THE ESSENTIAL KNOWLEDGE, SKILLS AND PERSONAL ATTRIBUTES OF THE 2020S MARKETING PROFESSIONAL

**Jyväskylä University
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ABSTRACT

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Abstract	
Companies are increasingly seeking marketing professionals who know how to run digital marketing campaigns and how to use various digital tools. In the constantly changing work environment, the importance of meta-skills has also increased. These changes in marketing practice have affected marketing education as universities are expected to prepare "work-ready" graduates, who have a wide variety of knowledge and skills needed in today's world. However, according to previous studies, this has not been easy as there is a gap between education and practice. This study aims to describe what kind of knowledge, skills and personal attributes are required for Finnish marketing professionals. In addition, the study examines whether the job level of the marketing position, the business sector of the employer company or the business size of the employer company affects the knowledge, skills and attributes requested from a marketer. Finally, the knowledge, skills and personal attributes required by employers are compared to the knowledge, skills and personal attributes emphasized in the marketing programme at the University of Jyväskylä to find out whether there are gaps between education and practice. The data of the study consist of job advertisements and course descriptions. The data was analysed using theory-driven content analysis. In addition, SPSS software was used to analyse the results. The results of the study show that Finnish marketing professionals are expected to have knowledge of digital marketing, communication and collaboration skills, and the ability to use social media. In addition, Finnish marketers should be creative, proactive and independent. According to the results, in particular, the job level of the marketing position affects the knowledge and skills sought from job applicants. Lastly, the results show that marketing education at the University of Jyväskylä does not fully meet the demands of employers: for instance, the development of meta-skills and technical skills have not been prioritized enough in marketing education. Therefore, marketing education should be further developed to make the employment of marketing graduates easier.	
Key words	
Marketing education, marketing knowledge, meta-skills, technical skills, personal attributes	
Place of storage	
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TIIVISTELMÄ

Tekijä Riikka Ojanperä	
Työn nimi 2020-luvun markkinoijan olennaiset tiedot, taidot ja persoonallisuuspiirteet	
Oppiaine Markkinointi	Työn laji Pro gradu -tutkielma
Päivämäärä Marraskuu 2022	Sivumäärä 67 + liitteet
Tiivistelmä Yritykset tarvitsevat yhä enenevissä määrin markkinoijia, jotka tietävät kuinka digitaalista markkinointia toteutetaan ja miten erinäisiä digitaalisia työkaluja käytetään. Myös metataitojen merkitys jatkuvasti muuttuvassa työelämässä on korostunut. Nämä muutokset käytännön markkinoinnissa ovat vaikuttaneet myös markkinoinnin koulutukseen, sillä yliopistojen odotetaan kouluttavan markkinoinnin osaajia, jotka omaavat useita nykymaailmassa tarvittavia tietoja ja taitoja. Aiempien tutkimusten mukaan tämä ei kuitenkaan ole ollut helppoa: koulutuksen avulla opittu osaaminen ei vastaa käytännön markkinointityössä vaadittua osaamista. Tämän tutkimuksen tavoitteena onkin kuvailla, millaisia tietoja, taitoja ja persoonallisuuspiirteitä suomalaisilta markkinoijilta vaaditaan. Lisäksi tutkimuksessa selvitetään vaikuttaako työn taso, työantajan yrityssektori tai työantajan yrityskoko markkinoijalta vaadittuihin osaamisiin. Lopuksi työnantajien vaatimia tietoja ja taitoja verrataan Jyväskylän yliopiston markkinoinnin opintosuunnassa painotettuihin tietoihin ja taitoihin, jotta voidaan selvittää vastaako koulutus käytäntöä. Tutkimuksessa analysoitiin työpaikkailmoituksia ja kurssikuvauksia teoriaohjaavan sisällönanalyysin avulla. Myös SPSS-ohjelmaa hyödynnettiin tulosten analysoinnissa. Tutkimuksen tulokset osoittavat, että suomalaisilta markkinoijilta odotetaan erityisesti digitaalisen markkinoinnin tietämystä, kommunikointi- ja yhteistyötaitoja sekä sosiaalisen median käytön osaamista. Lisäksi suomalaisten markkinoijien toivotaan olevan luovia, oma-aloitteisia ja itsenäisiä. Tulosten mukaan erityisesti työn tasolla on vaikutusta työnhakijoilta vaadittaviin tietoihin ja taitoihin. Lisäksi tulosten perusteella voidaan päätellä, että Jyväskylän yliopiston markkinoinnin koulutus ei vastaa täysin työnantajien vaatimuksiin ja esimerkiksi metataitojen ja teknisten taitojen kehittämistä ei ole priorisoitu koulutuksessa tarpeeksi. Markkinoinnin koulutusta olisikin syytä kehittää vastaamaan paremmin työmaailmaa, jotta markkinoinnin oppiaineesta valmistuvien työllistyminen helpottuu.	
Asiasanat Markkinoinnin koulutus, markkinointitiedot, metataidot, tekniset taidot, persoonallisuuspiirteet	
Säilytyspaikka Jyväskylän yliopiston kirjasto	

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1 INTRODUCTION

1.1 Introduction to the topic

Digital transformation has revolutionized the operation of businesses, changed how companies and consumers interact and affected all aspects of the marketing mix (Langan et al., 2019; Opetushallitus, 2019). 21st-century technologies have not just changed the way marketing is done but also the role of marketing in the organization (Harrigan & Hulbert, 2011). The ongoing shift towards digital marketing has resulted in organisations needing to develop new marketing strategies and employ marketers with up-to-date knowledge of how to manage different digital marketing techniques (Chaffey & Ellis-Chadwick, 2019). For example, the demand for analytical skills has grown significantly when organizations try to make sense of the huge amount of data available through digital media (Kurtzke & Setkute, 2021).

The need for new skills in the digital-first world has been called the digital skills gap (Royle & Laing, 2014; Salesforce, 2021). Driven by digitalization this gap has been widening gradually, but COVID-19 has made the need for digital skills even more important. This means that organizations need to start investing in digital skills or the gap will continue to grow and decrease long-term economic growth (Salesforce, 2021). Research by RAND Europe and Salesforce (2021) estimates that by 2028 the G20 countries could miss 11.5 trillion dollars of cumulative GDP growth if the digital skills gap is not addressed.

It is quite clear that digital skills are much needed in the marketing industry, where digital marketing technologies and tools are constantly evolving. Still, some scholars report that the demand for people skills, such as empathy and communication skills, is growing and analytical skills per se are not needed anymore (Huang & Rust, 2018; Rust, 2020). Huang and Rust (2018) are even warning that we should be careful about oversupplying analytics skills, as more advanced Artificial Intelligence (AI) will perform analytical tasks in the future. According to them, the skill to interpret data and make decisions based on it is more important.

To summarize it seems that both digital skills and people skills are important to future marketers. According to a study by The Economist Group and Digital Marketing Institute (2019), 74 per cent of marketing executives believe that marketing organizations face a critical talent shortage because of the lack of skills needed to meet new customer demands. These future skills and competencies required of marketers were for instance technology skills, openness to change, adaptability and broader business knowledge. In addition, research by Royle and Laing (2014) states that both technical skills and business management skills are needed.

The changes in marketing practice are also affecting marketing education. Universities are expected to prepare "work-ready" graduates with a variety of suitable generic and occupational skills and personal attributes (McArthur et al., 2017; Schlee & Karns, 2017). This has turned out to be a difficult task as many scholars have stated that there is a gap between marketing education and practice (Harrigan & Hulbert, 2011; Helgesen et al., 2009; Wellman, 2010). Researchers have suggested several ways how to close this gap. Some have recommended that there should be more collaboration between marketing faculty and other faculties (McArthur et al., 2017; Schlee & Karns, 2017), while others have proposed that digital marketing should be put at the centre of the marketing curriculums (Harrigan & Hulbert, 2011; Rohm et al., 2019; Wymbs, 2011). Previous studies have also focused on teaching methods. There have been suggestions for instance to use project-based learning (Rohm et al., 2019; Rohm et al., 2021) or implement industry learning platforms, such as Google Analytics Academy or Salesforce Trailhead, into marketing courses (Cowley et al., 2021; Humphrey et al., 2021; Staton, 2016). All in all, there seem to be many different solutions to the problem, but still, there cannot be found any implications that the gap between marketing education and practice is getting smaller.

1.2   Justification, objectives and research questions

As digital marketing and adopting digital technologies have become essential to stay competitive, new skills and competencies are expected from marketers. Today, marketing jobs for graduates often include digital marketing, marketing analytics and social media marketing positions (Rohm et al., 2021). Digital transformation has emerged even new job positions and job titles, such as digital marketing specialist, growth marketing strategist, SEO specialist, and so on. This implies that the requirements of marketing professionals have changed a lot during the digitalization of the marketing industry.

Although previous studies seem to agree that marketing graduates are not equipped with the skills that employers expect, there cannot be found much literature that analyses if this is caused by curricular priorities. There can be found many studies that are stating which knowledge and skills are the most important to marketing professionals (e.g., di Gregorio et al., 2019; McArthur et al., 2017; Royle & Laing, 2014; Schlee & Karns, 2017). One of the most recent ones is a study

by Elhajjar (2022) where the author analysed digital marketing job descriptions and concluded that communication is the most frequently stated skill, and technology knowledge, such as knowledge of marketing automation systems and content management systems, is the most frequently mentioned marketing knowledge area. However, the author does not study what skills and knowledge universities are teaching. In turn, some studies focus merely on marketing education. For instance, Langan et al. (2019) analysed undergraduate marketing programs to understand the state of digital marketing in the marketing education landscape. Nevertheless, the authors do not study the state of digital marketing in practice.

Against this backdrop, this study focus both on marketing practice and marketing education. The purpose of this study is to identify possible differences in the competencies that employers require from marketing professionals and in the competencies that marketing educators emphasize in the learning outcomes of marketing programmes. As the noticed gap between marketing education and practice has not been reported to be narrowing down, this study tries to find out if the misalignment between priorities of marketing educators and employers could explain the ongoing differences in marketing education and practice. Additionally, this is the first study focusing on marketing professionals in Finland as most previous studies are conducted in the US and the UK. Although skills and knowledge might be quite universal, it is important to study them in different countries. Moreover, most of the studies have concentrated on marketing graduates leaving out more experienced marketing professionals and the knowledge and skills that are important to them. This study is also focusing on graduates but it does not leave out middle-level or senior-level positions because universities are educating students for careers, not just for entry-level positions. This study also analyses if knowledge areas, skills or personal attributes differ by business sectors or business sizes of employer companies, which have been left out in many previous studies.

The research questions of the study are:

1. What specific knowledge areas, skills and personal attributes do employers seek from marketing professionals in Finland?

2. Do the knowledge areas, skills and personal attributes required for marketing positions differ by job level, business sector or business size?

3. Has the marketing curriculum evolved to reflect the current needs of marketing practice?

This study is conducted as a qualitative research method with quantitative elements. The chosen research technique is a content analysis which can be both qualitative and quantitative. The first part of the data consists of job advertisements published on duunitori.fi -website. Job advertisements are used to perceive employer needs. The second part of the data is collected from the website

of the University of Jyväskylä. The information needed can be found in a study guide, where all courses of the programmes are listed and described (University of Jyväskylä, n.d.). More precisely the interest is to find out which learning outcomes are set to be achieved during bachelor's and master's degree programmes in marketing. The aim is to capture which curricular priorities the programmes have.

1.3   Structure of the study

The study is structured as follows: First is an introduction to the topic, where previous studies and the current situation are briefly discussed. The introduction also includes a justification for the study and introduces research questions, that the study is trying to answer.

The second chapter is a literature review based on existing research on the topic. The chapter starts with a discussion about marketing education and the gaps that exist between education and practice. Thereafter the literature review focuses on how marketing knowledge, marketing skills and personal attributes have been studied previously. The second chapter ends with a summary, where the findings of the previous studies are aggregated into tables. This tries to clarify the literature that is being used as a basis for the analysis.

The third chapter explains the methodological choices of the study. Firstly, the research design is presented. After that data collection and data analysis is described. Then the fourth chapter reports the results of the study and chapter five includes a discussion of the findings. Additionally, the fifth chapter includes conclusions based on the results and a discussion about the limitations of the study and future research avenues.

2 LITERATURE REVIEW

For a start, this chapter covers relevant literature on marketing education. More precisely, the marketing education sub-chapter discusses the current gap between marketing education and practice, and how to potentially avoid the gap from getting wider. It also discusses the role of knowledge and skills in marketing education. After that, it will be elaborated on what kind of marketing knowledge, skills and personal attributes are required for marketing professionals of today according to previous studies.

2.1 Marketing education

2.1.1 The gap between education and practice

The business environment is increasingly dynamic, which means that business schools must pay attention to the business world's changing needs by providing relevant knowledge and skills to their students (AACSB, 2021). According to AACSB (2021), which is a highly esteemed accreditor of business schools, business schools must develop new courses and continually update programs to ensure the relevancy of the curriculum. This means that periodic outcome assessments are required and graduates' work environment needs to be monitored continuously (Davis et al., 2002). However, in real life, this is not that simple since marketing practitioners and educators may have different views of the aims of marketing education programs (Clarke et al., 2006). In fact, it has been long acknowledged that there is a gap between marketing practice and marketing education (Harrigan & Hulbert, 2011; Helgesen et al., 2009; Wellman, 2010).

More specifically why does this gap exist? Gray et al. (2007) point out that university teaching of marketing is usually research-led, hence it might not be relevant enough to marketing practice. Additionally, Clarke et al. (2006) demonstrate that there are two distinct approaches in marketing education: instrumental; and intrinsic. The aims of educators are usually intrinsic which means that education is "to equip people to make their own free, autonomous choices about the life they will lead"(Bridges, 1992, p. 92). The intrinsic approach implies that education has value in itself (Clarke et al., 2006). Instead, marketing practitioners might view education instrumentally meaning that marketing education should give "students the opportunity to develop and apply skills in order to enhance personal effectiveness and achievement at work"(Bridges, 1992, p. 93). Hence, the instrumental approach is focusing on skills, and therefore education is not seen as an end in itself, but as the means to an end (Helgesen et al., 2009).

Which approach is then better? It is good to acknowledge that though intrinsic and instrumental approaches are different, they should not be seen as the opposite ends of a spectrum (Clarke et al., 2006). Often modules and subjects of marketing programs reflect both approaches to varying extents (Helgesen et al.,

2009). Consequently, Helgesen et al. (2009) state that marketing courses should focus on both theoretical knowledge and practical skills, hence a marketing degree is needed to be planned as a coherent program that both trains and educates graduates. Also, Schibrowsky et al. (2002) point out that the preferred approach for education is the blending of conceptual knowledge with practical skills. This requires that educators are open to the idea of developing marketing curricula together with industry practitioners.

At the latest, increasing competition and different policies have forced business schools to react to the expectation of marketing practitioners. Today there are a massive amount of open online courses and other competitors of higher education. This rising competition has led to a situation where universities and academics must offer degrees that consider graduates' employability to stay relevant (McArthur et al., 2017). Also, governments around the world are formulating policies expecting higher education to develop graduates' employability (Knight & Yorke, 2002). Therefore, higher education institutions have mostly accepted that graduate employability is used to measure university outcomes (Clarke, 2018). Graduate employability can be defined as "the possession of the understanding, skills and personal attributes necessary to perform adequately in a graduate-level job" (Knight & Yorke, 2002, p. 261). This is a good example of graduate employability defined from a human capital perspective, which is common to universities, employers, and governments (Clarke, 2018). Still, it is important to acknowledge that also social capital, such as social class and networks, and individual behaviours, such as career self-management, can affect the employability of an individual (Holmes, 2013). However, in this thesis, the focus will be on graduates' knowledge, skills and personal attributes and the social capital aspect is omitted outside the research.

In more detail what knowledge and skills are then required for marketing graduates to be employed? First of all, marketing graduates are employed in many different industries that are requiring different knowledge and skills from graduates. Consequently, marketing education cannot be expected to include the development of all possible skills graduates need for employment (Kelley & Bridges, 2005). However, there is some agreement among various stakeholders that marketing graduates should possess a range of analytical and soft skills and have enough marketing knowledge to develop in their careers (Kelley & Bridges, 2005). According to previous literature, there is a gap between marketing education and marketing practice when considering digital and technological skills. The role of digital marketing in practice is growing continuously, but still, the integration of technology and technological skills is lacking in the marketing curriculum (Davis et al., 2002; Harrigan & Hulbert, 2011; Schlee & Harich, 2010). A study by Davis et al. (2002) found that marketing alumni felt technical underpreparation after graduation meaning their ability to use different computer programs in a marketing context was not enough. Also, a study by Langan et al. (2019) reported that 27 per cent of accredited business schools were not offering any course that explicitly addressed digital marketing or marketing analytics. This is alarming since technologies are an important part of today's digital marketing. Furthermore, Kurtzke and Setkute (2021) emphasize that if business

schools want to remain relevant, they should adopt a digital orientation and design a digital-first curriculum. According to them, new emerging technologies, such as AI, machine learning, IoT, and more traditional marketing technologies, such as marketing automation and social media platforms, should be part of today's marketing education.

2.1.2 Closing the gap

The gap between marketing education and marketing practice has been recognized for a long. As a result, previous scholars have studied the gap and suggested many solutions to closing the gap. For instance, McArthur et al. (2017) propose that collaboration with journalism or other university departments could be useful in narrowing the gap. They also mention that academic curricula should be integrated with practical work-oriented experiences, and assessments should offer some evidence of hands-on practice. This eases students' transition from university to the workforce. Instead, Schlee and Karns (2017) point out that marketing educators should learn marketing technologies, such as customer relationship management (CRM) and data analytics software, to avoid challenges in teaching. Even though the authors highlight the importance of analytical and technology skills, they also mention that soft skills are important and educators should structure assignments that require students to solve problems on their own and think flexibly. This helps graduates to become lifelong learners. Lastly, the importance of internships and experiential learning is recommended in their conclusions.

Many authors also highlight the importance of digital marketing in education and recommend that educators should ask advice from marketing practitioners to ensure that marketing education is beneficial and relevant for graduates. For instance, Harrigan and Hulbert (2011) present "new Marketing DNA" as a model of marketing education. This model emphasizes that marketing technologies should be infused throughout the marketing curriculum. The authors also mention that practitioner knowledge should be embedded in the marketing curriculum to provide adequately skilled graduates. In addition, Wymbs (2011) argues that a digital marketing major is one attempt to bridge the gap between education and practice. In the article, the author describes the planning of a marketing curriculum together with industry representatives. Also, Rohm et al. (2019) suggest a digital-first marketing program where digital marketing is a centrepiece of the marketing curriculum. They advise that the curriculum should be developed closely with industry professionals. The authors also suggest different elements of teaching pedagogy such as experiential learning, skill development and project-based learning to be used to integrate the digital approach within the curriculum. By doing this the students have the opportunity to apply marketing knowledge and skills in a real-world context. Later Rohm et al. (2021) studied live project-based learning in marketing education and concluded that it is an effective way to develop both the technical skills and meta-skills of students. They state that live projects with real clients can be used to strengthen technical

skills in areas such as A/B testing, campaign optimization and analytics. The projects can also be used to develop meta-skills such as communication, critical thinking, collaboration, and creativity.

One recent solution to closing the gap between marketing education and practice is to use learning platforms and certifications provided by marketing technology platforms as a part of academic marketing education. Staton (2016) mentions that Google offers free courses that can be used to teach analytics, HubSpot Academy offers free courses focusing on inbound marketing, SEO and e-mail marketing, and the courses provided by Hootsuite can be used while teaching social media management. According to the author, all of these third-party programs offer certifications that likely will improve the employment of marketing graduates. Instead, Humphrey et al. (2021) studied the application of Salesforce Trailhead in the graduate classroom. They mention that the Salesforce Trailhead learning platform offers free modules resulting in badges. The modules include different topics of digital marketing, such as e-commerce, AI, analytics, CRM and so on (Salesforce, n.d.). Humphrey et al. (2021) used a survey to find out how students perceived the use of Salesforce Trailhead. The results showed that the students viewed the modules to have a positive impact on their career preparation and job search. Also, Laverie et al. (2020) studied how students perceived certifications provided by Google, HubSpot, Hootsuite, and Salesforce. The results conclude that students felt that being certified made them more prepared for a job search and careers. The students also said that they enjoyed the certifications and found them useful. In turn, Cowley et al. (2021) studied awareness, adoption, implementation, and perceptions of these third-party certifications among marketing faculty who teach courses related to digital marketing and media. The results show that 82 per cent of the respondents had used certification training material in one or more courses and most certifications had high awareness among respondents. The certifications were incorporated primarily into courses dealing with digital marketing or social media. The most frequently mentioned motivation to incorporate certificates was a desire to help students obtain jobs and a desire to increase course relevance. Instead, lack of knowledge/resources was the most commonly mentioned barrier to adopting certifications. All in all, respondents reported many benefits from incorporating certification and it can be assumed that the usage of certifications will increase in the future.

2.1.3 Skills versus knowledge in education

One relevant aspect of marketing education is the discussion of the importance of skills and knowledge. Almost two decades ago Shipp et al. (1993) stated that changes in the environment of business and business education have generated greater emphasis on the development of students' skills. According to the authors marketing curricula have traditionally focused more on content knowledge. There might be several reasons for this emphasis on knowledge, such as a lack of time for the development of the skills or a marketing professor's feeling of not being qualified to assess certain skills (Shipp et al., 1993). Still, skill development

should be an important part of marketing education since skills are frequently required to apply studied content knowledge (Shipp et al., 1993). Similarly, Davis et al. (2002) comment that without certain skills graduates cannot effectively perform their jobs, although they also mention that a marketing graduate with many skills but limited knowledge may not perform well either.

Overall, scholars have long debated whether developing marketing knowledge or skills is more essential to marketing practitioners (Finch et al., 2013). In other words, many academics are wondering should marketing courses include pragmatic knowledge of marketing tools and techniques or should they be academic and focus on creating scholars (Clarke et al., 2006). The supporters of knowledge development are stating that specific skills are changing over time whereas conceptual knowledge is significantly more stable, and therefore educators should prioritize knowledge over technical skills (Finch et al., 2013; Schlee & Harich, 2010). Still, many scholars are enhancing the importance of meta-skills and analytical skills for digital marketers (Finch et al., 2013; Kurtzke & Setkute, 2021; Royle & Laing, 2014; Schlee & Harich, 2010).

The debate seems to continue, but there is still some agreement between academics. It has been suggested that knowledge would be more important for marketers as they advance in their careers while skills are valued more in the first few years of employment (Davis et al., 2002). Since business schools are educating students for careers, educators must find a balance between the knowledge and skills needed for entry-level jobs and the knowledge and skills needed to advance to middle- and senior-level positions (Schlee & Harich, 2010). Also, AACSB's (2021) latest guiding principles and standards highlight that marketing curricula should include theories, concepts, knowledge, ideas, and skills that collectively form a degree program.

Next, the knowledge and skills of marketers are discussed in more detail. Since the study is focusing on 2020s knowledge and skills, studies published before the 21st century are not included in the literature review. Still, it is good to acknowledge that marketing and business capabilities have been studied already since the 1980s (Gray et al., 2007). In addition, it is important to realize that even though marketing knowledge, meta-skills, technical skills, and personal attributes are discussed in their own chapters, different knowledge and skills may overlap and they do not exist in isolation (Daellenbach, 2018). Daellenbach (2018, p. 4) explains this well by mentioning that "although the components of a marketing plan may be learned (part of marketing knowledge), a good marketing plan would draw on thinking and learning skill in order to create the strategy and draw on personal skills such as written and oral communication to deliver the plan."

2.2 Marketers' knowledge

First, it is essential to view how marketing knowledge has been defined by previous studies. According to Rossiter (2001, p. 9), marketing knowledge is "what

marketing academics and consultants teach and marketing managers draw upon in formulating marketing plans". It differs from marketing skills because marketing knowledge is something that exists regardless of a practitioner's ability to use it (Rossiter, 2001). Davis et al. (2002) simply define knowledge as the conceptual and theory-based aspects of marketing. Instead, Kurtzke and Setkute (2021, p. 299) mention that the term knowledge can be defined as "conceptual knowledge, that is, the learning of the theoretical base of a subject that appears in the respective textbooks". This study uses the former definition when analysing the data and drawing conclusions from it.

Many researchers have studied what kind of knowledge marketers should have. For instance, Walker et al. (2009) claim that sales knowledge, knowledge of market research and analysis, and marketing communication are important to marketers. They also emphasize that knowledge per se is not required, but the application of the knowledge in business situations. Instead, Finch et al. (2013) state that the development of strategic marketing knowledge is important to marketing graduates. According to their study also product and channel management and communication knowledge are requested from marketers.

The required marketing knowledge may also depend on who is being asked. A study by Gray et al. (2007) shows that marketing managers and academics have similar views regarding knowledge areas that are important to marketers. Both groups agree that marketing communication (PR, advertising, and promotion), market research and analysis, consumer behaviour, product and brand marketing, and strategic marketing are the top five knowledge areas for graduates. The study also included students' views which agreed broadly with managers' and academics' views, but students consider innovation and new product development to be more important than market research and analysis.

Some studies have used the same methodology as in the current study and analysed job advertisements to investigate what knowledge areas are the most required for marketing professionals. Schlee and Harich (2010) state that the most often mentioned marketing knowledge areas in marketing job advertisements are customer behaviour, promotion/advertising, marketing research, and sales management. The authors found that there were differences in required knowledge domains depending on the job levels. For instance, developing a marketing plan and managing marketing functions were increasing linearly from entry-level to upper-level jobs. Later Schlee and Karns (2017) studied again job advertisements and their results showed that selling was the most frequently listed marketing knowledge domain, followed by internet marketing, promotion, and service management. Similarly, McArthur et al. (2017) analysed job advertisements and observed that the most demanded occupational knowledge area was digital marketing. Other required knowledge areas were marketing project management, marketing communications and sales.

Lastly, it is relevant to mention that technology-related knowledge has been widely emphasized in previous studies. Harrigan and Hulbert (2011) state that graduates need to have technology-related marketing knowledge. According to their research, for instance, customer-led marketing, which includes the knowledge of customer insight, customer experience and customer behaviour, is

important to 21st-century marketers. In addition, value-driven marketing, the knowledge of different channels, data-driven marketing, and offline and online marketing communications should be part of marketing education. Similarly, Royle and Laing (2014) found that marketing employees need to have strategic business knowledge of digital marketing. In addition, technological knowledge, such as search engine optimization (SEO) and familiarity with mobile applications, is needed to be a successful digital marketer. Likewise, Kurtzke and Setkute (2021) state that data-driven marketing communications knowledge is essential for marketers. Also, the knowledge of digital technologies, such as e-commerce and marketing automation, and measurement and knowledge of metrics and data evaluation were found to be important for employability.

2.3   Marketers' skills

Skills can be defined as abilities that can be refined through practice (Shipp et al., 1993). In this study skills are divided into two subcategories: meta-skills (also called soft skills), and technical skills (also called hard skills). Meta-skills are non-job-specific skills, which are usually hard to measure (Opetushallitus, 2019). Instead, technical skills are job-specific and usually easily measured and trained through education (Opetushallitus, 2019).

2.3.1 Meta-skills

As said meta-skills are non-job-specific and therefore the focus of this chapter is at first on meta-skills called 21st-century skills, which are seen to be important to all knowledge workers. After that, it will be explained in more detail what meta-skills marketing professionals specifically need.

There are skills called 21st-century skills that most knowledge workers need in today's fast-changing knowledge economy (van Laar et al., 2017). These skills are any skills that are needed and used in the twenty-first century and therefore 21st-century skills do not need to be new, but just essential in today's information and knowledge economy (Griffin et al., 2012). Depending on the resource 21st-century skills may vary slightly but the most frequently reported skills are collaboration, communication, problem-solving, critical thinking, creativity, information management, and technical (van Laar et al., 2017). For instance, Binkley et al. (2012) have categorized 21st-century skills into four groupings: Ways of Thinking, Ways of Working, Tools of Working, and Living in the World. These four groups include ten skills that are presented in Table 1.

TABLE 1 21st-century skills (Binkley et al., 2012).

Ways of Thinking
1.   Creativity and innovation
2.   Critical thinking, problem-solving, decision making

TABLE 1 (continued)

3. Learning to learn, Metacognition
Ways of Working
4. Communication
5. Collaboration (teamwork)
Tools for Working
6. Information literacy
7. ICT literacy
Living in the World
8. Citizenship – local and global
9. Life and career
10. Personal and social responsibility – including cultural awareness and competence

According to Binkley et al. (2012) "Ways of thinking" include skills that can be seen as higher-order thinking skills requiring focus and reflection. Next comes "Ways of working", which include skills that are needed in today's rapidly transforming working environment. Binkley et al. (2012) mention that many employees are now working in teams that have members from across national borders and people telecommute, hence communication and collaboration skills have become essential to 21st-century knowledge workers. Instead, "Tools of Working" emphasize skills that are must-have skills to access and evaluate a huge amount of information available (Binkley et al., 2012). These skills are needed for utilizing all information that is relevant to a specific task at hand. Lastly is "Living in the World", which includes a group of skills needed in the globalizing world. Today people are expected to learn to live in the world in its entirety and it cannot be assumed that how things are done in your own country is how it is or should be all over the globe (Binkley et al., 2012).

There is also a report provided by Finnish National Agency for Education that focuses on the skills needed in 2035 at the Finnish national level (Opetushallitus, 2019). To compare the skills mentioned in the report with the above-mentioned 21st-century skills it can be noted that the skills are very similar to each other. According to the report, meta-skills needed in change management and skills related to digitalisation will be increasingly important in the future. The report state that knowledge of sustainable development, communication skills, problem-solving skills, creativity, the ability to learn, skills related to multiculturalism, and information evaluation skills are required in Finland in 2035.

Many of the above-mentioned skills have been identified to be essential to marketing professionals (e.g., Bruce & Schoenfeld, 2006; di Gregorio et al., 2019; Finch et al., 2013; Schlee & Harich, 2010; Schlee & Karns, 2017; Wellman, 2010). In general marketing-related studies are emphasizing that meta-skills are much needed for marketing professionals. For instance, Finch et al. (2013, p. 64) conclude that meta-skills are "the foundation on which every successful professional marketer is built". Also, di Gregorio et al. (2019) argue that meta-skills are considered the most important skills of marketers, and Schlee and Harich (2010) state that meta-skills are important to both entry-level and middle- to senior-level marketing jobs.

What meta-skills are then specifically requested from marketing professionals? It can be said that oral communication and written communication are seen as the most important meta-skills by almost every researcher (Binkley et al., 2012; Bruce & Schoenfeld, 2006; Davis et al., 2002; di Gregorio et al., 2019; Elhajjar, 2022; Gray et al., 2007; McArthur et al., 2017; Royle & Laing, 2014; Schlee & Harich, 2010; Schlee & Karns, 2017; Taylor, 2003; Walker et al., 2009; Wellman, 2010). Otherwise, the list of requested skills is varying depending on the source. For instance, Finch et al. (2013) discovered that especially important meta-skills for marketing graduates were associated with self-management, problem-solving, and adaptability. Instead, Schlee and Harich (2010) state that the most required meta-skills are oral and written communication, presentations, team/relational/leadership skills, and creative problem-solving. Also, Schlee and Karns (2017) noted that oral and written communication are the most frequently required meta-skills, followed by teamwork skills, time management skills, and presentation skills. Taylor (2003) emphasizes that communication and problem-solving skills, logical thinking, and teamwork skills are more important for marketing graduates than technical skills and knowledge.

The essential skills of marketers vary also depending on whether the opinions of practitioners, students or academics are surveyed. Gray et al. (2007) studied all of these groups and found that there are significant differences in the views of the three groups. For instance, marketing managers considered a willingness to learn to be more important than students did, while students rated teamwork, creativity, self-confidence, awareness of ethical issues, independent judgement, and the skills needed to implement change significantly higher than academics and managers. There were also similar views among all three groups: they all emphasized the importance of oral communication, problem-solving, interpersonal skills, analytical skills, flexibility, adaptability, and the ability to plan their own work. Also, Bruce and Schoenfeld's (2006) studied graduates, alumni, and corporate recruiters to view different opinions about the importance of different skills and abilities for marketers. The research shows that recruiters find the ability to think strategically and analytically to be the most important across a wide range of skills and abilities. Also, graduates reported that during their studies they have had the greatest improvement in their ability to think strategically. Still, alumni expressed that after graduation they have had the greatest educational need relating to developing a strategic plan and conducting financial analyses. All of this suggests that during higher education intellectual capabilities are highly developed, while operational skills are not.

Most recent studies by di Gregorio et al. (2019) and Elhajjar (2022) have focused even more on the skills that are important to digital marketers. According to di Gregorio et al. (2019), digital marketers are expected to have teamwork skills, interpersonal skills, willingness to take initiative, motivation, flexibility, communication and presentation skills, and stress resilience. They also emphasize analytical skills as data is becoming the most valuable resource in the world. Likewise, Elhajjar (2022) states that recruiters expect digital marketing professionals to have communication skills and analytical skills.

2.3.2 Technical skills

Technical skills can be categorized as vocational skills meaning that they are specific to the performance of a technical task (Schlee & Harich, 2010). According to Daellenbach (2018), some educators feel that technical skills should not be provided by universities, but still, these skills are desired by employers and therefore might affect graduates' employability. The author suggests that too many technical skills are not necessary but including some of them in a marketing degree might improve learning and offer value. Many other researchers agree that technical skills should be part of marketing education even though they might not be as important as meta-skills. However, there is one problem concerning technical skills in marketing education: since technology is continuously evolving technical skills usually change rapidly (Schlee & Harich, 2010). Therefore, the importance of specific technical skills should be evaluated frequently. With this in mind, this chapter proceeds from the oldest study to the most recent one to see if there are differences between studies published in different years.

Over ten years ago Wellman (2010) found that general office systems and database skills are essential to marketers. Instead, Schlee and Harich (2010) studied technical skills referring to specific software, such as Excel, and SPSS, or programming languages, such as SQL and Java. They found out that MS Office skills and database analysis were the most frequently requested technical skills from marketers of the 21st century. MS Office skills were most often listed as a requirement for entry-level positions than for middle- and upper-level jobs. In turn, job listings for upper management required often more advanced, industry-specific technical skills.

Later Royle and Laing (2014) stated that skills related to digital marketing, such as search engine optimization (SEO), mobile applications, online communication, social media tools, and digital analytics, are important to marketers. In turn, McArthur et al. (2017) found that recruiters are looking for marketers that have general IT skills, such as Microsoft Office and Adobe skills, and digital marketing skills, such as Google Analytics, social media, and SEO skills. At about the same time, Schlee and Karns (2017) concluded that over three-quarters of the job post included one or more analytical or technical skill categories. According to their study MS Office, Excel, project management, database skill, data analytics and web analytics are the most frequently requested analytical or technical skill categories. They also observed that technical skills, such as database skills, data analytics, SEO, CRM, and data mining, are associated with higher wages. These skills are not necessarily expected from marketing graduates, but graduates with those skills are more likely to get a higher-paying entry-level job.

Recent studies have emphasized even more digital marketing skills. A study by di Gregorio et al. (2019) shows that meta-skills are the most frequently required skills for marketers, but also digital and technical skills are important, especially to marketers working in highly digitalised firms. For instance, social media, mobile, e-commerce, and SEO, search engine marketing (SEM) are technical skills that recruiters are looking for in marketing professionals. According

to Kurtzke and Setkute (2021), marketers need CRM and database skills to analyse their customers, and technical skills relating to SEO, SEM, and web analytics to analyse the effectiveness of marketing campaigns. Instead, traditional research methods and tools, such as SPPS, seem to be less relevant in today's marketing practice (Kurtzke & Setkute, 2021). Similarly, Elhajjar (2022) claims that marketing professionals should possess technical skills related to marketing automation systems, web coding, SEO, paid ads, email marketing and so on.

To conclude it seems that required technical skills have changed over the years. Today's marketing professionals are expected to have skills to use specific tools, such as MS Office, Google tools and Adobe programs, but also more broad knowledge or experience of skills related to digital marketing, such as SEO, data analytics, CRM, and social media. This was also noted in the study by Kurtzke and Setkute (2021, p. 306) as the authors argue that marketers need "technical skills to be able to apply knowledge in practice" and "tool skills to be trained in specific software".

2.4 Marketers' personal attributes

Besides marketing knowledge and skills, studies have shown that personal attributes contribute to the employability of marketing graduates (Finch et al., 2013; Schlee & Karns, 2017). Literature has noted that personality traits are sometimes difficult to differentiate from skills, with there being both dimensions to factor such as problem-solving (Wellman, 2010). One way to differentiate skills from personal attributes is to think that personal attributes can be innate or learned, but they are not typically taught at university (McArthur et al., 2017). This thought is not purely solid, since usually some aspects of personality traits can be taught. For instance, risk-taking can be learned through risk analysis, game theory, and statistical modelling (Wellman, 2010).

Nevertheless, there are previous studies that are analysing personality traits that are requested from marketers. For instance, Wellman (2010) states that creativity and innovation, and attention to detail are clearly the most often required personality traits of marketing graduates. These are followed by responsibility, proactivity and initiative. Instead, Schlee and Karns (2017) present that the most commonly requested personal attributes are independence, detail orientation and problem-solving ability. They also state that being an independent learner may become increasingly important in the fast-pacing work environment. McArthur et al. (2017) note that after communication skills different personality traits have greater demand than any other attributes of marketing graduates. According to their study motivation, time management, attention to detail, a positive attitude and independence are requested from graduates. A recent study by Elhajjar (2022) found that flexibility, passion, and proactivity are the preferred personal characteristics of digital marketers.

Other studies have not focused on personal attributes, but many of them are mentioning these same attributes as meta-skills or soft skills. For this reason,

there can be found some overlap between this chapter and the chapter discussing meta-skills. For instance, a study by di Gregorio et al. (2019) has categorized initiative, motivation, and flexibility as soft skills, but in this study, they are seen as personal attributes. Another example of using different categorizations is a study by Schlee and Harich (2010), where detail orientation is seen as a part of meta-skills, but in this study, it is categorized as a personal attribute.

2.5   Summary of the literature review

This chapter summarizes the key literature related to the knowledge, skills and personal attributes of 21st-century marketers. Also, Appendix 1 concludes previous literature on the topic. Table 2 summarizes marketing knowledge, meta-skills, technical skills, and personal attributes that at least two previous studies have found to be important to marketers. This list of knowledge areas, skills and personal attributes is used as a starting point for the data analysis of the study, but the analysis is not limited to only these categories. Whilst previous research provides many insights about marketing knowledge, skills and attributes needed after graduation, there are still many aspects to resolve.

TABLE 2 Summary of marketers' knowledge, skills, and personal attributes found in previous studies.

Category		Resource
Knowledge	Marketing communications (including PR, advertising, promotion)	(Finch et al., 2013; Gray et al., 2007; Harrigan & Hulbert, 2011; McArthur et al., 2017; Schlee & Harich, 2010; Schlee & Karns, 2017; Walker et al., 2009)
	Market research and analysis	(di Gregorio et al., 2019; Gray et al., 2007; Harrigan & Hulbert, 2011; Royle & Laing, 2014; Schlee & Harich, 2010; Walker et al., 2009)
	Customer/consumer behaviour	(Gray et al., 2007; Harrigan & Hulbert, 2011; Schlee & Harich, 2010)
	Product/brand marketing	(Finch et al., 2013; Gray et al., 2007)
	Strategic marketing	(Finch et al., 2013; Gray et al., 2007; Harrigan & Hulbert, 2011; Royle & Laing, 2014)
	Selling and sales management	(di Gregorio et al., 2019; Gray et al., 2007; McArthur et al., 2017; Schlee & Harich, 2010; Schlee & Karns, 2017; Walker et al., 2009)
	Digital marketing	(di Gregorio et al., 2019; Harrigan & Hulbert, 2011; Kurtzke & Setkute, 2021; McArthur et al., 2017; Schlee & Karns, 2017)

TABLE 2 (continued)

Category		Resource
Meta-skills	Oral communication skills	(Binkley et al., 2012; Bruce & Schoenfeld, 2006; Davis et al., 2002; di Gregorio et al., 2019; Elhajjar, 2022; Gray et al., 2007; McArthur et al., 2017; Opetushallitus, 2019; Schlee & Harich, 2010; Schlee & Karns, 2017; Taylor, 2003; Walker et al., 2009; Wellman, 2010)
	Written communication skills	(Binkley et al., 2012; Bruce & Schoenfeld, 2006; Davis et al., 2002; di Gregorio et al., 2019; Elhajjar, 2022; Gray et al., 2007; McArthur et al., 2017; Opetushallitus, 2019; Royle & Laing, 2014; Schlee & Harich, 2010; Schlee & Karns, 2017; Taylor, 2003; Walker et al., 2009; Wellman, 2010)
	Presentation skills	(di Gregorio et al., 2019; Schlee & Harich, 2010; Schlee & Karns, 2017; Taylor, 2003; Walker et al., 2009)
	Analytical skills	(Bruce & Schoenfeld, 2006; di Gregorio et al., 2019; Elhajjar, 2022; Finch et al., 2013; Gray et al., 2007; Royle & Laing, 2014; Taylor, 2003; Walker et al., 2009)
	Project and time management skills	(di Gregorio et al., 2019; Finch et al., 2013; Gray et al., 2007; Royle & Laing, 2014; Schlee & Harich, 2010; Schlee & Karns, 2017; Taylor, 2003; Wellman, 2010)
	Quantitative skills	(Bruce & Schoenfeld, 2006; Schlee & Harich, 2010; Wellman, 2010)
	Leadership skills	(Bruce & Schoenfeld, 2006; Gray et al., 2007; Schlee & Harich, 2010)
	Information-gathering skills	(Binkley et al., 2012; Bruce & Schoenfeld, 2006; Opetushallitus, 2019; Royle & Laing, 2014)
	Continuous learning skills	(Binkley et al., 2012; Gray et al., 2007; Opetushallitus, 2019; Schlee & Karns, 2017)
	Teamwork skills	(Binkley et al., 2012; di Gregorio et al., 2019; Finch et al., 2013; Gray et al., 2007; McArthur et al., 2017; Schlee & Karns, 2017; Wellman, 2010)
	Networking skills	(di Gregorio et al., 2019; McArthur et al., 2017; Royle & Laing, 2014; Schlee & Harich, 2010)
	Strategic thinking skills	(Binkley et al., 2012; Bruce & Schoenfeld, 2006; Gray et al., 2007)
	Problem-solving skills	(di Gregorio et al., 2019; Finch et al., 2013; Gray et al., 2007; Opetushallitus, 2019; Schlee & Harich, 2010; Schlee & Karns, 2017)
Technical skills	MS Office skills	(McArthur et al., 2017; Schlee & Harich, 2010; Schlee & Karns, 2017)

TABLE 2 (continued)

Category		Resource
	CRM and database skills	(di Gregorio et al., 2019; Kurtzke & Setkute, 2021; Schlee & Harich, 2010; Schlee & Karns, 2017; Wellman, 2010)
	Web analytics skills	(di Gregorio et al., 2019; Kurtzke & Setkute, 2021; McArthur et al., 2017; Royle & Laing, 2014; Schlee & Karns, 2017)
	SEO/SEM skills	(di Gregorio et al., 2019; Elhajjar, 2022; Kurtzke & Setkute, 2021; McArthur et al., 2017; Royle & Laing, 2014; Schlee & Karns, 2017)
	Social media skills	(di Gregorio et al., 2019; McArthur et al., 2017; Royle & Laing, 2014)
Personal attributes	Initiative/proactivity	(di Gregorio et al., 2019; Elhajjar, 2022; Finch et al., 2013; Taylor, 2003; Wellman, 2010)
	Creativity	(Binkley et al., 2012; Bruce & Schoenfeld, 2006; di Gregorio et al., 2019; Elhajjar, 2022; Opetushallitus, 2019; Taylor, 2003; Wellman, 2010)
	Flexibility	(di Gregorio et al., 2019; Elhajjar, 2022; Finch et al., 2013; Gray et al., 2007; Taylor, 2003)
	Independence	(McArthur et al., 2017; Schlee & Karns, 2017)
	Self-confidence	(Gray et al., 2007; Wellman, 2010)
	Detail orientation	(di Gregorio et al., 2019; McArthur et al., 2017; Schlee & Harich, 2010; Schlee & Karns, 2017; Wellman, 2010)
	Motivation	(di Gregorio et al., 2019; McArthur et al., 2017)
	Stress resilience	(di Gregorio et al., 2019; Elhajjar, 2022)

3 METHODOLOGY

This chapter presents the methodological approach of the thesis. First, the research design of the study will be shortly described. After that data collection and data analysis will be discussed.

3.1 Research design

According to Hair Jr. et al. (2016), research design can be exploratory, descriptive, or causal. They state that exploratory research is usually conducted when there is little pre-existing information about a topic or the information has become outdated. Instead, descriptive research is used to describe the characteristics of the research topic usually in a structured way and causal research tests if one event causes another. However, the authors mention that researchers often use more than one research design in a single study. In this study, the research design is descriptive with exploratory features. The main focus of the study is to describe what kind of marketing professionals are Finnish employers looking for, but it also aims to discover new information. For instance, technical skills required for marketers are changing fast and therefore previous studies might give outdated results. Also, this study compares the knowledge and skills required for marketing professionals to learning objectives presented in a study guide of marketing programmes at the University of Jyväskylä. This part can be seen as exploratory since it is not based on any theory.

Following the chosen research design, the present study uses an abductive approach. An abductive approach combines deduction and induction. According to Saunders et al. (2019), a deductive approach starts with theory and then tests it, whereas an inductive approach starts with exploring data followed by theory building. Instead, an abductive approach is more flexible as it moves back and forth between theory and data. It can be used to generate a new or modify an existing theory (Saunders et al., 2019). Therefore, this study has an abductive approach as the starting point is existing literature, but it does not just test a previously formed theory but aims to modify it during the research process.

To move on to the methodological choices this study follows a qualitative research design but it has also some quantitative elements. Typically, qualitative research uses non-numerical data, whereas quantitative research relies on numeric data (Hair Jr. et al., 2016). The data in the present study consist of written job advertisements and course descriptions which implies that the research is qualitative. However, data analysis combines qualitative and quantitative techniques.

Lastly, it is noteworthy to mention that this study is so-called documentary research, which uses secondary data sources (Saunders et al., 2019). This means that research data was created for a different purpose. Instead, primary data is data that has been generated for the specific research project (Papachroni &

Lochrie, 2015). In the present study, the collected job advertisement and course descriptions existed before the research project ergo they were not created for a research purpose. The fact that the data was not designed for research should be noted when analysing and drawing conclusions from it (Saunders et al., 2019). Still, documentary research has many advantages. According to Tight (2019) documents are for instance easy to access, and stable, rich, and natural sources of information. Also, previous studies, that have used job advertisements as their data, point out that job advertisements show what employers need without any assumptions from researchers (Bennett, 2002; McArthur et al., 2017). Similarly, course syllabi give objective information about what happens in classrooms (Reavey et al., 2021).

3.2   Data collection

The data of this study consist of two parts: job advertisements and course descriptions. The idea is to compare these two to notice similarities and differences in knowledge and skills that are seen as important. The job advertisements represent employers' views whereas the course descriptions of marketing programme courses represent educators' views.

3.2.1 Job advertisements

The first part of the data for the research was collected manually from duunitori.fi -website. Duunitori.fi is the largest Finnish employment site, and it has over 700 000 website visits weekly (*Duunitori*, n.d.). Duunitori.fi gathers job advertisements from different sources and therefore it could be assumed that most of the relevant job advertisements were shown in the search results. Also, duunitori.fi offered suitable search filters that made it easier to filter only marketing-related jobs. The other option could have been LinkedIn, which is also a popular online recruitment site. During the data collection, it seemed that there were a bit different job listings on LinkedIn than on duunitori.fi. Still, LinkedIn would not have been suitable for this research because LinkedIn offers customized job listings based on users' qualifications (Schlee & Karns, 2017). This could have been biasing the sample. Therefore, only data gathered from duunitori.fi was used for the research.

The data were captured over 4 weeks period from January 24th to February 20th, 2022. The keyword of "markkinointi" (in English "marketing") was used for filtering the most relevant positions. Job listings were organized by date so that the most recent job advertisements appeared first. Later published job advertisements were selected until the selection process reached job advertisements already collected in an earlier search. Most of the time job advertisements were collected daily to avoid the removal of job advertisements before being collected. The results excluded jobs that were unpaid. In addition, jobs that did not locate in Finland or required unemployment or other specific criteria from applicants

were excluded. Also, jobs that focused only on selling or customer service were eliminated from the sample. These exclusions were made to analyse jobs that are relevant to most of the marketers living in Finland.

The final qualified sample totalled 210 job advertisements. A review study by Harper (2012) suggests that when analysing job advertisements, a minimum sample size should be over one hundred job adverts. Instead, relevant previous studies have had a sample size ranging from a minimum of 210 to a maximum of 776 job advertisements (di Gregorio et al., 2019; Schlee & Karns, 2017). Therefore, it can be said that the sample size of this study should be enough to get relevant results on the topic.

The sample consists of entry-level, middle-level, and senior-level marketing job advertisements. This differs from many earlier studies (McArthur et al., 2017; Schlee & Karns, 2017; Taylor, 2003; Wellman, 2010) that have been focusing on entry-level positions solely. Their perspective is also important but might lead to marketing programs being developed merely for requirements needed in entry-level jobs. This can further lead to a situation where skill development might be favoured over knowledge development as skills have been noted to be more important to marketers in their early careers (Davis et al., 2002). Therefore, middle- and senior-level positions were included in this study to avoid possible bias while studying only entry-level job advertisements.

3.2.2 Course descriptions

The second part of the data was manually collected from the website of the University of Jyväskylä (n.d.). Marketing programmes of the University of Jyväskylä were chosen for this study as there will be launched new curricula for bachelor's and master's degrees in marketing hence this study might assist the process. Finnish students can specialise in marketing in the bachelor's and master's degree programmes in business studies. In addition, there is an international master's degree programme in Digital Marketing and Corporate Communication (DMCC), but this programme was not included in the data as the students of the master's degree programme in business studies can optionally study the same courses as students of the DMCC programme. Therefore, most of the DMCC courses are already included in the sample as part of optional marketing studies. A list of the names of included courses can be found in Appendix 2.

The programme descriptions of bachelor's and master's degree education in business studies, associated course descriptions and learning outcomes were identified and collected. All compulsory courses were included in the sample as well as all optional marketing-related courses. The programmes include also optional study modules that can be selected from different faculties of the University of Jyväskylä and chosen language studies. These study modules could not be included in the study as each student can choose quite freely whatever courses he/she wants to complete.

The special focus of the study was on the learning outcomes of the courses. According to AACSB's (2018, p. 34) Standard 9 "curriculum content refers to theories, ideas, concepts, skills, knowledge, etc., that make up a degree program."

This is not the same as learning goals that describe "the knowledge and skills students should develop in a program and set expectations for what students should do with the knowledge and skills after completing a program". This means that not every content area needs to be included as a learning outcome. Therefore, learning goals or outcomes describe curricular priorities better than content descriptions. As the Jyväskylä University School of Business and Economics (JSBE) achieved AACSB accreditation in 2018 this study will concentrate on learning goals while evaluating what knowledge and skills are important to educators.

3.3   Data analysis

This study uses content analysis as a research technique. Content analysis is a frequently used analysis technique on pre-existing texts, images, or videos (Hair Jr. et al., 2016). Researchers can count for instance key phrases or words and analyse the frequencies (Adams et al., 2014). The aim of this is to describe the content systematically and classify the meanings of the data. Content analysis can be done by humans or nowadays even more often by computers (Neuendorf, 2017). In this study, the researcher is analysing the textual data herself and no computer-aided text analysis has been used. Hand coding can offer a deeper understanding of the data compared to software-provided coding (Hair Jr. et al., 2016).

Content analysis can be both quantitative and qualitative. Tight (2019) mentions that at first content analysis was specifically a quantitative technique, but later it included a qualitative approach as well. For instance, Neuendorf (2017, p. 1) states that content analysis is "the systematic, objective, quantitative analysis of message characteristics". The author seems to emphasize the quantitative approach of content analysis. Instead, Krippendorff (2019, p. 24) defines content analysis as "a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use". This definition does not specify whether the content analysis is quantitative or qualitative in nature, and therefore it is a more suitable definition for this study that combines qualitative and quantitative approaches.

Content analysis can also be divided into data-driven, theory-driven, and theory-guided analyses (Tuomi & Sarajärvi, 2018). According to Tuomi and Sarajärvi (2018), the key idea in data-driven content analysis is that the classification of the data is not based on existing theory. In turn, the authors state that theory-driven content analysis is based on previously formed theories, models, or concepts, and it usually aims to test existing knowledge in a new context. The combination of the two previously mentioned is theory-guided content analysis, which proceeds on the terms of the data, but also previous literature guides and helps in analysis (Tuomi & Sarajärvi, 2018). In other words, a theory-guided content analysis may be used to add new information to previous theories or models. As mentioned earlier this study uses an abductive approach and therefore theory-guided content analysis is the most suitable choice for the data analysis. The

analysis of the study is guided by previous literature, but also new categories, based solely on the data, are formed.

The data for this study were coded by a researcher of this study. The coding process was conducted three times to improve the reliability and credibility of the study. Then relevant textual parts of the ads and course descriptions were copy-pasted into an Excel document, which was used as a codebook for the study. In addition, the job advertisements were screenshotted to be sure to have an opportunity to get back to the original data if needed.

The coding of the data started with the categories found in the previous literature (see Table 2). During the coding process, new categories were formed if observed knowledge or skills were not fitting to the existing categories. This follows the earlier mentioned abductive approach, where the idea is to modify a previously formed theory. The four main categories of the codebook were marketing knowledge, technical skills, meta-skills, and personal attributes. These main categories included subcategories based either on existing literature or the studied data. The coding principle was to find an exact match or a close synonym of a specific code as in the study by Schlee and Karns (2017). Appendix 3 identifies some example terms and quotes from the sample accepted into different coding categories.

Finally, verbal codes were shifted into numerical variables and the data were analysed in SPSS software. As the data variables were only labels to classify objects (measured at the nominal level and nonparametric) crosstabulation was used to describe sets of relationships (Hair Jr. et al., 2016; Metsämuuronen, 2011). Then either Chi-square ($\chi2$) test or Fisher's exact test was used to test whether there are statistically significant differences between different categories. The null hypothesis was that there are no differences. The Chi-square test measures the independence between two variables and it can be used for nominally-scaled variables (Hair Jr. et al., 2016; Metsämuuronen, 2011). The test compares the observed frequencies with the expected frequencies. Observed frequencies are actual cell counts of data and expected frequencies are theoretical variables derived from the null hypothesis (Hair Jr. et al., 2016). The chi-square test is said to be reliable when all expected frequencies are over one and a maximum of 20 per cent of expected frequencies are less than five   (Metsämuuronen, 2004). If these assumptions are not met, the recommendation is to use Fisher's exact test, which is based on the calculation of the probability to get precisely such a 2x2 matrix (Metsämuuronen, 2011). Sparse distribution is not a problem in exact tests because the calculation of the probability can be done in any case (Metsämuuronen, 2004). The problem with Fisher's exact test is that it can be calculated only for a 2x2 matrix in SPSS and therefore Chi-square test was used in the study for larger matrixes even though all results were not fully reliable.

4 RESULTS

This chapter presents the finding of the study. Firstly, the sample of the study is shortly described. Then the findings from the first part of the sample, job advertisements, are introduced. These findings are categorized into four sub-chapters: first education and degree requirements of employers are presented, and then marketing knowledge, skills and personal attributes found from the sample are analysed. After that, the focus is on the second part of the sample, course descriptions, and the results discovered from them are presented. The chapter ends with a comparison of findings from job advertisements with findings from course descriptions to see if there are gaps between these two.

4.1 Description of the sample

The first part of the sample consisted of 210 marketing job advertisements. The locations of the jobs were all around Finland. Most of them (64.3 %) were based in the Finnish Capital Region which consists of Helsinki, Espoo, Vantaa and Kauniainen. The rest of the jobs (35.7 %) were located all over Finland. Also, remote-work possibilities were often offered, hence sometimes a job location included the whole country of Finland. Figure 1 illustrates more closely the variety of job locations.
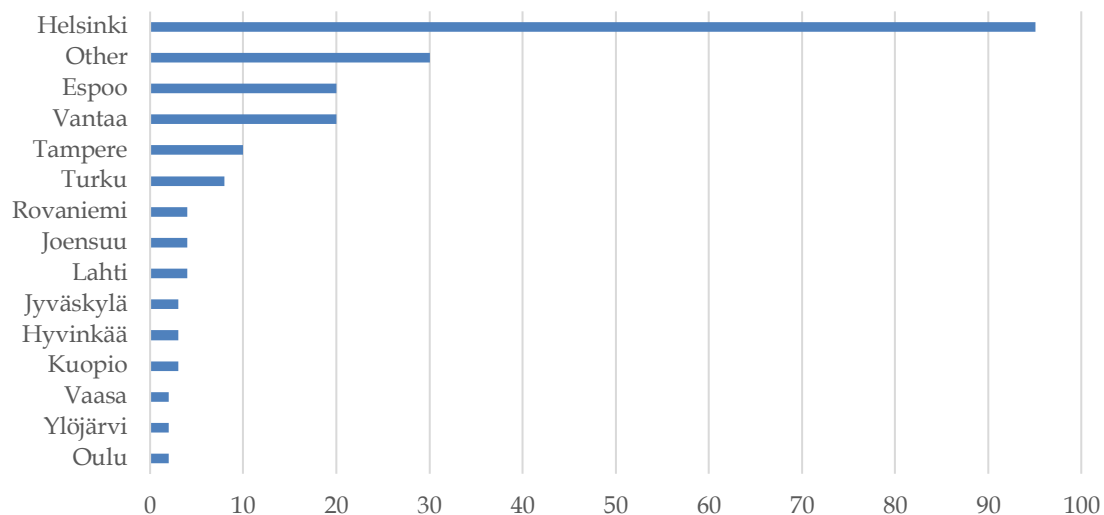
FIGURE 1 Locations of the marketing jobs.
Note: *Other* -category includes all towns mentioned only ones and the cases where no specific location was mentioned.

In addition, the sample included a wide variety of job titles (see Figure 2). The most frequently appearing titles were Marketing Manager (8.6 %), Marketing

Trainee (6.7 %), and Marketing Coordinator (6.2 %). 58 of all the job titles (27.6 %) appeared only once.
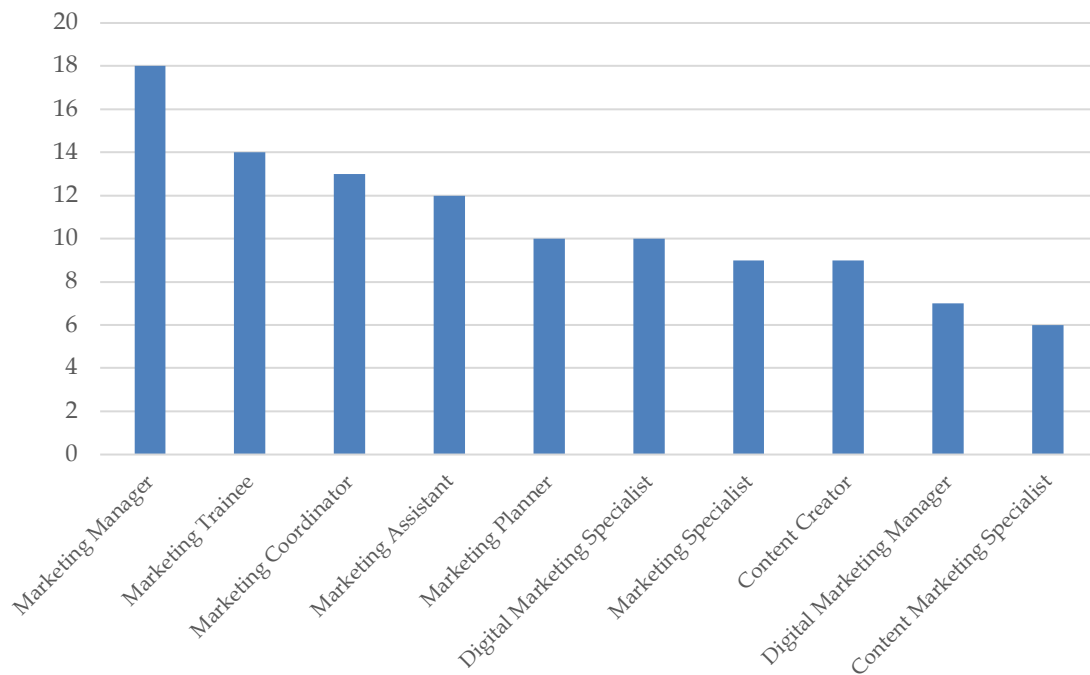
FIGURE 2 Ten most often occurring marketing job titles.

As seen in Figure 3 around half of the job advertisements were entry-level (f=108, 51.4 %), followed by middle-level (f=80, 38.1 %) and senior-level (f=22, 10.5 %) positions. The classification to different levels was based on the number of years of experience required in a job description. If there was no mention of the years of experience, the title and the work tasks were analysed to estimate the position. Entry-level jobs required no experience or minimal job experience. Also, the titles, such as "marketing assistant" or "marketing trainee", were classified as entry-level. Middle-level jobs required a few years of experience (over 2 years), and the titles, such as "marketing manager", were seen as middle-level positions. Senior-level jobs required a minimum of 5 years of experience. The titles, such as "chief marketing officer" or "marketing lead", were classified as senior-level.
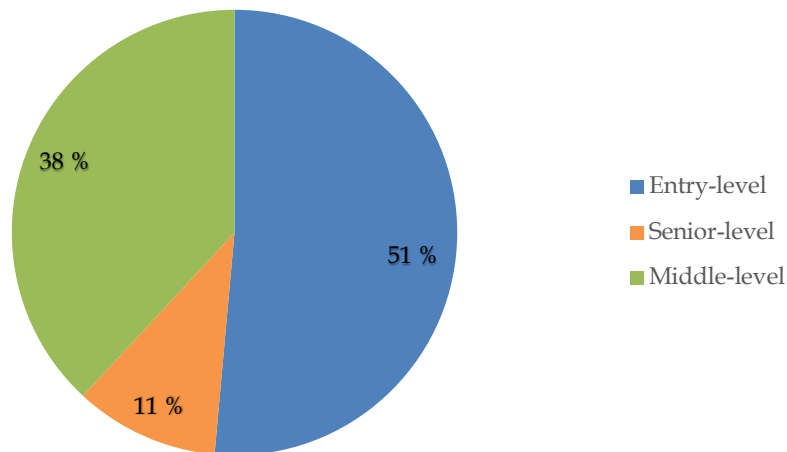
FIGURE 3 Distribution of the marketing positions by the job level.

In addition, job advertisements were coded by broad sectors of employer companies (see Figure 4). Usually, there were no specifications of the sector in job descriptions and therefore the sector classification is based on the analysis of the product/service of a company and who is the end-user of the product. Based on the information available 109 (51.9 %) were focused on business-to-business markets, 67 (31.9 %) on business-to-consumer markets, and 14 (6.7 %) on both. In addition, 9 (4.3 %) of the companies were classified as public sector and 11 (5.2 %) were non-profit organizations.
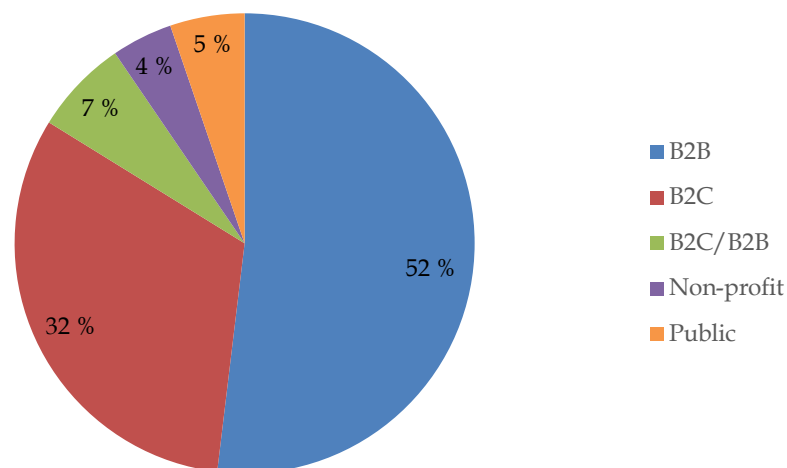
FIGURE 4 Distribution of the marketing positions by the broad business sector.

Lastly, the job advertisements were coded by the size of the employer company (seen Figure 5). The size of the business is not usually mentioned in job advertisements; hence the information was searched online (e.g., finder.fi). The number of people employed was used as the criteria while categorizing businesses. According to OECD (n.d.) micro-sized businesses employ fewer than 10 persons, small-sized businesses employ 10 to 49 persons, medium-sized businesses employ 50 to 249 persons, and large-sized businesses employ 250 or more people. This categorization was used in the current study as well. Based on the searched information 70 of the employer companies were large-sized (33.3 %). 62 of the companies (29.5 %) were small-sized, 42 (20.0 %) were medium-sized and 36 (17.1 %) micro-sized businesses.
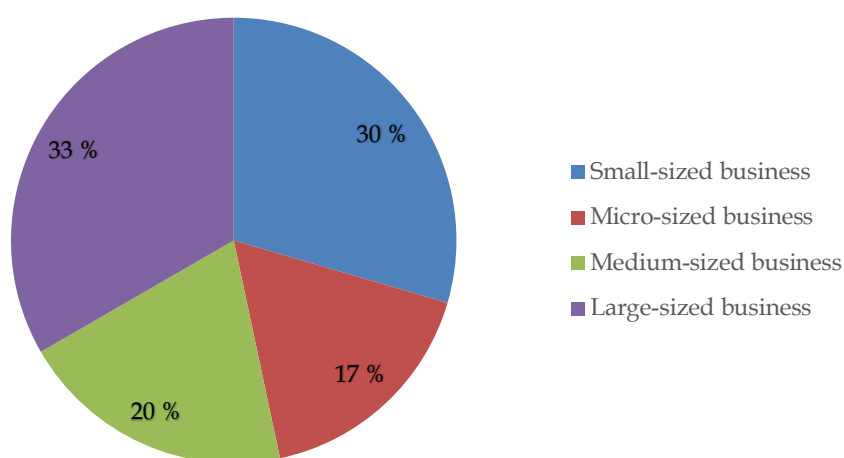
FIGURE 5 Distribution of the marketing positions by the business size.

The second part of the sample consisted of descriptions and learning outcomes of 51 courses included in bachelor's and master's degrees in marketing. 32 courses (62.8 %) were bachelor-level and 19 (37.3 %) were master-level courses. The sample included all compulsory courses, such as basic business studies, general studies, and communication studies, as well as all marketing-related courses that were either compulsory or optional to students. 29 (56.9 %) courses focused on marketing; the rests were just compulsory business and communication studies.

4.2   Degree and experience requirements of employers

Out of the 210 job advertisements, 129 (61.4 %) preferred or required an educational background of some kind (see Table 3). Of these 79 (61.2 %) specified that a degree should be in higher education or that a candidate should be a higher education student. Usually, there was no specification of a subject of a degree,

but just a mention that an applicant should have "a relevant degree". Sometimes it was mentioned that a degree should be in marketing, communication, or business, but all in all, it seemed that an applicant should him-/herself estimate what relevant degrees are.

TABLE 3 Frequencies of educational requirements in marketing job advertisements.

Education	Count of mentions	Percentage (%) within all educational requirements
Higher education degree	46	35.6 %
Higher education degree student	19	14.7 %
Bachelor's degree	6	4.7 %
Master's degree	8	6.2 %
Relevant education	50	38.8 %
Total	129	100.0 %

Previous work experience was either required or preferred in 182 (86.7 %) job advertisements. It was very common to mention desired work experience in years as 64 of the job advertisements (35.2 %) included phrases such as "minimum of 2 years of experience in marketing" or "several years of work experience in marketing". Some job advertisements did not mention any requirements for previous work experience. 27 out of 28 job advertisements not requiring any previous work experience were entry-level positions and one was a middle-level position. However, 81 out of 108 (75.0 %) entry-level job positions preferred or required earlier work experience.

4.3   Marketing knowledge demanded by employers

Different marketing knowledge areas were coded altogether 307 times. Demand for marketing knowledge was usually simply expressed by mentioning that a job applicant should know the specific marketing area. In addition, the request for previous work experience in the specific marketing area was interpreted as a requirement for knowledge. There was one new category, B2B marketing, added to categories based on previous literature. B2B marketing was included since it was mentioned several times in the job advertisements and it could not fit any existing knowledge categories. Other knowledge categories presented in the results were noticed already in the previous studies.

Firstly, the interest was to observe how often different marketing knowledge areas were occurring in the sample. The knowledge areas were organized in Table 4 by frequency of occurrence in job advertisements. From Table 4 we can see that digital marketing knowledge (62.9 %) was by far the most frequently requested marketing knowledge. This was followed by the knowledge of marketing communications (23.8 %), product and brand marketing (16.2 %) and strategic marketing (11.9 %). Other knowledge areas were mentioned in less than 10 per cent of job advertisements.

TABLE 4 Requested marketing knowledge areas in the job advertisements.

Knowledge	Count of mentions	Percentage (%) within all job advertisement
Digital marketing	132	62.9 %
Marketing communications	50	23.8 %
Product/brand marketing	34	16.2 %
Strategic marketing	25	11.9 %
B2B marketing	20	9.5 %
Selling and sales management	17	8.1 %
Customer/consumer behaviour	15	7.1 %
Market research and analysis	14	6.7 %
Total	307	

Secondly, marketing knowledge areas were categorized by the job levels of the marketing positions to see if there would be statistically significant differences in requested marketing knowledge areas between the job levels. Table 5 shows the counts of different knowledge areas at three different job levels and the percentage of how many job advertisements in a job level included a specific knowledge area. The Chi-square test showed that four marketing knowledge areas varied significantly by job level. These knowledge areas were product and brand marketing (p-value 0.000), strategic marketing (p-value 0.000), B2B marketing (p-value 0.007) and customer/consumer behaviour (p-value 0.035). While observing the percentage occurrences of these knowledge areas, it could be discovered that all four knowledge areas were more likely to be mentioned in middle- and senior-level positions compared to entry-level positions. For example, strategic marketing was mentioned in 20.0 % of middle-level job advertisements and in 36.4 % of senior-level job advertisements, but only in 0.9 % of entry-level job advertisements.

TABLE 5 Marketing knowledge areas by the job level of the marketing position.

Knowledge area		Entry-level	Middle-level	Senior-level	p-value
Digital marketing	Count	68	54	10	0.166
	% within Level	63.0 %	67.5 %	45.5 %	
Marketing communications	Count	20	25	5	0.127
	% within Level	18.5 %	31.3 %	22.7 %	
Product/brand marketing	Count	6	18	10	0.000*
	% within Level	5.6 %	22.5 %	45.5 %	
Strategic marketing	Count	1	16	8	0.000*
	% within Level	0.9 %	20.0 %	36.4 %	
B2B marketing	Count	6	8	6	0.007*
	% within Level	5.6 %	10.0 %	27.3 %	
Selling and sales management	Count	7	8	2	0.671
	% within Level	6.5 %	10.0 %	9.1 %	
Customer/consumer behaviour	Count	3	10	2	0.035*
	% within Level	2.8 %	12.5 %	9.1 %	

TABLE 5 (continued)

Knowledge area		Entry-level	Middle-level	Senior-level	p-value
Market research and analysis	Count	6	5	3	0.376
	% within Level	5.6 %	6.3 %	13.6 %	
Number of job advertisements		108	80	22	

*p-value ≤ 0.05 can be seen as statistically significant (Metsämuuronen, 2011).

Thirdly, marketing knowledge areas were categorized by the broad business sector of the employer company (see Table 6). Besides B2B and B2C businesses, the sample also included non-profit organizations, the public sector, and businesses with both B2B and B2C functions. However, only B2B and B2C businesses were compared as other categories included only a few job advertisements, leading to unreliable results. This focus on only B2B and B2C sectors is also used in all subsequent analyses.

Table 6 shows how many times different knowledge areas were appearing in B2B and B2C sectors. According to Fisher's exact test, there was a statistically significant difference between groups in the knowledge areas of product and brand marketing (p-value 0.026), B2B marketing (p-value 0.000) and customer/consumer behaviour (p-value 0.003). B2B marketing was more frequently used as a requirement in the job advertisements of B2B employer companies (15.6 %) than in the job advertisements of B2C employer companies (0.0 %). Instead, product and brand marketing and customer/consumer behaviour were used more frequently in the job advertisements of B2C employer companies (26.9 % and 16.4 %) compared to B2B employer companies (12.8 % and 2.8 %).

TABLE 6 Marketing knowledge areas by the broad business sector of the employer company.

Knowledge area		B2B	B2C	p-value
Digital marketing	Count	74	37	0.108
	% within Sector	67.9 %	55.2 %	
Marketing communications	Count	21	14	0.847
	% within Sector	19.3 %	20.9 %	
Product/brand marketing	Count	14	18	0.026*
	% within Sector	12.8 %	26.9 %	
Strategic marketing	Count	12	8	1.000
	% within Sector	11.0 %	11.9 %	
B2B marketing	Count	17	0	0.000*
	% within Sector	15.6 %	0.0 %	
Selling and sales management	Count	12	3	0.169
	% within Sector	11.0 %	4.5 %	
Customer/consumer behaviour	Count	3	11	0.003*
	% within Sector	2.8 %	16.4 %	
Market research and analysis	Count	9	5	1.000
	% within Sector	8.3 %	7.5 %	
Number of job advertisements		109	67	

*p-value ≤ 0.05 can be seen as statistically significant (Metsämuuronen, 2011).

Lastly, marketing knowledge areas were analysed by the business size of the employer company (see Table 7). The comparison was made between small and mid-size enterprises (SMEs) and large-sized businesses. SMEs -category included all micro-, small- and medium-sized businesses of the sample in other words all businesses that employ less than 250 people. This combination of three categories was made to get enough events per category and thereby reliable results. It is good to note that all subsequent analyses include this same combination of categories.

From Table 7 we can see the results of Fisher's exact test: there was no statistically significant variation of any knowledge area by business size. This could also be noticed from the percentages since all marketing knowledge areas were occurring almost as often in the job advertisement of large-sized employer companies as in the job advertisements of smaller-sized employer companies.

TABLE 7 Marketing knowledge areas by the business size of the employer company.

Knowledge area		SMEs	Large-sized business	p-value
Digital marketing	Count	86	46	0.650
	% within Size	61.4 %	65.7 %	
Marketing communications	Count	31	19	0.492
	% within Size	22.1 %	27.1 %	
Product/brand marketing	Count	20	14	0.323
	% within Size	14.3 %	20.0 %	
Strategic marketing	Count	15	10	0.500
	% within Size	10.7 %	14.3 %	
B2B marketing	Count	13	7	1.000
	% within Size	9.3 %	10.0 %	
Selling and sales management	Count	13	4	0.434
	% within Size	9.3 %	5.7 %	
Customer/consumer behaviour	Count	9	6	0.579
	% within Size	6.4 %	8.6 %	
Market research and analysis	Count	9	5	1.000
	% within Size	6.4 %	7.1 %	
Number of job advertisements		140	70	

4.4 Skills demanded by employers

This chapter is divided into three subchapters: meta-skills, technical skills, and tools skills. All these skills categories will be analysed in the same way but the division is made to facilitate the reader.

4.4.1 Meta-skills

Meta-skills occurred a total of 1057 times in the job advertisements of the sample. Many job advertisements included several meta-skills and it was very common in the job advertisements to just list different meta-skills one after another without any further explanation of what these skills exactly mean. The coding categories of meta-skills were solely based on the previous literature as any significant new meta-skills could not be found in the sample.

Table 8 shows meta-skills in the order of frequency of occurrence in the job advertisements. All in all, written communication and oral communication skills were the most frequently mentioned meta-skills (92.9 % and 84.8 %) followed by teamwork skills (83.3 %). The rest of the skills appeared in less than half of the job advertisements.

TABLE 8 Requested meta-skills in the job advertisements.

Skill	Count of mentions	Percentage (%) within all job advertisement
Written communication	195	92.9 %
Oral communication	178	84.8 %
Teamwork	175	83.3 %
Project and time management	103	49.1 %
Analytical	85	40.5 %
Strategic thinking	82	39.1 %
Continuous learning	71	33.8 %
Networking	67	31.9 %
Problem-solving	48	22.9 %
Leadership	28	13.3 %
Presentation	16	7.6 %
Information-gathering	6	2.9 %
Quantitative	3	1.4 %
Total	1057	

In Table 9 meta-skills are presented by the job levels of the marketing positions. The Chi-square test showed that analytical skills (p-value 0.000), strategic thinking skills (p-value 0.000), networking skills (p-value 0.000), and leadership skills (p-value 0.000) were found in significantly different proportions at different job levels. Table 9 shows that all these four skills are percentage-wise more often occurring in middle- and senior-level job advertisements than in entry-level job advertisements.

TABLE 9 Meta-skills by the job level of the marketing position.

Skill		Entry-level	Middle-level	Senior-level	p-value
Written communication	Count	102	74	19	0.402
	% within Level	94.4 %	92.5 %	86.4 %	

TABLE 9 (continued)

Skill		Entry-level	Middle-level	Senior-level	p-value
Oral communication	Count	93	67	18	0.834
	% within Level	86.1 %	83.8 %	81.8 %	
Teamwork	Count	86	69	20	0.291
	% within Level	79.6 %	86.3 %	90.9 %	
Project and time management	Count	49	42	12	0.540
	% within Level	45.4 %	52.5 %	54.6 %	
Analytical	Count	26	46	13	0.000*
	% within Level	24.1 %	57.5 %	59.1 %	
Strategic thinking	Count	18	48	16	0.000*
	% within Level	16.7 %	60.0 %	72.7 %	
Continuous learning	Count	42	23	6	0.275
	% within Level	38.9 %	28.8 %	27.3 %	
Networking	Count	20	33	14	0.000*
	% within Level	18.5 %	41.3 %	63.6 %	
Problem-solving	Count	26	18	4	0.831
	% within Level	24.1 %	22.5 %	18.2 %	
Leadership	Count	0	17	11	0.000*
	% within Level	0.0 %	21.3 %	50.0 %	
Presentation	Count	6	8	2	0.505
	% within Level	5.6 %	10.0 %	9.1 %	
Information-gathering	Count	5	0	1	0.149**
	% within Level	4.6 %	0.0 %	4.6 %	
Quantitative	Count	3	0	0	0.238**
	% within Level	2.8 %	0.0 %	0.0 %	
Number of job advertisements		108	80	22	

*p-value ≤ 0.05 can be seen as statistically significant (Metsämuuronen, 2011).
**Result is unreliable as over 20 % of the cells have an expected count of less than 5 (Metsämuuronen, 2004).

Next, meta-skills were categorized by the broad business sector of the employer company (see Table 10). This categorization shows that there is little difference in requested meta-skills between B2B and B2C businesses. In addition, the results of Fisher's exact test showed that there is no statistically significant difference in requested meta-skills between business sectors.

TABLE 10 Meta-skills by the broad business sector of the employer company.

Skill		B2B	B2C	p-value
Written communication	Count	101	62	1.000
	% within Sector	92.7 %	92.5 %	
Oral communication	Count	95	57	0.822
	% within Sector	87.2 %	85.1 %	
Teamwork	Count	92	54	0.540
	% within Sector	84.4 %	80.6 %	
Project and time management	Count	45	38	0.062
	% within Sector	41.3 %	56.7 %	

(continued)

TABLE 10 (continued)

Skill		B2B	B2C	p-value
Analytical	Count	42	28	0.751
	% within Sector	38.5 %	41.8 %	
Strategic thinking	Count	35	31	0.078
	% within Sector	32.1 %	46.3 %	
Continuous learning	Count	40	24	1.000
	% within Sector	36.7 %	35.8 %	
Networking	Count	33	19	0.866
	% within Sector	30.3 %	28.4 %	
Problem-solving	Count	27	15	0.856
	% within Sector	24.8 %	22.4 %	
Leadership	Count	14	9	1.000
	% within Sector	12.8 %	13.4 %	
Presentation	Count	8	5	1.000
	% within Sector	7.3 %	7.5 %	
Information-gathering	Count	5	1	0.410
	% within Sector	4.6 %	1.5 %	
Quantitative	Count	3	0	0.289
	% within Sector	2.8 %	0.0 %	
Number of job advertisements		109	67	

Lastly, it was analysed whether meta-skills differ by the business size of the employer company (see Table 11). Comparing percentages shows that requested meta-skills are not varying much. To be more accurate Fisher's exact test was used to find out that there are no statistically significant differences in meta-skills between company sizes.

TABLE 11 Meta-skills by the business size of the employer company.

Skill		SMEs	Large-sized business	p-value
Written communication	Count	129	66	0.778
	% within Size	92.1 %	94.3 %	
Oral communication	Count	120	58	0.684
	% within Size	85.7 %	82.9 %	
Teamwork	Count	112	63	0.078
	% within Size	80.0 %	90.0 %	
Project and time management	Count	64	39	0.190
	% within Size	45.7 %	55.7 %	
Analytical	Count	50	35	0.053
	% within Size	35.7 %	50.0 %	
Strategic thinking	Count	51	31	0.296
	% within Size	36.4 %	44.3 %	
Continuous learning	Count	46	25	0.757
	% within Size	32.9 %	35.7 %	
Networking	Count	41	26	0.274
	% within Size	29.3 %	37.1 %	
Problem-solving	Count	31	17	0.730
	% within Size	22.1 %	24.3 %	

TABLE 11 (continued)

Skill		SMEs	Large-sized business	p-value
Leadership	Count	16	12	0.284
	% within Size	11.4 %	17.1 %	
Presentation	Count	10	6	0.784
	% within Size	7.1 %	8.6 %	
Information-gathering	Count	4	2	1.000
	% within Size	2.9 %	2.9 %	
Quantitative	Count	3	0	0.552
	% within Size	2.1 %	0.0 %	
Number of job advertisements		140	70	

4.4.2 Technical skills

Altogether different technical skills were coded 277 times. During the coding process, new categories stood out: website and eCommerce skills, marketing automation skills, editing content and graphic design skills, and lastly photography and videography skills. These categories were included in the study in addition to the previously formed categories.

The most frequently mentioned technical skills can be seen in Table 12. Skills were organized by the frequency of occurrence in the job advertisements. The top three most often used meta-skills were social media (37.1 %), website/eCommerce skills (20.0 %) and SEO/SEM (15.2 %). All other categories of technical skills appeared in less than 15 % of the job advertisements.

TABLE 12 Requested technical skills in the job advertisements.

Skill	Count of mentions	Percentage (%) within all job advertisement
Social media	78	37.1 %
Website/eCommerce	42	20.0 %
SEO/SEM	32	15.2 %
Marketing automation	29	13.8 %
Editing content and graphic design	29	13.8 %
Photo- and videography	24	11.4 %
Web analytics	24	11.4 %
CRM and database	19	9.1 %
Total	277	

Next, technical skills were analysed by the job levels of the marketing positions (see Table 13). Percentages of how many job advertisements at a job level included specific technical skills already show differences in occurrences. According to the Chi-square test three technical skills -categories had statistically significant differences in occurrences between job levels: social media skills (p-value 0.037), marketing automation skills (p-value 0.050), and photography and videography skills (p-value 0.003). Social media skills were requested more at entry-

level and middle-level jobs (42.6 % and 36.3 %) than at senior-level jobs (13.6 %). Marketing automation skills were needed at middle-level jobs (21.3 %) more than at entry-level (9.3 %) and senior-level (9.1 %) jobs. Instead, photography and videography skills were percentage-wise more requested at entry-level jobs (18.5 %) than at middle-level (5.0 %) and senior-level (0.0 %) jobs.

TABLE 13 Technical skills by the job level of the marketing position.

Skill		Entry-level	Middle-level	Senior-level	p-value
Social media	Count	46	29	3	0.037*
	% within Level	42.6 %	36.3 %	13.6 %	
Website/eCommerce	Count	19	21	2	0.137
	% within Level	17.6 %	26.3 %	9.1 %	
SEO/SEM	Count	14	15	3	0.538
	% within Level	13.0 %	18.8 %	13.6 %	
Marketing automation	Count	10	17	2	0.050*
	% within Level	9.3 %	21.3 %	9.1 %	
Editing content and graphic design	Count	20	8	1	0.102
	% within Level	18.5 %	10.0 %	4.6 %	
Photo- and videography	Count	20	4	0	0.003*
	% within Level	18.5 %	5.0 %	0.0 %	
Web analytics	Count	8	13	3	0.160
	% within Level	7.4 %	16.3 %	13.6 %	
CRM and database	Count	6	11	2	0.153
	% within Level	5.6 %	13.8 %	9.1 %	
Number of job advertisements		108	80	22	

*p-value ≤ 0.05 can be seen as statistically significant (Metsämuuronen, 2011).

In Table 14 technical skills are divided by B2B and B2C businesses. There were not many differences in occurrences of technical skills between business sectors. Fisher's exact test showed that only photography and videography (p-value 0.048) differed significantly between B2B and B2C employer companies. Percentages show that photography and videography skills were percentage-wise more often requested in B2C employer companies (17.9 %) compared to B2B employer companies (7.3 %).

TABLE 14 Technical skills by the broad business sector of the employer company.

Skill		B2B	B2C	p-value
Social media	Count	41	22	0.627
	% within Sector	37.6 %	32.8 %	
Website/eCommerce	Count	22	15	0.849
	% within Sector	20.2 %	22.4 %	
SEO/SEM	Count	19	10	0.835
	% within Sector	17.4 %	14.9 %	
Marketing automation	Count	17	9	0.828
	% within Sector	15.6 %	13.4 %	

TABLE 14 (continued)

Skill		B2B	B2C	p-value
Editing content and graphic design	Count	17	4	0.060
	% within Sector	15.6 %	6.0 %	
Photo- and videography	Count	8	12	0.048*
	% within Sector	7.3 %	17.9 %	
Web analytics	Count	13	8	1.000
	% within Sector	11.9 %	11.9 %	
CRM and database	Count	14	4	0.201
	% within Sector	12.8 %	6.0 %	
Number of job advertisements		109	67	

*p-value ≤ 0.05 can be seen as statistically significant (Metsämuuronen, 2011).

Technical skills were also analyzed by the business size of the employer company (see Table 15). Fisher's test showed that only CRM and database skills (p-value 0.022) were found to differ statistically significantly between business sizes. From Table 15 we see that CRM and database skills were requested percentage-wise more often in large-sized employer companies (15.7 %) than in SMEs (5.7 %).

TABLE 15 Technical skills by the business size of the employer company.

Skill		SMEs	Large-sized business	p-value
Social media	Count	57	21	0.173
	% within Size	40.7 %	30.0 %	
Website/eCommerce	Count	24	18	0.148
	% within Size	17.1 %	25.7 %	
SEO/SEM	Count	22	10	0.841
	% within Size	15.7 %	14.3 %	
Marketing automation	Count	18	11	0.672
	% within Size	12.9 %	15.7 %	
Editing content and graphic design	Count	23	6	0.141
	% within Size	16.4 %	8.6 %	
Photo- and videography	Count	16	8	1.000
	% within Size	11.4 %	11.4 %	
Web analytics	Count	19	5	0.249
	% within Size	13.6 %	7.1 %	
CRM and database	Count	8	11	0.022*
	% within Size	5.7	15.7 %	
Number of job advertisements		140	70	

*p-value ≤ 0.05 can be seen as statistically significant (Metsämuuronen, 2011).

4.4.3 Tools skills

Following the example of Kurtzke and Setkute (2021) specific software tools were distinguished from broader technical skills. According to them, this should be done as tools skills have a shorter lifespan compared to broader technical skills. In this study tools skills were coded altogether 136 times. Only MS Office skills -

category was based on the previous studies. The rest of the tools skills -categories were formed from the sample.

The most frequently mentioned tools skills are presented in Table 16 in the order of frequency of occurrence in the job advertisements. The most often found tools skills were Adobe tools skills (20.5 %), Google tools skills (14.3 %) MS Office tools skills (14.3 %) and WordPress skills (10.5 %). The rest of the tools skills were occurring in less than 10 per cent of the job advertisements.

TABLE 16 Requested tools skills in the job advertisements.

Skill	Count of mentions	Percentage (%) within all job advertisement
Adobe tools	43	20.5 %
Google tools	30	14.3 %
MS Office	30	14.3 %
WordPress	22	10.5 %
HubSpot	7	3.3 %
Canva	4	1.9 %
Total	136	

In Table 17 tools skills are analysed by the job level of the marketing position. The results of the Chi-Square test showed that Adobe tools skills (p-value 0.003) and WordPress skills (p-value 0.011) differed significantly at three job levels. Adobe tools skills were requested more often in entry-level positions (28.7 %) compared to middle-level (15.0 %) and senior-level (0.0 %) positions. In addition, MS Office skills occurred more often in entry-level positions (21.3 %) than in middle-level (6.3 %) and senior-level (9.1 %) positions.

TABLE 17 Tools skills by the job level of the marketing position.

Skill		Entry-level	Middle-level	Senior-level	p-value
Adobe tools	Count	31	12	0	0.003*
	% within Level	28.7 %	15.0 %	0.0 %	
Google tools	Count	13	14	3	0.569
	% within Level	12.0 %	17.5 %	13.6 %	
MS Office	Count	23	5	2	0.011*
	% within Level	21.3 %	6.3 %	9.1 %	
WordPress	Count	13	9	0	0.234
	% within Level	12.0 %	11.3 %	0.0 %	
HubSpot	Count	1	5	1	0.125**
	% within Level	0.9 %	6.3 %	4.6 %	
Canva	Count	4	0	0	0.146**
	% within Level	3.7 %	0.0 %	0.0 %	
Number of job advertisements		108	80	22	

*p-value ≤ 0.05 can be seen as statistically significant (Metsämuuronen, 2011).
**Result is unreliable as over 20 % of the cells have an expected count of less than 5 (Metsämuuronen, 2004).

In Table 18 tools skills are categorized by business sectors of employer companies and in Table 19 by business sizes of employer companies. Both of these categorizations were analysed using Fisher's exact test. The results showed that there were no statistically significant differences in occurrences of tools skills neither between business sectors nor between business sizes.

TABLE 18 Tools skills by the broad business sector of the employer company.

Skill		B2B	B2C	p-value
Adobe tools	Count	20	18	0.192
	% within Sector	18.4 %	26.9 %	
Google tools	Count	17	9	0.828
	% within Sector	15.6 %	13.4 %	
MS Office	Count	19	7	0.275
	% within Sector	17.4 %	10.5 %	
WordPress	Count	16	5	0.230
	% within Sector	14.7 %	7.5 %	
HubSpot	Count	6	1	0.254
	% within Sector	5.5 %	1.5 %	
Canva	Count	2	1	1.000
	% within Sector	1.8 %	1.5 %	
Number of job advertisements		109	67	

TABLE 19 Tools skills by the business size of the employer company.

Skill		SMEs	Large-sized business	p-value
Adobe tools	Count	31	12	0.470
	% within Size	22.1 %	17.1 %	
Google tools	Count	19	11	0.680
	% within Size	13.6 %	15.7 %	
MS Office	Count	21	9	0.835
	% within Size	15.0 %	12.9 %	
WordPress	Count	18	4	0.152
	% within Size	12.9 %	5.7 %	
HubSpot	Count	7	0	0.098
	% within Size	5.0 %	0.0 %	
Canva	Count	4	0	0.304
	% within Size	2.9 %	0.0 %	
Number of job advertisements		140	70	

4.5   Personal attributes demanded by employers

All in all, there were 546 mentions of personal attributes in the sample. Three new attribute categories were formed during the coding process: result-driven, systematic, and reliable. Table 16 summarizes the most frequently mentioned per-

sonal attributes in the sample. The attributes were organized in Table 20 by frequency of occurrence in job advertisements. Creativity (50.0 %), initiative/proactive (48.1 %), and independence (32.4 %) lead the list of most commonly requested personality traits in the entire sample.

TABLE 20 Requested personal attributes in the job advertisements.

Attribute	Count of mentions	Percentage (%) within all job advertisement
Creativity	105	50.0 %
Initiative/Proactive	101	49.1 %
Independence	68	32.4 %
Self-confidence	48	22.9 %
Result-driven	45	21.4 %
Flexibility	45	21.4 %
Stress resilience	37	17.6 %
Detail orientation	35	16.7 %
Systematic	23	11.0 %
Motivation	20	9.5 %
Reliable	19	9.1 %
Total	546	

From Table 21 we can see that many personality traits do not differ between different job levels of marketing positions. According to the Chi-Square test, only result-driven (p-value 0.023) and detail orientation (p-value 0.044) differed statistically significantly between the three job levels. While looking at the percentages it can be observed that result-driven is percentage-wise higher at middle-level jobs (31.3 %) compared to entry-level (14.8 %) and senior-level (18.2 %) jobs. Instead, detail orientation was occurring more often in entry-level job advertisements (21.3 %) than in middle-level (15.0 %) or senior-level (0.0 %) job advertisements.

TABLE 21 Personal attributes by the job level of the marketing position.

Attribute		Entry-level	Middle-level	Senior-level	p-value
Creativity	Count	55	40	10	0.896
	% within Level	50.9 %	50.0 %	45.5 %	
Initiative/Proactive	Count	53	39	9	0.775
	% within Level	49.1 %	48.8 %	40.9 %	
Independence	Count	33	31	4	0.159
	% within Level	30.6 %	38.8 %	18.2 %	
Self-confidence	Count	21	21	21	0.477
	% within Level	19.4 %	26.3 %	27.3 %	
Result-driven	Count	16	25	4	0.023*
	% within Level	14.8 %	31.3 %	18.2 %	
Flexibility	Count	25	14	6	0.504
	% within Level	23.2 %	17.5 %	27.3 %	

TABLE 21 (continued)

Attribute		Entry-level	Middle-level	Senior-level	p-value
Stress resilience	Count	16	14	7	0.162
	% within Level	14.8 %	17.5 %	31.8 %	
Detail orientation	Count	23	12	0	0.044*
	% within Level	21.3 %	15.0 %	0.0 %	
Systematic	Count	14	6	3	0.452
	% within Level	13.0 %	7.5 %	13.6 %	
Motivation	Count	12	7	1	0.605
	% within Level	11.1 %	8.8 %	4.6 %	
Reliable	Count	12	5	2	0.517
	% within Level	11.1 %	6.3 %	9.1 %	
Number of job advertisements		108	80	22	

*p-value ≤ 0.05 can be seen as statistically significant (Metsämuuronen, 2011).

Personal attributes were also analysed by the broad business sector of the employer company (see Table 22) and by the business size of the employer company (see Table 23). Fisher exact test was run to see if either business sectors or business sizes had differences in the occurrences of personal attributes. The results showed that there were no statistically significant differences in personal attributes neither between business sectors nor between business sizes.

TABLE 22 Personal attributes by the broad business sector of the employer company.

Attribute		B2B	B2C	p-value
Creativity	Count	54	36	0.643
	% within Sector	49.5 %	53.7 %	
Initiative/Proactive	Count	51	35	0.536
	% within Sector	46.8 %	52.2 %	
Independence	Count	38	20	0.514
	% within Sector	34.9 %	29.9 %	
Self-confidence	Count	25	15	1.000
	% within Sector	22.9 %	22.4 %	
Result-driven	Count	22	17	0.458
	% within Sector	20.2 %	25.4 %	
Flexibility	Count	29	9	0.058
	% within Sector	26.6 %	13.4 %	
Stress resilience	Count	16	15	0.224
	% within Sector	14.7 %	22.4 %	
Detail orientation	Count	19	13	0.841
	% within Sector	17.4 %	19.4 %	
Systematic	Count	10	10	0.328
	% within Sector	9.2 %	14.9 %	
Motivation	Count	13	6	0.623
	% within Sector	11.9 %	9.0 %	
Reliable	Count	12	5	0.601
	% within Sector	11.0 %	7.5 %	
Number of job advertisements		109	67	

TABLE 23 Personal attributes by the business size of the employer company.

Attribute		SMEs	Large-sized business	p-value
Creativity	Count	70	35	1.000
	% within Size	50.0 %	50.0 %	
Initiative/Proactive	Count	65	36	0.558
	% within Size	46.4 %	51.4 %	
Independence	Count	46	22	0.877
	% within Size	32.9 %	31.4 %	
Self-confidence	Count	30	18	0.491
	% within Size	21.4 %	25.7 %	
Result-driven	Count	28	17	0.481
	% within Size	20.0 %	24.3 %	
Flexibility	Count	27	18	0.290
	% within Size	19.3 %	25.7 %	
Stress resilience	Count	21	16	0.180
	% within Size	15.0 %	22.9 %	
Detail orientation	Count	24	11	0.847
	% within Size	17.1 %	15.7 %	
Systematic	Count	17	6	0.491
	% within Size	12.1 %	8.6 %	
Motivation	Count	12	8	0.619
	% within Size	8.6 %	11.4 %	
Reliable	Count	13	6	1.000
	% within Size	9.3 %	8.6 %	
Number of job advertisements		140	70	

4.6 Curricular priorities of marketing education

In this sub-chapter, the focus is on the second part of the sample: course descriptions and learning outcomes of marketing programmes. Firstly, marketing knowledge areas mentioned in the course descriptions and learning outcomes were analysed. Altogether different marketing knowledge areas were coded 63 times. Observed marketing knowledge areas were based on the previous literature (see Table 2). In addition to the existing knowledge categories, six new categories were formed: CRM and service management, international marketing, social marketing, pricing, entrepreneurial marketing, and sport marketing.

Table 24 summarizes the frequencies of marketing knowledge areas mentioned in bachelor's and master's degree courses included in the sample. The knowledge areas were organized by the frequency of occurrence in the course descriptions. Market research and analysis was the most dominant knowledge area (31.4 %), followed by strategic marketing (15.7 %), customer/consumer behaviour (15.7 %), digital marketing (13.7 %) and marketing communications

(11.8 %). All other knowledge areas appeared in less than 10 % of the course descriptions.

TABLE 24 Marketing knowledge areas mentioned in the course descriptions.

Knowledge	Count of mentions	Percentage (%) within all courses
Market research and analysis	16	31.4 %
Strategic marketing	8	15.7 %
Customer/consumer behaviour	8	15.7 %
Digital marketing	7	13.7 %
Marketing communications	6	11.8 %
Product/brand marketing	5	9.8 %
CRM and service management	3	5.9 %
International marketing	3	5.9 %
B2B marketing	2	3.9 %
Selling and sales management	1	2.0 %
Social marketing	1	2.0 %
Pricing	1	2.0 %
Entrepreneurial marketing	1	2.0 %
Sport marketing	1	2.0 %
Total	63	

Secondly, meta-skills, technical skills (including tools skills), and personal attributes were coded from the course descriptions and learning outcomes. Skills and attributes occurred a total of 109 times in the course descriptions of the sample. Almost all found skills and attributes were based on previous literature and no new categories were formed. There was only one tools skills added to the categories: SPSS skills.

Table 25 summarizes the frequencies of skills and personal attributes mentioned in bachelor's and master's degree courses included in the sample. The most frequently used skills and attributes were analytical skills (54.9 %), problem-solving skills (25.5 %), information-gathering skills (23.5 %), presentation skills (19.6 %), written communication skills (15.7 %) and oral communication skills (13.7 %). The rest of the skills and attributes appeared in less than 10 per cent of the course descriptions.

TABLE 25 Skills and personal attributes mentioned in the course descriptions.

Skill/attribute	Count of mentions	Percentage (%) within all courses
Analytical	28	54.9 %
Problem-solving	13	25.5 %
Information-gathering	12	23.5 %
Presentation	10	19.6 %
Written communication	8	15.7 %
Oral communication	7	13.7 %
Teamwork	4	7.8 %
Strategic thinking	4	7.8 %

TABLE 25 (continued)

Skill/attribute	Count of mentions	Percentage (%) within all courses
Quantitative	4	7.8 %
Creativity	3	5.9 %
Photo- and videography	3	5.9 %
Independence	2	3.9 %
Website/eCommerce	2	3.9 %
SPSS	1	2.0 %
Adobe tools	1	2.0 %
Canva	1	2.0 %
SEO/SEM	1	2.0 %
Web analytics	1	2.0 %
Initiative/Proactive	1	2.0 %
Flexibility	1	2.0 %
Reliable	1	2.0 %
Project and time management	1	2.0 %
Total	109	

4.7 Comparison of marketing education and marketing practice

To conclude the results, the occurrences of knowledge, skills and personal attributes in the job advertisements were compared to the occurrences of knowledge, skills and personal attributes in the course descriptions. As the list of all knowledge, skills and attributes would be long, only the ones that are mentioned in over 10 % of the job advertisements or the course descriptions are gathered in Table 26 and Table 27. It is good to note that the sample included 51 course descriptions and 210 job advertisements hence the comparison of the frequencies is not fully reliable. However, positive gap scores indicate that knowledge, skills or attribute is used more often by employers, while negative gap scores indicate that knowledge, skills or attribute is used more often by educators.

Table 26 shows knowledge, skills and personal attributes that were emphasized more by employers than educators. To look at the widest gaps in Table 26, written communication skills (gap 77.2), teamwork skills (gap 75.5) and oral communication skills (gap 71.1) were used much more often in job advertisements than in course descriptions. Also, digital marketing knowledge (gap 49.2), project and time management skills (47.1), initiative/proactive (gap 47.1) and creativity (gap 44.1) were emphasized more in job advertisements. All in all, employers emphasised many knowledge areas, skills and attributes that were not mentioned even once in the sample's course descriptions or learning outcomes. This led to wide gaps between practice and education.

TABLE 26 Knowledge, skills and attributes emphasized in marketing jobs.

Knowledge, skills or attribute	Job advertisements mentions (%)	Course description mentions (%)	Gap
Written communication	92.9 %	15.7 %	77.2
Teamwork	83.3 %	7.8 %	75.5
Oral communication	84.8 %	13.7 %	71.1
Digital marketing	62.9 %	13.7 %	49.2
Project and time management	49.1 %	2.0 %	47.1
Initiative/Proactive	49.1 %	2.0 %	47.1
Creativity	50.0 %	5.9 %	44.1
Social media	37.1 %	0.0 %	37.1
Continuous learning	33.8 %	0.0 %	33.8
Networking	31.9 %	0.0 %	31.9
Strategic thinking	39.1 %	7.8 %	31.3
Independence	32.4 %	3.9 %	28.5
Self-confidence	22.9 %	0.0 %	22.9
Result-driven	21.4 %	0.0 %	21.4
Flexibility	21.4 %	2.0 %	19.4
Adobe tools	20.5 %	2.0 %	18.5
Stress resilience	17.6 %	0.0 %	17.6
Detail orientation	16.7 %	0.0 %	16.7
Website/eCommerce	20.0 %	3.9 %	16.1
Google tools	14.3 %	0.0 %	14.3
MS Office	14.3 %	0.0 %	14.3
Marketing automation	13.8 %	0.0 %	13.8
Editing content and graphic design	13.8 %	0.0 %	13.8
Leadership	13.3 %	0.0 %	13.3
SEO/SEM	15.2 %	2.0 %	13.2
Marketing communications	23.8 %	11.8 %	12.0
Systematic	11.0 %	0.0 %	11.0
WordPress	10.5 %	0.0 %	10.5
Web analytics	11.4 %	2.0 %	9.4
Product/brand marketing	16.2 %	9.8 %	6.4
Photo- and videography	11.4 %	5.9 %	5.5

Table 27 shows knowledge areas, skills and personal attributes that were emphasized more by educators than employers. The course descriptions and learning outcomes were mentioning the knowledge of market research and analysis (gap -24.7), information-gathering skills (gap -20.6), analytical skills (gap -14.4) and presentation skills (gap -12.0) more often than job advertisements. In addition, customer/consumer behaviour knowledge (gap -8.6), strategic marketing knowledge (gap -3.8) and problem-solving skills (gap -2.6) were emphasized slightly more in the course descriptions than in the job advertisements. Besides that, there could not be found any knowledge areas, skills or personal attributes used more in course descriptions compared to job advertisements.

TABLE 27 Knowledge, skills and attributes emphasized in marketing education.

Knowledge, skills or attribute	Job advertisements mentions (%)	Course description mentions (%)	Gap
Market research and analysis	6.7 %	31.4 %	-24.7
Information-gathering	2.9 %	23.5 %	-20.6
Analytical	40.5 %	54.9 %	-14.4
Presentation	7.6 %	19.6 %	-12.0
Customer/consumer behaviour	7.1 %	15.7 %	-8.6
Strategic marketing	11.9 %	15.7 %	-3.8
Problem-solving	22.9 %	25.5 %	-2.6

5   DISCUSSION AND CONCLUSIONS

In this chapter, the findings of the study are discussed and conclusions are made. Results are compared to previous literature and theoretical contributions are formed. Then implications for marketing educators are presented and recommendations based on the results are proposed. Lastly, the evaluation of the study is made and future research suggestions are introduced.

5.1   Discussion on findings

This study describes the 2020s marketing professionals by identifying the competencies they need in marketing jobs. In addition, the study examines whether these competencies differ by job level, business sector or business size. To see if there are gaps between marketing education and practice the study compares knowledge areas, skills and personal attributes demanded by employers (measured through the job advertisement content analysis) with knowledge areas, skills and personal attributes prioritized by university educators (measured through the course content analysis).

5.1.1 The 2020s marketing professional

Generally, it seems that marketing practitioners can have a wide variety of educational backgrounds or even be self-taught. This discovery has also been noted before (e.g., McArthur et al., 2017; Wellman, 2010). It seems that employers rarely specify that an applicant should have a marketing degree which is not a positive observation from the point of marketing education. Additionally, consistent with previous research (e.g., McArthur et al., 2017; Schlee & Karns, 2017; Wellman, 2010) previous work experience seems to be highly valued and even marketing graduates should have previous work experience. This indicates that a mere marketing degree is not usually enough but is often required in addition to relevant work experience.

The findings of the study indicate that marketing professionals need to have some marketing knowledge. However, different marketing knowledge areas were not mentioned in the job advertisements as often as different skills or personal attributes, indicating that marketing knowledge might not be the most significant factor when choosing employees. The most often mentioned marketing area was digital marketing, which has been emphasized by many before (e.g., di Gregorio et al., 2019; Kurtzke & Setkute, 2021; McArthur et al., 2017). Still, it was surprising that in this study almost two-thirds of the job advertisements mentioned digital marketing knowledge in some way. For instance, in the study by McArthur et al. (2017) digital marketing was the most frequently mentioned marketing knowledge domain but only 31.2 per cent of the job postings included it. Thus, the percentage has doubled in the current study. The explanation for the

increase might be that there are six years between the times when studied job advertisements were collected and during these years digital marketing knowledge has become more sought-after. Another interesting observation about marketing knowledge areas is that the knowledge of sales, customer/consumer behaviour and market research have been emphasized in previous studies (e.g., di Gregorio et al., 2019; Harrigan & Hulbert, 2011; Schlee & Harich, 2010) but in the current study, these knowledge areas do not seem to be that important to employers. This might indicate that marketing has become more operational than before and strategic parts of marketing knowledge are not emphasized anymore.

Previous research has been emphasizing the role of meta-skills for marketing professionals (di Gregorio et al., 2019; Finch et al., 2013; Schlee & Harich, 2010). Similarly in this study meta-skills were occurring in job advertisements much more often than marketing knowledge areas, technical skills, tools skills or personal attributes implying that meta-skills are very important to marketing professionals. Meta-skills found in this study are very similar to meta-skills found in previous studies and any new meta-skill categories were not added to existing ones. As mentioned in the literature review almost every previous study has concluded that oral and written communication skills are essential to marketing professionals. This study supports that and it seems that a marketer cannot get almost any job without good skills in written and oral communication. In addition, the results of the study show that some meta-skills are not that important to employers: presentation skills, information-gathering skills and quantitative skills were used in less than 10 per cent of the job advertisements. These results are similar to the findings of McArthur et al. (2017). The observation is interesting since these skills are typically emphasized in marketing education.

In addition, technical skills and tools skills have been stated to be essential to marketing professionals (Kurtzke & Setkute, 2021; McArthur et al., 2017; Schlee & Harich, 2010) Previous studies have also stated that required technical skills are changing rapidly (Daellenbach, 2018; Schlee & Harich, 2010). This can be identified in this study as many technical skills and tools skills categories were not based on previous literature but formed on the basis of the sample. In other words, skills, such as website and eCommerce skills, marketing automation skills, and Google tools skills, have become important to marketing professionals quite recently. All in all, technical skills related to digital marketing seem to be the most important technical skills for today's marketers and more traditional technical skills, such as statistical software skills, are not needed that often anymore.

Besides marketing knowledge and skills, studies have shown that personal attributes contribute to the employability of marketing graduates (Finch et al., 2013; Schlee & Karns, 2017). After meta-skills, personal attributes were used second most often in the job advertisements of the sample. This supports the findings of McArthur et al. (2017): personal attributes have a great impact on the employment of marketing professionals. In this study creativity, initiative/proactive and independence were the most frequently required personal attributes. Interestingly motivation and detail orientation were emphasized in previous studies (e.g., di Gregorio et al., 2019; McArthur et al., 2017; Schlee & Karns, 2017), but did not occur often in the sample of this study. It is unclear why motivation is

not mentioned often in the job advertisements of this study since, for instance, the annual National Recruitment survey conducted by Duunitori (2022) states that a job applicant's motivation towards the job is the most important factor influencing the hiring decision. One explanation might be that motivation is taken for granted and therefore it is not specifically mentioned in job advertisements. Instead, detail orientation can be explained while analysing personal attributes by job level: detail orientation is required more often in entry-level jobs than in middle-level or senior-level jobs. Many previous studies have studied only personal attributes that are required for marketing graduates and excluded middle- and senior-level marketing positions from the study, which might have resulted in a higher emphasis on detail orientation in previous studies compared to this study.

Marketing professionals can work in many different organisations. This study analysed if marketing knowledge areas, skills and personal attributes requested from marketing professionals differ by job level, business sector or business size of the employer company. The findings of the study indicate that the job level of the marketing position has a significant impact on the requirements of the marketing professional. Firstly, the job level significantly affected four out of eight marketing knowledge areas. According to the findings of the study, these knowledge areas occurred more often at middle-level and senior-level jobs than at entry-level jobs. As with earlier studies, this study's findings support the proposition that marketing knowledge will be more important for marketers as they advance in their careers than in the first few years of employment (Davis et al., 2002; Schlee & Harich, 2010). However, based on this study operational marketing knowledge areas, such as digital marketing knowledge and marketing communications knowledge, are required for entry-level positions as well. Secondly, the marketing position's job level significantly affected four meta-skills: analytical skills, strategic thinking skills, networking skills and leadership skills. All these meta-skills were required more in middle-level and senior-level positions than in entry-level positions. A study by Gray et al. (2007) had partially similar findings: to progress in their careers graduates need to develop strategic thinking and leadership and management skills. In addition, interpersonal skills, which can be assumed to include networking skills, were emphasized in marketing managers' jobs. However analytical skills were not important to managers according to their study. Instead, a study by Schlee and Harich (2010) showed that statistics and quantitative analysis skills were more frequently used in job advertisements at the middle- and senior-level than at entry-level, yet there was no statistically significant difference between job levels. Hence it seems that there is some contradiction in the result of different studies and more research will be needed to see if requirements of analytical skills truly differ significantly by job level. Thirdly, five technical and tools skills differed statistically significantly by job level. Social media skills, photography and videography skills, Adobe tools skills and MS Office skills were more often requested from entry-level marketers than from middle-level or senior-level marketers, hence these skills seem to be valued at an early stage of a marketing career. Interestingly marketing automation skills differed also significantly but it was used most often in middle-level

job advertisements indicating that marketing automation skills become more important after the first years of a marketing career. Lastly, two personal attributes, result-driven and detail orientation, differed significantly between job levels. Detail orientation was required more often in entry-level marketing positions than at higher levels. This might result from the idea that entry-level positions are more operational and middle- and senior-level positions more strategic. Operational work tasks may need more attention to detail while strategic work tasks focus more on the bigger picture. In turn, result-driven was emphasized more in middle-level positions than in entry-level or senior-level positions. This might indicate that especially marketers in manager positions are expected to drive results and achieve the set goals.

In addition, the business sector of the employer company has some impact on the requirements of the marketing professional. Especially required marketing knowledge areas differed significantly between B2B and B2C employer companies. Both product and brand marketing knowledge and customer/consumer behaviour knowledge were found more often as a requirement in B2C companies than in B2B companies. The explanation could be that B2B marketing is seen as more rational than B2C and therefore customer behaviour is not that important. In addition, B2B marketing has moved on to an increasing extent from a good-dominant to a service-dominant logic (e.g., Keränen & Jalkala, 2013; Tuli et al., 2007; Ulaga & Reinartz, 2008). This might explain why product and brand marketing are not required as often in B2B companies as in B2C companies. Additionally, photography and videography skills differed statistically significantly by business sector: it was requested more often in marketing jobs of B2C companies than B2B companies. However, editing content and graphic design skills were percentage-wise occurring more often in B2B companies than in B2C companies which may indicate that there are no big differences between business sectors but content creation and content marketing skills are just expressed with different emphases.

Lastly, the results of the study indicate that the business size of the employer company does not impact much on the requirements of marketing professionals. Only CRM and database skills differed statistically significantly by business size as these skills were needed more in large-sized companies compared to SMEs. This is not surprising as larger companies usually have more customers and therefore CRM systems are more important and beneficial for them. Otherwise required marketing knowledge, meta-skills, technical skills and tools, and personal attributes seem to be similar in companies of all sizes.

5.1.2 The gaps between marketing education and practice

To answer the third research question (*Has the marketing curriculum evolved to reflect current marketing practice needs*) the course descriptions and learning outcomes of the University of Jyväskylä's marketing programmes were analysed. It seems that marketing education at the University of Jyväskylä focuses on marketing knowledge areas and meta-skills since technical and tools skills and personal attributes were not often mentioned in the course descriptions or learning

outcomes of the sample. Therefore, the results show many gaps in technical and tools skills and personal attributes. This is not surprising as previous literature has stated there is a gap between marketing education and marketing practice while considering digital and technological skills (Davis et al., 2002; Harrigan & Hulbert, 2011; Schlee & Harich, 2010). Additionally, personal attributes have not been typically taught at university (McArthur et al., 2017).

According to the study findings, there are also gaps between marketing education and practice while considering marketing knowledge areas. The results indicate that digital marketing knowledge is more valued by employers than educators. Instead, the knowledge of market research and analysis is more emphasized by educators than employers. According to previous studies market research has been the most common marketing subject taught in marketing programmes for a long time (Finch et al., 2018; Küster & Vila, 2006). In addition, strategic marketing and customer/consumer behaviour have been core marketing knowledge areas in marketing education of the 21st century. These results indicate that marketing knowledge areas taught in universities are quite stable and it takes time for new knowledge areas to be included in marketing courses.

In addition, while observing meta-skills several gaps could be found. Overall employers seem to emphasize meta-skills much more than educators. However, Finch et al. (2018, p. 30) point out that educators may intentionally exclude meta-skills from course descriptions "as it provides an educator maximum flexibility for course delivery approaches and recognizes the importance of academic freedom in the classroom". This may have affected the results of this study, but still, some conclusions can be made. For instance, employers value written communication, oral communication, teamwork, project and time management, strategic thinking, continuous learning and networking skills more than educators. Previous studies have also noted that marketing graduates are underprepared in written and oral communication (Davis et al., 2002; Finch et al., 2013). Also, time management and teamwork skills have not been prioritized enough in marketing education (Finch et al., 2013). Instead, educators tend to prioritize more analytical, information-gathering and presentation skills. These findings also support the findings from previous studies: both Rhew et al. (2019) and Brink and Costigan (2015) noticed that business schools prioritize presentation skills much more than workplaces. In addition, Rhew et al. (2019) found that business programs value critical and analytical skills more than employers. This indicates that many universities have the same problems with overvaluing some meta-skills and undervaluing others.

5.2 Theoretical contributions

The study findings offer theoretical knowledge on the differences between marketing education and marketing practice by analysing marketing course descriptions and job advertisements. Supporting previous literature, the findings of this

study suggest that meta-skills and technical skills are not emphasized in marketing programmes even though employers are seeking marketers equipped with these skills. According to this study's findings, the learning outcomes of marketing courses focus on marketing knowledge than skills, which can lead to situations where meta-skills and technical skills are not developed efficiently. Thus, the findings of this study offer one explanation for the noticed gaps between marketing education and practice by identifying the misalignment between the competencies needed in the workplace compared to the competencies prioritized in marketing programmes. At least it is highly possible that this noticed mismatch between prioritises of marketing educators and employers of marketers will not help to narrow the gap between marketing education and practice and therefore it should not be ignored.

In addition, the study findings support previous literature proposing that meta-skills and personal attributes are highly requested from 21st-century marketing professionals. However, this study's findings also emphasize that knowledge and skills related to digital marketing have become more important in recent years indicating that in the 2020s there are not many marketing jobs where you do not need to work with digital marketing channels and technologies.

This study also showed that the marketing position's job level has an impact on marketing knowledge, skills and personal attributes requested from marketing professionals supporting the findings of earlier studies. Marketing professionals working in entry-level positions need more knowledge and skills that are important in operational tasks whereas marketing professionals working in middle- and senior-level positions are expected to have more strategic knowledge and skills.

Additionally, the study findings offered new insight into the effects of the business sector and business size of the employer company on the requirements of marketing professionals. It seems that business size does not have an impact on the competencies required for marketers. The business sector of the employer company has some effect on the requirements of marketing professionals, but mostly the differences between B2B and B2C companies are not significant. This indicates that companies of different sizes operating in different business sectors are looking for very similar marketing professionals.

5.3 Implications for marketing educators

This study offers several implications for marketing educators of Finnish universities. The findings of the study indicate that there are gaps between marketing education and marketing practice. It seems that the priorities of marketing education are partly different to the priorities of marketing practice. This is alarming as it might negatively dilute the perceived value of university education in marketing and make competing alternatives appear more attractive if nothing is done to reduce the gaps.

How marketing education should then be adjusted to reflect more marketing practice? According to the findings of this study digital marketing knowledge is highly valued by employers. Therefore, marketing educators should make sure that digital marketing is infused throughout the marketing programme. As Wymbs (2011, p.100) states "Digital marketing is not traditional marketing on steroids, nor is it just a faster or newer channel but rather a new approach to marketing, that is, the digital revolution has fundamentally changed marketing at the core." Since marketing has changed at the core it is not enough just offer a few courses focusing on digital marketing. In turn, it must be considered that every course of the marketing programme includes and deepens the knowledge of digital marketing.

Another implication is to consider if the knowledge of marketing research and analysis should be given that much emphasis in marketing programmes. After all findings of the study conclude that employers do not often request marketing research and analysis knowledge from marketing professionals. In addition, if marketing research and analysis skills are required for today's marketers, usually it means that marketer needs to analyse and interpret existing data, not produce research, and analyse the data found from it. This means that marketing educators should at least make sure that the knowledge of marketing research and analysis taught in the universities is focusing on modern ways of marketing research more than traditional ones.

This and many previous studies have highlighted the importance of meta-skills and personal attributes for marketers. Employers are valuing specific meta-skills and personal attributes more than conceptual marketing knowledge. For this reason, marketing educators should not focus merely on teaching marketing knowledge but also meta-skills. The findings of this study suggest that marketing educators should include specially written communication, oral communication, and teamwork skills development in marketing courses and learning outcomes. Of course, it is common to have course assignments where you need to write an essay or work in teams with other students, but is this enough or should educators teach how to effectively write, speak and collaborate, and give feedback on these skills to ensure that skills are truly developed during marketing programmes? This study does not answer to this question but still marketing educators should give thought to this and add meta-skills in learning outcomes of marketing courses to articulate students that these skills should be intentionally developed. In addition, project and time management, strategic thinking, continuous learning and networking skills could have more emphasis on marketing education. Instead, presentation skills and information-gathering skills should not be overemphasized as employers do not value these meta-skills much. As some aspects of personal attributes can be taught, marketing education should also include courses that develop personal attributes that employers are valuing the most: creativity, initiative/proactive and independence.

Furthermore, this study recommends that technical skills should be part of marketing education since they improve marketers' employability. Employers want to hire marketers that can use social media, build websites, edit content

with Adobe tools and analyse website traffic with Google tools and so on. Therefore, marketing educators should include at least some technical and tools skills in their courses to add value. Educators should not worry too much that technical skills and marketing tools are changing rapidly, but just remember to update used technologies and technical skills frequently if needed.

This study did not examine how marketing knowledge, meta-skills and technical skills should be taught. Luckily previous studies have given many recommendations on how to close the gap between education and practice (e.g., Cowley et al., 2021; Humphrey et al., 2021; Rohm et al., 2019, 2021; Staton, 2016). For instance, case studies, project-based learning, client projects and third-party certifications can be used to include requested meta-skills and technical skills in marketing education. In addition, internships can be added to marketing programmes as employers highly value previous work experience.

Lastly, it is recommended that marketing educators collaborate with marketing practitioners while planning and teaching marketing courses. After all, it cannot be expected that educators know all the latest trends in the marketing field and have practical experience in everything. However, by collaborating with industry experts marketing education can enhance the employability of future marketing professionals, which is eventually the goal that should be the priority of all main stakeholders: employers, educators, and students.

5.4   Evaluation of the study

This study's reliability and validity need to be specified to evaluate the study. The purpose of validity is to describe whether the study measures exactly what is intended to measure (Neuendorf, 2017). Instead, reliability means the extent to which the same results could be gotten on a repeated trial and with the same measurements (Metsämuuronen, 2011).

The reliability of the study might have decreased as the coding of the data was done by only one person. According to Neuendorf (2017), intercoder reliability is used often when coding is done by humans. Intercoder reliability means the agreement on measured variables among two or more coders. In this study, intercoder reliability was not tested; therefore, it cannot be assumed that someone else would code the sample similarly. However, to make coding more reliable previous literature was thoroughly examined. Few studies (e.g., McArthur et al., 2017; Schlee & Karns, 2017) have used content analysis of job advertisements as their method and the authors have listed examples of coding categories and variables in the research papers. These examples were used as a foundation of the coding process of this study to ensure that coding was done as closely as possible to previous studies. In addition, the coding of the sample was done by the author three times to reduce the risk of coding errors.

The study's validity can be divided into internal and external (Neuendorf, 2017). For instance, internal validity can be evaluated by assessing whether the chosen concepts are correct or whether measures have been made correctly

(Metsämuuronen, 2011). As said earlier the coding of the data was based on the categories found in at least two of the previous studies. Therefore, it can be assumed that the concepts and measurements are correct. In turn, external validity refers to generalizability in other words can the results be extrapolated to other settings, times, groups and so on (Neuendorf, 2017). In this study, there are many limitations in external validity. Firstly, the sample of 210 job advertisements is relatively small to make generalised conclusions. Secondly, job advertisements were gathered from one Finnish employment site and only the keyword "marketing" was used for search criteria. This means that the study's findings cannot be generalized to countries other than Finland or even to all marketing jobs in Finland. Students who have graduated from the marketing department can work for instance in sales positions, which were excluded from the sample. Also, this study did not consider a seasonal variance in job advertisements. The data was gathered in January and February, which may have led to the situation where the sample includes more entry-level positions than normal as many companies are recruiting summer employees during this time of the year. There are also limitations in the second part of the sample. Analysed course descriptions and learning outcomes were gathered only from one university, the University of Jyväskylä. This means that the findings of the study cannot be generalised to consider all universities and marketing programmes in Finland.

Lastly, it should be mentioned that this study is based on some assumptions. For instance, the characteristics mentioned in the job advertisements do not necessarily tell all about the qualifications of the applicants who were eventually hired for the positions. If there were many applicants for the position the hired one might have possessed more skills and knowledge than was required and vice versa if there were only a few applicants the hired one might not have possessed all skills and knowledge listed in the job advertisement. Similarly, course descriptions and learning outcomes give limited information about what knowledge, skills and attributes students truly are learning in the courses.

5.5 Suggestions for future research

Several previous studies have studied marketing professionals' knowledge, skills, and personal attributes. However, many of them have been focusing on marketing graduates and have not analysed the impact of the business sector or business size on required knowledge and skills. This study expanded the understanding of marketers' essential skills and knowledge by including these parts in the study. Still, there is a need for future research as the findings of this study are not generalized to a greater extent. The sample included only one Finnish university; thus, it would be reasonable to conduct a similar study that included other Finnish universities teaching marketing in the sample. In addition, future research could have a wider sample of job advertisements to get more reliable results.

Furthermore, marketing and the work environment are continually evolving; therefore, more research is needed to see how knowledge, skills and personal

attributes might shift over time. The same study could be done for instance after five years to observe possible differences in the findings. Additionally, this study focused on marketing jobs and marketing programmes. Future work could examine other business disciplines, such as accounting, management, and economics to see if there are gaps between education and practice in these areas. In addition, it would be interesting to compare if employers emphasize the same meta-skills and personal attributes when hiring accounting professionals as when hiring marketing professionals.

Lastly, this study used content analysis of job advertisements and course descriptions as a research technique. With this technique, objective results can be obtained but the results are not necessarily very profound. Both job advertisements and course descriptions are relatively short texts and that limits the findings. Therefore, the gaps between marketing education and practice, and essential knowledge, skills and personal attributes of Finnish marketing professionals could be further studied by interviewing Finnish marketing educators and industry experts.

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APPENDIXES

Appendix 1 Summary of the previous studies

Author (year)	Research goal	Method and data	Study findings
Davis et al. (2002)	Identify key skill and knowledge areas required for marketing jobs	Survey for 298 current and previous marketing students in US	Skills are more valued in entry-level jobs; knowledge might be more important later in a career. Marketing alumni perceive that they are underprepared in technical skills, written and oral communication skills, but over-prepared in designated knowledge areas.
Taylor (2003)	Present a course developed to help marketing undergraduates to have tools to get started and succeed in a marketing career.	An informal survey of the major requirements at nine peer institutions, focus group of ten local (Florida) marketing professionals.	The most important skills employers expect from graduates are written and oral communication skills, presentation skills, and analytical skills. Personal traits required are initiative, creativity, and flexibility among others.
Bruce & Schoenfeld (2006)	Investigate the skills and abilities that MBA marketing students and employers regard as important	Three international surveys for 5,829 MBA students, 5,601 alumina, and 1,691 employers	Marketing recruiters found the ability to think strategically and analytically, and oral communication skills as the most relevant for graduates. Alumni report greatest usage of interpersonal skills, and oral and written communication skills in their job. Instead, MBA graduates have improved most their ability to think strategically, ability to make decision with imperfect information and project management skills during their studies.

Appendix 1 (continued)

Author (year)	Research goal	Method and data	Study findings
Gray et al. (2007)	Examine the knowledge and skills that marketers need to improve management and firm performance	Survey for 141 marketing managers, 52 academics and 107 senior students in New Zealand	The essential skills are willingness to learn, problem-solving, written and oral communication, and teamwork. To career progress, graduates need to develop strategic thinking, leadership, and management skills and must have knowledge of strategic planning, product and brand management, communication and promotion, and consumer behaviour.
Walker et al. (2009)	Examine the essential skills and knowledge needed foe succeeding in marketing profession	In-depth interviews with 14 graduates and 14 employers in Australia	The most frequently identified marketing skills and knowledge areas are communications skills, sales knowledge, and marketing analytical skills. Graduates are lacking mostly skills that are peripheral. After entry-level stage, marketers are required to demonstrate application of their theoretical knowledge.
Schlee & Harich (2010)	Examine the skills and conceptual knowledge required for marketing jobs	Content analysis of 500 marketing job posts in US	Recent graduates rely more on skills than marketing knowledge. The essential skills required from graduates are oral and written communication, teamwork, and technical skills.
Wellman (2010)	Identify the employability attributes required from marketing graduates	Content analysis of 250 entry-level and early career marketing job post in UK	52 attributes, within 16 clusters, were discovered. Commonly required attributes include communications, planning, ICT-skills, teamwork, and data analysis. In addition, personal traits, such as creativity, attention to detail and initiative are important to employers.

(continued)

Appendix 1 (continued)

Author (year)	Research goal	Method and data	Study findings
Harrigan & Hulbert (2011)	Identify what marketing concepts and skills need to be taught to meet practitioners' needs	In-depth interviews of 70 senior marketing practitioners in UK	Presented "New Marketing DNA" includes customer-led marketing, value-driven strategic marketing, channels, data-driven marketing, and online and offline integrated marketing. Especially technology-related skills are much required by employers.
Finch et al. (2013)	Find out how to improve marketing education	Survey for 253 marketing practitioners in Canada	Meta-skills, such as problem-solving, written communication and prioritizing, should be priority in marketing education development. In addition, top priority in marketing education should be knowledge of evidenced-based marketing and strategic marketing.
Royle & Laing (2014)	Identify any digital marketing skills gap in communication industries	In-depth interviews of 20 communication industry professionals and focus group of 6 Public Relations Industry Advisory Group (PRIAG) members and 7 university marketing staff, Scotland	The key digital marketing skills gaps are difficulty to find employees with the strategic business knowledge, a lack of technical skills, the challenge of measurement, and a lack of intelligent futureproofing.
Schlee & Karns (2017)	Examine the knowledge, skills and personal attributes required for entry-level marketing job	Content analysis of 210 entry-level marketing job posts in US	Analytical skills have positive relationship with wages. The most frequently requested technical skills are Excel, other software, and project management skills. The general skills that are frequently requested are oral and written communication, and teamwork. The knowledge most often required are selling, internet marketing and promotion.

Appendix 1 (continued)

Author (year)	Research goal	Method and data	Study findings
McArthur et al. (2017)	Identify skills and attributes demanded from marketing graduates	Content analysis of 359 entry-level marketing jobs in Australia	The most frequently demanded generic skills are oral and written communication, and general IT skills, such as Microsoft Office. The most often mentioned personal attributes are motivation, time management and attention to detail. The most sought-after occupational knowledge is digital marketing.
di Gregorio et al. (2019)	Discover the knowledge, capabilities and skills that marketing graduates are required to succeed in digital domain	Content analysis of 359 online and 417 offline job advertisements in Italy, survey for 1562 marketing practitioners in Italy, 125 marketing practitioners in France, 125 marketing practitioners in Spain, 125 marketing practitioners in Germany, 125 marketing practitioners in UK	The identified employability skill categories are basic soft skills (initiative, teamwork etc.), digital and technical skills (knowledge of social media, mobile application etc.), core marketing skills (planning and time management, content creation etc.), analytical skills (data-driven, critical thinking etc.), and customer insight skills (knowledge of customer touchpoints and journey, CRM, and relational skills etc.)
Kurtzke & Setkute (2021)	Examine the analytical knowledge and skills required for marketing graduates	Semi-systematic literature review	The results show that marketing graduates need knowledge of marketing communications, measurement and evaluation, and digital technologies. The most required technical skills are data analysis, SEO and SEM, CRM and database skills. The most required soft skills are communication and presentation, interpersonal skills, and problem-solving.

Appendix 1 (continued)

Author (year)	Research goal	Method and data	Study findings
Elhajjar (2022)	Identify the current responsibilities, skills and knowledge required of digital marketing professionals	Content analysis of 320 international job descriptions	The most frequently required skills and knowledge are communication skills, technical skills, analytical skills, data and analytics, and creativity. Flexibility, passion and proactivity are most required personal characteristics.

Appendix 2 List of the courses included in the sample

Bachelor-level courses	Compulsory (C) / Optional (O)
Introduction to Management and Leadership	C
Introduction to Marketing	C
Introduction to Accounting	C
Introduction to Entrepreneurship	C
Introduction to Corporate Communication	C
Basic Business Studies in Practice	C
Consumer Behavior	C
Managing Customer Relationships and Services	C
Bachelor level research tutorial and bachelor's thesis	C
Maturity Test	C
Marketing Management	O
International Marketing	O
Productisation and Selling	O
Social Marketing	O
Society, Business and Sport	O
Digital Marketing	O
Creating and Editing Marketing Videos	O
Creating and Editing Photos Using Photoshop	O
Creating and Editing Social Media Content Using Graphic Design Platform Canva	O
Academic Literacies	C
Multilingual Interaction	C
Research Communication	C
Basics of Economics	C
Introduction to Civil and Property Law	C
Introduction to Responsible Business	C
Orientation to University Studies	C
Methods of Data Collection	C
Using Spreadsheet and Database Programs	C
Quantitative Methods and SPSS	C
Method Studies	C
Brush up your Mathematics	C
Mathematics for Business and Economics 1	C
Master-level courses	
Advanced Course in Consumer Behavior	C

Appendix 2 (continued)

Bachelor-level courses	Compulsory (C)/ Optional (O)
Master level research tutorial	C
Master's thesis	C
Qualitative research methods in marketing and corporate communication	C
Quantitative research methods in marketing and corporate communication	C
Relationships and Networks	C
Brand Management	O
Pricing Management	O
Strategic Marketing in Retail	O
Sustainable Consumption and Marketing	O
Innovative Marketing	O
Digital Technologies and User Behaviour	O
Introduction to Digital Marketing	O
Digital Interaction	O
Sport Marketing	O
Digital Marketing Communication	O
Digital Marketing in Action	O
Managing Customer Relationships	O
Professional Reporting	C

Appendix 3 Coding category examples

Main category	Subcategory	Example quotes and terms from the sample
Marketing knowledge	Digital marketing	*Solid understanding of digital marketing, including social media targeting, web analytics and Google optimization; Knowledge of different social media channels, understanding of websites and SEO*
	Marketing communications	*Strong knowledge of marketing communications; Knowledge of advertising and different platforms*
	Product/brand marketing	*You have a strong brand understanding; Proven track record in building new product concepts based on market, category, and consumer insights*
	Strategic marketing	*Broad and hands-on experience working with strategic marketing in different channels; Strategic understanding of building campaigns*

Appendix 3 (continued)

Main category	Subcategory	Example quotes and terms from the sample
	B2B marketing	*Experience in B2B marketing; Excellent understanding of B2B marketing*
	Selling and sales management	*An understanding of sales processes is a plus; Understanding and experience of B2B sales*
	Customer/consumer behaviour	*You understand what consumers want; You actively follow consumer trends*
	Market research and analysis	*You enjoy using data and research to find actionable insights leading to business opportunities; Knowledge of quantitative research is an advantage*
Meta-skills	Written communication	*Fluent in producing text content; Exceptional writing skills in English*
	Oral communication	*Excellent oral communication skills; Good communication skills both in writing and orally*
	Teamwork	*Collaborative; Great team player*
	Project and time management	*Well-organized; Ability to prioritize*
	Analytical	*Data-driven decision-making; Enjoy analysing data*
	Strategic thinking	*Able to plan, develop and implement strategic marketing activities; A strategic head*
	Continuous learning	*Want to develop your skills constantly; Eager to learn new things*
	Networking	*Ability to build and maintain customer relationships; Experience in building partnerships*
	Problem-solving	*Solution-oriented mindset; Not afraid of tackling problems*
	Leadership	*Leading the team by example; Ability to lead teamwork in multicultural environments*

Appendix 3 (continued)

Main category	Subcategory	Example quotes and terms from the sample
	Presentation	*Motivated to act as spokesperson in events; You are confident in communicating in front of an audience*
	Information-gathering	*Ability to collect research material; Management and acquisition of market information*
	Quantitative	*Have sense of figures; Calculation skills*
Technical-skills	Social media	*Knows how to advertise in social media; Social media campaigns execution*
	Website/eCommerce	*An eye for good web design and basic understanding of HTML and CSS; Experience in maintaining websites/webstores*
	SEO/SEM	*Strong knowledge of SEM and its tools; Advanced knowledge of SEO practices, analytics and tools*
	Marketing automation	*Pardot or other enterprise-scale marketing automation platform skills; Experience using a marketing automation software*
	Editing content and graphic design	*Good graphic design skills; Page layout software skills*
	Photo- and videography	*Basic hands-on skills with video production; Producing image and video material*
	Web analytics	*Basic level experience in a web analytics platform; Knowledge of marketing data analytics, such as monitoring web analytics dashboards and key reporting tools*
	CRM and database	*Salesforce or other CRM platform skills; Able to maintain CRM system*
Tools skills	Adobe tools	*Experience with video and image editing in Adobe tools (Premiere Pro, Photoshop); Professional skills for Adobe CC*

Appendix 3 (continued)

Main category	Subcategory	Example quotes and terms from the sample
	Google tools	*Data visualization with Google Data Studio or other; Good knowledge of Google Analytics and Google Ads*
	MS Office	*Good MS Office -skills; Excellent knowledge of MS Office (Word, Excel, PowerPoint*
	WordPress	*Experience in using WordPress*
	HubSpot	*Familiarity with HubSpot inbound marketing methodology and tools; you should have HubSpot experience at least 2 years*
	Canva	*Experience in creating marketing material with Canva; experience of video editing on Canva*
Personal attributes	Creativity	*Thinking outside the box; Visual eye*
	Initiative/Proactive	*Self-starter, Proactive mindset*
	Independence	*Self-guided; able to work independently*
	Self-confidence	*Can-do attitude; Brave*
	Result-driven	*Competitiveness; Goal-directed*
	Flexibility	*Adaptability; Knows how to work in different teams*
	Stress resilience	*Capability to thrive under pressure; Enjoy working in fast-paced environment*
	Detail orientation	*Diligent; Accuracy*
	Systematic	*Well-organized; Structured*
	Motivation	*Willingness to learn and grow in the role; Positive attitude*
	Reliable	*Responsible; A person with high integrity*