive analysis increases the likelihood of uncovering the variety of realities found in the data. Furthermore, this type of analysis is also more likely to increase the accountability, recognition, and explicitness in the interactions between the researcher and the informant. Additionally, the inductive analysis process is better equipped to create a fuller description of the setting. In a naturalistic inquiry, the setting requires a human instrument that adapts to the undefined situation (Lincoln and Guba 1985).

   The essential procedures of grounded theory research are the constant comparison and theoretical sampling (Strauss and Corbin 1998; Locke 1996). The analysis of the data follows the procedures set forth in grounded theory research, especially the techniques for constant comparison (Glaser and Strauss 1967). The grounded theory approach enables researchers not only to research a phenomenon and provide verification of facts but also to develop an explanation for the phenomenon (Glaser and Strauss 1967). Furthermore, Glaser and Strauss (1967) contrast their approach of grounded theory with the more established logically deduced theory. They claim that the merits of grounded theory and its usefulness reside in the way it is developed: A theory of social research is of higher quality when it is inductively derived from research (Glaser and Strauss 1967). Rather than attempting to verify qualitative data with quantitative methods, grounded theory can generate theory. In studies of grounded theory, it is of equal importance to discover evidence that supports one's statements as it is to discover evidence of variation (Strauss and Corbin 1990). This need for

research that goes beyond mere extensions of the existing body of knowledge also encouraged the development of the so-called Gioia methodology (Gioia et al. 2012).

The Gioia methodology, an inductive research approach developed and perfected by Dennis Gioia, is based on the convergence of the creativity of qualitative research and rigorous conceptualization and analysis (Gioia et al. 2012). Qualitative research can reveal intricacies in research phenomena that quantitative research cannot. However, criticisms of qualitative research have questioned the basis on which these revelations are built (Gioia et al. 2012). The systematic discipline of the approach enhances the creation of credibility in data interpretation and the development of plausible conclusions (Gioia et al. 2012).

The analysis of the interview data can be described as an immersive process with constant revisits to the data. The analysis follows the open-ended and inductive characteristics of naturalistic inquiry by simultaneously collecting and processing the data (Lincoln and Guba 1985). At the start of the interview data analysis process, I went through each interview separately and coded them based on the phrases and terms used by the interviewees themselves (Nag et al. 2007). This coding was done with the use of some computer software for qualitative analysis: ATLAS.ti. The software made the coding more systematic and as a result, the entire data set was more manageable. I read each interview several times to uncover similar and different phrases used by the interviewees. At this stage, the emphasis was on reporting the voice of the informants (Gioia et al 2012). Comparisons were drawn between the interviewees to uncover conceptual similarities (Glaser and Strauss 1967).

"Comparative analysis" serves as an umbrella term for this analytical process. For Glaser and Strauss (1967), comparative analysis is a method of generating theory. Codes employing similar terms were grouped into categories. As the analysis progressed, I began to distinguish codes across multiple interviewees who shared similarities and differences in their statements, and as a result, categories began to emerge. Whenever possible, I relied on the interviewees' own language when labeling the categories. After subsequent readings, I assembled the concepts into categories based on essential content for the interviewees and that shared similarities in relationships or ideas (Gioia and Thomas 1996). I used the ATLAS.ti software for the coding and constant comparison. An example is the phrase "putting out fires," as several programme representatives used this exact phrase to describe the operations of their respective programmes. The interviewees attributed the following characterizations to the operations: a lack of planning of activities, a disregard for proactive measures, and a failure to identify future opportunities. Other interviewees referenced similar types of activities but did not employ this exact phrase. I compared the data among the interviewees to ascertain a pattern of similar concepts, and ultimately, the concepts that bore similarities were included in the same category. This approach, which analyzes informant-centric phrases and terms, is called first-order analysis (Gioia et al. 2012). As the analysis thus far has focused on deconstructing the data, the data analysis process then

moves to bring the pieces together. In a naturalistic inquiry, the data are constructions provided by the sources employed in the research. The analysis of the data is, then, a reconstruction of the data (Lincoln and Guba 1985). The initial coding, or the first-order analysis, is comparable to Corbin and Strauss's (2008) open coding. Open coding begins with the deconstruction of the entire data set into smaller blocks of data, with demarcations between categories being drawn simultaneously. The demarcation of the categories coincides with the further characterization of the categories according to their properties (Corbin and Strauss 2008).

Concurrently, links across these categories began to emerge (e.g., "lack of continuity"). Such links allow researchers to create theoretically specific groups based on the first-order categories (Nag et al. 2007). The researcher-induced concepts then form second-order themes (Nag et al. 2007). This dual reporting of the voices of the informant and the researcher enables a robust depiction of the links between the data and provides insight into the studied phenomenon (Gioia et al. 2012). This approach has witnessed increasing use in recent years, being employed in, for example, studies by Corley and Gioia (2004), Nag et al. (2007), and Dacin et al. (2010).

Axial coding is the reassembly of the previously deconstructed data pieces. It recognizes the intersections and linkages between the categories (Strauss and Corbin 1998; Corley and Gioia 2004; Corbin and Strauss 2008). Linking the categories to one another also enables further elaboration. Linking is not restricted to a particular categorical level: It can occur at and between different levels (Corbin and Strauss 2008). The procedure of axial coding relates categories to subcategories regarding the respective dimensions and properties. The category itself refers to the phenomenon under investigation. A subcategory is also a category in itself, but in contrast to a category, which represents the actual phenomenon, a subcategory provides further details about the primary phenomenon (Strauss and Corbin 1998). Let us revisit the phrase "putting out fires" as an example: The phrase is a first-order category that is linked to the second-order theme of "lack of continuity." The first-order category thus becomes a subcategory that provides elaboration on the second-order theme (Corbin and Strauss 2008). The theme of "lack of continuity" is, then, a contributing block to the aggregate dimension. In this way, the dimension is "lack of a strategic program." Dimensions provide an umbrella for the second-order themes, and the inclusion of aggregate dimensions completes the theoretical framework that connects all the themes and categories developed from the data (Nag et al. 2007). Axial coding enables researchers to search for answers to the questions of why, where, when, how, and with what consequences. Furthermore, by answering the questions above, the researcher can contextualize the investigated phenomena (Strauss and Corbin 1998). Even though I distinguish between open coding and axial coding, they are conjoined processes. As Corbin and Strauss (2008:198) state,

"The distinctions made between the two types of coding are 'artificial' and for explanatory purposes only, to indicate readers that though we break data apart, and

identify concepts to stand for data, we also have to put it back together again by relating those concepts. As analysts work with data, their minds automatically make connections because, after all, the connections come from the data."

As I now have the set of first-order categories and second-order themes, as well as their aggregate dimensions, I can develop a visual representation of the progression of the analysis. Complementing one's methodological discussion with visual representations is a mark of top-level qualitative research (Pratt 2008). The process of developing a data structure also initiates a theoretically-based perception of the data (Gioia et al. 2012). Therefore, it is an essential step toward theorization. Taking cues from previous studies by Dennis Gioia (Gioia and Thomas 1996; Corley and Gioia 2004; Nag et al. 2007), I reiterate the emerging data, concepts, and related literature. At the start of the data collection process, I was acquainted with the organizational architecture literature as well as its preceding literature on organizational design and structures. I also familiarized myself with prior studies in higher education internationalization. A certain degree of ignorance related to all relevant literature is an advantage, however, as it keeps the terrain open and reduces the biases of confirming preconceived hypotheses. Gioia et al (2012:21) label this as the "witting ignorance of previous theorizing in the domain of interest." Finding a balance, of course, is crucial, as the likelihood of recycling established ideas increases if ignorance trumps knowledge. The data structure provides a critical component of the theorizing process, but it is not the end product of the process. Instead, it provides a static depiction of the studied phenomenon (Gioia et al. 2012). Ultimately, it is a visualization of the data. It is the step between data analysis and grounded theory articulation (Gioia et al. 2012).

1st order categories | 2nd order themes | Aggregate dimensions

- Lack of formal training
- Fluid participation
- There are no incentives to do it
- Low level of formalization

→ Deficient formal structures

- The programme is run a certain way
- Things are done ad hoc

→ Compensatory informal structures

- Development of lateral relations
- Information does not flow
- Experience matters

→ Information processing

- University is a complicated structure
- We focus on the substance and deliver the teaching
- We are doing it ourselves
- Whose responsibility is it?

→ Unclear division of labor

Current structural inertia

- We would like to do this but there is no time
- Arbitrary role assignment

→ Inadequate allocation of resources

- Putting out fires
- It wasn't systematic
- There is very little management

→ Lack of continuity

- Problems with including IMDPs into regular operations
- What is the purpose of the programmes
- It's still a Finnish university

→ Equivocal integration of the IMDPs

Lack of a strategic program

- An additional resource would help
- Contracts need to be extended

→ Changes in resource allocation

- The role of the central administration should be developed
- The IMDPs need to engage with each other

→ Increased coordination

- Preparations for the introduction of tuition fees
- Need for integration of IMDPs into faculties

→ Desired strategy for internationalization

Actor perceptions of necessary efforts towards internationalization

Figure 15   Data structure

4.3   Architectural aspects of IMDPs

I have described the setting in which IMDPs operate in a preceding section. The premise does not fully divulge their operational context. In order to justify my argument on the necessity of organizational architecture in the strategic process, I now analyze the architecture of the programmes themselves. The theoretical categorization of organizational architecture studies provides a framework to interpret the manifestation of the architecture.

4.3.1   Architecture as a structure

4.3.1.1   Formal structures

All the IMDPs have a representative, whether acting as a coordinator or as a director. The role of the coordinator or director is to assume a degree of responsibility for all issues related to the programme. Implementing this type of role or representative is beneficial, as having one individual bear all the

responsibility is seen as more effective than several individuals bearing some of the responsibility. Most notably, these roles bear the responsibility of student selection and student guidance. The coordinators and directors are not solely responsible for the aforementioned tasks but rather oversee the related activities. The roles above are not formally planned at any level; rather, the individuals in these positions assume responsibilities that fit their preferences. Therefore, the tasks and responsibilities of coordinators or directors may vary considerably even in the same programme. In some IMDPs, the directors or coordinators assumed great responsibility for the programme in terms of time and resource investments even though, as this type of commitment has not been mandated anywhere, these individuals were not required to do so. In other cases, the programme representative was merely a contact person. These instances were characterized by minimal effort and a disregard for the state of the programme.

Across all the programmes, a detailed division of labor seems to be missing. The appointments of coordinators and directors are not the result of careful deliberation and planning for the long-term benefit of the programmes; rather, the coordinators and directors are instated on an ad hoc basis. Little preliminary analysis or deliberation is done before the decision. Furthermore, the individual tasks associated with the roles are not clearly communicated, and unclear and uncertain tasks place additional strain on the representatives, as the successful execution of these tasks is reliant on their ability to see them through. The tasks, as well as finding the right sources of information, contain a learning curve.

From a broader organizational perspective, a clearly delineated distribution of responsibilities also seems to be lacking. The concerned parties in the administration of IMDPs are the programmes themselves, the faculties, and the central administration of the university. The tasks completed by the IMDPs vary across faculties and programmes. Some programmes have taken the initiative to perform the majority of associated tasks across the entire value chain. In these programmes, the operational responsibility is in the hands of a select few or, in some cases, one individual. In most cases (27 out of 34 IMDP representatives that were interviewed), the individuals responsible for the administration of the programmes are research and teaching staff. These individuals have other, primary responsibilities, and thus, they pay far less than optimal attention to administrative matters. A lack of formal documentation and standard operating procedures also increase the fragility of the IMDPs' operations. Essential tasks and their details are poorly documented and rely on the tacit knowledge of experienced personnel. There is an identified need to improve documentation, standard operating procedures, and effective communication of the aforementioned, but this need is overshadowed by time and resource constraints, as well as willingness, to some extent. As previously mentioned, the majority of IMDP representatives oversee the administration of the programmes on top of their primary responsibilities, which, accompanied by low levels of orientation and training in the relevant tasks, has resulted in stagnancy in international education.

All the faculties have various types of teams, councils, and committees that discuss relevant issues. Traditionally, all disciplines and educational programmes have their representatives present at the required entities to promote a universal approach. These are platforms for disseminating information and making decisions. Due to their unique nature, however, IMDPs have not been universally included in these entities. As IMDPs have traditionally been considered a somewhat loose structure within a faculty, they are not fully integrated across all cases. The programme coordinators and directors have had difficulties integrating their programmes into these administrative bodies, and they had to exert extra effort to be included in the relevant teams and councils. As a result of the IMDP representatives' proactivity, the programmes were successfully included in all relevant bodies. To further develop the programmes, a few of the IMDPs formed so-called "programme teams," which were designed as entities to review and discuss the programme's performance and critical issues. However, only a handful of these programme teams were actually active and carried out their purpose. In some cases, these so-called teams were formally mandated and made public but had never actually met. In other words, these programme teams were formally created but, in practice, were not operational. As some of the members of these teams were outside the IMDPs and even outside the faculties in question, the teams had the opportunity to provide an outsider perspective on the state of the programme. Due to conflicting schedules and other more primary matters, however, arranging team meetings seemed nearly impossible. In some exceptional cases, the members of the programme team were willing and motivated enough to invest their time into team matters. In these cases, the programme team met approximately twice a year to discuss current issues and to analyze future scenarios. These meetings were received with positive feedback from the IMDP representatives, as the team functioned as a sounding board for ideas and problems. As mentioned above, however, most decision-making and discussions in IMDPs are very informal and conducted in passing alongside daily operations. Many IMDPs claim that this approach suffices and that they do not see the need or a purpose for a programme team. Related meetings, memos, and minutes of these types of teams are regarded simply as an additional level of bureaucracy.

4.3.1.2 Informal structures

Shortcomings in the formal structures have been complemented to some extent by informal structures—the structures and arrangements that emerge from the day-to-day operations and the interactions among organizational members to enable the execution of operations. The IMDPs heavily employed informal communication and decision-making that primarily were a result of physical location and a small number of key individuals. Faculties and departments are traditionally located in the same building to ensure the proximity of affiliated members. Therefore, in urgent matters, decisions are made via the direct contact of key individuals. The IMDP representatives felt that the speed and flexibility of this approach were satisfying and that additional meetings or formal

documentation would be a hindrance. This idea was also presented in the low number of meetings, both official and unofficial. Furthermore, any form of meeting-related documentation was also deficient. Informal communication and decision-making enable fast decision-making and flexible operations, which can be advantageous. Nevertheless, as decrees and guidelines very much dictate the university context, fast decision-making at the programme level may not carry all the way through. Furthermore, often, IMDP representatives do not possess the necessary knowledge regarding these decrees, which, in turn, creates more significant interactions among the representatives and faculty administration, as well as among other relevant bodies within the university.

It has already been established that IMDP administration is handled by research and teaching staff within each faculty and department. Some of these individuals have taken on the responsibility hesitantly, whereas some have been willing and even motivated to do so. Many of them, however, see the administrative tasks as a burden that hinders their actual work. They have expressed their concerns of being overworked to their superiors, who mostly acknowledge and understand the situation but make no real efforts to rectify it. Some of the interviewees were fairly straightforward in asserting poor leadership from their superiors. Others, on the other hand, were less critical of their superiors and pointed out the resource constraints, which were out of their superiors' control. Furthermore, the level of interest in IMDP-related issues is low among staff. Predominantly, the programme representatives demonstrate a keen interest in the programme and invest their time in it, while other members of the programme or corresponding department do not embrace this interest. Daily operations and critical issues are in the hands of a select few, and others do not bear any substantial responsibility for the programme.

4.3.2 Architecture as a process

When programmes consider their performance, many factors must be taken into consideration. Demonstrated interest in the programme is a critical factor in maintaining a sustainable educational programme. This is a rather straightforward factor to measure, as the annual number of applications is a clear indicator of interest. For some IMDPs, the number of applications seems to be the essential factor in evaluating the viability and success of the programme. While a high or even acceptable number of applications does enable the successful operation of a programme, there are other, equally important factors. Interestingly, many IMDPs were not overly concerned with the self-evaluation of their programme, instead focusing on comparing their performance or operations with other programmes of the university. Marketing has been an essential point in these operations, and the IMDPs were brutally honest about the poor level of marketing done by them and the university in general. The justification for their low-level investment in marketing was that some programmes were even more inadequate at it. From a broad, organizational perspective, these programmes have no clear goals. The annual intake of individual programmes is predetermined, but measures beyond that are not

clearly controlled. Departments and faculties do set some objectives for the annual number of graduates per educational programme, but these goals act more like guidelines.

One predicament that troubled a notable number of the interviewees was the contradiction between the university strategy and resource endowments in terms of international education. Internationalization is a component of the University of Jyväskylä's strategy, and an international campus is being pursued. The IMDPs strongly feel that this stated importance is not represented in the attention and resources directed to the programmes. An interesting example in practice is the orientation of international staff: Documentation containing valuable information for new employees seems to be lacking. This lack of a framework for introducing new international employees increases the workload of existing employees, as many of them must take on some responsibility in helping newcomers integrate into the workplace and possibly even into the city. These types of deficiencies are not solely to the detriment of new employees: The distribution of university-wide information via newsletters, bulletins, email is predominantly in Finnish. Many emails do contain information in both Finnish and English, but as noted by several interviewees, the amount of English information is lower than the amount of Finnish information. As for the level of attention directed toward IMDPs, the programmes are only brought up in discussions when suitable for other purposes. Faculties and departments promote IMDPs or issues related to them when there is promotional value, either internally or externally, in doing so.

A member of the university administration pointed out that the resource constraints are a major concern from a broader perspective. Furthermore, the current situation, wherein research and teaching staff bear a great responsibility for the programmes, is hopefully just a temporary arrangement. According to this interviewee, the current arrangement is not sustainable, since time and resources that are supposed to go toward research and teaching are being spent on entirely different tasks. The IMDPs and their functioning in their respective departments and faculties are characterized by varying degrees of hierarchy. One interviewer characterized the operations as "autonomous to the point when money is involved." Basic operations, from student selection and student guidance to teaching, are fairly straightforward and follow a similar trajectory from year to year, allowing IMDPs to plan these operations in the given frameworks and act accordingly. One interviewer characterized the daily operations as occurring in a "flat hierarchy," meaning that IMDP members across all levels can converse, interact, make the necessary decisions without relying too much on higher-level acceptance. The university decrees heavily dictate some of the operations and require certain decisions to undergo a particular protocol involving several levels of university hierarchy. These types of decisions are not frequent; rather, they are more substantial decisions that involve substantial changes to be made to the programme. Decision-making in recently established programmes is thought of as slower, since obtaining information and learning the essential aspects took time. Especially in the development of the first IMDPs,

the learning curve was demanding, as the programmes did not have an established template. Reliance on the expertise of the administrative staff was substantial, and this reliance has even extended to modern times. In the majority of the programmes where administrative matters are performed by research and teaching staff, reliance on administrative staff is paramount. Research and teaching staff have very little knowledge regarding decrees, guidelines, and protocols, and often, they also hesitate to get acquainted with the matters, as they felt that these issues impeded their primary work. Furthermore, there has been some resistance on behalf of the administrative staff toward tasks related to international programmes. The staff feels that IMDPs are not a part of their job description and do not want to conduct tasks in English. This reluctance may also be attributed to poor language skills. This schism between administrative staff and research and teaching staff has also increased the differences between international programmes and Finnish programmes. The IMDPs feel that they are not on the same page in the faculty or department. The programmes are not self-contained units, even though they might exhibit some characteristics of such units.

The IMDP representatives stated that their respective programmes are operational with the current resources. Student admissions, courses, and student guidance all function satisfactorily. Nevertheless, the coordinators and directors are not satisfied with the current affairs in terms of the resources placed at their disposal. The programmes have learned how to manage with extremely limited resources, and they currently function by, as several interviewees labeled it, "putting out fires." This type of behavior is characterized by highly reactive operations and a low level of proactive planning and development. The low level of development results from the lack of resources and time. There are clearly identified pitfalls that require development, but due to resource constraints and the lowered levels of goals, these developmental projects are either rejected altogether or postponed for better times. Generally, it is unanimous that these developmental projects would be in the best interest of the programme to pursue. The prevailing situation, however, mandates that no additional resources are available for these projects, and the existing staff members are not willing to sacrifice their own time to pursue them. In the end, several development initiatives were identified, and their importance agreed upon, but no actions were taken.

4.3.3   Architecture as power

The lack of formal decision-making structures has not hindered decision-making in IMDPs. A well-known hierarchy establishes who has the final say. Often, the coordinators and directors of the programmes are free to decide on everyday issues, and when necessary, they refer to the administration or the responsible professor. Consultation with the administration predominantly concerns practical issues, such as student guidance and student admission. Whenever the programmes deal with issues related to money, the responsible professor or equivalent is consulted.

The scope of participation among academic staff in programme-related issues is varied. Coordinators and directors usually participate actively in the issues, unless there are some more pressing matters. Most of the time, these pressing matters related to the professors' own research: Individual research projects and all things related to them always takes precedent over IMDP issues. The other members of academic staff involved in the IMDP are even more elusive regarding programme issues.

The notion of information processing is highly important in the structuring of IMDPs. Formal structures in place for information processing do not guarantee effective information processing; instead, they steer the behavior of individuals in a preferred direction. As has become apparent, IMDPs are not ideally situated concerning the reception of relevant information at the right time. In many instances, the coordinators and directors receive essential information too late to be of use, which hinders the successful execution of important tasks. These shortcomings are communicated to superiors and the administration to ensure that such incidents do not occur again. Nevertheless, many additional failures in information processing were identified. The lack of effective formalized information processing leads to increased participation from individuals, and shortcomings in the organizational capabilities of information processing are, to some extent, complemented by the information processing capabilities of the individuals. Therefore, the existing formal structures are considered temporary. Furthermore, the deficiencies of the formal structures in enabling effective information processing lead to increased collaboration between IMDP representatives across faculties and departments. However, the university has failed to consider the information processing requirements and capabilities associated with IMDPs. There are no incentives to invest time and resources in the effective information processing of these programmes. One underlying reason for this lack of incentivization is, as previously identified, that the management and administration of IMDPs are handled by individuals for whom they are a secondary responsibility. It is natural to instead invest one's time and effort in the task that serves as the basis for one's performance evaluation.

Prior research has established the information processing capabilities of organizations (Tushman and Nadler 1978) and those of the individuals of organizations (Turner and Makhija 2012). Researchers have noted that different tasks require different approaches to process information (Galbraith 1973; Nadler and Tushman 1997). Furthermore, as prior research has identified, the requirements for information processing increase as task uncertainty increases. On the individual level in particular, there exist differences in the placement of emphasis on different tasks. In the university context, research and teaching staff have to balance competing demands. From the individual perspective, emphasis on research is most beneficial, as a solid track record in research activities is beneficial for scholars' future careers. Furthermore, top-class research is also supported by the university through additional funding and, to some degree, even incentives. For research activities and tasks, information processing

capabilities are carefully orchestrated. As researchers have teaching responsibilities mandated by their contracts, teaching is also an essential task.

Whereas the literature on information processing considers the creation of lateral relations as a conscious design choice among managers, in the studied context, there was no evidence of planned creation. It was evident that lateral relations were developed across programmes organically. As all the IMDPs faced similar issues in their operations, engaging in dialogue and collaboration among each other was a natural development. This cross-faculty collaboration was further accentuated by the lack of direction and guidelines from the faculties. Therefore, programme coordinators and directors began to consult with other coordinators and directors. Best practices were exchanged and basic guidelines created. The process of cross-faculty collaboration can be defined as the development of lateral relations. As mentioned previously, direct contact was employed at the University of Jyväskylä as a natural reaction to task uncertainty across IMDPs. The challenge of maintaining direct contact as a mechanism for knowledge exchange lies in its sporadic nature, as it lacks the systematic property to enable efficient knowledge exchange further. Furthermore, direct contact is entirely based on individuals, and thus, sustainable direct contact was few and far between. Individual direct contact was still prevalent, however, and this contact was further developed through formal meetings among all IMDPs. These meetings were coordinated by the Division of Strategic Planning and Development, and as a result, the collaboration has assumed a more formal form. These IMDP meetings take place a few times a year, usually coinciding with current activities such as upcoming application periods and student admissions. Nevertheless, several interviewees expressed their disappointment regarding the meetings, claiming they were unfruitful. These meetings serve as a platform for IMDP representatives and relevant members within the central administration to discuss relevant issues and share information, and the claims of them being unfruitful stem arise from the meetings' tendency to focus on just on a particular topic at a time. The meetings are thought to merely focus on technicalities and protocols on particular topics, such as student admission. Many programme representatives indicated a lack of discussion about problem-solving and development in the programmes, and a few unfruitful experiences with these meetings discouraged many IMDP representatives from attending them altogether. They clearly voiced their opinion of the meetings being a waste of their time, preferring to rely on subsequent communication about relevant issues or someone else being present at the meetings. This reliance on follow-up communication either by the central administration or by a colleague can be considered a compensatory informal structure.

Due to limited resources, there are only a few designated administrators involved in IMDPs. Therefore, most of the work and responsibilities are divided among research and teaching staff. Formal structures that delineate task responsibilities for research and teaching staff clearly stipulate that the allocation of time must be in accordance with employee contracts. Nevertheless, the deficiencies of the formal structures have caused informal structures to emerge.

This arrangement reflects the findings by Gulati and Puranam (2009) and Nyhagen and Baschung (2013). In the case of Cisco, the compensatory fit between the formal and informal organization enabled the pursuit of duality. It must be noted that this compensatory fit can only exist in an environment that already contains a robust informal organization (Gulati and Puranam 2009). In the current context, a scenario of this type also increases the likelihood of inefficient structures, because IMDP-related responsibilities are simply added on top of other priorities. Furthermore, there is no designated common administrator for the programmes, but a type of managerial linking role has been established to coordinate relevant issues for the programmes. As in the study by Nyhagen and Baschung (2013), this managerial linking role was added as an informal function for a person working in central administration. Whereas individuals in traditional managerial linking roles can exercise some degree of formal power, in this context, the position itself does not encompass any formal power per se. The influence lies in the department to which this person belongs: The department in question is in charge of strategic and development issues within the university.

In two out of seven faculties, a type of liaison role was initiated to improve communication among programmes as well as between programmes and the departments and faculties. In these two cases, a separate administrative person was assigned the role. The job description of these tasks was not clear at the beginning, and at one point, one of the tasks encompassed a multitude of responsibilities related to the internationalization of the faculty. The other faculties either neglected this role entirely or distributed the responsibilities of the role to existing academic staff. Several interviewees mentioned that the development of these kinds of roles was more or less dependent on the staff's proactiveness. Their superiors acknowledged the situation but did not take any actions on their behalf. Furthermore, most of the individuals assigned to coordinate and run the programmes received minimal or no training for the associated tasks. Predominantly, these individuals perform these tasks alongside their primary work, which is research and teaching.

As previously mentioned, the status of an IMDP is challenging and poorly resourced, and the level of formal planning and operation is low. The informal structures developed within and between programmes counteracts the deficiencies in the formal organization, the plethora of structural arrangements vary from some formal structuring to no formal structuring, and there is strong tendency to complement formal structures with emerging informal structures. Many of the informants stated that they consciously circumvent the formal structures because the emergent structures are more effective for completing the relevant tasks. Even though the informal structures are prevalent and provide a somewhat functional template for day-to-day handling of operations, they are highly vulnerable and critically dependent on a few individuals and their selfless dedication to the programmes. Furthermore, lateral relations were developed to ensure more information processing. Direct contact across departmental and faculty lines was applied on a large scale among the individuals performing

administrative tasks. As the programmes all deal with similar issues, the tendency to seek support from peers is natural. Due to the nature of the institutional environment, there are no systematic methods for compensation or incentivization for the management and administration of IMDPs. Furthermore, the majority of the people responsible for the programmes are only temporarily employed; therefore, the sustainability of programmes is severely compromised.

5   FINDINGS

This study on universities' internationalization efforts of instating IMDPs to attract foreign degree students involves many different aspects. The most critical factors in comprehending the phenomenon are organizational structures, integration, and information processing. These factors are somewhat general, and they include a variety of subthemes, which are discussed in the following section. The data structure was presented in the previous chapter. Table 12 displays additional evidence as informant quotes related to the second-order themes is presented.

5.1   Deficient formal structures

One of the most important themes that emerged from the interviews and the secondary material was the university's formal structures and, more precisely, their deficiencies related to the organization of the IMDPs. The international programmes differ from the more traditional ones in a few key ways. First and foremost is the notion of student recruitment and applications. As previously mentioned, prospective students apply through a different system than applicants to Finnish-taught programmes. The application system must be managed and updated, and in most cases, the responsibility lies with the research and teaching staff of the individual programmes. This arrangement differs tremendously from that of the Finnish-taught programmes, where the administrative personnel within faculties or departments handle such administrative matters. In addition to the different application systems, most IMDPs also conduct interviews with prospective students, which further differentiates them from the traditional programmes.

Most IMDPs have appointed programme coordinators or directors. The tasks associated with these positions vary significantly between programmes. As the role of coordinator or director is rarely documented, there is confusion regarding the allocation of tasks. Due to their somewhat distinct nature, the

position of the programmes within faculties and departments has been challenging. In many instances, they are on the sidelines when compared to the more traditional Finnish programmes.

5.1.1 Lack of formal training

A critical feature of formal structures in the division of labor is the training and orientation of new employees and new tasks. It has become apparent that, in the context of international programmes, tasks related to administration are predominantly secondary or even tertiary tasks for the individuals performing them. Traditionally, it would have been the responsibility of the individual's superior to provide proper training in and orientation of the new tasks. However, such training was found to be severely lacking for tasks within IMDPs. Often, a more experienced employee was assigned these tasks due to changes in personnel, and this more experienced employee assumed these responsibilities in addition to his or her primary responsibilities. Often, this individual was not familiar with the programme or its related activities. Only a rudimentary, general description of the tasks was provided, and the orientation was conducted predominantly by peers. One interviewee gives a rather straightforward description of the orientation provided for a new employee:

> "My orientation was that here are your keys, here is the phone, the pin number is this and the number is this, here is your desk... That was about it."

When the first generation of IMDPs was implemented, one interviewee described the process as being an individual effort and very challenging:

> "There was quite, maybe not pressure but like that, I would be a suitable person for it and there weren't other suitable persons [....] There was no training because of the tremendous rush to do it so there would have not been any time to attend any training anyway. It was pretty intense working all the time. Meeting the other master programmes was very difficult."

As expected, the first programmes operated under the rule of a few solitary persons, as no one had had any prior experience planning, implementing, and running such programmes. Perhaps surprisingly, this type of unsupported activity has continued well into the present day. Another interviewee, who oversaw the planning and implementing of a new programme, noted:

> "The planning process was very quick, and we didn't get any support for it. [...] It was learning by doing. [...] It would have been nice to hear from somewhere how these things should be done. It was entirely learning by doing."

Before the planning described above, the university had hosted IMDPs for well over a decade. However, no procedures or guidelines for implementing new programmes were made available. Acquaintance with the relevant tasks was left to the proactiveness of the individuals and to the informal assistance provided by peers. When this study was conducted, there were indeed some systematic training efforts made. Annual training in the usage of the application service and

database was provided. The IMDP coordinators, directors, and other affiliated members held formal meetings occasionally to discuss relevant issues. Furthermore, relations that had informally emerged among programme members enabled the sharing of experiences and the distribution of knowledge. Nevertheless, outside of these few meetings, the programme representatives themselves were mainly responsible for finding information and support to perform their tasks.

5.1.2 Fluid participation

A noticeable challenge in organizing the programmes and distributing the responsibilities among staff was the variety of interest levels toward the responsibilities. The variance in time and effort placed on certain tasks or issues is described as fluid participation. The organization itself poses certain constraints. Nevertheless, as one of the informants clearly states personal preference influences participation greatly. Investing one's time and effort in tasks that are beneficial to one is natural:

> "Is it about attitudes that these aren't a priority. They are personal choices about what are the priorities. They have to be if one wants an academic career. If you begin to invest in teaching and these types of things you will get kicked out because you don't have any output. It would be foolish to invest in these because then you won't get a new contract. If you invest in this task your work won't continue which is foolish. I am constantly struggling with this because it annoys me tremendously. I don't even know if I want an academic career but I have to try. Then these would have to be done haphazardly."

Accepting administrative tasks can be seen as an obstacle in conducting one's primary task of research. This idea extends from the low level of formally delineated responsibilities, as there are no incentives for accepting these tasks. Furthermore, the declination of the tasks does not lead to any repercussions. There is a strong consensus that more attention and resources need to be placed on the organization of the programmes, but accepting these responsibilities is not a popular choice among staff:

> "I believe that these programme coordination tasks are for the lecturers like a hot stone that gets thrown around. Who is finally the yes-man who handles everything? It wouldn't necessarily be a large task if someone knew how to do them. It is always learning, kind of fumbling."

Another interviewee gives additional emphasis regarding the effects of low levels of formalization on the variety of participation:

> "I don't know, it's this university culture that this doesn't concern me. There needs to be a clearly placed responsibility for someone. This type of voluntary cooperation seems to be an oxymoron in this institution. People don't have the goodwill to help."

The notion of fluid participation was particularly strong among relatively new research and teaching staff: These individuals were expected to perform at a certain level concerning research outputs. For these individuals, research was

their primary measure of performance, and thus, acting toward that end was most beneficial for their career advancement. Therefore, the additional tasks related to the administration of a programme were often seen as an unnecessary burden. Furthermore, the inclusion of these tasks in the job description was not always clear. There were no formal structures regarding which tasks to perform and how to perform them, no sanctions for neglecting the programmes, and very little compensation.

5.1.3 There are no incentives to do it

Members of an organization have different goals, and the reward structure is designed to accommodate these differences to attain the organization's goals (March and Simon 1993). Regardless of the university's emphasis on claiming internationality, the IMDP representatives were unequivocal about the lack of a reward structure or incentives. One interviewee, who was heavily engaged in developing a new programme, stated that participating in the process was very time-consuming and that no reward systems were in place:

> "I would say that the compensation was ridiculous, just ridiculous. No sane person who cares about their career and health would take part in something like that without any compensation and recognition. For example, any of this wasn't included in my work plan because it came so suddenly."

The majority of the research and teaching staff primarily conduct research. Therefore, engaging the staff to participate in the administration is challenging. The level of involvement required in the administration of the programmes can vary depending on the size of the programme. Nevertheless, the university has acknowledged that having research and teaching staff responsible for the administration can be detrimental to the programmes' performance.

When the first IMDPs were launched in 2005, some separate funding was available for the programmes to hire full-time coordinators to manage the programmes. However, the funding eventually ran out, and the coordinator positions were the first targets for cuts, leaving the existing programmes vulnerable. The only option was to transfer the responsibility of programme management to the research and teaching staff. After the funding ceased, the integration of the IMDPs into their respective departments and faculties became a challenge (University of Jyväskylä 2014). One member of the university's management raised similar concerns, hoping that the current situation is only a temporary solution:

> "To be honest, it is bad faculty management. It is not the type of work that is reasonable for the teaching staff to do. In that sense, I hope it stays as this type of temporary. These programmes have certain special characteristics that require, for example, reasonable language proficiency. A regular member of the study administration might not have it. If they don't and it's a faculty programme, then it must be arranged so that they do. There are many things that create the separateness and detachment of the programmes."

There seems to be a tendency within the university to place more emphasis on research activities. Individual scholars and the broader organization view their goals as aligned. A solid track record in high-ranking publications increases a scholar's chances of obtaining a more permanent position within the university, and the university benefits from having internationally recognized scholars, thereby attracting more international faculty and outside funding. There are also incentives to lead research projects. As one programme director states, however, incentives do not extend to the tasks and responsibilities related to IMDPs:

> "The university's payroll system is what it is. I had an added bonus but that was not related to the programme director's tasks. It was related to my research, I was a responsible leader in a large research project. There was a bonus related to that. But as the project has ended so has the bonus."

Minimal formal training related to IMDP tasks, accompanied by practically nonexistent incentives to invest one's time in the programmes, have steered the focus of individual scholars away from the IMDPs. Furthermore, as the IMDP tasks are a primary responsibility for only a select few within the university, participation among research and teaching staff tends to be very low.

5.1.4 Low levels of formalization

The focus now turns to the level of formality regarding processes and procedures within the programmes. Many of the international programmes are small in the number of both affiliated staff and students. The low number of staff, in particular, has reduced the need for official meetings and guidelines to the bare minimum. Therefore, informal decision-making and discussion are employed to ensure a certain degree of viability. The role of informal structures is analyzed in more detail in a later section. There are clearly identified deficiencies regarding relevant processes, which are even more emphasized when a new staff member joins the programme:

> "... there have not been any major problems, but it is true that if these tasks are done by someone who is not that familiar with this university or the system, then it can be difficult. So we should document more."

There was widespread recognition that documentation would be beneficial. The lack of documentation was identified as a hindrance. The internal evaluation also brought this conclusion to the forefront of the discussion. Proper documentation of relevant processes and procedures would enable programmes to function more effectively, as the documentation would serve as a reference point on key issues. The internal evaluation report links the lack of formalization to the increasing predicaments of the programmes:

> "Because of limited resources, many programme directors are forced to heavily rely on the contribution of PhD students and temporary staff in programme administration, teaching, and student guidance. This makes the IMDPs extremely vulnerable both in academic and administrative issues because very few of the IMDPs have sufficiently

documented processes and guidelines to assist them through the continuous changes in staff." (University of Jyväskylä 2014:8)

The interviewees stated that there are instances in which the programme staff are unable to recall or simply do not know a particular procedure or detail. These instances are usually solved by consulting more knowledgeable staff, often the administrative staff. However, these consultations can become burdensome to both the programme and the administrative staff. As one interviewee noted, "If there is one person there who knows most and that person is away, for example on sick leave, then we are left wondering who knows what."

For many IMDPs, the notion of documentation was raised, and there has been some encouragement toward increasing it. Efforts to document have been modest, as they are seen as too time-consuming. Furthermore, the issue of who would be responsible for the documentation becomes a threshold. As has become apparent, the details of task responsibilities are not always clear among staff. Therefore, assigning responsibility for documentation would also be a challenge. Some IMDPs hold meetings very rarely and employ no memos or meeting minutes during them. Reliance is placed on the individuals attending the meetings to remember or to write notes or possible emails. The lack of documentation has been a consistent feature, and the call for more documentation is counterargued with a lack of time.

A few of the interviewees offered contradictory views regarding the need for documentation. In programmes with relatively stable staff and a modest number of applications and students, the need to increase the documentation of protocols and processes was not a primary concern. For these interviewees, the absence of any form of documentation was not a particularly pressing issue. The student application process and the evaluation of applications are often documented for both internal and external purposes. As one programme director claimed, "It is just internal information in case someone asks, then we have something to show. I was a little bit against it because we don't need it in detail. If someone asks about it, we can tell them.

5.2 Compensatory informal structures

In the previous section, findings related to the formal structures were presented. The noted deficiencies of those structures affect the emergent, or informal, structures. Shortcomings in the formal structures have been complemented to some extent by informal structures, which are structures and arrangements that emerge from day-to-day operations and interactions among organizational members to enable the execution of the operations.

The absence of any form of incentives regarding the IMDPs did not deter some individuals from investing their time in the administration of one of the programmes. One programme director accepted the responsibility out of

altruistic interest toward educational programmes, fully aware of the complete lack of incentives:

> "There are no extra things. I look at it from the perspective of not even expecting anything because I'm used to the university system. I see it at as an interesting task to be a part of and develop it. It was meaningful even though it took a lot of time, it is still the type of work I like to do. Even without extra compensation. Financial."

The above quote serves as an example of informal structures conveying a supplementary logic concerning the deficiencies of the formal structures of IMDPs. Some programme representatives engaged in the operational activities out of perceived necessity and went beyond the call of duty. Furthermore, a certain degree of autonomy in the role enabled the director to be more engaged. This finding corresponds to the findings by Nyhagen and Baschung (2013).

5.2.1 The programme is run a certain way

The emerging structures within the IMDPs create a particular modus operandi. Regardless of the presence, or absence, of formal structures, all organizations, divisions, departments, and programmes develop a particular way of operating, to which the notion of a culture is closely related. Some programmes develop a highly open and democratic culture in which several people are involved and provide input. Other programmes operate under a significantly more closed culture, almost a dictatorship. In such a scenario, most of the programme responsibilities are allocated to one person, who may choose to not include others in the discussions. Whatever the culture may be, people require time to become acquainted with it. One coordinator noted that it is challenging if a person is not aware of the ins and outs:

> "Then there are the tacit rules about what should be done and what should be asked. You cannot know these in the beginning. Then you might get reprimanded for doing something on your own accord like you sent an email."

The ways of operating develop over time, sometimes over several years, and eventually become an accepted way of doing things. Some interviewees stated that the relevant staff agreed that certain aspects of the programme should be changed. Some issues requiring change have been discussed formally and informally for prolonged periods of time without any action taking place to initiate the change.

> "Kind of streamlining of working methods would be one way to make things easier. It would be difficult to alter a working culture at a point where it has developed for years."

These types of obstacles can be discouraging for the highly invested, as these individuals wish to carry out improvements, but the lack of authority and decision-making inhibits such actions.

> "Sometimes it feels that it would be easier just to do certain things, just do it. In a way, it takes time when we brood over everything together and it can lead to us wondering what was the point of all this. If the conversation is just about talking and the issue ends up going the way it was originally planned."

The IMDP representatives seem to hold slightly contrasting views regarding the culture of the programmes and the level of decentralization. Some feel that a more open and democratic approach would be optimal in all instances, whereas others feel that certain issues need to be in the hands of one individual, often the programme director. When referring to the decision-making power of a previous programme director, one current programme director confirmed that the needs for a certain degree of sole decision-making authority:

> "Probably the culture here was that this person strongly assumed that type of role. On the other hand, they were on the right issues. Now that I'm doing that task there are certain issues in which the decision-making must be in the hands of one person. You can always discuss the issues and inform people."

5.2.2 Things are done ad hoc

The IMDPs relied on informal communication and made operational decisions with minimal deliberation. Shared physical location of faculties and departments enable direct contact. Also, few key members usually handle most issues, a fact that further enables quick discussion and decision-making. When necessary, decisions can be consulted and made via a quick face-to-face meeting. Several interviewees felt satisfied with how quickly and flexibly issues were solved. Furthermore, the interviewees expressed their concerns regarding the increased number of meetings. Doing more documentation was also considered somewhat pointless. The interviewees regarded them as inhibiting and slowing down their daily activities. Therefore, it is not surprising that official meetings were held seldom. Nevertheless, the lack of meetings and documentation did raise some concerns. When asked about meetings among staff within the IMDP, one interviewee painted the following picture regarding the lack of meetings and the subsequent consequences:

> "We haven't really had any official [meetings]. Personally, I think it is bad because then it becomes ad hoc. The professor comes, and okay, now we have this and this. That interrupts everything else and becomes a burden. [...] It is very ad hoc. It hasn't been very systematic. It creates the illusion that if you're small you don't need them, but there are still common issues that need to be made aware. Even if the sessions were short."

Several interviewees mentioned that while the lack of formal meetings was regarded positively, there was concern that issues were not being discussed and information was not flowing. Whenever physical proximity permitted, informal discussions took place. Indeed, it is natural for individuals who share an office or have offices close to engage in frequent discussion.

Documenting was not an established form of formal structures. Meetings within programmes were informal in and the informality extended to

documentation and meeting minutes. Interviewees felt confident that the informal discussions and meetings were beneficial. Individuals were responsible for taking notes on issues discussed in meetings. Documentation on broader issues, such as university-level decisions that concern all programmes, was not optimal. This was brought by one interviewee when referring to programme meetings:

> "Everybody makes notes, for example, if we are distributing tasks or teaching assignments or something. If we make decisions regarding some general issues, then nobody writes any memos."

The ad hoc nature of the activities created pitfalls that fully realized when a new person entered the programme staff. Orientation for the new member relied on semi-structured discussions and generic instructions. Task details were unclearly communicated and thus the learning-by-doing-approach carried onwards. Temporary staff members and the resulting high turnover of staff resulted in compromised consistency.

As all Finnish universities, University of Jyväskylä is controlled by national level guidelines and decrees. The internal protocols and decrees influence the activities of faculties, departments, and programmes. These facts hinder informal communication and decision-making processes. Furthermore, the IMDP representatives are often oblivious about these decrees and what are their ramifications to practice. This leads to double-checking and searching for confirmation from other bodies such as other IMDP representatives and faculty administration. Also, other relevant bodies within the university' administration are consulted.

Research and teaching staff are the ones bearing the major responsibility of the IMDPs. Some were reluctant to accept the responsibility, as they were very aware of the additional burden it would bring. Lack of interest in programme administration was also present. On the other hand, some research and teaching staff were more open to accepting the role of director or coordinator. For some of these individuals, there was an intrinsic motivation towards developing the IMDPs. However, majority of the interviewed research and teaching saw the administrative tasks as a burden that hindered their primary work. They had been open about their concerns towards their superiors. The superiors were acknowledging and understanding but their lack of actions led to some interviewees to claim poor leadership from their superiors.

Quick decision-making and informal discussions emerged in the daily activities of the IMDPs as the formal structures did not properly enable these. Daily operations and critical issues were handled by a few individuals or by one individual. The other staff members related to a programme were not proactive in engaging in decision-making or discussions. As the informal structures are comprised of several minuscule ad hoc activities done by a few individuals, there is a very little potential for maintaining consistency in these activities.

5.3   Information processing

As mentioned earlier, information processing is closely related to organizational decision-making as a facilitating factor. When an organization processes information, it gathers, interprets, and synthesizes information for decision-making purposes. Ensuring that the right information is directed at the right place at the right time is vital for an organization. Furthermore, information processing within organizations can be manipulated to fit the desired purpose. In the context of IMDPs, the communication of information is a critical issue, since expertise and knowledge are essential resources and the possession of these resources is not always guaranteed.

5.3.1   Development of lateral relations

In the context of IMDPs, the development of lateral relations was highly prevalent. As has become apparent, the formal structures of the programmes were not overly efficient, and thus, the programme representatives had to resort to other means. They could not always obtain guidelines and support from their immediate peers and other faculty members. When this study was conducted, there were 18 IMDPs across seven faculties of the university, and all programmes were, to a certain degree, dealing with the same issues. Therefore, the coordinators and directors engaged in cross-programme and cross-faculty collaboration.

This lateral correspondence has been particularly prevalent in situations in which a new programme has been launched or the planning of a new programme has commenced. A typical setting in which lateral relations began to develop was when a new programme was launched in a department or faculty that already hosted an operational IMDP. The staff involved in implementing the new programme engaged with the staff of the existing programme to benefit from their guidance and experience. The formal side of the administration was a recurring topic:

> "Mostly we asked about the practicalities of the application process, how do they select and carry it out? What kind of acceptance letters and information packages do they send after the selections have been made and stuff like that. Then we have strived toward combining a few courses."

In some cases, this collaboration even worked in the opposite direction, with the newer programme sharing information with the older programme. This phenomenon can be attributed to the minimal documentation and lack of formalized structures of the older programme:

> "There was nothing planned, so this was just a lucky series of random incidents that we began to collaborate with the new master's programme. There is this open and dialogic atmosphere also with the staff of the other programme. We have gotten a lot of help from them, different kinds of email templates and everything we could modify for our students. If we need to inform about something, there is this one person in the

other programme who has done these administrative tasks for a while, so he has all these templates in his archives."

In this case, the emerging collaboration between these two programmes has been mutually beneficial, as the staff of the older programme has begun to consider more closely the division of labor within their programme. Moreover, they have begun to create process descriptions of the most frequently occurring processes.

The university has become aware of the need for international programmes to engage in communication and even collaboration. Certain processes related to the programmes must be centrally coordinated to avoid overlapping activities. To this end, occasional IMDP meetings are held to discuss relevant issues. Both the central coordination and the IMDP meetings revolve around two predominant issues: the application process and recruitment marketing. The meetings themselves have received somewhat mixed reviews from the programme personnel: Many programme representatives have acknowledged the utility of these meetings as a vessel to share information and generate discussion, but at the same time, many feel that the meetings have not lived up to their potential. They feel that due to the somewhat strict, predetermined agendas of the meetings, more pertinent issues can be left out of the discussion. Instead of being an open forum for discussion, the meetings have become more of a platform for the university administration to inform programme staff of particular details. The purely informative nature of the meetings has deterred some members from attending, as they feel they do not benefit from them.

5.3.2 Information does not flow

Several interviewees referred to the importance of information flow (i.e., the existence of proper channels to distribute information to the right people). International degree education involves several different entities, and thus, the variety of relevant information is extensive. The programme staff, especially the research and teaching staff, was often unaware of crucial issues due to their lack of training and, to some extent, their lack of motivation. In these instances, they were highly dependent on the effective communication of information and furthermore relied on other parties to disseminate information to them.

The level of participation among the programme staff varied greatly. Some staff members were complacent in the current situation and did not wish to make any extra effort, which can be attributed to the lack of incentives. Others were more willing to invest time in the programme and were proactive in critical matters. Occasions on which the reception of information was heavily dependent on the proactiveness of the recipient were frequent.

> "When it comes to administrative matters, I've noticed that there is no information flow. It is somehow very difficult to know from whom to ask a particular issue. Then it becomes just running around in panic and asking a lot of people who don't know who would know anything about this particular issue. A sort of lack of general organizing is observable."

Due to the fuzzy division of labor across and within organizational units, communicative responsibilities were unclear. Within the university, information is often distributed to a wide audience, which has led to information overload, thereby decreasing the amount of attention paid to individual pieces of information. Some interviewees felt that some information needed to be filtered, as not all members of the university needed to receive the same information. The dissemination of all information to everyone is not a practical solution, and the lack of targeted distribution of information leads to failures in information processing. On the other end of the spectrum, some individuals do not receive essential information. In some instances, the distribution of information has only been the result of fortunate coincidences, as in the case of a new coordinator:

> "It happened that I was with another coordinator at a session where we were modifying the websites to a similar form and she asked me if we had updated our programme information because today was the deadline. We had to update the programme information to the CIMO database. I was like, what is CIMO?"

Occurrences of breakdowns in information communication were reported by the programme staff. Interviewees mentioned that isolated events were understandable, but when they occurred more frequently, some interviewees felt neglected. The departments, faculties, or even the university, in general, failed to take into account that certain information needed to be communicated to the international programmes.

5.3.3 Experience matters

There is a natural progression of experience when an individual is associated with an IMDP for a long period. Continued exposure to recurring processes and activities increases one's knowledge and skills and enables the development of routines. Routines that developed for administrative tasks were regarded as essential in this resource-scarce environment. As has become apparent, additional resources for the programmes were few and far between, and the responsibility lay with the research and teaching staff. The staff saw the development of routines as positive as they minimized the detrimental effects of these additional tasks on their primary work. When a new staff member is assigned programme tasks without any or with only minimal training and orientation, the tasks are executed poorly. One new programme coordinator was straightforward about the mistakes made in the beginning but was confident that, through the accumulation of experience, similar mistakes could be avoided.

Programme coordinators and directors who had worked in the programmes for several years noted that the workload has increased over the years. The accumulation of students naturally creates more duties. Furthermore, the temporal nature of the staff numbers and the increases in responsibilities for the programmes also played a role. According to one programme director, the international nature of the IMDPs also adds to the workload as compared to the Finnish programmes. Experience helps in overcoming the associated challenges:

> "On the other hand, experience, of course, eases things a little bit and learning from your mistakes every now and then. You try to develop the programme and its operations in a better direction."

The accumulation of experience is, of course, a luxury available only to those who can work in the programmes for several years or even on a permanent basis. For many of the research and teaching staff, such accumulation is not necessarily a possibility. The low level of formal structures, accompanied by a lack of experience, inhibits the formation of more effective formal structures. Interviewees described the frequent familiarization and learning of new staff members as reinventing the wheel. IMDPs within the university are highly diverse in both the number of associated staff and the distribution of responsibilities; thus, the sharing of experiences in the joint programme meetings can create positive ideas but can also entail some more negative issues:

> "In some of these meetings, I've heard quite alarming stories about the way some of these other programmes are run. Both in terms of the way the programmes are managed which often seems to involve some fairly junior staff, who don't even necessarily have permanent positions at the university."

This issue, which was brought up by an experienced programme director, is not an isolated event. Reliance on junior and temporary staff is a common occurrence and has raised serious concerns among the programmes. From an individual perspective, the heavy workload associated with the programmes and the resulting diminished attention to one's primary work can have serious consequences. IMDPs do not benefit greatly from having temporary staff assume programme responsibilities, as the departure of temporary staff is far more likely than that of permanent staff. This situation leads to the compromised continuity of the programme and its key processes.

5.4   Unclear division of labor

The three previous sections serve as building blocks for the broader issue at hand: the unclear division of labor. This issue was evident in the interviews, either implicitly or explicitly.

5.4.1   University is a complicated structure

Prior literature on the organizational structures of universities has also mentioned the apparent multilayered complexities of their structures. The complexity of a university's administrative structures can be an inhibiting factor in the proper execution of administrative tasks. The formal structures do not always ensure that a particular issue is attended to, and thus, the processes related to the execution of a task may be more complicated than initially thought. One member of the university's central administration raises an issue regarding the challenges of unclear hierarchies:

"You can notice it in my superior's work and how his work is divided. What he can influence and what he can't. That then trickles down to what our opportunities are. Then, it is typical that instead of thinking that the organizational structure is this so if I want to present something or push something forward the official route would be this, this, and this. You have to navigate it."

The deficiencies in the formal structures have implications for the subsequent division of labor within IMDPs and their respective departments and faculties. Several interviewees noted that the assignment of programme-related tasks was not always successful. Tasks were formally assigned to individuals without proper training and often without the knowledge of the task details. In some cases, the faculty or department management assigned tasks haphazardly with little or no consideration of how the actual operations would proceed. One case in which two non-Finnish members of the research and teaching staff were assigned the task of student guidance serves as an illustrative example: These individuals had no prior experience in student guidance and no knowledge of the relevant protocols and decrees. Due to poor management, one member of the administration then became the de facto person performing student guidance:

"Their superiors are not necessarily familiar with them and they don't know what needs to be known. Then it's difficult to give advice from the bottom to the top."

The absence of relevant information seems to be a determining factor in a programme's decision-making, as those capable of making the decisions do not have the necessary information. At the same time, those with the information have minimal or no decision-making authority.

One of the fundamental challenges in the organization of universities is maintaining the delicate balance between scholarship and bureaucracy. The notion of academic freedom associated with teaching and research is an undisputed premise within universities. The freedom is paramount for the creative process associated with these tasks. Therefore, there is a strong tradition of providing scholars with vast amounts of freedom for conducting their research and teaching in the manner they see fit. On the other hand, as universities tend to be large organizations, there also needs to be a bureaucratic mechanism in place to ensure the functionality of the organization. For the research and teaching staff, academic freedom is more important than the bureaucracy in all instances. Nevertheless, as an interviewee from the university's administration states, there needs to be a managerial component within the university:

"But I think this type of organization is not just that. Instead, the management on the organizational level has to be thought out in some way. The management is not just about giving orders from the top. I see it as being more about us figuring out the objectives and then the units figure out how to set their own goals within these predetermined objectives."

Another member of the university's administration sees the faculties as extending their reach even further:

"The faculties in this university are quite independent. Of course, the faculties have certain possibilities within their legally mandated educational responsibility to act despite the university's will. From what I know, I think here it is a bit more liberal than in some other universities. We are lacking in guiding documents or others. Also, there are incidents where we might have some guiding principles or decisions by the board or the rector, but they are not followed. We don't have a system for sanctions."

5.4.2   We focus on the substance and deliver the teaching

This category expands on the issue of balancing academic freedom and bureaucracy. The interviewees expressed an unequivocal view of the assignment of IMDP-related tasks. For the research and teaching staff, the demarcation between teaching and administration was obvious: The research and teaching staff should focus solely on teaching, and some other entity should conduct the administration. When referring to the administration of the application process and the operations with the UAF application service, one interviewee was straightforward regarding whose responsibility it should be:

"In a way, the message that I have given, and others as well, was that the master's programmes at the departments do not want anything to do with the application or other software or the language criteria. Someone else can decide those. We will focus on the substance and deliver the teaching. No interest in the administrative side or the criterion or others, deadlines. No, not interested."

As the distribution of responsibilities among the research and teaching staff has shown, there existed several programmes in which the research and teaching staff predominantly did the administration. Furthermore, student guidance is often concentrated in the programmes themselves, as a member of the research and teaching staff usually conducts the guidance. This guidance is considered a part of the substance of the programme, and thus, it is considered a natural part of the programme staff's tasks. There tends to be a demarcation regarding what is part of the student guidance of the IMDPs and what is the responsibility of other units or individuals:

"I have tried to keep my part focused on the substance as much as possible. With all the social and financial issues, I usually suggest that they contact the international office."

The above quote from an experienced programme coordinator illustrates this demarcation, as he expressed that his expertise is solely in guidance related to studying in his particular programme. This issue also touches upon the notion of required expertise and where is it situated. Due to the fragmented nature of IMDPs, the programme staff has been forced to deal with issues with which they are not familiar. As previously mentioned, the level of training in programme issues is generally low, and thus, there are deficiencies in the level of expertise. One constant dilemma of most of the programmes is the low number of applications, which has increased the importance of the programmes' marketing. The majority of the IMDPs do not conduct their marketing efforts other than sending out emails and handing out brochures within their professional

networks. The programmes rely tremendously on the university to carry out the marketing efforts:

> "We don't do it ourselves. We have relied greatly on the marketing done through CIMO and the coordinated marketing by the international office, the proper marketing."

The university has not had the proper resources to conduct marketing for the international master's programmes. One coordinator responsible for international and national student recruitment was hired, which has led to increased efforts to market all the international programmes in a similar format.

5.4.3 We are doing it ourselves

At this point, it has been firmly established that the IMDPs are poorly resourced and struggling with operation and development. Furthermore, challenges in the distribution of responsibilities across organizational levels have created obstacles. The lack of resources and the minimal central coordination has forced programme staff to search for more flexible solutions. One department within the university realized that its research and teaching staff was highly multicultural and diverse. Resource-related challenges have forced the department and the IMDP to be creative in organizing their work, which has served as an impetus to integrate teaching more effectively into the programme and expand the amount of teaching conducted in English. One experienced programme coordinator described it as follows:

> "We are able to utilize the backgrounds and knowhow of different types of people. We are used to being multidisciplinary, and we are also multitalented in many respects. It is entirely based on our own doing: We decided to do it ourselves. There was no advice, guidance, support or resources from anywhere. It has been a kind of a survival strategy."

The most pressing issue concerning the IMDPs at the University of Jyväskylä is marketing. All programmes, as well as the central administration, acknowledge this problem. The variance in solutions to this issue across programmes is broad. A certain degree of centralized marketing is carried out by the university in the form of memberships in popular education portals. The university also has a joint brochure for its international degree education programmes in general. However, any additional targeted marketing is the responsibility of the programmes or departments/faculties. The problem with this scenario is that individuals then conduct the marketing with little or no training and often very little motivation. This statement was confirmed in the internal evaluation of the IMDPs (University of Jyväskylä 2014:10): "Marketing and student recruitment was seen as an area that especially requires a level of expertise that the staff in IMDPs do not have (or even need)." One programme representative offers an apt summary of the situation of all IMDPs:

"If we would like to advertise, for example, the master's course, we really need to strongly advertise internationally, then that should really be handled by an administration that has funding. At the moment, we are advertising somehow within our own research links with other institutions. I think this is not correct because we are not, our skills are not in advertising."

In the previous section, it has become evident that some programmes have outright refused to conduct activities not considered relevant to them. Administrative issues not seen as part of the substance of the IMDP are not given proper attention. At the same time, it has also become apparent that some programmes have accepted full responsibility for all programme-related issues.

"If you think about a researcher's job, well from the start and still I am booking hotels for all our teachers, organizing, finding teachers for international courses. There is a tremendous amount of organizing tasks that do take a large amount of time."

5.4.4   Whose responsibility is it?

During the first few years of the first IMDPs, the role of the international office was remarkably large. All issues were directed to the international office. This phenomenon can partly be attributed to the lack of English language skills of the staff, which made conducting the activities almost impossible. Nowadays, the division of responsibilities is clearer. Nevertheless, there are still occasional instances in which faculties direct international students to the international office, even if the issue is not the responsibility of the international office. The unclear distribution of responsibilities is prevalent among all prevalent entities, the university's central administration, faculties and departments, and the programmes.

The programmes themselves also struggle to determine the allocation of tasks. In some instances, the administrative personnel of the faculty or department conduct several programme-related tasks. Even relatively simple matters, such as who should attend the international master's programme meetings, are not always clear, as one coordinator stated:

"Sometimes, I get the feeling at one of these IMDP meetings that was this actually my responsibility. Perhaps this could be done by our service center, but the professor wants me to be there. The line of what is whose responsibility."

This type of confusion might be a radical example, but the underlying issues are critical. The joint programme meetings often deal with mechanical issues, such as the updating of databases and admission criteria. As has been made clear, the division of labor in terms of programme issues is very unclear, which may lead to an individual with no interest or reason to attend these meetings going to them. Since attendance is not required and the level of participation is fluid, necessary information may not ever reach the right person.

One issue within the realm of the IMDPs no longer under debate is the role of UAF. The establishment of a separate organization to manage the application process was a joint effort by several Finnish universities. The associated universities provide funding to UAF to handle applications and check the

authenticity of application documents. The decision to establish this organization was heavily influenced by the workload and required expertise associated with document analysis. The university management is rather unambiguous regarding the benefits and necessity of this arrangement:

> "This [application process and checking of documents] is one of those things that, from the perspective of expertise, should not under any circumstances be the responsibility of an individual programme. The university's own expertise is not sufficient, and that is why we joined UAF. Its important role is the expertise in conducting the application process and checking the authenticity of the documents. It is centralized in a way but no longer at the university level."

As the discussion surrounding UAF was based on the necessary expertise related to the application process, discussions regarding other areas of IMDP activities that warrant expertise are also ongoing.

5.5   Inadequate allocation of resources

Issues related to the resourcing of the IMDPs were unequivocally the most pressing. A clear indicator of the scale of these issues is that the research and teaching staff handle the majority of the administrative duties of the programmes. An internal evaluation conducted to investigate the state of the programmes reached a similar conclusion: "While there is some level of variation in the level of involvement and commitment of the home department and faculty, the evaluation interviews reveal that most IMDPs are isolated and separate units within their department or faculty and very often have limited access to the administrative or academic support services available to the Finnish programmes" (University of Jyväskylä 2014:7). With this underlying premise, the IMDPs have been forced to maneuver creatively.

5.5.1   We would like to do this, but there is no time

In academia, one of the most precious resources is time. The allocation of time to essential activities is a cornerstone of academic achievements. The research and teaching staff in a university balance their time between teaching activities and research endeavors, and the addition of a new responsibility, such as the administration of a degree programme, adds an extra layer to the allocation of time. It has become apparent that, due to the increased workload and a lack of incentives, it is not beneficial for a member of the research and teaching staff to assume the responsibilities of an IMDP.

The notion of prioritizing activities has become a key issue for the research and teaching staff. In the current university environment, maintaining a respectable track record in research is the most reliable way to establish a career, and naturally, those pursuing careers in academia prefer to devote their time and resources to activities that facilitate that objective. Consequently, time and

resources are then steered away from teaching and other matters. This fact, as well as the lack of incentives, discourage the research and teaching staff from turning their attention to these activities. Some interviewees feel an obligation toward the students and thus work more than expected to accomplish everything. The result is an extreme overload of work:

> "Workdays are extended to 12–15 hours if you want to keep the research going. Of course, I do because I have projects with external funding. I cannot tell the financiers that I haven't been able to do anything because I have been busy answering emails. You are constantly doing the work of two full-time employees if you want to keep research and the teaching and coordinative responsibilities."

The area most affected by time allocation and task prioritization is the additional development of the programmes. In general, the programmes strive to accomplish all foundational tasks, such as student recruitment, course planning, student guidance, and thesis supervision. In this way, the development of the programmes is neglected due to the factors mentioned above. The issues of marketing and alumni relations have been brought up on several occasions and have clearly been identified as issues that are not receiving proper attention. One member of the faculty administration noted that the regular activities are given priority:

> "It has been in the backs our minds for a few years now. We should do it, but nobody really knows how to take charge of it. It is not the most important priority right now, so as we are putting out fires, it just stays in the backs our minds."

As there have been several minor and major deficiencies regarding programme operations, some directors and coordinators have been keen on identifying areas for further development. Other staff members have also engaged in discussions regarding improvements seen as necessary and predicted to eventually be highly beneficial for everyone. The interviewees stated that there is often a consensus regarding the necessity of issues, but unfortunately, no actions or even plans of actions are taken. Some interviewees also felt that if they suggested some new initiatives, they would end up in charge of them, which increased their hesitance to introduce new initiatives. In general, the pursuit of these developmental objectives was obstructed by the lack of time:

> "Everything could be done so much better if there were time. A sad university employee sees wonderful development areas all around. That should be done, I could do that as well. Then in the evening you wonder do I feel up to watching TV. I don't feel like it, I have to go to sleep."

5.5.2 Arbitrary role assignment

The tasks related to the international master's degree programme are varied and complicated. The absence of designated administrative resources results in the research and teaching staff assuming responsibilities within the programmes. The role of the programme coordinator or director is a formalized approach to dividing responsibilities. As discussed earlier, the actual tasks entailed in the

roles are subject to discussion, and there is no uniformity in the tasks across IMDPs and faculties. Therefore, the roles of the coordinators and directors vary greatly. The role of the programme director does not entail any proper authority, but at the same time, the director is responsible for the programme. In IMDPs in which the level of involvement among the teaching staff is low, the director is unable to control the programme as a whole. One solution would be to increase the authority of the programme director to enable some degree of quality control:

> "I think a master's programme director should have more authority to step in, toward course feedback, contents, and others. Otherwise, the development of the programme is pretty much impossible. After all, the whole is made up from the individual courses."

Increasing the authority of the programme director could lead to dual reporting, as there might also be head of the unit or discipline who acts as the superior of all members of the unit. The reporting relationships can become fuzzy if the authoritative roles are not clear. This situation becomes even more emphasized when the IMDP, or any other degree programme, for that matter, is not entirely integrated into the unit.

In addition to the different content of the administrative roles, the assignment of the roles among the research and teaching staff can be characterized as arbitrary or haphazard. Rather than an emphasis on finding the most suitable and qualified individual, there is complacency on just finding someone to accept the responsibility. An international member of the research and teaching staff describes the initial discussion of the role as follows:

> "When I was coming to this position or role for the first time, it was just asking whether I am available for international students as a point of contact. Ok, I did not even know what it meant. And then some new tasks just popping up from time to time."

Due to the lack of unspecified tasks in the coordinator and director roles, changes to the tasks are commonplace. Decreases in tasks are few and far between, but increases in tasks are familiar to several programme representatives. The interviewees believed that if they were already responsible for any aspect of the IMDP, they would often be expected to accept additional tasks. Prior proactiveness and reliability were contributing factors in receiving additional tasks.

5.6   Lack of continuity

The current state of affairs in the university is characterized by a lack of funding and temporary contracts, which is seen as particularly detrimental to multiyear research efforts. Unfortunately, discussions of the importance of continuity for educational programmes such as IMDPs have been severely neglected. While the responsibility of particular courses may be assigned to particular staff members

for many years, the assignment of administrative responsibilities often lacks a sense of continuity.

5.6.1 Putting out fires

A phrase utilized by several interviewees was "We are putting out fires." This type of situation was prevalent across various faculties and different programmes and is characterized by highly reactive measures as opposed to proactivity. Many urgent matters requiring immediate attention could have been pre-emptively managed, thereby avoiding unnecessary urgency. The interviewees referred to the lack of planning of programme activities concerning the available resources. They also believed that limitations in resources could have been overcome through the proper preparation of assignments and actions. Furthermore, certain recurring processes were poorly executed, which some interviewees saw as another consequence of the failure to plan for the future. In some cases, such failure was a direct result of changes in staff, as staff turnover creates challenges for the communication of information. Furthermore, there were several cases in which one individual oversaw certain processes for an extended period of time. When these people left, serious vacuums were created. Therefore, the distribution of responsibilities and a clear division of labor among programme members are common concerns. One member of the administrative personnel noted the following:

> "...there are terrible deficiencies regarding who is responsible for what and how a certain process proceeds. These types of things just haven't been thought through. If I think about the broader picture, it's just about constantly putting out fires."

The lack of continuity is detrimental from the perspectives of both the organization and the individual. The organization suffers because tasks are not carried out on time, and the possible redistribution of tasks creates additional demands for staff. According to the interviewees, however, this concern was not particularly emphasized by the organization. From the interviewees' perspectives, the detrimental effect is the insecurity of their jobs, which is a more primary concern for them. A programme coordinator whose temporary contract with the university was ending was left pondering the continuation of her duties as well as the overall continuation of the programme activities:

> "If there is no continuation for me or if I end up making a different solution with my life because I haven't been told about any further possibilities, then they are left wondering. Probably a month before my course should begin, they are like well, who could lecture this course? A kind of continuity and flow of information. It is also considering the fact that if a teaching program is valid for three years, then it is valid for three years. Somehow, it should be made sure that the courses can be lectured.

A tendency toward short-sightedness, or only focusing on the immediate situation, also creates unnecessary hindrances, as unprepared processes must be addressed eventually.

"Some type of anticipation. For example, the student selections. They come every year, so anticipating them by thinking about the division of labor, a process description and criterion well in advance. Not like as the applications land on your desk then you start thinking about what should we do with these."

5.6.2 It wasn't systematic

A satisfactory degree of operational continuity requires systematic attention paid to relevant issues. Fluid participation characterizes the distribution of attention within the studied organization.

The lack of systematic effort was most notable in activities related to the promotion and marketing of the programmes. In addition to the aforementioned activities, the development of alumni relations has also been a topic of focus in IMDP-related discussions. Holding activities for programme alumni and promoting successful alumni to potential students are seen as effective marketing approaches. However, while all these activities were unanimously considered to be highly important, they were not pursued. When they were pursued, the implementation was haphazard and lacked a clear focus. Maintaining connections with graduated students is seen as challenging:

"We have been able to reach some through Facebook, but basically, we have no systematic information where they are, for example, five years after they have graduated."

Furthermore, marketing-related issues only become a priority when the application period for new applicants is approaching. The discussions do not always lead to actions, as programme representatives' willingness to invest time in marketing is extremely low. The issue of promotion and marketing seems to dominate discussions within programmes:

"Probably the most talked about issue is the more systematic and better planned marketing. [...] It could be necessary to increase the know-how, time, and resources for systematic marketing."

The programmes are not the sole entity to blame for the unsystematic nature of their activities: The university's attention to IMDP-related issues is also deficient from a systematic perspective. The internal evaluation conducted in 2007 raised several issues warranting attention and action. Another, broader internal evaluation was conducted in 2014, and the similarities in the issues were self-evident. The challenges in integrating the international programmes into the faculties were already introduced in the 2007 evaluation report, and the lack of integration was seen as a potential source of downfall in the future (Räsänen 2007). The earlier report also identified necessary pedagogical considerations, as teaching and learning in a multicultural environment entail specific unique characteristics. The development of the pedagogical skills of the teaching staff was seen as an important recommendation in both reports, which were written seven years apart from each other. Furthermore, an earlier report on English-medium teaching and learning within the university also recommended

additional training of the teaching staff and emphasized pedagogical skills in a multicultural and multilingual setting (Räsänen 2000).

5.6.3   There is very little management

The deficiencies in systematic planning and the recurring reliance on reactive actions point to failures in management. The management of these programmes is a complex issue, as the authority is heavily dispersed among different levels. The position of programme director does not contain much actual authority; rather, the director is often forced to consult the professor in charge of the discipline or department. Unfortunately, the person in charge might not always be knowledgeable of the programme and its operations. Furthermore, these roles are secondary roles for the individuals fulfilling them, which influences how much they are willing to invest in them. The combined effects of fluid participation and poor management place the programmes in a volatile state:

> "The person in charge does not give orders. The person in charge seems to assume some sort of voluntariness but that does not work in these instances. In this institution, there are too many individuals that are only looking to benefit themselves."

The low level of management is not restricted to the management of the programmes. Programme representatives and the faculties prefer that the central administration of the university does not interfere too much with or dictate the activities, but many do wish that the central administration were more proactive in providing guidelines and support. Common protocols in certain vital issues would enable more streamlined activities and reduce the need to obtain approval:

> "If it were clearly managed from there, a lot less energy would go to asking around about how to proceed with a particular issue. All issues that do not necessarily require an exception in each programme were firmly established in the same form. It would definitely help the coordinator in being aware of everything and also the management."

Negligence was also prevalent in managerial issues. The research and teaching staff assumed more responsibilities than what their contracts obligated them to, and when these discrepancies were brought to the superiors' attention, no actions were taken. The research and teaching staff were forced to negotiate and plan the division of responsibilities themselves. Additional strain is placed on planning when a programme or a unit is expanding and assuming new projects, in which case meticulous planning of resource allocation and the division of labor would be a necessity. The reality tends to be a bit different, as one experienced programme director noted:

> "My job description has been all over the place because we have had very little staff the entire time. We have been under-resourced, and at the same time, the unit has expanded in its tasks tremendously. In terms of management and building an organization, they have not worked very well. How to fit the existing and available staff in relation to the given projects."

5.7 Equivocal integration of the IMDPs

As previously mentioned, a critical aspect of internationalizing higher education is the successful integration of the international component into the institutional policies and programs. The integration of the IMDPs into the respective faculties and departments has been a continuing concern among programme representatives.

5.7.1 Problems with including IMDPs in regular operations

The underlying juxtaposition between education delivered in Finnish and education delivered in English (via the IMDPs) has been most notable in the delivery of support services related to study affairs. Furthermore, programme representatives are not always "kept in the loop." The more structured programmes tend to be less integrated into their faculties and departments than the more loosely structured ones (University of Jyväskylä 2014). This disconnection forces programme directors and coordinators to be excessively proactive in keeping the programme operational:

> "It has been a kind of an additional extra in the normal operations, this international master's degree programme in the Finnish language education. It has not been remembered that information needs to go there as well. If there are questions to the faculty regarding it, they necessarily do not know to ask or even forward the information. You have to do an awful amount of work yourself to know what happens and when."

In many instances, the IMDPs were not on the same level as the traditional education, because they did not receive the same treatment in administrative matters. The administration handled issues related to the administration and studies of Finnish-taught programmes, but similar treatment was not always extended to international programmes. This tendency was escalated in faculties and departments in which an assigned resource for the IMDPs was available:

> "So far, I have done everything always by myself. It has been more of a kind of juxtaposition that these are international affairs, so I am supposed to handle them."

The university holds a clear view on the provision of support services for the IMDPs: Under no circumstances should there be any differentiation between Finnish and non-Finnish educational programmes. The particular characteristics of the IMDPs should be taken into account, just as any other aspect would be. The central administration views the issue as being crystal clear:

> "In principle, the services available for study administrative affairs in faculties or departments, there should be no difference on what is for IMDPs and what are for the others. There should be no difference. The service center produces study administrative services for all regardless of whether it is a foreign student or a foreign member of staff..."

University policy does not leave much room for interpretation, but the actions within the faculties and departments suggest otherwise. The unclear division of labor and the challenges in obtaining proper support from the administration show that the university guidelines are not always followed. Therefore, adherence to the protocols and policies varies greatly. Some staff attribute this difference to the autonomy of the faculties. The discussion then moves to the strategic importance—or lack thereof—of the programmes.

5.7.2　What is the purpose of the programmes?

Discussions surrounding the IMDPs point to issues far beyond the programmes themselves. Broader issues that are the responsibility of the university have significant repercussions on how the programmes are managed and how they are portrayed within the university. Several programme representatives expressed their concern regarding the status of their programme and international education in general. One programme director stated the following:

> "At the moment, I am hoping for strategic choices. Or more precisely, that the faculty would have a strategy on how to manage these in the future. But we don't have an international strategy even at the university level. Therefore, we are operating in a way that is resolving problems as they come, it's like the fire department putting out fires. Then we just move on."

One member of the university's management raised concerns that closely echo the reality of the programmes. According to the interviewee, there are serious, unclear issues pertaining to the aspirations and status of international programmes.

> "In a sense, these IMDPs have, for historical reasons, become partially separate structures. In that sense, we haven't been very successful in thinking at the university level about what are we pursuing with them and what is the status of the programmes. We would need to do a lot of work to really think about what we are really aspiring for. What are the strategic goals for having these?"

As the University of Jyväskylä is a multidisciplinary university with several faculties that have considerable autonomy regarding their operation, there are variations in the architectural aspects of the international programmes. Furthermore, the programmes fit their respective faculties in a variety of ways. This fit became apparent when the rationales for creating new programmes were considered. Some programmes were born out of a recognized demand from prospective students, while others were created based on benchmarking from other universities where similar programs had proven attractive.

> "It began by accident. Somebody heard somewhere that the faculty, or apparently the university, wants this and the person knew that these exist. Then faculty mentioned to someone at a meeting that we should have these, they encourage this. After that, in one of our working groups, it was said that we should have these as well. Well, then we converted our master studies into English and said now we have one. It was the mentality that let's just make the faculty happy that now we have this."

This type of haphazard creation is quite volatile, as minimal emphasis is placed on resources, the division of labor, and continuity.

5.7.3   It's still a Finnish university

The University of Jyväskylä has made significant efforts over the years to become more international, most notably by expanding its selection of IMDPs. Furthermore, there has been an increase in international research and teaching staff. Due to the language barrier, the majority of the international staff teach in the IMDPs. Therefore, attention must be paid to the administrative procedures, as the international staff is often not able to communicate in Finnish. The faculties and departments should accommodate the international staff by communicating more effectively in English. Several programme representatives, both international and Finnish, indicated that the quality of English communication within the university is not high. The international staff does not feel included in certain activities, as their presence is not always considered. Meetings within the department are supposedly for all, but the choice of language creates a barrier:

> "For some reason, for the staff meetings, that's not an option. That's, I think, maybe it's faculty related, I'm not sure. But there is this, at least that's the argument they give, that those meetings for some reason have to be in Finnish."

The deficient language skills of the administrative staff presented a challenge, especially in the early days of the IMDPs. If the administration was unable to communicate in English to international students or staff, the programme staff was forced to assume the responsibilities.

> "It is probably very exhausting when these issues have been discussed and said but nothing happens. Now it is looking good, as the emails from the personnel administration are also in English. We have had international people at the departments for over 10 years. It has placed a strain on the other staff, as they need to take care of things for them. That is taking away from their actual work input, so it's entirely ineffective."

The process of internationalization creates requirements for the organization, and it takes time for the internationalization to permeate the entire organization. The long tradition of Finnish language education influences the operation of the more new international programmes. The transition to an international programme creates new demands and changes the workload, as one programme director pointed out:

> "It has changed insofar as when we changed to the international side, of course the amount of work is a lot bigger then. Preparation of the teaching, conducting the teaching, all the communication with the people, it just goes... There is a sort of factor there."

5.8   Changes in resource allocation

The previous sections analyzed the views of the interviewees regarding the state of current affairs. The discussions were often extended to their views on necessary changes and propositions for the future.

5.8.1   An additional resource would help

The most commonly expressed solution to the predicament IMDPs face was additional resourcing. The research and teaching staff were firmly in favor of the allocation of additional resources to help them assume their IMDP-related responsibilities. Due to the broader financial situation, which also affects the university as a whole, the staff was quite realistic about the likelihood of obtaining additional resources.

Not all IMDP staff members were hired on a permanent basis. Planning the teaching of a programme is challenging when some teachers have only been temporarily hired. One method available to the research and teaching staff to combat the lack of resources is research projects, as the external funding for a research project enables the hiring of the additional temporary teaching staff.

One predicament seems to be in determining the position of a possible additional resource. A paradox arises because administrative tasks must be put in place for the resource, but the research and teaching staff are not in favor of increasing the number of administrative staff. One proposition was to have another member of the research and teaching staff assumes the administrative tasks, but this idea goes against the wishes of the programme staff to reduce their administrative responsibilities. The necessity of conducting administrative tasks is widely understood, but at the same time, there is widespread reluctance to do it. A critical look at the programmes and their resources is in order:

> "Perhaps this would be something that actually could be done, surely this could be contemplated at the university level. Identify those that, even if it would mean that one or two master programmes would have to be shut down. If we would get additional resources to remaining English language master programmes it would help. Specifically, that it would not go to the administration."

Some programmes reached the conclusion that actions need to be taken, as additional resources are simply not available. The integration of international degree programmes with teaching offered in Finnish is regarded as key in making the most out of the available resources. As of late, there has been an increased discussion on the necessity and possible benefits of such integration. Poor integration was also brought up in the 2014 internal evaluation (University of Jyväskylä 2014). The current situation is quite straightforward, as one programme director stated:

> "At the moment, it is merely a matter of money. There are no financial resources; it is not possible. It is almost the opposite: We should be able to handle the tasks with an

even smaller budget. This should be done by integrating the Finnish and international teaching as effectively as possible."

Interestingly, the IMDP representatives are predominantly in favor of a university intervention. The programmes feel that it is the university's responsibility to provide practically everything to manage the programmes. At the same time, the IMDPs are negligent in terms of adhering to university guidelines and policies.

5.8.2   Contracts need to be extended

In addition to vocal requirements for increases in resources, IMDP representatives demand more attention be paid to existing resources. The 2014 internal evaluation raised concerns regarding the sustainability of the programmes. A great deal of this concern can be attributed to the temporary resources at the disposal of the programmes. One of the many recommendations outlined in the evaluation report was a sustainability plan for the programmes that would disclose the resources of the programmes (University of Jyväskylä 2014). The proposal is an essential step in shedding light on the resources allocated to the programmes, but operating with temporary resources nonetheless poses certain constraints. Several IMDPs combat the lack of resources by having members of an affiliated research project teach in the programme. This solution is not without its share of difficulties, however, as teaching directs attention away from the project, and the sustainability of the projects is also very limited:

> "That is the challenge if the only way to get additional resources is through unsure research projects. You might get someone to help in teaching for a while, for two years, then that person leaves. It is unsustainable."

The temporary nature of contracts also creates challenges for the staff, as the insecurity of employment forces them to seek alternative solutions. Furthermore, one's chances of continuation are usually contingent on one's personal, proactive behavior. One programme coordinator proposed that, without her active engagement, the continuation of her contract and even the programme itself would have been compromised:

> "I don't think anybody would have thought about it at any point, like what's going to happen when her contract ends at Christmas. If the situation would have been that I wouldn't have brought it up, then surely no one would have been ready for it. I think they would have wondered around and realized that ok, we need to do these tasks as well."

Short-term contracts enable liabilities to emerge when there is no guarantee of available resources for the teaching and administration tasks over a prolonged period. Examples of such liabilities include the scheduling of courses and the assignment of administrative tasks. The sustainability of courses and administrative processes can also be severely compromised by the departure of

a key individual. Therefore, the combined effects of inadequate resources and the lack of continuity contribute to the expectations regarding the future of the programmes.

5.9   Increased coordination

A broad theme that emerged throughout the study was coordination—the interviewees were unusually unequivocal about the lack thereof. Stronger efforts in coordination are required to combat the apparent deficiencies in the operation of individual programmes.

5.9.1   The role of the central administration should be developed

One of the most commonly encountered issues in the interviews was the notion of focus or coordination, the importance of which the interviewees referred to on several different levels. At the programme level, there were instances in which the teachers responsible for the courses primarily focused on the courses as individual components. The coordinators and directors expressed interest in adopting a more focused approach by viewing the courses as being part of the whole programme. Furthermore, several programmes were struggling to induce staff to participate in broader planning efforts, such as redesigning or updating the teaching plan.

The interviewees were quick to place more responsibilities of programme issues on the university's central administration. As has become apparent, the most emphasized matter that must be performed centrally is marketing and promotion. Nevertheless, the interviewees stated that increased coordination or even control from the university would be warranted. The arguments for coordination revolve around the need for better information processing:

> "If there are 17–18 programmes, it is quite likely that a lot of us are trying to solve the same problem individually. So, we are wasting a lot of time and effort. There are things like that where I am convinced that somebody knows something I don't, and it would be better if we could centralize that."

Guidelines for the IMDPs have been developed, and a handbook is also under development. More and more efforts have been made to ensure that important information is available. The responsibility for most activities is still within the programmes, but the programmes now receive additional support from the university. The opinion among the programme staff is that more coordinated efforts need to be instated by the university. One programme director suggested a structural change to the management and integration of international programmes:

> "Then when programmes are being promoted internationally, it could be helpful to promote it in that way that they come as part of an international... rather, in the same way, we currently have or we have now moved to the system of having university-

wide doctoral program or faculty doctoral program. All students whatever department they are in our faculty are a part of the faculty doctoral program, and certain things can be done at that level. Maybe for these international programmes something along those lines, umbrella academic structure within which all these different programmes operate."

An essential step in the realization of the programmes' needs was an internal evaluation. One representative of the university administration stated that the evaluation had made public what the programmes themselves already knew and that the report served as a platform from which to start:

"When we were doing the evaluation and people were given the opportunity to talk, there was a realization that things are done very differently in different places. That in itself was a good foundation to notice it, and developing things further is easier afterward."

5.9.2   The IMDPs need to engage with each other

It has become apparent that the IMDPs within the university share commonalities. For example, they universally agree that mutual collaboration and lateral communication among programmes would be highly beneficial. This engagement was regarded as highly apparent, but the level of engagement was nonetheless very low. Some interviewees attributed this to the lack of time, and others were straightforward about their own inability to take action:

"In my opinion, there should be a lot more of it [engagement between IMDPs]. I guess one could be more active in it, but then again, I hope the university would also bring us together more. Perhaps there should be more, even having teaching content in which we could collaborate more."

While the interviewees were vocal regarding their need to engage more in collaboration and networking, they were also clear on the importance of the university's general support. The IMDP representatives feel that the programmes have proven their position as important players within the university, but they wish the university saw the situation in the same way. Professional support regarding marketing activities was a popular suggestion. Changes in the format of the joint IMDP meetings were also brought up:

"I would hope that the university's central administration or the strategic development would more often take a larger role in it. The meetings do not need to be so carefully planned and the content determined beforehand. They could be more informal every once in a while; we could find surprising possibilities for collaboration."

Often, the IMDPs call out to the university to handle issues of engagement and collaboration: It is evident that the programmes themselves are not proactively engaging or collaborating. Some minor activities do occur, especially among programmes within the same department or faculty; however, cross-faculty collaboration seems to be a significant challenge. Certain collaborative efforts must be generally agreed upon to achieve cross-faculty collaboration. As one

interviewee stated, actions need to be taken by both the programmes and the university in general:

> "I view it as an area for development in the future, joint coordination and communication of these programmes should be increased. Especially the marketing will be a big challenge for us which the university should tackle. Since there will be or if there will be fees."

The IMDPs tend to see the need for lateral engagement among them as exogenously influenced. The lack of resources and support services, as well as poor management, creates a need to develop lateral relations. The exchange of experiences and ideas with representatives from other IMDPs provides a platform for development. One looming exogenous threat is the introduction of tuition fees for non-EU/EEA students, which the IMDPs feel adds increased pressure to the already underperforming marketing activities. There have been very few actions taken toward collaboration concerning endogenous factors.

5.10 Desired strategy for internationalization

Certain imperatives came into the forefront in the interviews. The programme representatives expressed their concerns and expectations of the future of the international programmes.

The underlying discussion in the preceding sections has created an understanding of the necessity of change in the organization of the IMDPs. The programmes have been operational in their current form for more than a decade. Additional funding was available in the early years to launch and develop them further, but now, there are no avenues for extra funding. Therefore, the IMDPs must be managed with the current resources like any other educational component in a department or faculty. The interviews brought out certain imperatives that require attention.

5.10.1 Preparations for the introduction of tuition fees

The most predominant exogenous factor that will have severe effects on the programmes, and international degree education in general, is the introduction of tuition fees for non-EU/EEA students. The IMDP representatives see this introduction of fees as a severe threat to their viability, as the application numbers will be negatively affected, and eventually, the number of graduated students will also suffer. Tuition-free education has been a tremendously attractive feature for international degree students coming to the university (University of Jyväskylä 2014), and the impending removal of this competitive advantage has prompted the interviewees to express their concerns for the future. Some programmes even stated that due to the low number of applications and the geographical locations of the potential applicants, the very existence of such programmes is in jeopardy. The university is aware of the ramifications of

introducing tuition fees through the experiences of other Nordic countries, such as Sweden. Therefore, preparatory actions must be made to combat the ramifications as effectively as possible. Regardless of this impending change, there have been no actions taken in preparation for the tuition fees. The details of the tuition fee issue, such as handling of payments and deadlines, were still unclear at the time of this study, which caused challenges in the preparation. As the Finnish government handles the issue, universities are eagerly awaiting the solution. The management level of the university is anticipating the solution, as the selected course of action will be chosen accordingly:

> "Before we somehow have the information, it is quite difficult to think about what our goals through them would be. Especially if we have to charge large amounts of tuition fees, then we have to think about the programmes from a completely different perspective than in the complete opposite situation in which we are not allowed charge anything of the programmes. Or if we are allowed to make the choice ourselves, these are very different situations. There are differences in what type of strategy is chosen.

The discussion within IMDPs thus turns to marketing, which, as has become apparent, is regarded as the responsibility of the university. The introduction of tuition fees creates even more demand for a different kind of professional marketing and promotion. One programme member articulated it this way:

> "There needs to be more visibility and also university should make some efforts on how to make all our master programmes more visible in that situation. In my opinion, it calls for a kind of a common outing with different kinds of programmes."

The expectation of the introduction of tuition fees for non-EU/EEA students became a reality. Somewhat surprisingly, there were practically no discussions on whether the introduction of tuition fees would need to be reflected in the programmes' operations. If one of the most attractive features of these programmes is taken away, actions will need to be taken within the programmes to compensate. However, the programmes seem to generally look at the university's central administration to look after them. One programme director was hoping for a champion of the international programmes:

> "The IMDP are important, and of course, the threat is if there will be tuition fees for students from outside the EU. It touches us quite a lot because we get quite a lot of students from outside the EU. These types of issues, in a way, someone should stand up for the IMDP in these general issues. Remind that these are beneficial for internationalization and other."

The IMDPs look to the university's central administration for assistance and action and pay minimal attention to potential actions that could be taken by programmes and faculties to counteract the effects of tuition fees. Programme members would embrace champions and advocates of the programmes. Furthermore, the members of the IMDPs seem to prefer someone promoting them on their behalf rather than engaging in championing activities themselves.

5.10.2 Need for the integration of IMDPs into faculties

The integration of the international programs into the so-called regular operations is seen as a fundamental issue to be addressed. Generally, in the Finnish university system, such international programs are introduced into the organizations later than the Finnish programs, which make them a bit different. Furthermore, the additional funding that was available to the first generation of IMDPs within the University of Jyväskylä also distinguishes them from the regular faculty operations. The funding enabled the hiring of appointed coordinators, who assumed the responsibilities of the programme affairs. When the funding that was earmarked to launch these programmes ran out, the first course of action was to reduce the number of coordinators. The former coordinators' tasks were divided in a less than optimal manner. The situation does not gather praise from the university's management:

> "As the additional funding that was used to hire the coordinators ceased, then naturally, the first thing was to reduce the amount of full-time coordinators. The actual study administration did not assume those responsibilities, so someone had to be found to handle it. To be brutally honest, it is bad faculty management. It is not the type of work that is smart for the research and teaching staff to do."

The IMDPs find themselves in various stages of integration. Some of them have been designed from the start to fit into the existing teaching programmes in a way that ensures the efficient use of available resources. On the other end of the spectrum, some programmes have not been able to integrate into the faculty at all and are operating detached from the regular activities.

The integration of international education is not solely focused on the relationship between the programmes and their respective departments and faculties: Another important aspect of integration concerns the students of the IMDPs. The programmes consist of varying ratios of Finnish and non-Finnish students. For the Finnish students, attending courses and activities in Finnish is not an issue. However, non-Finnish students face challenges, as the language barrier can inhibit participation in some courses and activities. Therefore, several programme coordinators and directors voiced their concerns about the level of inclusion of the international student cohort.

> "I have a concern from time to time about whether our Erasmus exchange students and international degree students are given enough teaching in English. Occasionally they have to resort to self-studying, and I don't think that is a particularly good thing.

One programme director drew a connection between the integration of international students and the resources devoted to the international programmes:

> "If you're really serious about taking international students, you have to treat them properly and treat them on par with the other students. That requires input from at least some quite senior people in the department."

5.11 Summary of the findings

To conclude this chapter, I will briefly summarize the findings. The integration of international education into the policies and programmes of a university is an essential process of internationalization. In the studied university, I was unable to find clear steps made toward this integration. The acknowledgment of this omission was explicit but any actions towards rectifying the situation were missing. Resource allocation was a constant target of criticism. The interviewees were remarkably outspoken about the low level of strategic and managerial attention paid to the programmes. All of the aforementioned contributed to wider disarray regarding the purpose of the programmes.

Lack of documentation, inadequate training, and especially the inefficient incentivizing resulted in deficiencies in operations. Informal structures emerged to enable the handling of daily activities, but these structures were not consistent enough to become stable and eventually formalized structures. The lack of incentives demotivated research and teaching staff to develop their programmes and often resorted to blaming the unclear division of labor of any malpractice. Breakdowns in information processing became commonplace.

The interviewees, or actors, stated their perceptions on efforts that would further the internationalization. Additions in resources and extensions in contracts were considered vital. Reorganization of the division of labor and coordination between central administration and the programmes as well as among programmes was prevalent. The discontent of the programme representatives can be viewed as resistance towards the higher level authorities. The resistance is not towards specific organizational actions but rather towards inaction. The programme representatives state that enough has not been done to enable the development of IMDPs and their position within the university. All these return to the overarching theme of what does the university aim to achieve with this internationalization process and with what methods.

6   AN ARCHITECTURAL REASONING BEHIND INTERNATIONALIZATION FAILURE

This section synthesizes the analyses provided in the previous sections in an attempt to create a theoretical model of the effects that organizational architecture has on a strategic process as exhibited in the internationalization process of a higher education organization. I present the fundamental concepts of the study and the essential relationships in order to explain the failed internationalization of educational programs. First, it would be beneficial to revisit the factors that contribute to the failure of the internationalization efforts of higher education. Previously identified factors are a lack of financial resources, a lack of coherent strategies, policy restrictions, and poor institutional commitment (van Damme 2001). A further cause for concern has also been the level of methodical attention paid to suitable arrangements (Fogelberg 1999). These previously identified factors were discovered in the context of a more comprehensive interpretation of higher education internationalization. In the current study, the form of internationalization under scrutiny is the IMDP. To reiterate the position of this thesis in the field of higher education internationalization, I am studying the translation of organizational internationalization strategies into practice. I expect that the previously identified factors also influence this process but to varying degrees. Furthermore, I propose that the previously understudied effect of an organization's architecture on higher education internationalization plays a significant role. As has been made clear, the internationalization efforts studied in this thesis were not successful. Understanding what contributed to this failure from the perspective of the organization's strategy and its architecture is essential. More specifically, this thesis aims to provide an architectural explanation of why no new strategy related to the international programmes emerged, which ultimately resulted in the failure of the internationalization efforts.
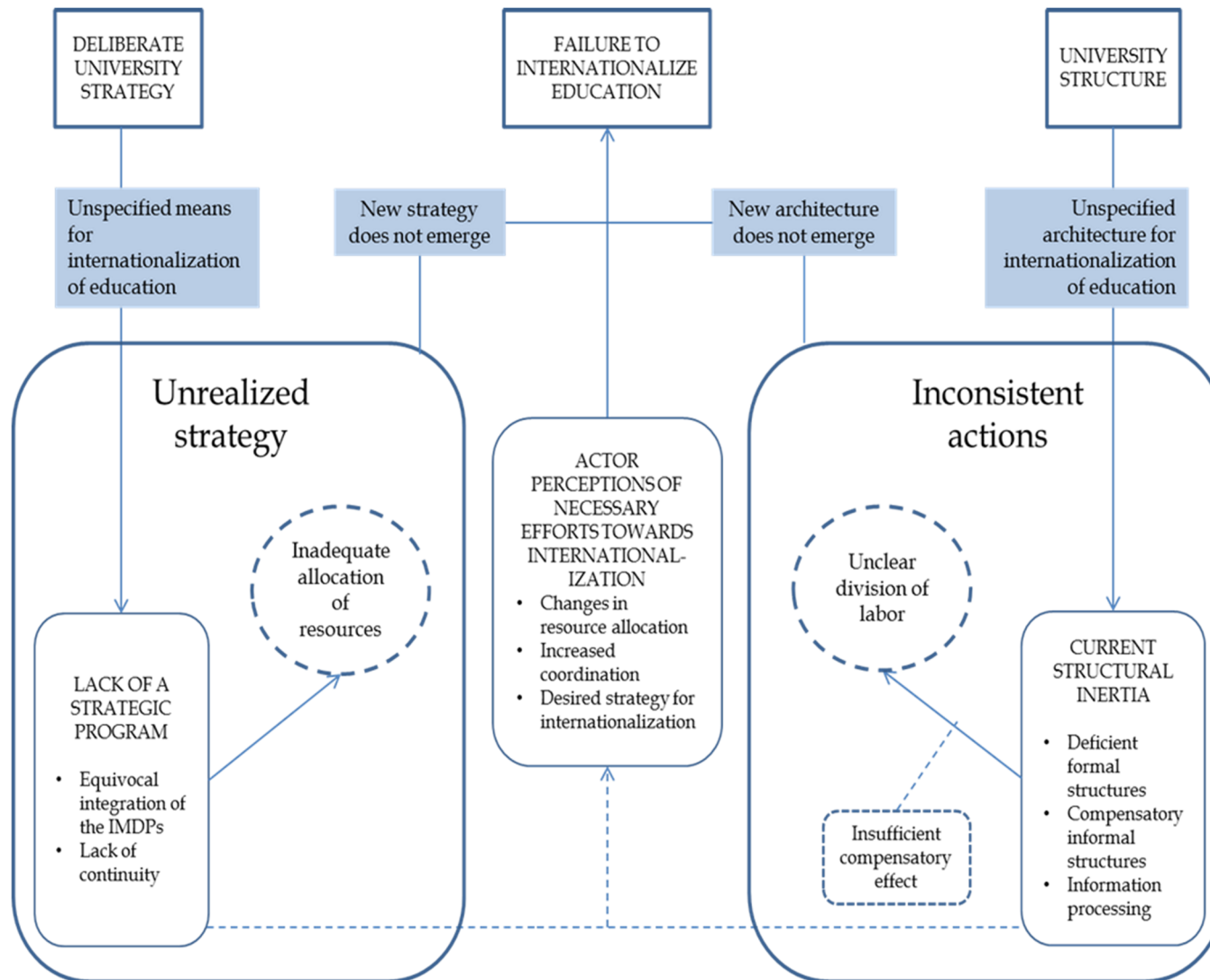
Figure 16   Developed theoretical model for internationalization failure

The data collected in this study strongly suggest that the architectural arrangements correspond to the prevalent organizational strategy. The structure of the university succeeds its strategy, but the strategic endeavors dictate the structural arrangements. This line of thinking takes its cues from the work of Alfred Chandler (1962). The statements in an organization's strategy translate into a strategic program that lays down the path to operationalize the strategy via its architectural arrangements. In order for an architecture to provide a framework to carry out the strategic vision, the strategy must be focused. I discovered that the unclear strategic purpose of the international programmes translated into an unclear architecture concerning terms of the broader division of labor. In cases where the organization's strategy falls short, also known as an unrealized strategy (Mintzberg and Waters 1985), new strategies can emerge. I argue that organizational architecture is closely related to the emergence, or lack thereof, of a new strategy. By analyzing the architecture related to the administration and management of IMDPs, I was able to pinpoint obstacles preventing new strategies from emerging. Therefore, the role of the organization's architecture can potentially be attributed to the discovered failure.

This theoretically based explanation provides an in-depth look at the university in question. Furthermore, the model has the potential to explain similar processes on a broader population of organizations. The developed theoretical model is presented in Figure 16. In the model, the strategy and structure of the university are presented as concurrent, by which I refer to their joint effect on the university, as neither is treated in isolation. The presented strategy and structure are of the formal and general documents the university has published. Internationalization efforts begin in the deliberate strategy of the organization or, in this case, the lack thereof. Regardless of the lack of strategic emphasis, the programmes are a part of the university's educational palate and thus must be organized in an orderly fashion. The formal structure of the university delineates the organization's primary operations into faculties, departments, and disciplines. This delineation is also illustrated in the university's organizational chart (Figure 7). Faculties bear the educational responsibilities of their respective subjects as well as the organization of the respective educational subjects. The faculties also house the necessary support functions for their operations. More extensive administrative tasks and other services are organized separately at the university level and are available to all faculties. This system is the basic division of labor within the university and is relatively applicable to the organization of Finnish-taught education across faculties. Surprisingly, however, the same division of labor does not translate entirely to international education, which in itself speaks volumes of the level of integration of international education at the university. Ideally, both Finnish-taught education and international education would be on equal footing in terms of administration, support functions, and the overall division of labor. However, it has become apparent that formal structures and organization charts do not provide an accurate depiction of the reality of a given situation. In order to pinpoint the actual structural arrangements of the architecture of international

education, an in-depth inquiry of the actual resources, the formal and informal structures, and their interplay are warranted. Attention must also be paid to potential developments in the architecture of the IMDPs. The noted division of labor concerning the international programmes is disorganized and thus broadly influences their further development.

The emergence of a new strategy is a well-known concept within the strategy literature, as it was popularized by Mintzberg and Waters (1985). It has also been complemented by similar ideas from Burgelman (1983a, 1983b, 1983c). Accompanying the notion of emerging strategy, I propose that the emergence of a new architecture deserves a place in the discussion. As with the emergence of a new strategy, the emergence of new architecture can occur when the deliberate architecture fails. Predetermined architecture does not guarantee the execution of tasks in a preferred manner, and emerging architecture has the potential to arrange to meet the needs of the organization better. Higher level members of the organization compose the deliberate architecture with possible gaps in knowledge regarding operational aspects. On the other hand, architecture that emerges at the operational level—in this case, the programmes—is based on firsthand knowledge of what works and what does not. The impediments for emerging architecture are the lack of programme autonomy, the lack of championing at the programme level, and the lack of managerial attention.

To make the presented theoretical model understood, I will describe it. The reasoning begins at the top of the organization, as the top is where an organization's strategy is developed. The higher levels of the organization also provide a template for the organization's architecture. The reasoning then moves to the operational and individual levels, which are the levels where the operational side of the organization is revealed. Also, the emergent strategies and emergent architecture are influenced by the experiences at these levels. The model then returns to the top organizational level for its conclusion, as I describe the ramifications of the internationalization efforts. The next section begins with an exploration of the effects of the university's strategy on the IMDPs. Then, the focus shifts to the deliberate architecture and its influences on the actions of the programmes.

6.1   Unrealized strategies for the internationalization of education

Should internationalization of higher education be included in the strategy of an HEI? The simple answer is yes. Prior research has shown that strategic focus enhances efforts in university internationalization (Elkin et al. 2008). Robust strategies form a strong link between the university's general mission and its internationalization goals (Van der Wende 1999). Furthermore, international strategies must connect to the university's internal organization (Taylor 2004). To summarize, some research literature states that a successful strategy for higher education internationalization can be attained through a focused and robust

strategy linked to the university's mission and bearing a connection to its internal structures.

From a strategic viewpoint, the University of Jyväskylä does not stand out from other organizations. It has a strategy in place that guides its actions accordingly. Internationalization is included in the strategy as a broad concept, with references made to the creation of an international campus. However, the strategy does not include any explicit actions or propositions regarding the attainment of such a campus. The connotations of this statement imply favorability of the IMDPs, though, as they are among the top vessels in attracting international students and thus contribute to an international campus. It must also be noted that this idea holds for student and staff mobility and, more specifically, incoming mobility. Therefore, the university's internationalization connects to research and education in general terms. There is no specific strategy for the internationalization itself, and the strategy of the university does not explicitly state its efforts toward international education. While it maintains its status as an international university concerning both research and teaching, the notion of international education is somewhat marginalized regarding the strategic meaning and assigned resources. As Jane Knight (2004) stated, for internationalization to be successful and not reduced to the sidelines, it must be integrated into the institution's programs and policies. This integration process relies on the strategic significance and articulation of the internationalization. Therefore, I deduced the following proposition:

> Proposition 1a: The lack of an explicit strategy for internationalization leads to the marginalization of international education.

The strategic vagueness, or ambiguity, was pinpointed by the representatives of the IMDPs. The existence of the programmes was seen primarily as a validation of the internationality statement in the university's strategy. The statement has not been put into effect in daily operations, however. The top leadership of the university has not been able to induce the faculties to develop the programmes. Furthermore, the notion of internationality was regarded as highly ambiguous by the interviewees within the programmes. There was a tendency to regard the internationality of the university as nothing more than talk. An international university was an overall perspective, with no clarifications on what that would mean in terms of resources, staff, students, and structures. This premise serves as the impetus for the developed theoretical model.

The internationalization of education is contingent on its successful integration into the appropriate levels in policy and protocols. I state that integration, by definition, requires adaptive capabilities of the formal structures of the organization. This integration would be enhanced by a program that governs the preferred behavior. As shown in Figure 16, the internationalization of international educational programmes is subject to the interplay between the university's strategy and its structural arrangements. Concurrently, structural

inertia and the lack of a strategic program form the basis of the underperforming internationalization efforts. The most apparent points of negligence were poor resource allocation and the unclear division of labor. This study also suggests that ambiguous strategic efforts regarding the international programmes affected the coordination of the programmes and their potential for continuity. The current lack of clarity regarding the division of labor associated with the programmes enhanced the failure of the departments and faculties in managing the programmes.

According to Mintzberg and Waters (1985), when a deliberate strategy fails to achieve its original intentions, it is termed an "unrealized strategy." In the current context, the strategic efforts related to the internationalization of education are unrealized due to the lack of an adequately delineated strategic program. The intentions of the strategy were obvious, albeit not overly explicit: to increase and enhance international education. The lack of precise steps and initiatives toward realizing the strategy prevented the strategy from being transplanted into the operational side of the university. Therefore, the behavior of the key units and individuals were not specifically oriented toward developing the educational programs in a strategically desirable manner. Furthermore, the lack of strategic programs led to inadequate allocation of resources within the realm of the IMDPs. This reasoning justifies the following proposition:

> Proposition 1b: The lack of a strategic program for internationalization leads to inadequate allocation of resources.

To summarize, if internationalization is not specifically articulated in the organization's strategy, it is marginalized in the pecking order. Marginalization leads to weak or nonexistent programs for the strategy, which, in turn, is detrimental to the allocation of essential resources. The faculties, departments, and programmes operate in disarray, as it is unclear what is expected of each of them in the operation of the international programmes, and there seems to be confusion regarding how these programmes fit into the university's strategy and objectives. These circumstances lead to inconsistencies regarding resource endowments, the division of labor, and structural arrangements. As this ambiguity of the strategic importance of international education exists concurrently with the architecture of the organization, it is bound to have direct and vicarious ramifications on the architecture. Similar to an organization's strategy, the architecture of an organization is considered deliberate. One interesting issue that arises relates to the deliberate architectural arrangements and how they correspond to the deliberate strategy. Furthermore, previous literature has overlooked the issue of the evolution of architectural arrangements under an unrealized strategy.

6.2 An inconsistency of actions generated by deliberate architectural arrangements

The previous sections have contained statements regarding the necessity of the integration of international education. Methods to achieve integration of any kind are contingent on the strategy and architecture of the organization in question. The attention now turns to the architecture in which the international education programmes operate. When focusing on architecture, it is essential to bear in mind the context in which the studied phenomenon is occurring. In the studied university, when compared to the so-called traditional education in the university (i.e., education taught in Finnish), international education programs are a relatively new phenomenon. Study packages consisting of English-taught courses were first made available in the 1990s. The IMDPs began in earnest in 2005 with a decree issued by the Ministry of Education and Culture. The decree stipulated, among other things, that these international programmes were to have a separate admission process. This primarily technical anomaly also differentiated the two streams of education. At the time, the university also provided extra funding in the beginning phases of these programmes for the execution of administrative matters. Right from the initial stages, the IMDPs were developed in faculties and departments alongside other teaching and administration endeavors: There was no blank slate on which to place these programmes. This setup is no different from any other organizational development, as there is always an accumulation of pre-existing processes, structures, and units. The early stages of the programmes saw an architecture devoted to them via the coordinators, whose roles were enabled by the extra funding. The temporary nature of the funding was anticipated, but preparations for the eventual termination of the extra funds were minimal. This termination resulted in a decrease in administrative personnel and an increased workload for the research and teaching staff, and the situation has, by and large, remained the same ever since.

The aggregate dimension of the current structural inertia and its first-order categories and second-order themes represent the obsolete nature of the structural aspects related to the IMDPs. The formal structures of tasks relevant to the IMDPs were not sufficiently designed. Several IMDPs were operating without any training provided to staff members for important tasks. The university does provide courses for professional and personal development in a wide variety of areas; however, no specific training for the issues related to the international programmes was available, and no relevant courses for programme staff were explicitly promoted to them. The lack of knowledge of necessary skills and know-how related to the IMDPs contributed to the low amount of attention paid to the issue by faculty management. As a result, the programme staff spent unnecessarily long periods of time learning the relevant tasks. Learning by doing was a remarkably frequent occurrence among IMDPs, even when no particular changes made regarding tasks were made. This setup speaks volumes of the

deficiencies of both the formal structures and the managerial attention. Furthermore, the IMDPs were subject to a state of stagnation due to the lack of incentives for the research and teaching staff to develop them further. The lack of documentation of the tasks and protocols resulted in haphazard actions. However, the deficient formal structures were compensated to some extent by the emerging informal structures.

As per McEvily et al. (2014), informal structures can compensate for the inadequacies of formalized structures. Individuals, engaged in the daily operations within the organization, develop more efficient methods to execute certain tasks if the formal structures do not enable such efficiency. Networks and personal connections empower individuals to discover alternative solutions. The studied IMDPs presented some characteristics of such emerging structures, most notably the ad hoc nature of operations. Ad hoc operations can be defined as "spur-of-the-moment" activities. Due to the inadequate formal structures, there were no established protocols to handle specific issues, so individuals developed an approach to work around the formal structures. In other words, a new approach to the execution of tasks emerged in the daily operations. The way an issue was handled at one point in time does not guarantee it will be handled the same way in the future: The issue must be recurring for it to be formalized.

As has become apparent, the administration and management of the IMDPs was not the primary task for the research and teaching staff. Therefore, their level of participation could be characterized as fluid and their attendance toward tasks minimal. Issues were attended to only when absolutely necessary. Proactive behavior was minimal, and reactive behavior was high. Whereas Gulati and Puranam (2009), as well as Nyhagen and Baschung (2013), discovered that deficient formal structures can be overtaken by informal structures rooted in altruism, I found that the lack of incentives had a more profound effect. As the primary measure of performance of research and teaching staff is research output, all possible investments were directed toward that end. Programme representatives exhibited conflicting feelings, as they viewed the programmes as important but justified the prioritization of their research endeavors. Research suggests that the subjectively perceived importance of an organizational task, such as doctoral education in Nyhagen and Baschung (2013), facilitates the execution of the task, even in the presence of deficient formal structures; however, the data in this study presented a different view. The organization struggled to divide the work and provide structures for the operations, and the individuals associated with the programmes were not incentivized to work toward the development of the programmes. The two following propositions are drawn concerning formal structures:

> Proposition 2a: Deficient formal structures inhibit the effective division of labor within units.

> Proposition 2b: Deficient formal structures inhibit proactive behavior among individuals.

The data of this thesis have shown that some members of the research and teaching staff put significant effort into the IMDPs. The presence of informal structures proved to be volatile since the secondary nature of IMDP-related issues diluted the continued presence of these structures. The fluid participation precipitated by the deficient formal structures overshadowed the compensatory effects of the informal structures. Similar to the emergence of strategy, if informal structures are not formalized, the result will be disarray. In this case, the development and exploitation of the informal structures enabled a somewhat tolerable state of affairs: Roles were assumed, information was shared, and decisions were made. To ensure a satisfactory division of labor, however, the informal structures alone did not suffice. From an information-processing perspective, the interplay between formal and informal structures creates an underperforming mechanism. The low capacity for processing information was also identifiable in the reactive learning-by-doing approach. Necessary information regarding tasks and processes was available, but the dissemination of that information, both formal and informal, was nonexistent. Ultimately, the structural inertia, accompanied by insufficient informal structures, contributed to the overall unclear division of labor, which, in turn, affected the un-emergence of new strategies.

The titles of the research and teaching staff were unequivocal and quite uniform across the university. During the data collection process, the IMDP representatives demonstrated a remarkable variety of tasks and responsibilities extending beyond their titles. Furthermore, individuals with the same titles in the official hierarchy sometimes differed significantly in the additional tasks they performed. This variety was prevalent across faculties, departments, and even disciplines: Individuals with the same titles working in the same discipline sometimes had extremely different job descriptions. This setup was a steady source of discontentment, as the additional tasks, such as programme coordination, often interfered with one's primary work. Thus far, it has been made clear that the university, in general, did not provide an explicit architecture for the IMDPs. As the responsibility of providing teaching and issuing degrees is in the hands of the faculties, they were expected to carry out the necessary arrangements.

The processing of information consists of gathering, interpreting, and synthesizing information for decision-making (Tushman and Nadler 1978). An organization can rationalize its internal coordination by pursuing a reduction in the amount of necessary information, which can be achieved by manipulating the structures and mechanisms related to information processing. The alteration of the information-processing capabilities is contingent on the organization's objectives (Tushman and Nadler 1978). In terms of the studied organization's capabilities for information processing, the formal structures did not favor effective processing capabilities because of the lack of objectives and, by extension, strategic ambiguity regarding internationalization. The effects such ambiguity has on architectural arrangements are already known. The resulting deficient formal structural arrangements render essential tasks highly

ambivalent, as the information necessary for task execution is not present. Galbraith (1973) defined this disparity between possessed information and required information as "task uncertainty." Due to the challenges of formalizing information related to the IMDPs, informal structures and especially lateral communication became important. As lateral relations cut an organization horizontally, they have the potential to utilize lower-level knowledge within the organization. The IMDP representatives met on a regular basis to discuss and share ideas, but these forums lacked any formal decision-making authority and focused more on top-to-bottom communication. Therefore, effective lateral engagement among the IMDPs was minimal and did not lead to the development of novel decision-making processes separate from the established chain of command. The lack of development was predictable, as the behavior of individuals in information processing is influenced by architectural arrangements, which can steer individual behavior in the desired direction. Furthermore, consistent exposure to the arrangements increases the information-processing capability of individuals (Turner and Makhija 2012). Moreover, increased influence at the middle and operational levels of an organization increases the likelihood of emergent strategies (Mintzberg and Waters 1985) and the emergence of champions (Mantere 2005). The findings of this study bear similarity with the relatively understudied connections of staff involvement in higher education internationalization. Dewey and Duff (2009) discovered the importance of faculty participation in the internationalization process and touched upon the relevance of champions in the process, as championing activities are firmly linked to an organization's architecture and its strategy. In conclusion, my findings related to information processing in the organization substantiate the work of previous studies in the field. Therefore, I present the following proposition:

> Proposition 2c: Strategic ambiguity and inconsistent architecture interfere with an organization's information-processing capacity through the lack of objectives and the failure to utilize lateral relations.

6.3 Actor perceptions of necessary efforts toward internationalization

A relatively unknown factor in higher education internationalization is the role of the academic faculty or staff. Some scholars have acknowledged the importance of the faculty as the primary key for internationalization (Stohl 2007; Dewey and Duff 2009). The particularly invested individuals, also known as enthusiasts (Jones and Brown 2007) or champions (Dewey and Duff 2009), should be taken into consideration. According to Schoorman (1999), the university administration adopts different views from the academic staff. The former looks

at internationalization from a university-wide perspective, while the latter only focuses on the effect it has on their immediate environment, such as their department. I assert that this is not an issue for concern.

As presented on the left side of Figure 16, the strategy of the university failed to dictate the steps toward internationalizing education. The interplay that occurs when ineffective structural arrangements accompany the absence of a strategic program to internationalize education has ramifications, and one of these ramifications is the sub-optimal situation the programmes currently face. The unclear strategic purpose combined with the ineffective architecture renders any developmental initiatives practically obsolete. The actors related to the programmes collectively address the issues at hand, and the constant exposure to these deficiencies enables the staff to come up with areas of development. The initiatives and championing activities of programme staff are not supported adequately.

> Proposition 3a: Strategic ambiguity and inconsistent architecture enhance actor perceptions of necessary development areas.

Crucial members of the programmes became frustrated with the lack of direction and the deficient structures. These members, or actors, perceived the internationalization efforts of the university quite negatively. Their views regarding resource allocation and coordination were unequivocal. Regarding resource allocation, the most pressing issue by far was the necessity of additional resources. The research and teaching staff conducting the administrative tasks of the IMDPs were considered a waste of resources and to have an adverse effect on programme performance. The time they spent on administrative issues was time directed away from their primary tasks. These views were also echoed in the rector's decision to re-establish the programmes in an attempt to clarify the strategic position of the programmes. In this endeavor, special attention is paid to the programmes' fit with the university's core fields. Through the re-establishment, the faculties are expected to ensure that future programmes will have the necessary resources in place.

One of the most dominant factors in an organization's architecture is its capacity for coordination. Coordinative capacity can refer to internal coordination, which deals with the division of labor and the execution of tasks. I also suggest that one component of an organization's coordinative capacity is the coordinative ability between strategy and structure. The notions of emergent strategy and emergent architecture demand some degree of coordination and this need is especially pronounced in the studied situation of the IMDPs. The perceptions within the programmes toward coordination are critical, and the current level of coordination from the central administration is minimal. Interestingly, the actors felt that increased coordination was necessary, which goes against the traditional view of faculties maintaining the autonomy of their educational responsibilities. However, the IMDPs expressed their concerns from the programme perspective, which did not represent the views of the faculty as

a whole. Therefore, it is safe to assume that if the programmes had been able to carry out their operations successfully with the support and resources given by the faculty, they would not have pined for increased coordination from the central university administration. Strengthened collaboration with other IMDPs across faculty lines was also highly welcomed.

Missing from the overall picture was the possibility for the IMDP staff to operationalize their perceptions regarding the development of the programmes. The discontentment toward the prevalent strategic efforts was palpable, as was the frustration toward their inability. Attracting the attention of the university management and leadership was a priority for the programmes: More engaged dialogues with higher levels would translate into revised strategic efforts. A practical example of this connection was presented by Dewey and Duff (2009). In their case of the internationalization of a university, one of the recommendations to further develop internationalization was the creation of a liaison role, which would counteract the lack of oversight of a variety of internationalization activities. The liaison role, an international initiatives director, would connect the students, staff, and administration, harnessing the potential to increase dialogue and thereby shedding light on crucial development areas and identifying championing activities.

The perceptions of the actors and their ability to translate these perceptions into actions share the fundamentals of strategic learning, which did not occur because of the neglect of the ongoing championing activities. Champions are individuals who are successful in securing support from other organizational members to further their cause (Mirabeau and Maguire 2014). Furthermore, the cause that they aim to further is one beyond their immediate responsibilities (Mantere 2005). The identification of championing activities and the causes being championed is paramount for the emergence of a new strategy. In accordance with Mirabeau and Maguire's (2014) ephemeral autonomous strategic behavior, the abandonment of championing activities can be attributed to practices within the organization. As per Mantere (2005), these practices can have either enabling or disabling effects on the champions. I discovered that crucial disabling practices were organizational and control practices.

Based on the preceding discussion, I developed the following proposition, which encapsulates the importance of coordination on championing:

> Proposition 3b: The coordinative capacity of an organization can enable further championing activities within it by providing a liaison among relevant parties.

At the University of Jyväskylä, the unrealized strategy for the internationalization of education and the inconsistent actions created by the architectural deficiencies place the programme actors in a challenging situation. The actors display an unusual amount of knowledge and insight regarding the programme operations and express practical suggestions to improve the programmes. However, the actors within the programmes do not possess any

formal power in concerning resource allocation or division of labor, and the actors' lack of managerial control puts the programmes in a state of suspended animation. The unrealized potential nested within the programmes inhibits the emergence of a new strategy better suited for this particular context.

6.4 Un-emergence of a new strategy

The leadership of the university has not succeeded in encouraging faculties to develop their programmes. Whether this lack of success is intentional or not, the fact remains that the strategic development of the programmes is in the hands of the programmes themselves. As shown in Figure 16, inconsistent actions resulted from the unclear division of labor both within programmes and between different levels of the university. Maintaining consistency in actions is severely compromised in situations characterized by a lack of leadership and an unclear division of labor among the concerned parties.

The theoretical model shows that the various shortcomings related to the university's strategy and architecture lead to its failure to internationalize its education, and one underlying factor in this failure is the un-emergence of new strategies for internationalization. The described context of the IMDPs is ideal for new strategy emergence, so why has no emergent strategy formed to compensate for the unrealized strategy? The programme representatives, who can be characterized as middle- and operational-level employees, are highly knowledgeable regarding the relevant occurrences within the programmes and their environment. The research and teaching staff have concrete suggestions for future development that they feel warrant immediate attention from those in the higher ranks of the university hierarchy. Herein lies the potential for discovering new ways to improve the programmes.

The IMDPs operate under the auspices of an unrealized strategy and inertial structures. Due to the underachieving structural arrangements, developing the programmes is not beneficial for the research and teaching staff, and the IMDP representatives have not been able to champion potential developments in a way that top management would embrace. This challenging situation has continued for several years, with the continually changing allocation of resources creating difficulties in maintaining consistency in operations. One crucial impediment to the realization of the internationalization strategy and, subsequently, strategic learning is resource scarcity. To be exact, the absence of devoted resources for programme development creates an unfavorable environment for strategic learning. The discontinuity plaguing several of the programmes stems from the absence of devoted resources that would assume the responsibility for administrative operations: A devoted and stable resource would enable long-term planning that incorporates a degree of learning. However, scarce resources are a direct consequence of the strategic ambiguity that characterizes the internal standing of the IMDPs. The programmes are expected to manage themselves with the currently available

resources. The organization needs a more robust architecture to maximize the potential of the available resources.

A delicate balance between formal and informal structures is necessary for the emergence of strategy at the operational level. Formal structures are put in place to provide frameworks on which the actual work is carried out. They need to be rigid enough to offer clear instructions, but at the same time, they need to flexible enough to create space for novel activities. Informal structures must also be acknowledged. When informal structures provide a superior approach to the tasks at hand, the pre-existing formal structures need to be adjusted accordingly. If the informal structures become haphazard to the point of inconsistency, an intervention is in order. I argue that strategic learning is impeded in situations in which the organization's architecture does not enable the development of an effective division of labor:

> Proposition 4: Organizational architecture affects the emergence of new strategies based on the development of the organization's division of labor and its subsequent influence on strategic learning.

When programmes, faculties, and the central administration contemplate what actions to take and when there is minimal chance of focused efforts toward the programmes. There must be a responsible body or individual who specifically focuses on the programme(s) to uncover what works. For this learning to occur, a degree of responsibility needs to be assumed, and this responsibility needs to be attached to an incentive to ensure that the issue receives proper attention, as it has been made clear that the lack of incentives has had profoundly detrimental effects on the administration and management of these programmes. The recognized fluid participation within and among the IMDPs has not led to high levels of focus on them, and this lack of focus inhibits the identification of essential occurrences, thus compromising learning. Reliance on the altruistic and proactive behavior of a handful of individuals is highly volatile. Such behavior must gain additional momentum and widespread acceptance to have a profound and long-term effect.

Mirabeau and Maguire (2014) placed the formation of an emergent strategy to the championing of local projects toward the manipulation of the strategic context. The local project's consistency with the current organizational strategy is a significant point of development and is necessary for the project's legitimacy, which could not have been achieved without the initial championing activities and the subsequent mobilization of support. I found this notion to also be right in the internationalization efforts of University of Jyväskylä. The trajectory, which was very similar to that of Mirabeau and Maguire (2014), was present. The deviation from that trajectory was identified as residing in the mobilization of support. The local champions were able to attract like-minded supporters, but these supporters were not sufficiently influential. A shared understanding of the situation and the necessary efforts was in place, but it was not realized any further. The mobilization of support is important, but the mobilization of

influential support is essential for the legitimation of championing activities. Therefore, we can state that the mobilization of support did reach a level where it could be labeled as championing. Thus, the dissonance between the projects and the dominant strategy remained. Upon closer inspection, a predisposition toward this dissonance within the projects was revealed to be inevitable. As has been pointed out, the strategic context was ambiguous, and thus, developing consonance within the projects was difficult. One form of legitimation would have been the creation of a liaison role to act as a conduit between top management and the programme representatives. As previously mentioned, the necessity of such a role in the context of higher education internationalization was also emphasized by Dewey and Duff (2009). In their case, the process was supported by a review committee that suggested the creation of an entirely new position to serve as a liaison. The utility of a liaison role from a structural perspective, namely information processing, has also been emphasized by Galbraith (1973, 1974). As noted earlier, some faculties acknowledged the relevance of a liaison role by implementing a type of liaison of their own. However, these roles did not possess the authority to communicate with top management but rather to communicate within their respective departments and with other programmes. I argue that the creation of a liaison role similar to the one in Dewey and Duff's 2009 study would constitute a crucial step toward an emergent strategy. The proposed rationale is that, through an architectural readjustment (the liaison role) based on championing activities, the champions can influence the emerging strategy.

6.5   Un-emergence of a new architecture

Thus far, I have presented the reasoning behind the un-emergence of a new strategy, attributing it largely to the organization's architecture. The theoretical model also shows the un-emergence of a new architecture accompanying the un-emergence of a new strategy. The prevailing structural context contributed to the un-emergence of a new architecture by dismissing the perceptions of the relevant actors and failing to readjust the formal structures accordingly. This model focuses on the operational level, as the inability of top management to address the situation has already been made clear. One factor that has not been made clear is the unsuccessful attempts of the operational levels to influence their immediate structures. Furthermore, the literature on emergent strategy and autonomous strategic behavior has also overlooked these activities.

The body of research in organizational architecture has not paid attention to the notion of emerging architecture. Only a few individual studies (Gulati and Puranam 2009; Joseph and Ocasio 2012) have been welcome exceptions. Gulati and Puranam's (2009) discovery of the supplementary effect of the so-called informal organization is essential: The authors stated that the importance of the informal organization was to motivate employee behavior deemed valuable but not correctly emphasized by the formal organization. Joseph and Ocasio (2012)

found that different governance channels affected the distribution of attention of the organization's management, which, in turn, had ramifications on the organization's strategic adaptation. The temporal coupling of specific governance channels was seen as a key to the desired differentiation and integration, resembling the notion of vacillation as discussed by Boumgarden et al. (2012). Vacillation refers to the fluctuation among different types of structures to better meet the current needs and objectives.

Strategy studies, namely by Mintzberg (1978) and Mintzberg and Waters (1985), have long since acknowledged the difference between intended strategy and realized strategy. A formalized strategy may be realized or unrealized, and a formalized architecture is, by default, a realized architecture. The utility and functionality of an intended architecture is and should be open to critical evaluation. Informal structures, also known as emergent structures, come to fruition as a result of the actual needs of organizational members in different parts of the organization. Similar to autonomous strategic behavior becoming emergent strategy (Mirabeau and Maguire 2014), the endurance of informal structures dictates whether or not they will become formalized. The data in this study have shown that these emerging structures were often the first response, with the awareness of the ineffectiveness of the formal structures encouraging action to be taken locally. These types of actions are short-sighted, however, as they only deal with the immediate problem and disregard the organization's formalized architecture, which is problematic due to the purpose of architecture: to provide a template for the organizational members to carry out their work. Persevering informal structures that are not formalized render the original architecture obsolete, and if this process is taken too far, the organization is left with two different architectures: the intended architecture and the realized one. The co-existence of two architectures is sustainable to a degree. For example, in the Cisco case studied by Gulati and Puranam (2009) the informal structures served as supplementary structures to the formal ones. The formal structures provided the intended architecture, and the realized architecture originated from the informal structures developed through daily operations. The key here is the ability of the informal structures to be formalized and to form new architectures.

The presented line of reasoning has reached a critical point, as I am uncovering the reasons for the un-emergence of a new organizational architecture. The intended architecture, the de facto formal structures, does not correctly support the strategic process of internationalization. The main shortcomings of the operational-level formal structures are the lack of incentives and the poor division of labor. The weak division of labor enables the emergence of new, informal structures as champions identify more efficient ways to operate. The lack of incentives, on the other hand, is instrumental in inhibiting these emergent structures from reaching any level of notable consistency because the individuals do not see any utility in investing vast amounts of their resources in improving the organization's architecture and, by extension, the internationalization process. Therefore, I propose the following statement:

Proposition 5: Informal structures fail to reach a level of consistency due to the low level of championing brought on by detrimental formal structures.

From the perspective of the point of origin, informal structures bear a resemblance to autonomous strategic behavior, as they too develop through localized problem-solving. Furthermore, these structures are in dissonance with the organization's formal structures, a relationship akin to that between autonomous strategic behavior and an organization's strategy.

6.6   Failure to internationalize education

The preceding discussion has paved the way for the conclusion that the efforts to internationalize the degree education at the University of Jyväskylä have failed. While the statistics regarding application numbers, international students, and international graduates also point toward unsatisfactory results, I focus more on the efforts within the organization that led to the failure. In order to validate and justify this conclusion, a reference to the approach of higher education internationalization is in order: The objective is to delve deeper into internationalization at the institutional level. More precisely, the interest focuses on the internationalization activity generated by the IMDPs and the internal arrangements that accompany it. In essence, the emphasis is on the extent of the integration of international education into the pre-existing architecture of the university. Constraining factors of higher education internationalization are found at the national level in the form of cuts in funding for universities. The universities can also fumble in transforming the variety of international activities into a coherent component of its strategy (Altbach and McGill Peterson 1998). Several scholars in the field (Van der Wende 1999; Van Damme 2001; Taylor 2004) share concern regarding the weak connection between internationalization and a university's mission and strategy. Furthermore, the necessity of the systematic evaluation of internationalization should not be overlooked, as the alignment of the reasons and objectives are essential (Dewey and Duff 2009). For this doctoral thesis, the latter is of more interest, especially in the context of internal organizational evaluation.

The failure at the studied university should not be considered an overnight phenomenon, as there have been several signs of imminent failure: Prior internal evaluations have raised concerns about similar issues. Recommendations in the reports included the need for more documentation, mainly to serve the needs of the students. Furthermore, a significant area of development was the IMDPs' level of integration. As the published reports were released several years apart, it is clear that the university failed to implement the recommendations made in the first one. The failure to maintain systematic comprehension of the internationalization efforts led to a plethora of different approaches and methods regarding the programmes. It is surprising that they have been operating for

several years, some for even more than a decade, considering the disappointing performance of the programmes. A certain degree of politics is also present in the discussion in terms of the viability of the programmes: Housing an international programme affords the university leadership a favorable image—one of an internationally oriented unit within the university. Upon closer inspection, this type of internationalization does not amount to much more than rhetoric. Instating a programme that was merely a collection of pre-existing courses accompanied by self-study options was not what the university leadership intended. These arrangements were known, but the programmes were not evaluated or required to rectify the situation.

Architecturally challenged programmes have been able to survive because the intake of students has remained modest. A modest number of applications and students is manageable under the current structures and resources. A notable increase in student and application volumes, however, would have forced the programmes and faculties to re-examine the situation. The individuals in the programmes have voiced their discontentment toward the current situation, but they did not engage in championing activities or advocacy. The extra efforts that some individuals took were few and far between, and there was no sense of sustainability regarding championing activities or advocacy. I was able to extrapolate from the data that for programme members, especially the research and teaching staff, investing time and effort in the programmes was not beneficial. These members viewed the investment from a highly utilitarian view (i.e., the personal reward for the investment). If these individuals perceive the value of increased efforts as negative, then they have no incentive to engage in them. Therefore, the perceptions of the actors within the programmes were not fully utilized. Discontent towards the university leadership's inability to adequately support the programmes resulted in voicing criticisms.

In line with the literature on emergent strategy, the operational and middle levels were crucial in responding to the reality of the situation. The lack of consistency of the actions at the operational level did not result in an emergent strategy. The novelty in the findings resides in the extension of the emergent strategy to emergent architecture. For an architecture to be labeled emergent, it too must bear the characteristics delineated in the emergent strategy.

7   DISCUSSION

This doctoral thesis participates in the discussion of higher education internationalization from the perspective of organizational architecture. The motivation was to illuminate the current state of higher education internationalization, internationalization as a strategic process, and the role of organizational architecture on internationalization as a strategic process. The following section discusses the various potential effects this doctoral thesis offers. First and foremost, the theoretical contributions are presented, as well as possibilities for future research in the field. As the study was firmly rooted in practical issues, discussion on the implications for practical issues is also presented. This section concludes with a discussion of the limitations of this study.

7.1   Theoretical contributions

The internationalization of higher education organizations as a strategic process is challenging to manage. The minimal amount of literature that exists on the topic points to discrepancies between organizational levels. Rationales for internationalization emanate from the national level and at the top levels of the higher education organizations. Aspirations for the global enhancement of a nation's education (Yonezawa et al. 2009) and all-encompassing national development (Yang and Welch 2012) drive the internationalization of higher education at the national level. Organizational-level rationales revolve around revenue diversification (van Damme 2001) and the strengthening of the institution's international profile (Maiworm and Wächter 2014). Additionally, the introduction of English-taught programs is seen as a vessel for removing language barriers and enhancing the international skills of the domestic student population (Maiworm and Wächter 2014). The literature embraces the importance of motives and rationales in engaging in internationalization, but surprisingly little attention is placed on the process of turning the rationales into

action. Furthermore, very little research exists on the role of the faculty and administration in the internationalization process.

In order to understand the strategic and structural implications of higher education internationalization, this thesis relies heavily on the organizational architecture literature. Organizational architecture serves as the basis for the broader theoretical framework on which this thesis is based. The theoretical contributions of this thesis fall into these three fields: the internationalization of higher education, organizational architecture, and strategy process. Building on studies in these three fields, I have theorized architectural reasoning for the failure of the internationalization process. The interplay that occurs between the architecture and the strategy of an organization in the context of higher education internationalization shows that a higher education organization cannot restructure and renew itself for the sake of improving its operations. The organization's rigid architecture inhibits the engagement of middle-level actors. The contributions to the various theoretical fields are presented in the chapters below.

7.1.1   Internationalization of higher education

Research question 1: How is the strategic process of internationalization enveloped within an HEI?

As discussed in prior sections of this thesis, higher education internationalization lacks a coherent theoretical framework. There have been a plethora of studies focusing on the different rationales for internationalization at different levels: For example, rationales at the national level may favor international cooperation with other countries or wish to increase the number of international students coming into the country. All forms of HEI internationalization, however, are ultimately determined by the individual institution and how that institution aims to achieve its internationalization. From the perspective of an individual institution, internationalization is a process with antecedents and ramifications in strategy and architecture.

The theoretical contribution of this doctoral thesis concercning the field of higher education internationalization firmly sits within the discussion on policy-making and strategies. Previous literature on the topic of internationalization has extensively covered the various rationales at different levels, and the traditional form of internationalization (i.e., student and staff mobility) has been discussed at length. Curriculum internationalization has also been gaining the interest of international education scholars. The literature suggests that there are benefits in this mobility, as it allows students to increase their intercultural competence (Sample 2013; Barker and Mak 2013) and enables the development of a broader set of skills for students entering the workforce (Stutz et al. 2015). English-taught programs can also be considered components of curriculum internationalization, as they create an international environment for students and enable them to engage with each other. My study touches upon the literature on the internationalization of curricula by analyzing how these English-taught programs are organized, thus contributing to the literature. Previous literature

has championed the benefits of curriculum internationalization without acknowledging the effects caused by the mode of delivery, by which I refer to the structuring and organization of the programs. Knight (2004) suggests that the organizational and individual levels are the levels at which internationalization occurs. Therefore, the organizational characteristics of a study program and the related division of labor among staff members influence the broader internationalization. Furthermore, some scholars (Jones and Brown 2007; Dewey and Duff 2009) have recognized that champions of internationalization within higher education organizations can be vital for the internationalization process and that these individuals should be supported via the proper organizational arrangements. Prior research has not devoted significant attention to this topic, so this doctoral thesis is breaking new ground.

Earlier research has shown that new initiatives and strategies related to a university's internationalization efforts must be reflected in the structural arrangements (Taylor 2004; Hu and Lei 2014). Furthermore, a policy that is confined solely for rhetorical purposes and not adequately supported will not lead to any substantial actions (Hu and Lei 2014). The successful implementation of an international strategy is contingent on clearly designated targets and the necessary support to achieve those targets, as well as on a well-thought-out division of labor among the relevant staff (Taylor 2004). The internationalization process studied in this doctoral thesis corroborates these statements, which are discussed in the following section. This thesis contributes to the growing literature on policy-making and strategy in higher education internationalization by presenting the implications of internationalization at the operational level. Rather than emphasizing faculty participation in the internationalization process (Dewey and Duff 2009), I emphasize the potential of enabling the faculty to develop the process. I also agree with Dewey and Duff (2009) by acknowledging the need to develop a reciprocal relationship between the faculty and the administration. In a broad process such as internationalization, one cannot function without the other. Furthermore, the reciprocity between the two would also benefit the essential integration of the international component, as proposed by Knight (1999). The data in this doctoral thesis suggests that the interactions between the faculty and the administration are of increased importance in situations with scarce resources.

7.1.2 Strategy process

Research question 2: What role does the organization's internal architecture play in the process of higher education internationalization?

An official internationalization strategy did not delineate the higher education internationalization within the studied university. The official strategies of the university made references to internationalization, but no specific program for the operationalization of the strategy was instated, and thus, planned actions toward higher education internationalization were minimal and haphazard. The programme representatives also demonstrated a failure to understand how these programmes fit into university, or, more precisely, they

questioned their strategic relevance. Strategy scholars have stated that an organization's intended strategy can be realized or unrealized (Mintzberg 1978; Mintzberg and Waters 1985). From a strategic perspective, the attempt to internationalize education fell short, as similar deficiencies had previously been identified in multiple cases spanning several years. Finally, all the IMDPs were terminated and re-established. However, the organization failed to form a strategy that corresponded to the actual occurrences within the organization. Such an emergent strategy would display a degree of consistency in its actions and portray a pattern of actions that disregarded the absence or presence of preconceived goals. Strategies can emerge when the experiences and know-how of the operational and middle levels are incorporated into the decision-making process. If top management is aware of the developing new initiatives at these levels, they should analyze their utility and act accordingly. In the analyzed university, the interviewees reported that their expressed concerns and suggestions for new initiatives had not led to any significant actions by the faculties or the central administration, which suggests that the top management did not consider these issues or were unable to initiate any actions. Further reasoning in this issue relates to the information processing of the organization. In order for decision-makers to make information-based decisions, they need to receive the proper information. The interviewees also expressed instances in which top management was not informed, either knowingly or accidentally. Some of the programme representatives were not particularly active in informing their superiors, which was attributed to prior experiences in the futility of elevating issues. These experiences seem to underscore the perceived failures in the overall management of these programmes.

The issue of championing activities emerged as an important topic in this doctoral thesis. As per Mantere's (2005) definition, champions are individuals attempting to influence matters outside the purview of their primary tasks. The majority of the university's programme coordinators and directors are research and teaching staff, whose primary tasks lie in research, and thus, the role of a programme coordinator or director is secondary for them. This study found that some of these programme representatives made enormous strides toward the further development of the programmes, but they did so with full awareness that time spent developing the programmes was time directed away from research, and research output was one of the major factors of their performance evaluations. Therefore, championing programme-related issues fell outside the scope of their primary tasks. This situation raises some questions regarding the strategic importance of IMDPs. I have made clear that the internationalization of education was not a strategic priority within the university; nevertheless, the programmes are operational, with certain responsibilities to be managed and particular targets to be met. However, the administration and management of these programmes are heavily reliant on the efforts of the research and teaching staff, for whom these tasks are secondary, and therefore, their participation in these matters is, at times, minimal. The interesting remaining issue that cannot be answered through strategic ambiguity or personal career advancement is the

obstacles faced by those who attempted to champion the programmes. I propose that the architecture of the university can explain these obstacles. The deficiencies in the university's architecture created hindrances for the ongoing support of championing individuals, and initiatives for the further development of the programmes were not pushed forward by the administration or the management levels.

7.1.3   Organizational architecture

Research question 3: Does the organization's architecture enable the emergence of championing activities?

The process of higher education internationalization necessitates alterations and adjustments in an organization's strategy and architecture. For an organization's architecture to be effective in the long run, it needs to be able to adapt to changes. Organizational architecture is similar to organizational strategy, as they can both be deliberate and emergent. The capability of architecture to be emergent resides in its informal structures.

The reliance on formal structures at the University of Jyväskylä did not guarantee effective programmes in operational terms. Fluid participation and the lack of incentives contributed to the varying degrees of interest among the programme representatives. The informal structures of the programmes revealed a different reality of the division of labor within the programmes: The informal structures did compensate for the deficiencies of the formal structures, but this compensatory effect was not consistent. Gulati and Puranam (2009) discovered in their study on the restructuring of Cisco the compensatory effect of informal structures. Employees who were reassigned to new tasks in new units maintained their sensitivity toward the customer post-reorganization, and these individuals went beyond their mandated tasks to ensure customer satisfaction. Therefore, in Gulati and Puranam's (2009) case, informal structures enabled championing activities. In the studied university, I discovered that informal structures compensated for formal structures but only in a limited manner: The compensatory effect was ephemeral at best. Some individuals made extra efforts to ensure that specific issues were addressed, but there were no guarantees of consistency in this behavior. In some cases, the individuals refrained from engaging further in this behavior, citing that these tasks were not part of their formally delineated tasks. The necessity of these additional tasks was not refuted, but constant engagement in them was seen as inhibiting one's primary work. In other words, individuals carried out championing actions only as long as these actions were not too much of a burden, with the tendency to favor the formally mandated tasks over the informal ones. Whereas Cisco was able to develop a compensatory fit between the formal and informal organization and pursue dual goals (Gulati and Puranam 2009), the analyzed university was not able to achieve a similar result.

The concept of information processing has a strong presence in the literature on organizational architecture. In particular, the writings by Galbraith (1973; 1974; 1994) and by Tushman and Nadler (1978) have been instrumental in

shaping our understanding of organizations as information-processing systems. It is the organization as a whole that gathers, interprets, and synthesizes information for decision-making purposes. By modifying their structures and mechanisms, organizations can manipulate their information-processing capabilities (Tushman and Nadler 1978). The type of design an organization adopts influences the information-processing capabilities of the individuals (Turner and Makhija 2012). The creation of lateral relations is a design strategy that aims to increase an organization's capacity to process information (Galbraith 1973; Galbraith 1974). In the studied case, however, the lateral relations were not the result of conscious design: The IMDP representatives engaged in one form of lateral relations (i.e., direct contact). They began consulting one another about programme-related issues, as support was not always available in their units. This engagement developed informally and out of necessity. The architectural arrangements did not favor championing activities, and the development of lateral relations by some of these champions, or enthusiasts, as labeled by Jones and Brown (2007), did not lead to any major formal restructuring, although the utility of this contact was acknowledged and the university's central administration instated more formalized meetings with all representatives. As Galbraith (1973; 1974) suggests, when such communication patterns become more frequent, the creation of more formal roles to streamline the communication is beneficial. Furthermore, increases in the number of departments involved should translate into a separate task force and teams assigned to specific issues (ibid.). Apart from temporary working groups, the university did not formalize this process. The lack of formally mandated task forces and the lack of teams with some level of authority contributed to the nonexistent championing activities among programme representatives. As per Dewey and Duff (2009), internationalization requires more than passion; it needs resources, support, and coordination. In this case, the organization's architecture had an inhibiting factor to championing activities rather than enabling.

7.2   Practical implications

This study has shown how the IMDPs within one Finnish university were organized. The IMDPs demonstrated several different approaches to organizing programme functions. All programme representatives identified issues that needed attention. These issues and other relevant findings that are potentially applicable in practice are presented in this section. The implications are aimed at Finnish higher education institutions in general. Also, the Ministry of Education and Culture can pay attention to these.

The propositions derived from this study provide a starting point for HEIs in terms of the analysis of the organizational aspects of their respective international degree programmes. There exist no prior studies in this area, and thus, this study offers a novel approach to the analysis of such programmes. Furthermore, this thesis offers tools to disseminate international education in

general. Herein lies one of the essential implications for practice: These programmes require evaluation and a critical overview of their viability. However, the majority of these programmes are left to their own devices, and the lack of planning is a systemic condition. One possible course of action would be to have the university or the faculties require a critical and comprehensive overview of the programmes. As has been made apparent, knowledge of the programmes' realities does not always reach the higher levels in the university hierarchy. The requirement for a more detailed evaluation of the programmes was already raised in both internal evaluation reports, in 2007 and 2014. The lack of development in this respect is an issue for concern since the recommendations made in the 2007 report were repeated in the more recent evaluation report. Furthermore, some of the identified issues were also presented in the 2000 report on English-medium learning and teaching, which recommended additional training for Finnish staff teaching in English in multicultural classrooms. The fact that three separate reports outline the same issue stipulates the need to address the situation. Furthermore, the fact that the reports span 14 years renders the implied lack of actions alarming. The university should take heed of the recommendations presented in the evaluations.

From the outset, the most apparent implication regarding the development of the IMDPs was the need for an increase in resources. Currently, the research and teaching staff are handling most of the administrative and substance matters of the programmes, even though these activities often impede their primary tasks. An analytical approach to the needs and requirements of the IMDPs is warranted across all faculties and departments. There is an understanding among the programme staff that, due to financial constraints and resource allocation, it is not feasible to assign a coordinative resource to all programmes. Furthermore, because of the small size of some of the programmes, an additional resource would not even be warranted, as there is no justifiable need for it. Nevertheless, as all faculties of the university house more than one international master's degree programme, possibilities for a joint resource should be considered. Some programmes might currently feel that their small size allows the programme staff to conduct their primary work effectively, and in these cases, the allocation of an additional coordinative resource is unnecessary. An additional resource with reasonably assigned responsibilities and sufficient training would enable the research and teaching staff to focus on their primary work. This observation reveals a close connection to another glaring problem: The status of the international programmes is still fickle, as the university seems to have difficulties in communicating their role. While the internationality of education is mentioned in the university's strategy, the translation of the strategy into practice is still in its infancy. The IMDPs are confident in their utility toward fulfilling the strategic component of international education, but at the same time, the programmes were not granted proper objectives, let alone the tools to accomplish them.

The findings show that there were clear deficiencies in the formalized structures and the division of labor among the concerned parties. Knowledge

regarding programme-related procedures and processes were minimal, and thus, the development of routines was hindered. Investments in the training of programme staff would minimize excess efforts in accomplishing recurring activities. Currently, the execution of particular activities, even periodically recurring ones, is far from optimal. A possible resolution would be to instate to each programme a director who accepts responsibility for the programme and the execution of all tasks. It must be noted that most IMDPs do have a formally assigned director or coordinator, but the lack of authority and the fluid participation render the role obsolete. The role of the responsible director must be altered to encompass authority and accountability of the programme activities. All staff members, whether research and teaching staff or administrative staff, must be provided with training in the necessary tasks.

Informal structures within and across the programmes provided a way to exchange knowledge and experiences. As an unintended consequence of poor formal training, the implementation of informal relations helped programme staff engage in mutual learning. However, the full potential of the informal relations was not captured, as the interactions were spontaneous and often arose in urgent matters. Furthermore, as the relations are dependent on individuals, there exist differences in the interactions. One perceived benefit was the increased communication and exchange among representatives of different programmes. The forum for the IMDPs provided a starting point for discussions, as it allowed programme representatives to see that all programmes were dealing with similar issues. The exchange of ideas and solutions was welcomed, and aspirations for more possibilities to engage in lateral interactions emerged. The university's IMDPs hold formal meetings once or twice per semester.

One issue, with potentially tremendous effects on the programmes, is the introduction of tuition fees for students from outside the EU and EEA. Several programmes were extremely vocal about the predicted compromised functionality of the programmes if they were forced to collect tuition fees from a specific group of students. The very viability of some IMDPs will be severely compromised, as free education is one of the few attractive features of the programmes. Sweden's experiences in introducing tuition fees show that a decrease in application numbers is to be expected. Efforts must be made to market the programmes to combat the decrease, which can be achieved from two perspectives: the marketing of the university in general and programme-specific marketing. The university can market its offerings in international education broadly to increase awareness of all the possibilities it presents to obtain a master's degree. On the other hand, the programmes possess a more detailed knowledge of the potential target groups for their marketing efforts. Furthermore, programme staff members might have useful contacts within their professional networks to expand their marketing reach. Mechanisms must be put in place to more effectively exploit these contacts while at the same time securing time for the staff's primary work. If programmes rely on the efforts of just a few individuals, there is a risk that more and more of these individuals' efforts will become directed toward work that is not part of their job descriptions. If these

increased efforts are a conscious choice by both the organization and the individual, compensation must be made available. All additional tasks should be taken into consideration during performance evaluations, and assuming responsibility for programme-related activities should not in any way impede one's primary tasks, be they research, teaching, or administration.

7.3 The position of the researcher and trustworthiness

The issue of reflexivity is important to acknowledge in this research process. Reflexivity is reviewing oneself as a researcher within a research process (Berger 2015). Personal characteristics experiences, as well as ideologies and political views, can affect the position of the researcher (Berger 2015). Reflexivity also means to take into account issues such as researcher status, insider/outsiderness, gender, and ethnicity (Attia and Edge 2017). Reflexivity does not view these issues as potential contaminants of data. Reflexivity aims to help researchers in understanding how the aforementioned affect their research process analytical lenses (Attia and Edge 2017). As I was also a member of the organization under study and had working experience very similar to the interviewees, certain issues affected my position as a researcher. The researcher identifies oneself as participating in the research and also assumes the responsibility of the participation (Berger 2015). My experience and affiliation were likely beneficial in securing interviews as several interviewees recognized me from joint meetings. Also, the realization of the interviewees that I was well-acquainted with the reality of the IMPDs was a factor. This contributed to the building of trust with the interviewees which is important in qualitative inquiry (Lincoln and Guba 1985). I was careful to suspend preconceptions I had regarding the programmes and the internal issues related to them.

Regarding verification of the study, an essential part of the process is the coding of categories (Creswell 1998). As mentioned previously, the first-order categories emerged from the interviewee's own terms. The data is verified through axial coding where revisits to the data either confirm or deny the researcher's questions (Creswell 1998). This leads to theoretical saturation (Strauss and Corbin 1998). Other studies employing the same research approach and methods, for example, Nag et al. (2007), conducted the study as a team effort with several researchers. A team of researchers was able to verify the coding of the categories as researchers work individually in coding. Comparison of the categories was done between the individual researchers. This doctoral thesis was an individual effort in terms of data collection, analysis, and coding of the categories. Naturally, the trustworthiness of the coding would have been enhanced with the inclusion of an additional coder. Nevertheless, I followed the guidelines of grounded theory carefully and also paid particular attention to studies by Dennis Gioia to provide systematic discipline to the analysis. Gioia et al. (2012) methodology to enhance grounded theory development presents the steps and key features. The steps are research design, data collection, data

analysis, and grounded theory articulation. Data analysis and grounded theory articulation are the steps that distinguish the methodology from traditional grounded theory approaches (Gioia et al. 2012).

7.4   Limitations and suggestions for further research

All research endeavors have their limitations, and this doctoral thesis is no exception.

The empirical setting of this doctoral thesis was one university in Finland. This study would have benefited from the inclusion of more universities as cases to provide an even more illustrative perspective on the current situation of international degree education in Finland. While the described phenomenon is highly informative, it does not provide a uniform picture of the situation in Finland, and therein lays a strong encouragement for further research in this area. Another suggestion would be to conduct similar studies in other countries. Each country has its own form of higher education, and thus, analyzing the internationalization efforts of different higher education systems could expand our understanding of the intricacies of the process. Furthermore, studies in international higher education have focused predominantly on Western countries.

From the perspective of integrating international dimensions into a university's education, a beneficial avenue for research would be to compare the architectures of traditional and international education within a single university. By traditional education, I refer to education given in the native language of the host country. In Finnish universities, the number of students receiving an education in their native language outnumbers those studying in a foreign language. Therefore, the numbers between traditional education and international education differ remarkably. The low number of students in the international programmes influences the structures of the programmes, as they operate with poor resources and deficient structures. A comparative study of these two types of educational programs, which differ remarkably in numbers, would uncover resources, structures, and potential emergent strategies and architectures. Do educational programs develop through championing activities when higher volumes necessitate development?

The notion of championing was emphasized in this study. The importance of this activity in higher education internationalization has already been brought up by a few scholars (Jones and Brown 2007; Dewey and Duff 2009). However, there is a gap in the literature regarding how to take advantage of championing individuals. As I discovered, championing activities are not sustainable if there is no favorable architecture present. In relation to organizational architecture, there are also possibilities to uncover a relationship between lateral relations and championing activities.

8 CONCLUSION

Higher education internationalization requires notable efforts from the organization. Any grand endeavor of a strategic nature places demands on an organization. Here, a reminder of the points raised by Garvin (1993) and Dill (1999) is in order. The incapability of universities to engage in internal improvement is a relevant topic, which Garvin (1993) attributes to universities' failure to learn. Such a statement opens exciting avenues for research on strategies and structures within universities. Prior literature regarding higher education internationalization at the organizational and structural level is minimal, and organizational architecture as a field of research has not delved deeply into higher education. Furthermore, the literature on strategy processes is extensive, but that literature has not been discussed in the context of higher education internationalization. Deficiencies in strategic and structural factors hindered the internationalization process that occurred at the University of Jyväskylä. Earlier studies have suggested that when the deliberate strategy of an organization is not realized or does not apply to the actual events, strategies can emerge to better correspond to the reality at the operational and middle levels. Furthermore, earlier literature also proposed the notion of informal, or emergent, structures that develop in the day-to-day organizational activities. Both of these emergent components were witnessed in the current study, albeit at a minimal degree. Concurrent strategic ambiguity regarding the meaning behind the internationalization and the deficient organizational architecture rendered most attempts at further development obsolete. Herein lays potential for the practitioners working in the field of higher education internationalization: The removal of intra-organizational and, especially, structural boundaries to enable internationalization is a method at the disposal of the organization.

To reiterate my point, I argue that research on higher education internationalization will benefit from an increased interest in studying the organizations of higher education. The phenomenon of higher education internationalization is complex and is manifested in different forms and at multiple levels. As Jane Knight (2004) stated, the organizational level is the level at which internationalization actually occurs. Internationalization is, thus, a

process that encompasses the entire organization. As a strategy, it should not be reduced to a mere rhetorical tool, but it requires efficient support from the structural components. As a research finding, this result adds to the already formidable group of studies that promote the importance of an organization's architecture on its strategy. The novelty of the current study resides in the transference of the architecture discussion unto the higher education field. Regarding organizational members, some embrace the internationalization process more than others. The individuals who embrace it are known as enthusiasts (Jones and Brown 2007) or champions (Dewey and Duff 2009). The input of these individuals must be identified and adequately supported for the further development of the internationalization process. As a form of support, providing incentives for these individuals to prioritize the internationalization process over their primary work occasionally is a viable measure. Championing internationalization should not be detrimental to these individuals' primary tasks. Whereas previous studies have discussed championing activities in relation to strategic processes, such as higher education internationalization, I promote the importance of championing activities concerning the organizational architecture. The deficient formal structures enable the identification of improved methods of operating and the emergence of new structures. Concurrently, however, the deficient formal structures slow down the momentum of the informal structures and hinder them from a threshold of consistency. Without consistency, a new architecture does not emerge.

This study shared similar findings to previous studies on organizational architecture. Emergent organizational architecture is a concept that has not been properly addressed in the field of organizational architecture. As I discovered, informal structures, also accurately referred to as emergent structures, were prevalent on many occasions. They did not manifest consistently, however, and thus, their effect was less than optimal, and they failed to impact the broader architecture. Therefore, further studies on the development of emergent architecture should take into account the challenges of reaching and maintaining consistency in emergent structures in the presence of deficient formal structures.

YHTEENVETO (SUMMARY IN FINNISH)

Kansainvälistyminen on yksi haastavimmista strategisista prosesseista organisaatioissa. Korkeakoulut ja kansainvälisyys eivät ole toisilleen vieraita. Korkeakoulut ovat tiedon luojia ja levittäjiä joilla on merkittävä vaikutus ympäröivään yhteiskuntaan ja vallitsevaan keskusteluun. Jotkut tutkijat ovat kuitenkin kritisoineet korkeakouluja, erityisesti yliopistoja, siitä että ne eivät kykene sisäiseen kehittämiseen ja uusiutumiseen. Yliopistot tasapainoilevat tutkimustyön vaatiman rakenteiden joustavuuden sekä ison organisaation operatiivisen hallinnon vaatiman byrokratian kanssa.

Organisaation formaalit rakenteet luovat pohjan työnteolle ja työnjaolle. Ne määrittelevät tehtäväkuvaukset, vastuunjaot, palkitsemiset, raportoinnin ja dokumentaation. Nämä muunneltavissa olevat rakenteet määrittelevät työnjaon yksiköiden ja yksilöiden välillä. Formaalien rakenteiden lisäksi organisaation päivittäisessä toiminnassa ovat vahvasti vaikuttamassa ns. informaalit eli epämuodolliset rakenteet. Nämä voidaan ymmärtää rakenteina jotka tulevat esiin toiminnassa ja perustuvat organisaation ihmisten toimintatapoihin. Esiin nousevat rakenteet voivat poiketa formaaleista rakenteista ja joissain tapauksissa myös ylittää ne. Tämä voi tapahtua tilanteissa joissa formaaleja rakenteita ei ole määritelty ollenkaan tai ne eivät mahdollista tehokkainta toimintatapaa. Tällöin organisaation jäsenet alkavat toimia parhaaksi näkemällään tavalla jolla tarvittavat tehtävät tulevat tehdyiksi. Epämuodollisilla rakenteilla on potentiaalia suoriutua paremmin kuin formaalit rakenteet ja jos epämuodolliset rakenteet ovat johdonmukaisia niin niistä voi kehittyä uudet formaalit rakenteet. Nadler ja Tushman (1997) määrittelevät organisaation arkkitehtuurin koostuvan niistä sisäisistä rakenteista ja koordinaatiosta jotka mahdollistavat organisaation kykyjen maksimoimisen. Arkkitehtuuri muodostuu formaaleista ja informaaleista rakenteista, työn luonteesta, ihmisistä, ja näiden edeltävien keskinäisestä koordinaatiosta. Organisaatioissa voi myös olla yksilöitä jotka ajavat tiettyä asiaa eteenpäin, vaikka se ei kuuluisi heidän formaaliin tehtävänkuvaukseen. Näistä henkilöistä käytetään nimitystä champion (suom. esitaistelija tai puolustaja) (Mantere 2005). Nämä yksilöt ottavat jonkin tärkeäksi kokemansa asian organisaatiossa ja edistävät sitä ja pyrkivät saamaan asian edistämiselle tarvittavan tuen.

Korkeakoulun kansainvälistyminen vaatii korkeakoululta resursseja, tukea, ja koordinointia (Dewey ja Duff 2009). Kansainvälistyminen strategisesti merkittävänä prosessina on riippuvainen organisaation sisäisestä järjestäytymisestä, ts. organisaation arkkitehtuurista. Kansainvälistä korkeakoulutusta on tutkittu laajalti ja aikaisempi tutkimus voidaan jakaa neljään teemaan: perustelut kansainvälistymiselle, kansainvälistymisen linjaukset ja strategiat, opetusohjelman kansainvälistäminen sekä henkilökunta- ja opiskelijaliikkuvuus. Karkeasti jaoteltuna tutkimus on keskittynyt kansainvälistymisen syihin sekä seurauksiin. Kansainvälistyminen organisaation sisäisenä prosessina on jäänyt vähäiselle huomiolle. Aikaisempi tutkimus on erityisesti jättänyt huomioimatta kansainvälistymisen

korkeakoulun sisäisenä prosessina ja miten se vaikuttaa korkeakoulun arkkitehtuuriin sekä miten arkkitehtuuri vaikuttaa tähän prosessiin. Tähän puutteeseen tässä esiteltävä tutkimus pyrkii puuttumaan.

Tutkimus tehtiin yhdessä suomalaisessa yliopistossa, Jyväskylän yliopistossa. Yliopiston kansainväliset maisteriohjelmat valikoituvat tutkimuksen kohteiksi, sillä ne ovat oivallisia instrumentteja koulutuksen kansainvälistymiselle. Nämä ohjelmat ovat kaksivuotisia maisterin tutkintoon johtavia ohjelmia joiden opetuskieli on englanti ja joihin rekrytoidaan opiskelijoita myös Suomen ulkopuolelta. Tutkimuksen aikaan Jyväskylän yliopistossa oli 18 tällaista maisteriohjelmaa seitsemässä eri tiedekunnassa. Pääasiallinen aineisto kerättiin teemahaastatteluilla. Haastateltavina olivat kansainvälisten maisteriohjelmien johtajat sekä koordinaattorit. Näiden lisäksi haastattelin myös yliopiston keskushallinnossa toimivia henkilöitä joiden työnkuvaan kuuluvat kansainväliseen tutkintokoulutukseen liittyvät asiat. Haastattelujen kokonaismäärä oli 37. Teemahaastattelujen tueksi käytettiin sekundäärisenä aineistona yliopiston strategioita, sisäisiä raportteja, sekä tilastoja.

Kansainvälistymisen löyhä kytkös yliopiston strategiaan johti siihen, että strategian toimenpideohjelma ei luonut puitteita kansainvälisten maisteriohjelmien kehittämiselle. Tutkimus osoitti, että formaalit rakenteet, kuten kannustimet, työnjako, ja vastuut, eivät tukeneet ohjelmien kehittämistä. Myös päivittäinen toiminta oli heikosti organisoitua. Kansainvälisten tutkinto-ohjelmien operationaalinen vastuu ja koordinaatio olivat opetus- ja tutkimushenkilöstön vastuulla. Näillä henkilöillä ei ollut kannustimia kehittää ohjelmia, sillä heidän työn pääasiallinen arviointi tapahtuu tutkimustoiminnan perusteella. Eräs haastateltavista oli suorapuheinen koskien panostusta koulutusohjelmaan panostamiseen, viitaten sen olevan erittäin haitallista urakehitykselle.

Kansainvälisten maisteriohjelmien koordinaattorit ja johtajat olivat yhteydessä yli ohjelma- ja tiedekuntarajojen. Tällainen lateraalinen kommunikaatio oli yksi muoto epämuodollisista rakenteista. Formaalit rakenteet eivät tuottaneet tarvittavaa tietoa, joten ohjelmien henkilöstö turvautui konsultoimaan vertaisiaan eri ohjelmissa. Tutkimuksessa nousi myös esille perustavanlaatuinen kysymys siitä, että mitä yliopisto haluaa saavuttaa näillä kansainvälisillä maisteriohjelmilla. Ohjelmien toiminnassa puuttui systemaattisuus ja toiminta oli usein reagoimista kiireellisiin asioihin. Osuva kuvaus toiminnalle oli usean haastateltavan käyttämä kuvaus: "tulipaloja tässä sammutetaan". Tällä he viittasivat toiminnan lyhytkatseisuuteen, sillä ohjelmien kehittäminen jäi päivittäisen toiminnan jalkoihin. Ohjelmien perusasioihin liittyvä huono valmistautuminen ja suunnittelu johtivat siihen, että näihin asioihin kiinnitettiin huomiota vasta kun asioiden hoitaminen oli täysin välttämätöntä tai jo myöhästynyt.

Tutkimukseni osoitti, että korkeakoulutuksen kansainvälistyminen vaatii sitoutuneiden yksilöiden, etenkin opetus- ja tutkimushenkilöstön, panostusta. Organisaation arkkitehtuurin tulee tukea näiden henkilöiden työtä ja tarjota

kannusteet jotka edistävät kansainvälistymistä. Nykytilanteessa tämä on haastavaa, miltei mahdotonta, koska opetus- ja tutkimushenkilöstöön kohdistuvat paineet korkeatasoisiin julkaisuihin ja ulkoisen rahoituksen saamiseen. Näihin panostaminen on hyödyllistä myös yksilön omalle urakehitykselle, kansainvälisten koulutusohjelmien kehittäminen ei ole. Kansainvälistymiseen on otettava mukaan henkilöstöä niin opetus- ja tutkimushenkilöstöstä kuin hallinnosta. Strategian ja arkkitehtuurin uusiutumiset ovat mahdollisia, jos operatiivisella tasolla olevien ihmisten mielipiteet ja panostukset otetaan huomioon ja viedään käytäntöön.

REFERENCES

Agarwal, R., Anand, J., Bercovitz, J., & Croson, R. 2012. Spillovers across organizational architectures: The role of prior resource allocation and communication in post-acquisition coordination outcomes. Strategic Management Journal 33 (6), 710–733.

Altbach, P. G., & de Wit, H. 2017. Trump and the coming revolution in higher education internationalization. International Higher Education 89, 3–5.

Altbach, P. G., & McGill Peterson, P. 1998. Internationalize American higher education? Not exactly. International Higher Education 11, 15–17.

Aoki, M. 2004. An organizational architecture of T-form: Silicon Valley clustering and its institutional coherence. Industrial and Corporate Change 13 (6), 967–981.

Aoki, M., & Jackson, G. 2008. Understanding an emergent diversity of corporate governance and organizational architecture: An essentiality-based analysis. Industrial and Corporate Change 17 (1), 1–27.

Aspara, J., Aula, H. M., Tienari, J., & Tikkanen, H. 2014. Struggles in organizational attempts to adopt new branding logics: The case of a marketizing university. Consumption Markets and Culture 17 (6), 522–552.

Attia, M., & Edge, J. 2017. Be(com)ing a reflexive researcher: A developmental approach to research methodology. Open Review of Education Research 4 (1), 33-45.

Aula, H.-M. 2015. Constructing reputation in a university merger. Aalto University publication peries – Doctoral dissertations 184/2015. Helsinki.

Aula, H.-M., Tienari, J., & Wæraas, A. 2015. The university branding game: Players, interests, politics. International Studies of Management and Organization 45 (2), 164–179.

Barbaroux, P. 2011. A design-oriented approach to organizational change: Insights from a military case study. Journal of Organizational Change Management 24 (5), 626–639.

Barker, M. C., & Mak, A. S. 2013. From classroom to boardroom and ward: Developing generic intercultural skills in diverse disciplines. Journal of Studies in International Education 17 (5), 573–589.

Bartell, M. 2003. Internationalization of universities: A university culture-based framework. Higher Education 45 (1), 43–70.

Berger, R. 2015. Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. Qualitative Research 15 (2), 219–234.

Berry, C., & Taylor, J. 2014. Internationalisation in higher education in Latin America: Policies and practice in Colombia and Mexico. Higher Education 67 (5), 585–601.

Blau, P. M. 1973. The organization of academic work. New York: John Wiley & Sons.

Bonjour, E., & Micaelli, J. 2010. Design core competence diagnosis: A case from the automotive industry. IEEE Transactions on Engineering Management 57 (2), 323–337.

Boumgarden, P., Nickerson, J., & Zenger, T. R. 2012. Sailing into the wind: Exploring the relationships among ambidexterity, vacillation, and organizational performance. Strategic Management Journal 33 (6), 587–610.

Brickley, J., Smith, C., & Zimmerman, J. 1995. The economics of organizational architecture. Journal of Applied Corporate Finance 8 (2), 19–31.

Brown, J. 1991. Research that reinvents the corporation. Harvard Business Review January-February, 102-111.

Brown, J., & Duguid, P. 1998. Organizing knowledge. California Management Review 40 (3), 90–111.

Burgelman, R. A. 1983a. A model of the interaction of strategic behavior, corporate context, and the concept of strategy. Academy of Management Review 8 (1), 61–70.

Burgelman, R. A. 1983b. A process model of internal corporate venturing in the diversified major firm. Administrative Science Quarterly 28 (2), 223–244.

Burgelman, R. A. 1983c. Corporate entrepreneurship and strategic management: Insights from a process study. Management Science 29 (12), 1349–1364.

Burgelman, R. A. 1994. Fading memories: A process theory of strategic business exit in dynamic environments. Administrative Science Quarterly 39 (1), 24–56.

Burgelman, R. A. 2002. Strategy is destiny - How strategy-making shapes a company's future. New York: Free Press

Burns, T., & Stalker, G. M. 1966. The management of innovation. 2nd edition. London: Tavistock Publications.

Burton, R., & Obel, B. 1980. A computer simulation test of the M-form hypothesis. Administrative Science Quarterly 25 (3), 457–466.

Burton, R., & Obel, B. 2011. Computational modeling for what-is, what-might-be, and what-should-be studies—and triangulation. Organization Science 22 (5), 1195–1202.

Cabigiosu, A., & Camuffo, A. 2011. Beyond the "mirroring" hypothesis: Product modularity and interorganizational relations in the air conditioning industry. Organization Science 23 (3), 686–703.

Campagnolo, D., & Camuffo, A. 2010. The concept of modularity in management studies: A literature review. International Journal of Management Reviews 12 (3), 259-283.

Caruso, R., & de Wit, H. 2015. Determinants of mobility of students in Europe: Empirical evidence for the period 1998-2009. Journal of Studies in International Education 19 (3), 265–282.

Caves, R. 1980. Industrial organization, corporate strategy and structure. Journal of Economic Literature 18 (1), 64–92.

Ceylan, C. 2013. Commitment-based HR practices, different types of innovation activities and firm innovation performance. International Journal of Human Resource Management 24 (1), 208–226.

Chandler, A. D. 1962. Strategy and structure: Chapters in the history of the American industrial enterprise. Cambridge: MIT Press.

Charan, R. 1991. How networks reshape organizations--for results. Harvard Business Review September-October, 104–115.

Charmaz, K. 2000. Grounded theory - Objectivist and constructivist methods. In Denzin, N. K., & Lincoln, Y. S. (eds.) Handbook of qualitative research, 2nd ed. Thousand Oaks, CA: Sage Publications Inc., 509-535.

Child, J. 1972. Organizational structure, environment and performance: The role of strategic choice. Sociology 6 (1), 1–22.

Christensen, M., & Knudsen, T. 2010. Design of decision-making organizations. Management Science 56 (1), 71–89.

Chuma, H. 2006. Increasing complexity and limits of organization in the microlithography industry: implications for science-based industries. Research Policy 35 (3), 394–411.

Ciborra, C. 1996. The platform organization: Recombining strategies, structures, and surprises. Organization Science 7 (2), 103–119.

Cohen, M., March, J., & Olsen, J. 1972. A garbage can model of organizational choice. Administrative Science Quarterly 17 (1), 1–25.

Corbin, J., & Strauss, An. 2008. Basics of qualitative research - Techniques and procedures for developing grounded theory. 3rd edition. Thousand Oaks, CA: Sage.

Corley, K. G., & Gioia, D. A. 2004. Identity ambiguity and change in the wake of a corporate spin-off. Administrative Science Quarterly 49 (2), 173–208.

Cox, H., Biao, H., & Metcalfe, S. 2003. Compradors, firm architecture and the "reinvention" of British trading companies: John Swire & Sons' operations in early twentieth-century China. Business History 45 (2), 15–34.

Creswell, J. W. 1998. Qualitative inquiry and research design – Choosing among five traditions. Thousand Oaks, CA: SAGE.

Crowston, K. 1997. A coordination theory approach to organizational process design. Organization Science 8 (2), 157–175.

Csaszar, F. 2012. Organizational structure as a determinant of performance: Evidence from mutual funds. Strategic Management Journal 33 (6), 611–632.

Csaszar, F. 2013. An efficient frontier in organization design: Organizational structure as a determinant of exploration and exploitation. Organization Science 24 (4), 1083–1101.

Cyert, R. M. & March, J. G. 1992. A behavioral theory of the firm. 2nd edition. Englewood Cliffs, New Jersey: Prentice-Hall

Czarniawska, B., & Genell, K. 2002. Gone shopping? Universities on their way to the market. Scandinavian Journal of Management 18 (4), 455–474.

Dacin, M. T., Munir, K., & Tracey, P. 2010. Formal dining at Cambridge colleges: Linking ritual performance and institutional maintenance. Academy of Management Journal 53 (6), 1393–1418.

Daft, R. L. 2013. Understanding the theory and design of organizations. 11th edition, International edition. South-Western Cengage Learning.

Daft, R., & Lewin, A. 1990. Can organization studies begin to break out of the normal science straitjacket? An editorial essay. Organization Science 1 (1), 1–9.

Daft, R., & Lewin, A. 1993. Where are the theories for the "new" organizational forms? An editorial essay. Organization Science 4 (4), i–vi.

de Haan, D., & Sherry, E. 2012. Internationalisation of the sport management curriculum: Academic and student reflections. Journal of Studies in International Education 16 (1), 24–39.

de Wit, H. 1999. Changing rationales for the internationalization of higher education. International Higher Education 15 (3), 2–3.

Dervitsiotis, K. N. 2008. Guiding human organisations to climb the spiral stages of performance improvements. Total Quality Management & Business Excellence 19 (7-8), 709–718.

Dewey, P., & Duff, S. 2009. Reason before passion: Faculty views on internationalization in higher education. Higher Education 58 (4), 491–504.

Dill, D. 1999. Academic accountability and university adaptation: The architecture of an academic learning organization. Higher Education 38 (2), 127–154.

Drazin, R., & Van de Ven, A. 1985. Alternative forms of fit in contingency theory. Administrative Science Quarterly 30 (4), 514–539.

Dunbar, R. L. M., & Starbuck, W. H. 2006. Learning to design organizations and learning from designing them. Organization Science 17 (2), 171–178.

Easton, G. 2010. Critical realism in case study research. Industrial Marketing Management 39 (1), 118–128.

Eigi, J., Põiklik, P., Lõhkivi, E., & Velbaum, K. 2014. Supervision and early career work experiences of Estonian humanities researchers under the conditions of project-based funding. Higher Education Policy 27 (4), 453–468.

Eisenhardt, K. M. 1989. Building theories from case study research. Academy of Management Review 14 (4), 532–550.

Elkin, G., Farnsworth, J., & Templer, A. 2008. Strategy and the internationalisation of universities. International Journal of Educational Management 22 (3), 239–250.

Engwall, L. 2016. The internationalisation of higher education. European Review 24 (2), 221–231.

Ethiraj, S., & Levinthal, D. 2004a. Modularity and innovation in complex systems. Management Science 50 (2), 159–173.

Ethiraj, S., & Levinthal, D. 2004b. Bounded rationality and the search for organizational architecture: An evolutionary perspective on the design of organizations and their evolvability. Administrative Science Quarterly 49 (3), 404–437.

Fang, W. 2012. The development of transnational higher education in China: A comparative study of research universities and teaching universities. Journal of Studies in International Education 16 (1), 5–23.

Fjeldstad, Ø. D., Snow, C. C., Miles, R. E., & Lettl, C. 2012. The architecture of collaboration. Strategic Management Journal 33 (6), 734–750.

Fleming, P., & Spicer, A. 2008. Beyond power and resistance - New approaches to organizational politics. Management Communication Quarterly 21 (3), 301-309.

Fogelberg, P. 1999. Using the IQRP in a comprehensive university - University of Helsinki, Finland. In Knight, J. & de Wit, H. (Eds.), Quality and internationalisation in higher education. Paris: OECD/ IMHE, 111-138.

Fredrickson, J. W. 1986. The strategic decision process and organizational structure. Academy of Management Review 11 (2), 280–297.

Galbraith, J. R. 1973. Designing complex organizations. Reading, Mass.: Addison-Wesley Publishing Company.

Galbraith, J. R. 1974. Organization design: An information processing view. Interfaces 4 (3), 28–36.

Galbraith, J. R. 1994. Competing with flexible lateral organizations. 2nd edition. Reading, Mass: Addison-Wesley Publishing Company.

Galbraith, J. R. 2002. Designing organizations – An executive guide to strategy, structure, and process. San Francisco, CA: John Wiley & Sons, Inc.

Galbraith, J. R. 2012. The evolution of enterprise organization designs. Journal of Organization Design 1 (2), 1–13.

Galunic, D., & Eisenhardt, K. 2001. Architectural innovation and modular corporate forms. Academy of Management Journal 44 (6), 1229–1249.

Garicano, L., & Wu, Y. 2012. Knowledge, communication, and organizational capabilities. Organization Science 23 (5), 1382–1397.

Garvin, D. 1993. Building a learning organization. Harvard Business Review 71 (4), 78–84.

Ghazarian, P. G., & Youhne, M. S. 2015. Exploring intercultural pedagogy: Evidence from international faculty in South Korean higher education. Journal of Studies in International Education 19 (5), 476–490.

Gioia, D. A., Corley, K. G., & Hamilton, A. L. 2012. Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. Organizational Research Methods 16 (1), 15–31.

Gioia, D. A., & Thomas, J. B. 1996. Identity, image, and issue interpretation: Sensemaking during strategic change in academia. Administrative Science Quarterly 41 (3), 370–403.

Glaser, B. G., & Strauss, A. L. 1967. The discovery of grounded theory: Strategies for qualitative research. Chicago, Ill: Aldine Publishing Company.

Goold, M., & Campbell, A. 2002. Do you have a well-designed organization? Harvard Business Review 80 (2), 117–124.

Grabher, G. 2004. Temporary architectures of learning: Knowledge governance in project ecologies. Organization Studies 25 (9), 1491–1514.

Greenwood, R., & Miller, D. 2010. Tackling design anew: Getting back to the heart of organizational theory. Academy of Management Perspectives 24 (4), 78-88.

Gross, E. 1968. Universities as organizations: a research approach. American Sociological Review 33 (4), 518–544.

Gulati, R., & Puranam, P. 2009. Renewal through reorganization: The value of inconsistencies between formal and informal organization. Organization Science 20 (2), 422–440.

Gulati, R., Puranam, P., & Tushman, M. 2012. Meta-organization design: Rethinking design in interorganizational and community contexts. Strategic Management Journal 33 (6), 571–586.

Gulati, R, & Singh, H. 1998. The architecture of cooperation: Managing coordination costs and appropriation concerns in strategic alliances. Administrative Science Quarterly 43 (4), 781–814.

Gulick, L. 1937. Notes on the theory of organization. In Shafritz, J. M., & Hyde, S. C. (eds.) 2007. Classics of public administration, 6th edition. Boston, MA: Thomson Wadsworth, 105-113.

Hannan, M., Pólos, L., & Carroll, G. 2003. Cascading organizational change. Organization Science 14 (5), 463-482

Harris, M., & Raviv, A. 2002. Organization design. Management Science 48 (7), 852–865.

Hart, S. L. 1992. An integrative framework for strategy-making processes. Academy of Management Review 17 (2), 327–351.

Hayter, C. S., & Cahoy, D. R. 2018. Toward a strategic view of higher education responsibilities: A dynamic capabilities approach. Strategic Organization 16 (1), 12-34

Henderson, R., & Clark, K. 1990. Architectural innovation : The reconfiguration of existing product technologies and the failure of established firms. Administrative Science Quarterly 35 (1), 9–30.

Henderson, R., & Cockburn, I. 1994. Measuring competence? Exploring firm effects in pharmaceutical research. Strategic Management Journal 15 (1), 63–84.

Hirsjärvi, S. & Hurme, H. 2001. Tutkimushaastattelu - Teemahaastattelun teoria ja käytäntö. Helsinki: Yliopistopaino.

Hitt, M. A., Ireland, R. D. & Hoskisson, R. E. 2009. Strategic management: Competitiveness and globalization: Concepts & cases. 8th edition. Mason, OH: South-Western

Horta, H. 2009. Holding a post-doctoral position before becoming a faculty member: Does it bring benefits for the scholarly enterprise? Higher Education 58 (5), 689–721.

Hu, G., & Lei, J. 2014. English-medium instruction in Chinese higher education: A case study. Higher Education 67 (5), 551-567.

Huang, J., & Kim, H. J. 2013. Conceptualizing structural ambidexterity into the innovation of human resource management architecture: The case of LG Electronics. International Journal of Human Resource Management 24 (5), 922–943.

Huber, G. P., & McDaniel, R. R. 1986. The decision-making paradigm of organizational design. Management Science 32 (5), 572–589.

Hudson, R. 2015. Dominated by economics? Evidence of changing drivers of internationalization and its funding within higher education institutions in Europe. Higher Education Policy 29 (1), 1–19.

Huff, A. S., & Reger, R. K. 1987. A review of strategic process research. Journal of Management 13 (2), 211–236.

Hutzschenreuter, T., & Kleindienst, I. 2006. Strategy-process research: What have we learned and what is still to be explored. Journal of Management 32 (5), 673–720.

INSEAD 2015. Our mission and values. [Accessed on 27.05.2015]. Available in http://about.insead.edu/who_we_are/mission_visions.cfm

Jacobides, M. G. 2005. Industry change through vertical disintegration: How and why markets emerged in mortgage banking. Academy of Management Journal 48 (3), 465–498.

Jacobides, M. G. 2006. The architecture and design of organizational capabilities. Industrial and Corporate Change 15 (1), 151–171.

Jacobides, M. G. 2007. The inherent limits of organizational structure and the unfulfilled role of hierarchy: Lessons from a near-war. Organization Science 18 (3), 455–477.

Jacobides, M. G, & Billinger, S. 2006. Designing the boundaries of the firm : From "make, buy, or ally" to the dynamic benefits of vertical architecture. Organization Science 17 (2), 249–261.

Jon, J.-E. 2012. Power dynamics with international students: From the perspective of domestic students in Korean higher education. Higher Education 64 (4), 441–454.

Jones, E., & Brown, S. 2007. Contextualising international higher education. In Jones, E., & Brown, S. (Eds.). Internationalising higher education. London: Routledge, 195-200.

Joseph, J., & Ocasio, W. 2012. Architecture, attention, and adaptation in the multibusiness firm: General Electric from 1951 to 2001. Strategic Management Journal 33 (6), 633–660.

Kallio, K.-M., Kallio, T. J., Tienari, J., & Hyvönen, T. 2016. Ethos at stake: Performance management and academic work in universities. Human Relations 69 (3), 685–709.

Karim, S. 2006. Modularity in organizational structure: The reconfiguration of internally developed and acquired business units. Strategic Management Journal 27 (9), 799–823.

Karim, S., & Williams, C. 2012. Structural knowledge: How executive experience with structural composition affects intrafirm mobility and unit reconfiguration. Strategic Management Journal 33 (6), 681–709.

Karky, N. 2013. International students in an Indian technical university: Faculty counselors' preparedness and perspectives. Journal of Studies in International Education 17 (1), 39–54.

Kehm, B. M., & Teichler, U. 2007. Research on internationalisation in higher education. Journal of Studies in International Education 11 (3-4), 260–273.

Keupp, M. M., Palmié, M., & Gassmann, O. 2011. Achieving subsidiary integration in international innovation by managerial "tools." Management International Review 51 (2), 213–239.

Killick, D. 2012. Seeing ourselves-in-the-world: Developing global citizenship through international mobility and campus community. Journal of Studies in International Education 16 (4), 372–389.

Knight, J. 1999. Internationalisation of higher education. In Knight, J. & de Wit, H. (Eds.), Quality and internationalisation in higher education. Paris: OECD/ IMHE, 13-28

Knight, J. 2003. Updated definition of internationalization. International Higher Education 33, 2–3.

Knight, J. 2004. Internationalization remodeled: Definition, approaches, and rationales. Journal of Studies in International Education 8 (1), 5-31.

Knight, J., & Morshidi, S. 2011. The complexities and challenges of regional education hubs: Focus on Malaysia. Higher Education 62 (5), 593–606.

Kondakci, Y., & van den Broeck, H. 2009. Institutional imperatives versus emergent dynamics: A case study on continuous change in higher education. Higher Education 58 (4), 439–464.

Kuhn, T. S. 1970. The structure of scientific revolutions. 2nd edition, enlarged. Chicago: The University of Chicago Press.

Kuroda, C. 2014. The new sphere of international student education in Chinese higher education: A focus on English-medium degree programs. Journal of Studies in International Education 18 (5), 445–462.

Kvale, S. 1996. Interviews - An introduction to qualitative research interviewing. Thousand Oaks: Sage Publications

Laitinen, M. 2015. Finland. In Internationalisation of higher education. Study. European Parliament, Policy Department B: Structural and Cohesion Policies. Brussels: European Parliament, 85-96

Lam, Q. K. H, & Wächter, B. 2014. Executive summary. In Wächter, B., & Maiworm, F. (eds.) English-taught programs in European higher education: The state of play in ACA Papers on International Cooperation in Education. Bonn: Lemmens Medien GmbH, 15-24

Lampel, J., & Bhalla, A. 2011. Living with offshoring: The impact of offshoring on the evolution of organizational configurations. Journal of World Business 46 (3), 346–358.

Lawrence, P. R., & Lorsch, J. W. 1967a. Differentiation and integration in complex organizations. Administrative Science Quarterly 12 (1), 1–47.

Lawrence, P. R., & Lorsch, J. W. (1967b). Organization and environment - Managing differentiation and integration. Boston, Mass: Division of research, Graduate school of business administration, Harvard University.

Leask, B. 2013. Internationalizing the curriculum in the disciplines—Imagining new possibilities. Journal of Studies in International Education 17 (2), 103–118.

Lee, J. T. 2014. Education hubs and talent development: Policymaking and implementation challenges. Higher Education 68 (6), 807–823.

Levinthal, D. 1997. Adaptation on rugged landscapes. Management Science 43 (7), 934–950.

Levinthal, D., & Warglien, M. 1999. Landscape design: Designing for local action in complex worlds. Organization Science 10 (3), 342–357.

Lincoln, Y. S., & Guba, E. G. 1985. Naturalistic inquiry. Newbury Park, CA: Sage.

Lincoln Y. S., & Guba, E. G. 2000. Paradigmatic controversies, contradictions, and emerging confluences. In Denzin, N. K., & Lincoln, Y. S (eds.) Handbook of qualitative research, 2nd ed. Thousand Oaks, CA: Sage Publications Inc., 163-188

Locke, K. 1996. Rewriting *The discovery of grounded theory* after 25 years? Journal of Management Inquiry 5 (3), 239-245.

Lopez-Cabrales, A., Valle, R., & Herrero, I. 2006. The contribution of core employees to organizational capabilities and efficiency. Human Resource Management 45 (1), 81–109.

Lorenz, C. 2012. If you're so smart, why are you under surveillance? Universities, neoliberalism, and New Public Management. Critical Inquiry 38 (3), 599–629.

Luijten-Lub, A., van der Wende, M., & Huisman, J. 2005. On cooperation and competition: A comparative analysis of national policies for internationalisation of higher education in seven western European countries. Journal of Studies in International Education 9 (2), 147–163.

Lutz, F. 1982. Tightening up loose coupling in organizations of higher education. Administrative Science Quarterly 27 (4), 653–669.

Ma, W., & Yue, Y. 2015. Internationalization for quality in Chinese research universities: Student perspectives. Higher Education 70 (2), 217–234.

MacCormack, A., Baldwin, C., & Rusnak, J. 2012. Exploring the duality between product and organizational architectures: A test of the "mirroring" hypothesis. Research Policy 41 (8), 1309–1324.

Maiworm, F. & Wächter, B. 2014. Part I - The big picture. In Wächter, B., & Maiworm, F. (eds.) English-taught programs in European higher education: The state of play in 2014. ACA Papers on International Cooperation in Education. Bonn: Lemmens Medien GmbH, 25-62

Malone, T. W., & Crowston, K. 1994. The interdisciplinary study of coordination. ACM Computing Surveys 26 (1), 87–119.

Mantere, S. 2005. Strategic practices as enablers and disablers of championing activity. Strategic Organization 3 (2), 157–184.

Mantere, S., & Vaara, E. 2008. On the problem of participation in strategy: A critical discursive perspective. Organization Science 19 (2), 341–358.

March, J. G. & Simon, H. A. 1993. Organizations. 2nd edition. Cambridge, Mass: Blackwell Publishers.

McEvily, B., Soda, G., & Tortoriello, M. 2014. More formally: Rediscovering the missing link between formal organization and informal social structure. Academy of Management Annals 8 (1), 299–345.

Medcof, J. W., & Song, L. J. 2013. Exploration, exploitation and human resource management practices in cooperative and entrepreneurial HR configurations. International Journal of Human Resource Management 24 (15), 2911–2926.

Mendelson, H. 2000. Organizational architecture and success in the information technology industry. Management Science 46 (4), 513–529.

Merton, R. K., Fiske, M., & Kendall, P. L. 1990. The focused interview - A manual of problems and procedures. 2nd edition. New York: Free Press

Meyer, C. B. 2001. A case in case study methodology. Field Methods 13 (4), 329–352.

Miles, M. B., and Huberman, A. M. 1994. Qualitative data analysis - An expanded sourcebook. 2nd edition. Thousand Oaks, California: Sage Publications.

Miles, R., Snow, C., Meyer, A., & Coleman Jr, H. 1978. Organizational strategy, structure, and process. Academy of Management Review 3 (3), 546–562.

Miller, D. 1986. Configurations of strategy and structure: Towards a synthesis. Strategic Management Journal 7 (3), 233–249.

Miller, D. 1987. The genesis of configuration. Academy of Management Review 12 (4), 686–701.

Miller, D. 1993. The architecture of simplicity. Academy of Management Review 18 (1), 116–138.

Miller, D. 1996. Configurations revisited. Strategic Management Journal 17 (7), 505–512.

Ministry of Education Finland. 2009. Strategy for the internationalisation of higher education institutions in Finland 2009–2015. Publications of the Ministry of Education, Finland 2009:23.

Mintzberg, H. 1973. Strategy-making in three modes. California Management Review 16 (2), 44–53.

Mintzberg, H. 1978. Patterns in strategy formation. Management Science 24 (9), 934–948.

Mintzberg, H. 1979. The structuring of organizations - A synthesis of the research. Englewood Cliffs, New Jersey: Prentice-Hall

Mintzberg, H. 1980. Structure in 5's: A synthesis of the research on organization design. Management Science 26 (3), 322–341.

Mintzberg, H. 1983. Structure in fives - Designing effective organizations. International edition. Englewood Cliffs, New Jersey: Prentice-Hall

Mintzberg, H. 1994. The rise and fall of strategic planning. New York: Prentice Hall.

Mintzberg, H., Ahlstrand, B., & Lampel, J. 2009. Strategy safari – Your complete guide through the wilds of strategic management. Second edition. Harlow, UK: FT Prentice Hall.

Mintzberg, H., & Waters, J. 1985. Of strategies, deliberate, and emergent. Strategic Management Journal 6 (3), 257–272.

Mintzberg, H., Raisinghani, D., & Théoret, A. 1976. The structure of "unstructured" decision processes. Administrative Science Quarterly 21 (2), 246–275.

Mirabeau, L., & Maguire, S. 2014. From autonomous strategic behavior to emergent strategy. Strategic Management Journal 35 (8), 1202–1229.

Nadler, D. A. 1992. Organizational architecture: A metaphor for change. In Nadler, D. A., Gerstein, M. S., Shaw, R. B. and associates. Organizational architecture - Designs for changing organizations. San Francisco: Jossey-Bass, 1-8

Nadler, D. A., & Gerstein, M. S. 1992. What is organizational architecture? Harvard Business Review, 70(5), 120–121.

Nadler, D. A., Gerstein, M. S., Shaw, R. B. and associates, 1992. Organizational architecture - Designs for changing organizations. San Francisco: Jossey-Bass.

Nadler, D., & Tushman, M. 1988. Strategic organization design - Concepts, tools, and processes. Glenview, Ill.: Scott, Foresman and company.

Nadler, D. A., & Tushman, M. L. 1997. Competing by design - The power of organizational architecture. New York: Oxford University Press.

Nadler, D. A., & Tushman, M. L. 1999. The organization of the future : Strategic imperatives and core competencies for the 21st century. Organizational Dynamics 28 (1), 45–60.

Nag, R., Corley, K. G., & Gioia, D. A. 2007. The intersection of organizational identity, knowledge, and practice: Attempting strategic change via knowledge grafting. Academy of Management Journal 50 (4), 821–847.

Neave, G. 2002. Anything goes: or, how the accommodation of Europe's universities to European integration integrates an inspiring number of contradictions. Tertiary Education and Management 8 (2), 181–197.

Nelson, R. 1991. Why do firms differ, and how does it matter? Strategic Management Journal 12 (S2), 61–74.

Nokelainen, S. 2016. Kun strategiapöhinä tuli talon - Tapaustutkimus strategioinnin kehittymisestä pluralistisessa. Tampereen teknillinen yliopisto. Julkaisu 1368.

Nyhagen, G. M., & Baschung, L. 2013. New organisational structures and the transformation of academic work. Higher Education 66 (4), 409–423.

O'Reilly, C. A., & Tushman, M. L. 2004. The ambidextrous organization. Harvard Business Review 82 (4), 74–81, 140.

Opetusministeriön asetus yliopistojen maisteriohjelmista 569/2005. Opetusministeriö.

Opetus- ja kulttuuriministeriön asetus yliopistojen perus- rahoituksen laskentakriteereistä 20.4.2012/182, 2012. Opetus- ja kulttuuriministeriö.

Opetus- ja kulttuuriministeriön asetus yliopistojen perusrahoituksen laskentakriteereistä 331/2016. Opetus- ja kulttuuriministeriö.

Ottaway, T., & Burns, J. 1997. Adaptive, agile approaches to organizational architecture utilizing agent technology. Decision Sciences 28 (3), 483–511.

Papatsiba, V. 2014. Policy goals of European integration and competitiveness in academic collaborations: An examination of joint master's and Erasmus Mundus programmes. Higher Education Policy 27 (1), 43-64

Pena, I., & Villasalero, M. 2010. Business strategy, human resource systems, and organizational performance in the Spanish banking industry. International Journal of Human Resource Management 21 (15), 2864–2888.

Pennings, J. 1975. The relevance of the structural-contingency model for organizational effectiveness. Administrative Science Quarterly 20 (3), 393–410.

Pettigrew, A. M. 1992. The character and significance of strategy process research. Strategic Management Journal 13 (S2), 5–16.

Pfotenhauer, S. M., Jacobs, J. S., Pertuze, J. A., Newman, D. J., & Roos, D. T. 2012. Seeding change through international university partnerships: The MIT-Portugal program as a driver of internationalization, networking, and innovation. Higher Education Policy 26 (2), 217–242.

Pietilä, M. 2018. Making Finnish universities complete organizations – Aims and tensions in establishing tenure track and research profiles. University of Helsinki, Department of Political and Economic Studies. Helsinki: Unigrafia.

Potts, D. 2015. Understanding the early career benefits of learning abroad programs. Journal of Studies in International Education 19 (5), 441–459.

Powell, W. W., & Snellman, K. 2004. The knowledge economy. Annual Review of Sociology 30, 199–220.

Pratt, M. G. 2008. Fitting oval pegs into round holes: Tensions in evaluating and publishing qualitative research in top-tier North American journals. Organizational Research Methods 11 (3), 481-509.

Ranki, S. 2016. Strateginen johtaminen suomalaisissa korkeakouluissa. Työsuojelurahasto.

Roberts, K. A., & Donahue, K. A. 2000. Professing professionalism: Bureaucratization and deprofessionalization in the academy. Sociological Focus 33 (4), 365–383.

Räsänen, A. 2000. Learning and teaching through English at the University of Jyväskylä. Project report from Jyväskylä University Language Centre. Jyväskylän yliopiston kielikeskus, Raportteja 4.

Räsänen, A. 2007. Missä mennään maisteriohjelmissa? Englanninkielisten maisteriohjelmien arviointikierroksen näkymiä. Jyväskylän yliopiston kielikeskus, Working paper 3.

Saarinen, T., & Taalas, P. 2017. Nordic language policies for higher education and their multi-layered motivations. Higher Education 73 (4), 597-612

Sah, R., & Stiglitz, J. 1986. The architecture of economic systems: Hierarchies and polyarchies. American Economic Review 76 (4), 716–727.

Sample, S. G. 2012. Developing intercultural learners through the international curriculum. Journal of Studies in International Education 17 (5), 554–572.

Sanchez, R., & Mahoney, J. 1996. Modularity, flexibility and knowledge management in product and organization design. Strategic Management Journal 17 (1), 63–76.

Santos, F. M., & Eisenhardt, K. M. 2005. Organizational boundaries and theories of organization. Organization Science 16 (5), 491–508.

Sarpong, D., Maclean, M., & Davies, C. 2013. A matter of foresight: How practices enable (or impede) organizational foresightfulness. European Management Journal 31 (6), 613–625.

Sauer, C., & Willcocks, L. 2002. The evolution of the organizational architect. MIT Sloan Management Review 43 (3), 41–49.

Saxena, K. B. C. 1996. Re-engineering public administration in developing countries. Long Range Planning 29 (5), 703–711.

Schimank, U. 2005. 'New Public Management' and the academic profession: Reflections on the German situation. Minerva 43 (4), 361–376.

Schoorman, D. 1999. The pedagogical implications of diverse conceptualizations of internationalization: A U.S.-based case study. Journal of Studies in International Education 3 (2), 19–46.

Scott, W. R. 1987. Organizations: Rational, natural, and open systems. 2nd edition. London: Prentice-Hall.

Scott, W. R., & Davis, G. F. 2007. Organizations and organizing - Rational, natural, and open system perspectives. Pearson International edition. New Jersey: Pearson Education, Inc.

Seeber, M., Cattaneo, M., Huisman, J., & Paleari, S. 2016. Why do higher education institutions internationalize? An investigation of the multilevel determinants of internationalization rationales. Higher Education 72 (5), 685-702

Siggelkow, N. 2011. Firms as systems of interdependent choices. Journal of Management Studies 48 (5), 1126–1140.

Siggelkow, N., & Levinthal, D. 2003. Temporarily divide to conquer: Centralized, decentralized, and reintegrated organizational approaches to exploration and adaptation. Organization Science 14 (6), 650–669.

Simon, H. A. 1962. The architecture of complexity. Proceedings of the American Philosophical Society 106 (6), 467–482.

Simon, H. A. 1997. Administrative behavior - A study of decision-making processes in administrative organizations. 4th edition. New York, NY: The Free Press.

Slater, S. F., Olson, E. M., & Hult, G. T. M. 2010. Worried about strategy implementation? Don't overlook marketing's role. Business Horizons 53 (5), 469–479.

Smith, C. 2001. Organizational architecture and corporate finance. Journal of Financial Research 24 (1), 1–13.

Soda, G., & Zaheer, A. 2012. A network perspective on organizational architecture: Performance effects of the interplay of formal and informal organization. Strategic Management Journal 33 (6), 751–771.

Stohl, M. 2007. We have met the enemy and he is us: The role of the faculty in the internationalization of higher education in the coming decade. Journal of Studies in International Education 114 (3), 359–372.

Strauss A. L., & Corbin, J. 1998. Basics of qualitative research: Techniques and procedures for developing grounded theory. 2nd edition. Thousand Oaks, CA: Sage

Stutz, A., Green, W., McAllister, L., & Eley, D. 2015. Preparing medical graduates for an interconnected world: Current practices and future possibilities for internationalizing the medical curriculum in different contexts. Journal of Studies in International Education 19 (1), 28–45.

Svensson, L., & Wihlborg, M. 2010. Internationalising the content of higher education: The need for a curriculum perspective. Higher Education 60 (6), 595–613.

Söderqvist, M. 2002. Internationalization and its management at higher-education institutions: Applying conceptual, content and discourse analysis. Helsinki, Finland: Helsinki School of Economics.

Taylor, J. 2004. Toward a strategy for internationalisation: Lessons and practice from four universities. Journal of Studies in International Education 8 (2), 149–171.

Teece, D. J. 2018. Managing the university: Why "organized anarchy" is unacceptable in the age of massive open online courses. Strategic Organization 16 (1), 92-102.

Teichler, U. 2004. The changing debate on internationalisation of higher education. Higher Education 48 (1), 5–26.

Tham, S. Y. 2013. Internationalizing higher education in Malaysia: Government policies and university's response. Journal of Studies in International Education 17 (5), 648–662.

Thomas, R., & Hardy, C. 2011. Reframing resistance to organizational change. Scandinavian Journal of Management 27 (3), 322 - 331

Tienari, J., Aula, H.-M., & Aarrevaara, T. 2016. Built to be excellent? The Aalto University merger in Finland. European Journal of Higher Education 6 (1), 25-40.

Times Higher Education 2015. The 100 most international universities in the world 2015. [Accessed on 27.05.2015]. Available in http://www.timeshighereducation.co.uk/news/the-100-most-international-universities-in-the-world-2015/2018125.article

Tirronen J., Aula H.-M., Aarrevaara T. 2016. A complex and messy merger: The road to University of Eastern Finland. In Pinheiro R., Geschwind L., Aarrevaara T. (eds). Mergers in Higher Education. Higher Education Dynamics, vol 46. Springer, Cham. 179-193.

Turner, K., & Makhija, M. 2012. The role of individuals in the information processing perspective. Strategic Management Journal 33 (6), 661–680.

Tushman, M., & Nadler, D. 1978. Information processing as an integrating concept in organizational design. Academy of Management Review 3 (3), 613–624.

Tushman, M., Smith, W., Wood, R., Westerman, G., & O´Reilly, C. 2010. Organizational designs and innovation streams. Industrial and Corporate Change 19 (5), 1331–1366.

University Admissions Finland. 2018. University Admissions Finland closed down. (Accessed on 25.08.2018.). Available in http://universityadmissions.fi/

University of Jyväskylä. 2014. Final report - Internal evaluation of the international Master's degree programmes at the University of Jyväskylä.

Urbanovič, J., & Wilkins, S. 2013. Internationalisation as a strategy to improve the quality of higher education in small states: Stakeholder perspectives in Lithuania. Higher Education Policy 26 (3), 373–396.

Valorinta, M. 2010. IT alignment and the boundaries of the IT function. Journal of Information Technology 26 (1), 46–59.

Van Damme, D. 2001. Quality issues in the internationalisation of higher education. Higher Education 41 (4), 415–441.

Van de Ven, A. H., Ganco, M., & Hinings, C. R. 2013. Returning to the frontier of contingency theory of organizational and institutional designs. The Academy of Management Annals 7 (1), 393-440.

van der Wende, M. 1999. An innovation perspective on internationalisation of higher education institutionalisation: The critical phase. Journal of Studies in International Education 3 (1), 3–14.

Van der Wende, M. 2007. Internationalization of higher education in the OECD countries: Challenges and opportunities for the coming decade. Journal of Studies in International Education 11 (3-4), 274–289.

Välimaa, J., Fonteyn, K., Garam, I., van den Heuvel, E., Linza, C., Söderqvist, M., Wolff, J. J., & Kolhinen, J. 2013. An evaluation of international degree programmes in Finland. Publications of the Finnish Higher Education Evaluation Council 2:2013.

Weick, K. 1976. Educational organizations as loosely coupled systems. Administrative Science Quarterly 21 (1), 1–19.

Wiers-Jenssen, J. 2007. Does higher education attained abroad lead to international jobs? Journal of Studies in International Education 12 (2), 101–130.

Wooldridge, B., & Floyd, S. W. 1990. The strategy process, middle management involvement and organizational performance. Strategic Management Journal 11 (3), 231–241.

Wooldridge, B., Schmid, T., & Floyd, S. W. 2008. The middle management perspective on strategy process: Contributions, synthesis, and future research. Journal of Management 34 (6), 1190–1221.

Worren, N., Moore, K., & Cardona, P. 2002. Modularity, strategic flexibility, and firm performance: A study of the home appliance industry. Strategic Management Journal 23 (12), 1123–1140.

Yang, R., & Welch, A. 2012. A world-class university in China? The case of Tsinghua. Higher Education 63 (5), 645–666.

Yonezawa, A., Akiba, H., & Hirouchi, D. 2009. Japanese university leaders' perceptions of internationalization the role of government in review and support. Journal of Studies in International Education 13 (2), 125–142.

APPENDICES

Appendix 1

Literature review

As the objective of this study is to create an understanding of the concept of organizational architecture and its use in business and management studies, I conducted a search of the "ISI Web of Science" database. To be more precise, I narrowed my search to solely the Social Sciences Citation Index (SSCI) because "architecture" is a more prominent topic in other fields, such as natural sciences than in the social sciences. This way, I could ensure that the results focused on the social sciences. I conducted my initial search in December 2013. The "ISI Web of Science" database covers the period from 1956 until the present. I conducted the search by entering the term "organizational architecture" in the "topic" field of the ISI search engine. I deemed this term the most appropriate based on prior experience, as it had been present in both article keywords and article and book titles. This search resulted in 393 hits. In the next step, I analyzed the abstracts among the results and excluded the ones that did not consider architecture a principle of organization design. I also excluded abstracts with references to product and IT architecture as opposed to organizational architecture. Furthermore, I also omitted from the final selection of articles studies that solely focused on a single aspect of the organizational composition, such as innovation teams, enterprise resource planning systems, reward systems, etc. A study focusing on a single aspect of the organizational composition, while commendable in its own right, does not fully capture the underlying premise of organizational architecture. In addition, I omitted the literature on modularity, a clear fixture and a prevailing perspective in the architecture literature, since it is an established stream of research in itself. Campagnolo and Camuffo (2010) provide an extensive review of the concept of modularity. Furthermore, I also included in this review several items that were not results in the initial search, which I discovered through previous readings of the literature and by following citing paths. In the end, 83 articles and four books were included in the final review, making the total number of reviewed items 87. The selection of references can be seen in Table 1.

The initial analysis revealed some features of organizational architecture as a concept: the varied use of terminology, multidisciplinary approaches, visceral relevance for organization theory, and practical relevance. The selected studies were grouped according to their primary architectural focus. The groupings are as follows: structure, process, and power. Definitions of organizational architecture were found across the groupings, but several studies omitted a definition altogether.

Table 11 Grouping of references

	References	architecture as a structure	architecture as a process	architecture as power
1	Agarwal et al. (2012)		1	
2	Aoki (2004)	1		
3	Aoki and Jackson (2008)			1
4	Barbaroux (2011)		1	
5	Bonjour and Micaëlli (2010)	1		
6	Boumgarden et al. (2012)		1	
7	Brickley et al. (1995)	1		
8	Brown and Duguid (1998)			1
9	Brown (1991)		1	
10	Burns and Stalker (1966)		1	
11	Burton and Obel (2011)			1
12	Cabigiosu and Camuffo (2011)		1	
13	Caves (1980)		1	
14	Ceylan (2013)		1	
15	Chandler (1962)		1	
16	Charan (1991)			1
17	Child (1972)		1	
18	Christensen and Knudsen (2010)			1
19	Chuma (2006)	1		
20	Ciborra (1996)	1		
21	Cox et al. (2003)			1
22	Csaszar (2012)			1
23	Csaszar (2013)		1	
24	Daft and Lewin (1990)			1
25	Daft and Lewin (1993)			1
26	Dervitsiotis (2008)	1		
27	Dunbar and Starbuck (2006)		1	
28	Ethiraj and Levinthal (2004a)	1		
29	Ethiraj and Levinthal (2004b)	1		
30	Fjeldstad et al. (2012)	1		
31	Galunic and Eisenhardt (2001)	1		
32	Garicano and Wu (2012)			1
33	Goold and Campbell (2002)		1	
34	Greenwood and Miller (2010)		1	
35	Gulati and Puranam (2009)	1		
36	Gulati and Singh (1998)	1		
37	Gulati et al. (2012)	1		

38	Hannan et al. (2003)			1	
39	Harris and Raviv (2002)				1
40	Henderson and Clark (1990)			1	
41	Henderson and Cockburn (1994)			1	
42	Huang and Kim (2013)			1	
43	Huber and McDaniel (1986)				1
44	Jacobides (2005)			1	
45	Jacobides (2006)			1	
46	Jacobides (2007)		1		
47	Jacobides and Billinger (2006)		1		
48	Joseph and Ocasio (2012)			1	
49	Karim (2006)			1	
50	Karim and Williams (2012)		1		
51	Keupp et al. (2011)		1		
52	Lampel and Bhalla (2011)			1	
53	Lawrence and Lorsch (1967a)			1	
54	Levinthal (1997)			1	
55	Levinthal and Warglien (1999)			1	
56	Lopez-Cabrales et al. (2006)			1	
57	MacCormack et al. (2012)		1		
58	Medcof and Song (2013)			1	
59	Mendelson (2000)				1
60	Miles et al. (1978)			1	
61	Miller (1986)			1	
62	Miller (1993)			1	
63	Mintzberg (1980)		1		
64	Nadler and Gerstein (1992)			1	
65	Nadler and Tushman (1997)			1	
66	Nadler and Tushman (1999)			1	
67	Nelson (1991)			1	
68	O'Reilly and Tushman (2004)			1	
69	Ottaway and Burns (1997)				1
70	Peña and Villasalero (2010)			1	
71	Pennings (1975)			1	
72	Sah and Stiglitz (1986)				1
73	Sanchez and Mahoney (1996)		1		
74	Sarpong et al. (2013)		1		

75	Sauer and Willcocks (2002)			1
76	Saxena (1996)		1	
77	Siggelkow (2011)	1		
78	Siggelkow and Levinthal (2003)		1	
79	Simon (1962)	1		
80	Slater et al. (2010)		1	
81	Smith (2001)	1		
82	Soda and Zaheer (2012)	1		
83	Turner and Makhija (2012)			1
84	Tushman and Nadler (1978)			1
85	Tushman et al. (2010)		1	
86	Valorinta (2010)	1		
87	Worren et al. (2002)		1	
		26	43	18

As a highly versatile and interdisciplinary concept, organizational architecture accommodates a wide range of studies. The previous literature on organizational architecture can be divided into three main research streams: architecture as a structure, architecture as a process, and architecture as power. The studies are divided into these categories based on their most prevalent aspect or primary focus. Some of the studies include minor links to the other streams, but the linchpin of the study is of the most crucial importance. The following sections describe the individual streams and their defining characteristics. It must be noted that certain organizational characteristics and functions can be included in more than one stream. Organizational decision-making has been a staple in many studies and has been examined from a plethora of different perspectives. Decision-making as a cognitive process and the limitations of managers as decision makers have both been extensively studied. Decision-making can also be considered informal, as the organizational culture tends to alter the allocation of decision-making rights. In this review, decision-making is described as an integral part of architecture as power. The distribution of decision-making rights can be accomplished through formal structuring, informal structuring, or even a mutually reinforcing combination of the two. Nevertheless, decision-making is ultimately an exercise of power, and thus, the most proper organizational architecture perspective from which to consider it is power.

Appendix 2

Interview themes for representatives of the international Master Degree Programmes

Background
- What is your title?
- How long have you been at this university/faculty?
- What tasks are involved in your position?
    - How (clearly) were the responsibilities the role defined?
    - Have the responsibilities changed over time?
    - Division of time between tasks (%)?
- Who is ultimately responsible for the programme?

Curriculum & courses
- How is the curriculum designed?

Student recruitment
- How do you handle the UAF application procedure?

Student guidance
- Who does student guidance?
- Follow-up after graduation? Alumni?

Formal organization
- Is there a clear division of labor in the IMDP?
- arranged meetings
- Staff training

Decision making
- Who makes the final decision? Who are involved?
- sharing of information; information communicated to the right person?

Informal organization
- informal processes & informal discussions
- networks, communities
- culture/atmosphere
- documentation of informally made decisions/procedures/policies?

Cooperation & interaction
- between programmes
- within the faculty
- between different universities

Given the power, what would you change in the organization of your IMDP?

Appendix 3

Interview themes for members of the university's central administration

Background
- What is your title?
- How long have you been at this university?
- What tasks are involved in your position?
    o How clearly were the responsibilities the role defined?
    o Have the responsibilities changed over time?
    o Division of time between tasks (%)?
- What tasks deal with the IMDPs?

Organization
- What are the primary tasks of your department?
- What type of cooperation does your department do with the IMDPs?
    o Why your department?
    o Does your department work with individual IMDPs?
    o Does your department communicate directly with IMDPS?
        ▪ If so, regarding what types of issues?
        ▪ Do IMDPs contact your department?
    o What sort (if any) of influence do you have over the IMDPs?
- What kinds of resources are devoted to tasks related to IMDPs?
    o Is there an entity responsible for monitoring and assisting the IMDPs?
- Is there a division of responsibilities between IMDPs and the central administration?
    o If so, what kind?
        ▪ Is it documented and communicated?
    o Is there cooperation between different departments of central administration regarding IMDPs?
- Do the IMDPs have a dual reporting role?
    o Central administration & individual faculties
- Does the university provide training for IMDP staff in relevant areas?
- From your perspective, how would you describe the situation of IMDPs of University of Jyväskylä?
    o What are the most pressing matters?
    o What is the role of IMDPs within the university and its strategy?
    o Who initiated the recent internal evaluation of IMDPs?
        ▪ On what grounds?
        ▪ To what actions did the evaluation lead to?

Given the power, what would you change in the organization of IMDPs?

Appendix 4

Table 12   Dimensions, themes, categories, and quotations

Second-order themes and first-order categories	Representative quotations
Aggregate dimension: Current structural inertia	
1. Deficient formal structures	
A. There is a lack of formal training	A1. "My orientation was that here are your keys, here is the phone, the pin number is this and the number is this, here is your desk... That was about it." A2. "The planning process was very quick, and we didn't get any support for it. [...] It was learning by doing. [...] It would have been nice to hear from somewhere how these things should be done. It was entirely learning by doing."
B. Participation is fluid	B1. "Is it about attitudes that these aren't a priority. They are personal choices about what are the priorities. They have to be if one wants an academic career. If you begin to invest in teaching and these types of things you will get kicked out because you don't have any output. It would be foolish to invest in these because then you won't get a new contract. If you invest in this task your work won't continue which is foolish. I am constantly struggling with this because it annoys me tremendously. I don't even know if I want an academic career, but I have to try. Then these would have to be done haphazardly." B2. "I believe that these programme coordination tasks are for the lecturers like a hot stone that gets thrown around. Who is finally the yes-man who handles everything? It wouldn't necessarily be a large task if someone knew how to do them. It is always learning, kind of fumbling."
C. There are no incentives to do it	C1. "I would say that the compensation was ridiculous, just ridiculous. No sane person who cares about their career and health would take part in something like that without any compensation and recognition. For example, any of this wasn't included in my work plan because it came so suddenly." C2. "The university's payroll system is what it is. I had an added bonus but that was not related to the programme director's tasks. It was related to my research, I was a responsible leader in a large research project. There was a bonus related to that. But as the project has ended so has the bonus."
D.	D1. "It is just internal information in case someone asks, then we have something to show. I was a little bit against it because we don't need it in detail. If someone asks about it, we can tell them."

Levels of formalization are low	D2. "... there has not been any major problems, but it is true that if these tasks are done by someone who is not that familiar with this university or the system then it can be difficult. So we should document more."
2. Compensatory informal structures	
E. The programme is run a certain way	E1. "Then there are the tacit rules about what should be done and what should be asked. You cannot know these in the beginning. Then you might get reprimanded for doing something on your own accord like you sent an email." E2. "Sometimes it feels that it would be easier just to do certain things, just do it. In a way, it takes time when we brood over everything together and it can lead to us wondering what was the point of all this. If the conversation is just about talking and the issue ends up going the way it was originally planned."
F. Things are done ad hoc	F1. "We haven't really had any official [meetings]. Personally, I think it is bad because then it becomes ad hoc. The professor comes and okay, now we have this and this. That interrupts everything else and becomes a burden. [...] It is very ad hoc. It hasn't been very systematic. It creates the illusion that if you're small, you don't need them, but there are still common issues that need to be made aware. Even if the sessions were short." F2. "Everybody makes notes, for example, if we are distributing tasks or teaching assignments or something. If we make decisions regarding some general issues, then nobody writes any memos."
3. Information processing	
G. The development of lateral relations is poor	G1. "Mostly we asked about the practicalities of the application process, how do they select and carry it out? What kind of acceptance letters and information packages do they send after the selections have been made? And stuff like that. Then we have strived toward combining a few courses." G2. "There was nothing planned, so this was just a lucky series of random incidents that we began to collaborate with the new master's programme. There is this open and dialogic atmosphere also with the staff of the other programme. We have gotten a lot of help from them, different kinds email templates and everything we could modify for our students. If we need to inform about something, there is this one person in the other programme who has done these administrative tasks for a while, so he has all these templates in his archives."
H. Information does not flow	H1. "When it comes to administrative matters, I've noticed that there is no information flow. It is somehow very difficult to know from whom to ask a particular issue. Then it becomes just running around in panic and asking a lot of people who don't know who would know anything about this particular issue. A sort of lack of general organizing is observable." H2. "It happened that I was with another coordinator at a session where we were modifying the websites to a similar form and she asked me if we had updated our programme information because today was the deadline. We had to update the programme information to the CIMO database. I was like, what is CIMO?"
I.	I1."On the other hand, experience, of course, eases things a little bit and learning from your mistakes every now and then. You try to develop the programme and its operations in a better direction."

Experience matters	I2. "In some of these meetings, I've heard quite alarming stories about the way some of these other programmes are run. Both in terms of the way the programmes are managed, which often seems to involve some fairly junior staff who don't even necessarily have permanent positions at the university."
4. Unclear division of labor	
J. University is a complicated structure	J1. "You can notice it in my superior's work and how his work is divided. What he can influence and what he can't. That then trickles down to what our opportunities are. Then, it is typical that instead of thinking that the organizational structure is this so if I want to present something or push something forward the official route would be this, this, and this. You have to navigate it." J2. "But I think this type of organization is not just that. Instead, the management on the organizational level has to be thought out in some way. The management is not just about giving orders from the top. I see it as being more about us figuring out the objectives and then the units figure out how to set their own goals within these predetermined objectives."
K. We focus on the substance and deliver the teaching	K1. "In a way, the message that I have given, and others as well, was that the master's programmes at the departments do not want anything to do with the application or other software or the language criteria. Someone else can decide those. We will focus on the substance and deliver the teaching. No interest in the administrative side or the criterion or others, deadlines. No, not interested." K2. "I have tried to keep my part focused on the substance as much as possible. With all the social and financial issues, I usually suggest that they contact the international office."
L. We are doing it ourselves	L1. "We are able to utilize the backgrounds and knowhow of different types of people. We are used to being multidisciplinary, and we are also multitalented in many respects. It is entirely based on our own doing: we decided to do it ourselves. There was no advice, guidance, support or resources from anywhere. It has been a kind of a survival strategy." L2. "If we would like to advertise, for example, the master's course, we really need to strongly advertise internationally, then that should really be handled by an administration that has funding. At the moment, we are advertising somehow within our own research links with other institutions. I think this is not correct because we are not, our skills are not in advertising."
M. Whose responsibility is it?	M1. "Sometimes I get the feeling at one of these IMDP meetings that was this actually my responsibility. Perhaps this could be done by our service center, but the professor wants me to be there. The line of what is whose responsibility." M2. "This [application process and checking of documents] is one of those things that, from the perspective of expertise, should not under any circumstances be the responsibility of an individual programme. The university's own expertise is not sufficient, and that is why we joined UAF. Its important role is the expertise in conducting the application process and checking the authenticity of the documents. It is centralized in a way but no longer at the university level."
Aggregate dimension: Lack of a strategic program	
5. Inadequate allocation of resources	

N. We would like to do this but there is no time	N1. "Workdays are extended to 12–15 hours if you want to keep the research going. Of course, I do because I have projects with external funding. I cannot tell the financiers that I haven't been able to do anything because I have been busy answering emails. You are constantly doing the work of two full-time employees if you want to keep research and the teaching and coordinative responsibilities." N2. "Everything could be done so much better if there were time. A sad university employee sees wonderful development areas all around. That should be done, I could do that as well. Then, in the evening, you wonder do I feel up to watching TV. I don't feel like it, I have to go to sleep."
O. Role assignment is arbitrary	O1. "I think a master's programme director should have more authority to step in toward course feedback, contents, and others. Otherwise, the development of the programme is pretty much impossible. After all, the whole is made up from the individual courses." O2. "When I was coming to this position or role for the first time, it was just asking whether I am available for international students as a point of contact. Ok, I did not even know what it meant. And then some new tasks just popping up from time to time."
6. Lack of continuity	
P. "Putting out fires"	P1. "… there are terrible deficiencies regarding who is responsible for what and how a certain process proceeds. These types of things just haven't been thought through. If I think about the broader picture it's just about constantly putting out fires." P2. "If there is no continuation for me or if I end up making a different solution with my life because I haven't been told about any further possibilities, then they are left wondering. Probably a month before my course should begin, they are like well, who could lecture this course? A kind of continuity and flow of information. It is also considering the fact that if a teaching program is valid for three years, then it is valid for three years. Somehow, it should be made sure that the courses can be lectured."
Q. It wasn't systematic	Q1. "Probably the most talked about issue is the more systematic and better planned marketing. […] It could be necessary to increase the know-how, time, and resources for systematic marketing." Q2. "We have been able to reach some through Facebook, but basically, we have no systematic information where they are, for example, five years after they have graduated."
R. There is very little management	R1. "The person in charge does not give orders. The person in charge seems to assume some sort of voluntariness but that does not work in these instances. In this institution, there are too many individuals that are only looking to benefit themselves." R2. "If it were clearly managed from there, a lot less energy would go to asking around about how to proceed with a particular issue. All issues that do not necessarily require an exception in each programme were firmly established in the same form. It would definitely help the coordinator in being aware of everything and also the management."
7. Equivocal integration of the IMDPs	
S.	S1. "It has been a kind of an added extra in the normal operations, this international master's degree programme in the Finnish language education. It has not been remembered that information needs to go there as well. If there are questions to the faculty

There are problems with integrating IMDPs into regular operations	regarding it, they necessarily do not know to ask or even forward the information. You have to do an awful amount of work yourself to know what happens and when." S2. "In principle, the services available for study administrative affairs in faculties or departments. There should be no difference in what is for IMDPs and what are for the others. There should be no difference. The service center produces study administrative services for all regardless of whether it is a foreign student or a foreign member of staff..."
T. What is the purpose of the programmes?	T1. "At the moment, I am hoping for strategic choices. Or, more precisely, that the faculty would have a strategy on how to manage these in the future. But we don't have an international strategy, even at the university level. Therefore, we are operating in a way that is resolving problems as they come. It's like the fire department putting out fires. Then we just move on." T2. "In a sense, these IMDPs have, for historical reasons, become partially separate structures. In that sense, we haven't been very successful in thinking at the university level about what are we pursuing with them and what is the status of the programmes. We would need to do a lot of work to really think about what we are really aspiring for. What are the strategic goals for having these?"
U. It's still a Finnish university	U1. "It is probably very exhausting when these issues have been discussed and said but nothing happens. Now it is looking good, as the emails from the personnel administration are also in English. We have had international people at the departments for over 10 years. It has placed a strain on the other staff, as they need to take care of things for them. That is taking away from their actual work input, so it's entirely ineffective." U2. "It has changed insofar as when we changed to the international side, of course the amount of work is a lot bigger then. Preparation of the teaching, conducting the teaching, all the communication with the people, it just goes. [...] There is a sort of factor there."
Aggregate dimension: Actor perceptions of necessary efforts toward internationalization	
8. Changes in resource allocation	
V. Additional resources would help	V1. "Perhaps this would be something that actually could be done. Surely this could be contemplated at the university level. Identify those that, even if it would mean that one or two master programmes would have to be shut down. If we would get additional resources to remaining English language master programmes it would help. Specifically, that it would not go to the administration." V2. "At the moment, it is merely a matter of money. There are no financial resources; it is not possible. It is almost the opposite: We should be able to handle the tasks with an even smaller budget. This should be done by integrating the Finnish and international teaching as effectively as possible."
W. Contracts need to be extended	W1. "That is the challenge if the only way to get additional resources is through unsure research projects. You might get someone to help in teaching for a while, for two years, then that person leaves. It is unsustainable."

	W2. "I don't think anybody would have thought about it at any point, like what's going to happen when her contract ends at Christmas. If the situation would have been that I wouldn't have brought it up, then surely no one would have been ready for it. I think they would have wondered around and realized that okay, we need to do these tasks as well."
9. Increased coordination	
X. The role of the central administration should be developed	X1. "If there are 17–18 programmes, it is quite likely that a lot of us are trying to solve the same problem individually. So, we are wasting a lot of time and effort. There are things like that where I am convinced that somebody knows something I don't and it would be better if we could centralize that." X2. "Then when programmes are being promoted internationally, it could be helpful to promote it in that way that they come as part of an international ... rather, in the same way, we currently have or we have now moved to the system of having university-wide doctoral program or faculty doctoral program. All students whatever department they are in our faculty are a part of the faculty doctoral program, and certain things can be done at that level. Maybe for these international programmes something along those lines, umbrella academic structure within which all these different programmes operate."
Y. The IMDPs need to engage with each other	Y1. "In my opinion, there should be a lot more of it [engagement between IMDPs]. I guess one could be more active in it, but then again, I hope the university would also bring us together more. Perhaps there should be more, even having teaching content in which we could collaborate more." Y2. "I would hope that the university's central administration or the strategic development would more often take a larger role in it. The meetings do not need to be so carefully planned and the content determined beforehand. They could be more informal every once in a while, we could find surprising possibilities for collaboration."
10. Desired strategy for internationalization	
Z. Preparations for the introduction of tuition fees are necessary	Z1. "There needs to be more visibility and also university should make some efforts on how to make all our master programmes more visible in that situation. In my opinion, it calls for a kind of a common outing with different kinds of programmes." Z2. "The international master's degree programmes are important, and of course, the threat is if there will be tuition fees for students from outside the EU. It touches us quite a lot because we get quite a lot of students from outside the EU. These types of issues, in a way, someone should stand up for the international master's degree programmes in these general issues. Remind that these are beneficial for internationalization and other."
AA. IMDPs need to be integrated into faculties	AA1. "As the additional funding that was used to hire the coordinators ceased, then naturally, the first thing was to reduce the amount of full-time coordinators. The actual study administration did not assume those responsibilities, so someone had to be found to handle it. To be brutally honest, it is bad faculty management. It is not the type of work that is smart for the research and teaching staff to do." AA2. "If you're really serious about taking international students, you have to treat them properly and treat them on par with the other students. That requires input from at least some quite senior people in the department."