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INTELLECTUAL CAPITAL AND PROPERTY RIGHTS (IPR) AS THE KEY ASSET OF A FAMILY FIRM: A Case Study with an Evaluation Approach

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Abstract

The role of immaterial production factors is becoming more and more important and they are estimated to be over two-thirds of what is required in production in our post-industrial time. Accordingly, the discussion of Intellectual Property Rights (IPR) as key assets is increasing. If these assets are wrongly estimated, this can be very harmful in loan negotiations, credit ratings, taxation, and family business successions or sell-outs. The research question of the present study is: How does a family business owner evaluate the IPR goodwill of his company, and what are his experiences of financiers' evaluations? The case firm in the study is a Finnish firm that produces recorded material, mainly music. The two theoretical approaches included in the literature review are as follows: Intellectual capital and property rights (IPR) and Information asymmetry. The single-case study illustrates the problems of IPR evaluation. Major differences could be discovered in the evaluations of IPR and, according to the empirical data, this seems to be, to a great extent, a consequence of information asymmetry between the family enterprise and their financier. The limitation of the study is that it is based on a single case representing just one industrial branch and one country, but some analytical generalizations may still be possible. The main policy and educational implication is that new thinking in evaluating IPR assets as a family business resource would be needed in financial institutions as well as in governmental industrial policy.

Key words: Evaluation, Finland, Immaterial assets, Information asymmetry, Intellectual capital, Intellectual property, IPR.

INTRODUCTION

The value of an enterprise is typically made up of physical, financial and intangible assets (also called intellectual capital or intellectual property). Intellectual property can be the most productive part of the assets, but because these assets are non-financial, there is no consensus about how they should be evaluated on a balance sheet (cf. Sveiby, 1988, and 1997). Very often they are left off of the balance sheet and sometimes they are mentioned under the title of “goodwill”.

Some family firms have chosen a branch of industry where goodwill plays an important role in the total value of the firm. A major part of such a goodwill value may be based on the intellectual property rights. Examples of such companies are software companies, film and music producers, industrial designers, and architects, to name a few. A common nominator for them is the accumulated asset of IPR's which is often an invisible item on a balance sheet but that may still be the key resource and the important source of income to the firm and its owners (Sveiby, 1988). On the other hand, financiers do not always sufficiently value such assets as a security (collateral) of the loans. The values can become disputable in loan negotiations, credit ratings, company sell-outs, and - even between relatives - in family business successions.

For example, if IPR assets are underestimated in loan negotiations, the family often has to use other types of securities including private wealth to overcome this problem and to fill the collateral gap. There is also a related problem of information asymmetry (cf. Aboody and Lev, 2000) where one party has more or better information than the other. Typically, the business owner knows better the value of intangible assets than the financier, but still the imbalance of power exists and favors the financier. This can be harmful if the financiers do not know or understand the real value of IPRs for the company.

The research question of the present paper is expressed as follows: ***How does a family business owner evaluate the IPR goodwill of his company, and what are his experiences of financiers' evaluations?*** The informant in the single-case study is a producer of recorded material, mainly music. The products are CDs, DVDs and related hybrid products including voice, picture and printed text. The branch is both capital intensive and labor intensive. The labor input must be given by professional experts and artists, such as composers, lyricists, singers, studio professionals, and graphics designers. The managerial expertise is related to the coordination of this creative process and its economy, and the ability for keeping various activities and their timetables under control. The leadership expertise is related to the skills of motivating professionals and artists in their creative work. Marketing activities include sales promotion, networking, filling and renewing sales displays in shops, as well as monitoring the sales performance.

When the so-called IT Bubble started to grow some dot-com companies became very highly valued in a few months. The NASDAQ index of 2000-03-10 was 5132.5 and is now in November 2010 less than half of this i.e. 2504,8. This demonstrates that the market value of some of them that became publicly quoted grew dramatically. Later on, some of these companies lost their market value significantly. One explanation could be that the goodwill was overestimated in an earlier phase, but in the following years these companies have shown a more realistic level of the invisible assets.

LITERATURE REVIEW

Intellectual Capital and Property Rights (IPR)

The academic discussion on the intellectual assets and property started when the Japanese Itami published his findings on the effect of invisible assets on management in the 1980s (Itami, 1987). Sveiby contributed to this discussion and published the widely-quoted text "The Invisible Balance Sheet" (Sveiby, 1988). Stewart started to use the concept "Intellectual Capital" in articles from 1994, and later published a textbook called "Intellectual Capital" (Stewart, 1999).

From Sveiby (1988) we can learn that in some cases the returns generated by the assets that are not reported on the Balance Sheet may be the most important ones. For some organizations, like for the case target of this paper, this can be the biggest source of value creation. A distinction can be made between internal intellectual capital (like the knowledge and expertise of the personnel, information systems, brand names, and copyrights) and external intellectual capital (like well-established customer and supplier relationships).

Thomas Stewart refers to the Intellectual Capital as the "new wealth of organizations" (Stewart, 1999, and 2001). Intellectual property is a term that is also widely used. Most often this means creative outcomes of the human mind for which intellectual property rights can also be recognized. Examples of such rights are copyrights, trademarks, patents, and so on.

The empirical case in this paper is a music producer. In songs published by a music producer, the copyright covers both a melody and a text for decades. Accordingly, intellectual capital and intellectual property rights should be an essential source of the goodwill value of the firm.

Information Asymmetry

The notion of information asymmetry is nowadays a central viewpoint in economics and especially in contract theory, financial market research, and accounting. In 2001, the Nobel Prize in Economics was awarded to three analysts of markets with asymmetric information. They were Akerlof, Spence and Stiglitz.

Information asymmetry exists when one party has more or better information than the other. A classical example in a family business setting is the principal-agent problem, when a non-owning CEO is hired by the owners to run the company. The information asymmetry to some extent can be overcome by careful monitoring and mutual trust, but nevertheless it is embedded in the principal-agent relationship of this kind.

Another classical example is the recruitment process. The employer (recruiter) knows better the firm and worse the applicant's real competence and motivation, whilst the applicant knows better his/her competence and motivation and worse the firm. In this respect, there is a multiple (two-way) information asymmetry. In labor economics, Hayes (1984) has studied the impact of information asymmetry on the behavior of trade unions, such as when striking. When a patient goes to see the doctor, s/he knows better how s/he is feeling (symptoms), but the doctor will still have better knowledge and skills to make a proper diagnosis of the reasons. Discussions (transfer of information, communication) help to balance the information asymmetry between the doctor and the patient, but a certain amount of asymmetry normally remains, if the patient is not an expert on healthcare.

In the stock market, the insiders have more and better information than the outsiders. In other words, there is an information asymmetry. Therefore, the insiders are not allowed to make transactions close to the release of quarterly information (cf. Aboody and Lev, 2000). Every now and then, this principle is not followed in practice, as insiders are accused of breaking this rule.

In the case study to be presented, the key viewpoint is the information asymmetry between a family business owner (here called “Eric”) and his main financier (a financial institution here called “Fund”). The relationship between the two has lasted over ten years, and it has had ups and downs over this time. In addition to the Fund, Eric's firms have raised money from a commercial bank, and private investors.

Information asymmetry often causes the problem of an *adverse selection*. Sometimes this can mean that banks give out loans too carelessly as happened during the last financial crisis nearly everywhere. In Eric's case the situation is different. Eric thinks that the “Fund” is too risk-avoidant, mainly because the “Fund” does not evaluate enough his company's IPR assets. Theoretically, there are two approaches to solving the problem of an adverse selection. One is *signaling* (Spence, 1973). If Eric's company is showing good results, the “Fund” should interpret this as a signal showing the potential and value of intellectual property. The other one is *screening* (Stiglitz, 2001) which is a technique used by one economic agent to extract otherwise private information from another. For example, the “Fund” could ask another financial institution about the general performance level of the industrial branch or the private-sector venture capitalists about how they would see the value of intellectual property in this field. Although Eric has provided a lot of financial information about his company to the “Fund”, there is a huge difference with regard how Eric evaluates now his intellectual property and how the “Fund” evaluates it.

Famous economist John Kendrick, an expert of productivity and production factors, has commented on our era of post-industrialism in the following way. He thought that nowadays the immaterial capital is about 70 per cent and the material capital is 30 per cent of what is required in production. Furthermore, he suggested, that the difference is growing. When studying the main drivers of U.S. economic growth he found the increase in the contribution of intangible assets to U.S. economic growth. It has been reported that in 1929 the ratio of intangible business capital to tangible business capital was 30 % to 70 %. In 1990, that ratio was 63 % to 37 % (Hoskisson et al. 2008). Therefore it would be extremely important that also the financiers would re-consider their policy regarding collaterals. Otherwise there is an immoderate pressure of using the private wealth and the personal guarantees of the family members as a security, especially if the venture capital market is underdeveloped. In Eric's case this has meant that his family apartment is totally mortgaged and, in addition, the “Fund” has demanded Eric to accept several covenants related to his family business before lending any money to Eric.

METHODOLOGY AND RESEARCH METHOD

In this study, the ontological approach is based on social constructionism. It supposes that reality is created in social interaction between people. The epistemological approach is that the narratives and e-mail documents are the sources of information that can illuminate such an interaction for a researcher.

The results are based on a single-case study, and the purpose of the study is to illustrate the problems of IPR evaluation. The case demonstrates how greatly the views of a family entrepreneur and his financiers may differ. One explanation could be that there is a multiple information asymmetry between the business expert (the entrepreneur) and the financiers (who may be funding experts, but not business experts in this branch of industry). On the other hand, it can also be possible that the entrepreneur's view of funding may be biased or limited. The logic of judgment in the study is a theory-driven empirical analysis based on the in-depth interview of the entrepreneur and the participatory observation regarding the documented e-mail correspondence between the entrepreneur and the persons representing the financial institution. The theoretical background is the literature of Intellectual Capital, IPR, and the Information Asymmetry.

Later, the study will be continued by interviewing the representatives of the financial institution who are the key decision makers in funding decisions of creative industries in general and in this case enterprise, in particular. It will be interesting to see, how they define the value of intellectual assets in general and particularly in this case and, more importantly, how they explain and justify their view.

What we get from the interviews and observations are not necessarily *truths* in the strictest sense. Evaluations are, however, *realities at the level of language*. We have here the entrepreneur's reality and the financier's reality, and the two realities seem to be very far from each other. It is my role as a researcher to report how the entrepreneur evaluates and what kind of experiences he has from the financiers' evaluations.

EMPIRICAL CASE: FAMILY BUSINESS IN MUSIC PRODUCTION

Popularity of the Artists

Eric thinks that the IPR value of music production is based on several origins. The first one is the market value (popularity, desirability) of the artist. It is the market value that has been created earlier or must be created before the product can have any IPR value. We have read the stories about how difficult it was for the Beatles to get their first recognition, but later their IPR value became enormous and has remained at a high level for half a century. Good artists can be selective, and if a music producer is able to attract the best artists, it *signals* that the company is appreciated. Eric compares the development of a good artist with the development of a football player. It is often a fairly slow process during which the value of the artist (or the football player) gradually goes up if everything goes well. The “brand” of the artist is created together, and it requires inputs both in marketing and product development, typically for 5-10 years. The competition to get the best artists can be based on a long-term development from novices to professionals or on using money to recruit skilled artists from other producers (compare the player markets in football). The main logic here is that the music producer should be able to increase the artist's popularity.

Eric' personal experience is that the “Fund” has never evaluated these signals from Eric's business. Although they have been able to win several national pop song competitions with their artists, this has not been notified properly. Even recently Eric was able to recruit a big star that has been successful as a singer for decades, but the “Fund” has not changed their policy. Eric concludes that the information asymmetry here is 100 % (Eric) to 0 % (“Fund”). The IPR values of the best artists can remain protected by legislation for several decades even after their death and the recordings can be recycled in various album collections. Therefore, it is surprising that the “Fund” does not evaluate this kind of IPR at all.

Product Development

Eric holds the view that music products require continuous product development: both in new ones and renewals. Modern examples are CD/DVD cards, hybrid media, loadable products etc. Music products can be used in advertising as give-away products. Combining voice with picture (DVD, hybrid media) can be compared with the development from radio to television. Having a smart outlook for the product is an essential part of its marketability which means that also the graphics of the product must be of a high quality.

Eric concludes that the “Fund” has never paid any attention to these values. He thinks that the information asymmetry here is 100 % (Eric) to 0 % (“Fund”). In the 1930s, Disney experienced the same when developing the first film animation (“Snow White and the Seven Dwarves”) and nearly went bankrupt. Eric asks cynically: “Haven’t we learnt anything in 70 years?”

Technical Investments

Eric has created a studio. The equipment costs are nowadays reasonable, but the infrastructure is demanding. In a studio, the acoustics must be good, and also the operational design of the studio must be planned and realized carefully. The design decision means, for example, whether the environment is based on digital or analogical technology. The acoustics require good insulation. Additional equipment costs are caused by video production, multimedia, and graphical design. Eric concludes that the evaluation used by the “Fund” is about 10 per cent of the real value of the studio. They evaluate the studio only as a fitted room and equipment, but they do not pay any attention to its usability in making profit. He thinks that the information asymmetry here is 90 % (Eric) to 10 % (“Fund”).

Sales and Distribution Network

Together with his sales staff (= seven full-time sales people with vans) Eric has developed a sales network that is capable of filling the sales stands in over one thousand outlets (retail shops, petrol stations, etc. with a good regional cover). Creating such a network has demanded a lot of time and energy from the company. Sometimes, to get access to a good sales point requires many years and several calls to a shopkeeper. The producer must plan the seasonal offering (Christmas, Valentine's Day, Mother’s Day, Summer) and be flexible. The stands must look smart and attractive. The fulfillment requires a fairly high level of inventories which puts pressure on the working capital.

Eric thinks that the evaluation used by the "Fund" is about 10 per cent of the real value of the sales resources. They may see the items just as vans, stands and receivables, but they have not evaluated the high labor input that has been invested in getting the sales points and creating the inventories for them. Accordingly, he thinks that the information asymmetry here is 90 % (Eric) to 10 % ("Fund").

Tacit Knowledge and the Process - Holistically

The knowledge chain from the artist to the customer's purchasing decision requires a lot of competence that Eric has gained during the period he has been in the music business (over three decades). He has developed both the production efficiency and the service concepts. The possible bottlenecks in the chain can be sorted out by the in-house resource allocation or by flexible working hours. The professionals must be educated in a good mutual co-operation. The role of internal marketing is important. The development of special tacit knowledge and skills and the right working attitudes have required a lot of training investments both in production and in marketing. Eric feels disappointed that the "Fund" has never paid any attention to the intellectual property of tacit knowledge. He thinks that the information asymmetry is 100 % (Eric) to 0 % ("Fund").

Differentiation: Special Products

Eric has developed his business concept for more than 32 years. With about 20 full-time employees (on average) it means an investment of 600 fully-paid years. In addition, he has paid for about 100 years' worth of salaries to freelancers. He estimates that the number of working hours has been something like 700,000 hours. If his studio would have invoiced all these costs from external buyers, he would have gained 700,000 times 80 euros i.e. 56 million euros. Instead, he has developed intellectual property and retained IPRs within the company. Eric tells that the "Fund" has always thought that salaries are just costs (not investments in the intellectual property), although there are still many decades of protected time ("copyright time") even with the oldest products. He thinks that the information asymmetry here is 100 % (Eric) to 0 % ("Fund").

CONCLUDING EVALUATION

Eric concludes that the overall information asymmetry regarding the business itself between him and the "Fund" is 95 % (Eric) to 5 % ("Fund"). Regarding just the funding, the asymmetry is, of course, different. This has led to the situation where the "Fund" has stopped further financing and has been active in getting in amortizations faster than Eric would have liked to pay them. Eric thinks that the "Fund" has caused him a lot of pressure. He also thinks that the "Fund" has blockaded or stopped the promising internationalization process of his company. He thinks that information asymmetry may be one factor behind this antagonistic attitude.

Eric's business is a genuine family business where he is the founder. The firm employs his wife and children and several non-family employees, and the founder's family is economically very dependent on the company's performance. Eric feels stressed about losing the control of the business or about becoming insolvent. In the case of bankruptcy the intellectual property would not be evaluated as high as it yields when the business is flourishing.

DISCUSSION: REFLECTIVE THOUGHTS

Eric's case is not unique. There are several other companies who have faced the same kind of difficulties with this particular "Fund". For Eric, the whole situation is in a kind of a stalemate.

Eric has tried to give the "Fund" as much information about his performance and future plans as they have demanded and sometimes even much more. He has proactively analyzed the pluses and minuses of his business to the "Fund" in order to reduce the information asymmetry between them. Some individuals of the "Fund" have occasionally shown some understanding but no new financial decisions have been made in the last 2-3 years.

Could Eric and his family do more in this matter? Should they have acted differently? Hindsight or wisdom after the event is easy, but there may be something that Eric's case could teach us all. First, some delayed payments from Eric's side have given a negative signal that his company has liquidity problems (*signaling*). Second, Eric's main competitors are much bigger in size and multinational (such as Warner, Sony, EMI, and Universal), and their business logic and their negotiation power is very different. Therefore, the *screening* would not be very fair with those giants. Third, has the company relied too heavily on one major financier (the "Fund")? Fourth, a natural question could be: Have they grown faster than their finance and profitability have enabled them to do?

Eric thinks that his intellectual property is worth tens of millions of euros. The "Fund" thinks that the maximum loan he could get from them is about half a million euros. During the years Eric has pumped the profits in for re-investments, but in this industry these have been salaries and freelancers' wages mainly and are now invisible balance sheet items. New products have been developed (there are about 3000 master recordings) and a sales network of over one thousand sales points has been created.

As the case shows, the financiers do not pay enough attention to the value of intellectual capital. It is difficult to convince them about anything that is intangible by nature. They understand slightly better the physical and financial assets, but the intellectual capital is not for them a security.

This is a great pity, because Eric is a good example of a family business founder who has been successful in creating relational capital (with suppliers, clients, research centers, media, top-class artists, and so on). He has been successful in creating human capital (knowledge and skills of his employees) and organizational capital (collective knowhow beyond the capabilities of individual employees, information systems, business concepts, workflows, brand, and intellectual property). He has been able to develop a lot of assets in the intellectual property rights (Sveiby, 1997; Sullivan 2000).

LIMITATIONS AND IMPLICATIONS

At the moment, this research is just a single-case study, which is based on one company, one industrial branch, and one interviewee only. However, even the results of a single-case study can be generalizable if they are congruent with an existing theory (Yin, 2009). Earlier research has reported how difficult it is to evaluate IPR assets and R&D, and how information asymmetry exists also in the financial market (Aboody & Lev, 2000). Akerlof's classic paper on adverse selection called "The Market for Lemons" reported already in 1970 the existence of information asymmetry.

Despite its limitations, the case study offers a clear starting point for recommending new thinking in evaluating IPR assets as a family business resource. If those assets are underestimated, an adverse selection can mean that either the private wealth of the family is unnecessarily or over-proportionally used as collateral or, in the worst case scenario, a lot of profitable business remains uncreated due to the lack of finance. If they are overestimated, an adverse selection can mean that the financier takes too high a risk when funding.

An educational policy implication could be that financiers should be educated to see and understand the value of IPR assets more clearly. The same applies to public governmental organizations that offer financial support for start-ups, growth and internationalization of businesses. An industrial policy implication is that it could be useful to create special funding instruments for creative industries where the role of IPR assets is totally different from those in traditional industries.

In family businesses, assuming that the IPR assets are a major part of the wealth, the issue may become relevant in the following ways:

i) The taxation value of the company may be very different if the IPR assets are valued low or if they are valued high. This can have an impact, for example, on gift or inheritance taxes in succession.

ii) The terms in IPO (i.e. becoming publicly quoted) may be very different, if the IPR assets are valued low or if they are valued high.

iii) The views of a buyer and a seller may differ greatly if a family decides to sell its company and if the buyer and seller have very asymmetric information about the IPR asset value of the company.

iv) The credit rating of a family business may be very different if the IPR assets are valued low or if they are valued high. As Eric's case shows the difference of evaluation between his view and the "Fund's" view is enormous. This can harm loan negotiations.

v) In Family business succession, if only some of the children continue the parents' business, the evaluation of IPR assets can become problematic and cause disputes between the siblings. It is important that the siblings all agree on the principles of evaluating the IPR assets.

vi) In some cases, like in a fashion industry, some IPR assets can become obsolete rather soon; or different generations may evaluate the values of IPR assets very differently.

vii) Some IPR assets can be strongly family-related, like a good family name (such as Michelin, Heineken, and Peugeot, in Europe and even globally) as the key asset in branding. In the entertainment business, the Osbournes are a good example of such a family brand.

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