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Evaluating Company's Strategic Choices: Strategic Choices Set Model

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Abstract

The crux of strategic management is evidently about doing the right strategic choices. From a large set of different possible choices the top management team must select the one(s) that give competitive advantage for a company. However, many research results show that managers tend to select strategies they are familiar with, regardless of the strategic optimality. We construct and present a Strategic Choices Set model which is able to identify the available and implementable choices for top management. The model is based on well established and empirically validated theories of Upper Echelons, Industry Strategies, and Capital Structure. The ideal strategic choice should fulfill three simultaneous conditions: i) it belongs to the top management's expertise, ii) it has recognizable and proven value in the industry, and iii) the company has financial resources to implement it. The model is tested in the ICT industry, concentrating on two companies that operate also in smart phone sector, namely Nokia and Apple. The main contributions are the presented model and the pondering of strategic options in ICT industry based on emergence of cloud computing technology.

Keywords

Strategic Management, Strategic Choice, Strategic Choice Sets, Upper Echelon, Industry Strategy, Capital Structure, Financial Position, Leverage.

1. Introduction

There is a long research tradition in areas of industrial strategies (e.g. Hambrick, 1983), capital structure (Modigliani & Miller, 1958) and upper echelon (Hambrick & Mason, 1984). Furthermore, the association between these research areas has also been examined (see Carpenter et al. 2004; O'Brien, 2003; Bertrand & Schoar, 2003). However, no one has linked these three areas before.

Generally, strategy evaluation tries to identify how companies are competing against each other and to assess their competitive advantage. For instance, several different and potential strategic choices can be identified and evaluated by simultaneously analyzing the association between capital structure (CS), upper echelon (UE) and industry strategies (IS).

In this study, a novel model for evaluating available strategies that companies are able to implement is created. We test the developed model in ICT industry, especially from the point of view of two major smart phone manufacturers, namely Apple and Nokia.

We show that by combining strategic choices pointed with UE, CS and IS, the subset of implementable strategies can be identified. Furthermore, our model aids to identify strategic choices which can be made available if a company develops its current management team and/or capital structure. Interestingly, our model also shows an area where new industry strategies may be invented. Also, our model clearly shows those strategic choices a company should not get involved in.

We build a model based on existing and well established theories that have extensive empirical analysis. As a result, the proposed model is able to specify suitable strategies that work for a focal company. Our main contributions are the following: i) combining upper echelon, capital structure and industrial strategies in a novel way, ii) we can explicitly point out suitable strategies for a company, iii) we can identify new strategic possibilities and requirements for pursuing them, iv) we can identify strategies that quite likely will not work for a company.

The study is organized as follows. The background is discussed in the next chapter. We build our model in the third chapter and test it in the smart phone industry in the fourth chapter. Final chapter five concludes our study.

2. Background

Strategic management research is rich in variety and there exist multiple and contradicting theories, as does in capital structure research. However, some of the pillar research strands can be identified and supported with substantial empirical evidence, such as upper echelon theory, industrial strategies, and capital structure. As showed in Carpenter (2004), there is a strong association between upper echelon theory and chosen strategies. Also, similar relationship exists between upper echelon theory and capital structure (Bertrand and Schoar, 2004). Furthermore, O'Brien (2003) shows strong links between capital structure and industry strategies. We examine strategic choices in two commonly accepted postures of strategic adaptation in business strategy level: efficiency and market focus (cf. Strandholm, 2004). We make this choice to develop a model with minimum number of variables and to keep the model development manageable.

2.1 Upper Echelon (UE)

Upper Echelon (UE) theory proposes that organizations are reflections of their upper management (Hambrick and Mason, 1984). The top management team (TMT) interprets and makes decisions based on their cognitive capabilities. The performance of the organization depends on TMT's decisions and actions. One of the key propositions of UE is that demographic properties of TMT can be seen as useful proxy to TMT's cognitions and values. This means that in order to predict TMT's decisions one needs to study only team's demographic properties which can be identified quite easily by an outsider. Another insight offered by UE is that the decisions and actions that an organization takes can be understood better if TMT is considered an aggregate, not individuals. This means that if the mean age of TMT members is 60 it is a better indication of decisions than if we know that CEO is 60.

UE takes it as a starting point to believe that managers and their action matter for the performance of an organization (Hambrick, 2007). After almost 30 years of research the theory's main propositions are verified (Jackson, 1996; Carpenter et al. 2004). Also, important new avenues have been opened with the second generation studies affecting important company outcomes (Carpenter et al. 2004). Also, second generation studies have opened up the 'black box' of TMT decision making processes and psychological factors (Hambrick, 2007). The new avenues for upper echelon include connecting TMT decisions and company economics and applying more dynamic models (Carpenter et al. 2004).

The focus of UE is TMT and it is important to make a distinction between top managers and other managers. The original work of Hambrick and Mason (1984) focused on CEO and other C-level managers in company. This might be due to the fact than quite often especially in US CEOs are also the Chairs of the board (Hambrick, 2007). In our study we take a closer look at the CEO and chair, since at least in European settings, nowadays they are separated (Levy & McKiernan, 2009). Also, European boards are actively involved in shaping the strategy. One should notice that at the time the original UE theory was proposed, quite often the role of board was seen as a rubber stamp (see Hendry & Keel, 2004). However, at the moment the board's role is seen much more active. Boards can be seen also as drivers of the strategy change (Westphal & Fredrickson, 2001).

2.2 Capital Structure (CS)

Since the seminal study of capital structure by Modigliani and Miller (1958, MM henceforth), a large body of literature has covered the choice of firm's capital structure and its association with other firm characteristics, such as the firm value (Jensen & Meckling, 1976) and debt/equity level on firm's strategy (Sandberg, Lewellen & Stanley, 1987). The common factor for these studies is to reach identification for a so called optimal capital structure, resulting in the maximization of the wealth of shareholders. In their original model, MM show that capital structure is irrelevant of the firm value. However, they assume the world without taxes, agency costs and information asymmetries (for instance), i.e. perfect market condition. When taxes, agency costs and information asymmetries are considered, the association between capital structure and firm value becomes significant. The founding theories for capital structures under imperfect market conditions are agency costs, pecking order, and tradeoff (Jensen and Meckling, 1976; Myers, 1984; Mayers and Majluf, 1984, respectively).

In Jensen and Meckling (1976) the effect of agency costs on capital structure is examined. According to the theory of agency costs are transferred to the debtholders (banks, creditors) due to the firm's higher debt level. Thus, shareholders' wealth should be increased in higher firm valuation and leave managers more room to act in the interests of shareholders, under reduced agency costs of outside equity. Some of the pillar studies on agency cost theory on the capital structure can be found in Harris and Raviv (1991) and Myers (2001).

Myers (1984) shows that the optimal capital structure is found with the tradeoff theory at the point where the firm's debt level increases no longer bring economic benefits by the tax shield utilization. When the tax shield in higher debt level is exceeded by the increased costs of financial distress, a firm should not finance the forthcoming investments anymore by debt.

In the pecking order model by Myers and Majluf (1984), instead of the optimal capital structure - the preferred order for the sources of finance is examined under the existence of information asymmetry. According to their theory, internal financing (retained earnings) is preferred over debt and equity, since the use of external financing would be signals for unprofitable business operations. Furthermore, as the announcement of a new stock issue is a negative signal to the investors (especially when the stock price is low), managers prefer debt over equity.

Since MM (1958), numerous theoretical studies and empirical tests have been conducted to add understanding, knowledge and explanations for optimal capital structure. However, the convergence on the specific mechanisms of the optimal capital structure is still in progress, although theoretical background is well established. Especially the empirical research results are still unambiguous. It seems that industry-specific and/or country-specific features are partly driving the unique capital structures of firms (Kim, 1997 and Wald, 1999). Moreover, strategic choices may strongly be attached to the capital structure decisions (O'Brien, 2003; Barton and Gordon, 1987; Titman, 1984; Sandberg, Lewellen and Stanley, 1987).

Furthermore, the debt/equity level connected to the type of firm (efficiency/market –based) is one of the key issues when analyzing the strategic finance decisions of the firm. The financing decision of the firm should always be closely positioned with the strategy of the firm, i.e. correctly allocated debt/equity ratio towards the strategy. It seems that higher debt levels are associated with efficiency-oriented firms (Jermias, 2008; Jensen, 1986; O'Brien, 2003; Simerly and Li, 2000), and higher equity levels are associated with market-oriented innovative growth firms (Jordan, Lowe and Taylor, 1998, Huang and Song, 2006; Aggarwal and Zhao, 2006; Huang and Song, 2006; Campello, 2003; Qiuyan, Qian & Jingjing, 2012).

2.3 Industrial Strategies (IS)

Business level strategies have been an intensively studied area in strategic management literature (e.g. Cambell-Hunt, 2000; Porter, 1980; Mintzberg, 1988; Hambrick 1983). There are numbers of different categorizations but one of the most used frameworks is Porter's (1980) generic competitive strategies: cost leadership, differentiation, and niche. Although Porter's model is the basic textbook approach, there has been a lot of criticism against it (Cambell-Hunt, 2000) and for example Mintzberg's (1988) strategic categorization has been supported better by empirical evidence (Kotha & Vadlamani, 1995). It seems, however, that there is quite a common agreement that if we try to categorize strategies into two main classes these are either market oriented or efficiency oriented (Strandberg et al. 2004).

Efficiency oriented strategies seek to find the most efficient producer in the industry and thus achieve competitive advantage vis-à-vis other companies. Efficiency is achieved, among other things, by investing in scale, keeping tight cost control, and minimizing overhead. The main logic to achieve above average returns is to be the most low cost producer and thus having the best return for money. Market oriented companies try to find the best match between their products and markets. By having the best product in the eyes of the customer the company can price their products higher, and thus achieve above average returns. Achieving this kind of position, market oriented companies focus on marketing, R&D, and improving their product and service offerings, to name but a few approaches. Basically it is agreed that companies must choose their strategy from these two broad categories and mixing them will lead to disaster

(Porter, 1980). However, finding the balancing position in the middle of both of these strategies has also generated lots of research (e.g. Murray, 1988).

3. Strategic Choices Set Model (SCS Model)

SCS model's basic message is that the universe of strategic choices can be looked from three points of views, or three sets. One set includes those strategies that are known and actionable by the TMT. Another is the set of strategies that have been proven to work within an industry and the third one is the set that includes all those strategies that can be implemented with the resources a company has. The figure (Fig. 1) describes the situation.

These three selected sets reflect the basic situation when formulating and selecting strategies in a company. Classical strategic management approach (e.g. Porter, 1980) sees that it is industry that dictates strategies, and the implementation of selected strategy dictates the performance. Resource-based view (e.g. Barney, 1991; Wernerfelt, 1984) describes what kind of resources a company has and how it can utilize them in order to create competitive advantage. Also, its related views - capability based view (Teece, Pisano & Shuen, 1997) and knowledge-based view (Grant, 1996) describe how those resources can be applied. Again, concrete resources a company has can be seen in the balance sheet. Going inside the head of individual actors is a hard problem. Upper Echelon theory uses the background of TMT as a proxy for their cognitive capabilities and values. In the same way we can use capital structure as a proxy for the resources a company has to implement its chosen strategies. Upper Echelon theory describes the choices the company's TMT makes. Also, seeing capabilities it may be argued that TMT has certain capabilities to utilize concrete resources it has in its disposal.

All these three theories have the same central interest and focus, they focus on strategic choice. Because of this central mutual concept it is possible to use these theories in concert. All of them try to identify which kind of choices there are and which ones the company can and should select. The linking pin is the TMT which makes the choice in a strategic situation and within the industry with the focal company's resources. It can be argued that quite often with a big company these strategic sets are covering different areas and only part of all possible strategic choices are in the intersection of all these three sets. However, it is exactly this intersection and the strategies in it that should be selected by a company.

In SCS model we see all strategic choices creating a universe of strategic choices. The figure (Fig. 1) depicts this situation. The box is the universe (U) containing all possible strategic choices there are. There are three choices sets that include subsets of all choices (U). From the point of view of a focal company three subsets are important, sets that are created by the choices that industry has proven to work (Industry Strategies in the figure), strategic choices that TMT is able to implement (Upper Echelon in the figure), and choices that the firm has resources to implement (Capital Structure in the figure).

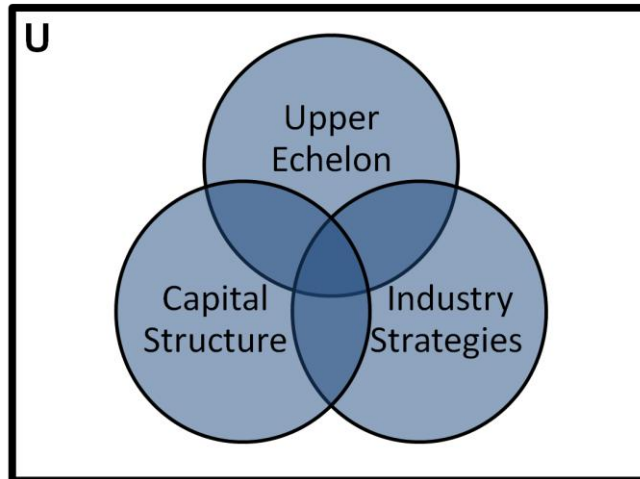


Figure 1: Strategic Choices Sets in the Universe of strategic choices. The intersection of all choices sets announce strategic choices that the focal company has chances to implement successfully.

3.1 Link Between Upper Echelons and Industry Strategies

TMT chooses strategies that they know. When managers perceive strategic situation they will choose from the set of strategies they are familiar with a strategy that (hopefully) will fit the strategic options an industry offers. Strandholm et al. (2004) show that if TMT have background in efficiency focused industries they will more likely perceive and select efficiency based strategy, and vice versa for market focused strategies. There exists a strong empirical base to believe that TMT's will perceive and select strategies based on their backgrounds (see e.g. Carpenter et al. 2004 for survey). Westphal and Fredrickson (2001) suggest that if a focal company is experiencing a downturn, outside board members will suggest their home company's strategy if it seems more successful.

3.2 Link Between Capital Structure and Industry Strategies

As referred earlier in this study, the theory of capital structure is well established but empirical evidence is lacking the convergence of generalization of specific conclusions. Part of studies support leveraging approach where the optimal tax shield is applied by firms, while other firms are engaged with low leverage – high equity setting in their capital structure decisions. We review that leveraged firms are associated with non-unique products (Titman, 1984 and Titman and Wessels, 1988), efficiency (Margaritis & Psillaki, 2010; Zingales, 1998), elasticity of product demand (Maksimovic, 1988), product-market competition (Showalter, 1999) and highly concentrated industry (Chevalier, 1995; Istitieh & Rodriguez, 2002), while unlevered firms often relate to innovation, new entries in market and competitive intensity (Hellman & Puri, 2000; Khanna & Tice, 2000; Jermias 2008), unique or highly specialized products (Menendez & Gomez, 2000), profitability, growth opportunities and sales growth (Huang & Song, 2006; Guzhva & Pagiavlas, 2003; Qiuyan, Qian & Jingjing, 2012). Furthermore, a powerful strand of literature has been focused more and more on analyzing the relationship between capital structure decisions and a firm's strategic choices (O'Brien, 2003; Barton & Gordon, 1987; Titman, 1984; Sandberg, Lewellen & Stanley, 1987). This seems an important research field

which has not been fully utilized in understanding the mechanisms of capital structure. Thus, it can be proposed that market-oriented firms are possible candidates for the low levered capital structure policies and efficiency-oriented firms would choose high levered capital structures instead.

3.3 Link Between Upper Echelons and Capital Structure

Bertrand and Schoar (2003) have studied the relationship between TMT actions and investments, financial, and organizational practices. They focus more on the economic side of a company. They go as far to call this the 'style' of the manager. Their study shows that different managers behave quite differently in the same situations based on their earlier experiences and cognition. They use MBA and age cohort as independent variables and look at what kind of financial decisions, among other things, managers make. Bernard and Schoar show that differences in managerial practices are systematical and they relate to different performance levels.

4. Results

We apply the SCS model here. We have selected ICT industry as our focus with two companies that operate on the smart phone sector, namely Apple and Nokia. We analyse the TMTs and capital structure for both of these companies. We examine the potential strategies they are able to perform based on SCS model. First we draft one possible way to understand what is happening in the ICT industry and what kind of way of framing the strategic situation might give us insights in the industry situation. This allows us to reason what strategic choices there are and what they require from a focal company. Second, we take a closer look at the case companies' financials. This allows us to reason about what choices can be implemented financially. Finally, we look at the TMT members and their demographic attributes that can be easily found out by outsiders. Upper Echelon theory uses this approach to predict the choices that TMT is likely to be familiar with and inclined to choose.

4.1 Industry Strategies for Mobile Phone Manufacturers

We focus on ICT industry and especially on the smart phone sector. Smart phones are a special category of mobile phones. We consider that mobile phone industry itself is efficiency driven but smart phone industry can be categorized as market driven. Smart phone industry is tightly linked to ICT industry and we hypothesize here that most of the moves and strategies that are currently being made in the smart phone sector are related to a bigger change that involves cloud computing. Smart phones could be seen as the devices that are our interface to the cloud. We know this is a big leap of faith, however, this makes analysis only more interesting and it does not change the way our presented model can be used.

The basic element in ICT industry is the computer. Even today we follow the so called von Neumann (1945) architecture, which dictates that computers have four central components: processing unit, memory, input/output (interface), and system bus. The fifth component is the programs (see e.g. Newell & Simon, 1973). The computer system is thus able to store programs, run them and manipulate symbols.

One way to see the history of computer is to consider how these central computer components are related to each other (see figure below). The first computers naturally included all of these components inside themselves. Even the mainframes, mini computers, and PC's could be seen

this way. The big step was when computers were able to communicate and exchange symbols via networks. Cloud computing can be seen as the third major step when we are separating interface from computer, and a massive number of computers and their computing power and memory are behind a unified interface.

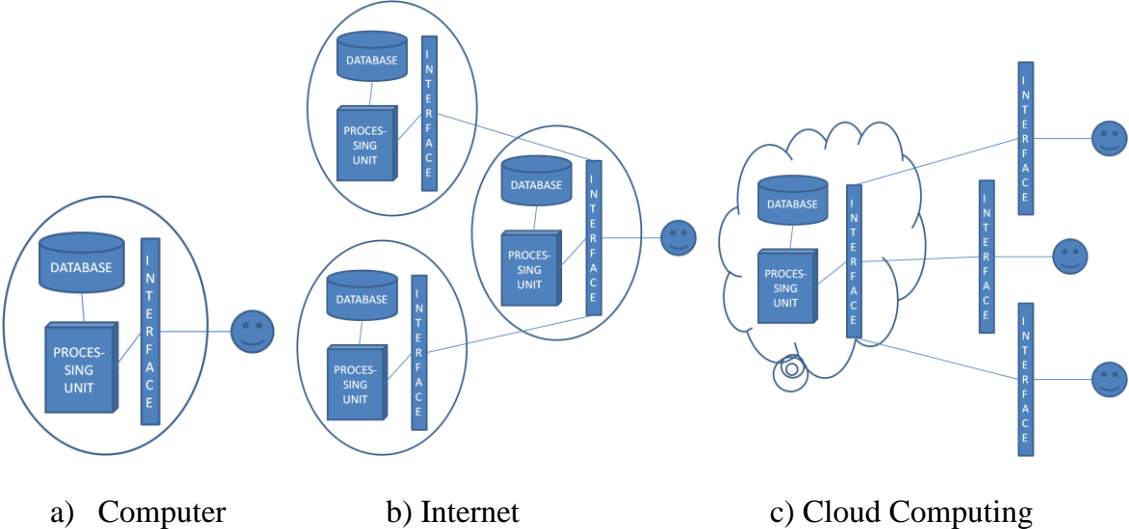


Figure 2: von Neumann architecture in a) Computer, b) Internet, and c) Cloud Computing

Technological change model (Anderson and Tushman, 1990) proposes that a technological breakthrough initiates an era of technological variation which ends when a dominant design is achieved. During the era of ferment many competing designs are introduced that are incompatible. One of the reasons for this is that since the technological solutions are new, quite often all of the components of technology must be in the hands of a central developer. Also, at the start of a new technological era the designs tend to be monolithic rather than modular. After a dominant design is selected starts the era of incremental change and modularization may begin.

We suggest here that cloud computing is in the phase of ferment, including smart phones and their ecosystems, and that currently we are seeing a competition for dominant design. Our hypothesis is that smart phones are important in a sense that they will be the interfacing device to the cloud. There are multiple worthwhile players here, IBM, Google, Apple, Amazon.com and Microsoft.

4.2 Capital Structure of Apple and Nokia

As stated above, smart phones industry is more market driven than efficiency driven at the moment. This statement gives us a foundation to link such orientations to firms’ capital structure analysis. Empirical exploitation supports the previous proposition in our model where market driven firms use higher equity in relation to debt than efficiency driven firms (Chevalier, 1995; Istitieh & Rodriguez, 2002; Hellman & Puri, 2000; Menendez & Gomez, 2000).

Apple's capital structure as per December 31, 2011 (Q1) contains 90,054 million dollars of equity and 48,627 million dollars of liabilities. Out of total liabilities, current liabilities are 34,607 million dollars (71%), meaning that long-term debt obligations are only a minor part of the total liabilities (29%). Current liabilities are financial items durable for less than one year and non-current for the durability of one or more years. Apple's net sales in 2010, (65,230 M\$) were over ten times larger compared to the starting year of 2002 (5,740 M\$). Apple's cash and equivalents at the end of 2011 are nearly 100 B\$, which is enormously large. Apple seems to have a clear competitive advantage and great financial possibilities to grab nearly any strategic moves in its sight in the near future. The debt/equity level, which is one commonly used factor for leverage, is 0.54 at the end of 2011 (ten year's average for debt/equity is 0.63). For the industry of computers and peripherals in US, the debt/equity level is 0.28 (ten year's average is 0.26). Apple is concentrated on maintaining and reaching high equity (low debt) position according to its financial strategy in order to have a full capacity for forthcoming strategic and innovative investments. Apple has a well-established position in its market driven orientation in both industrial and capital structure stand points. The capital structure with a high level of equity clearly shows support for market orientation with a high potential of financial capability to get involved in aggressive and innovative strategic operations. The financials for Apple and Nokia are shown in Figures 3 and 4.

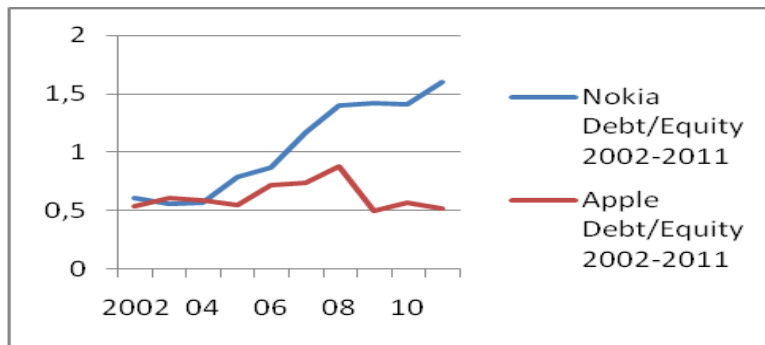


Figure 3: Debt/Equity ratios for Nokia and Apple during 2002-2011.

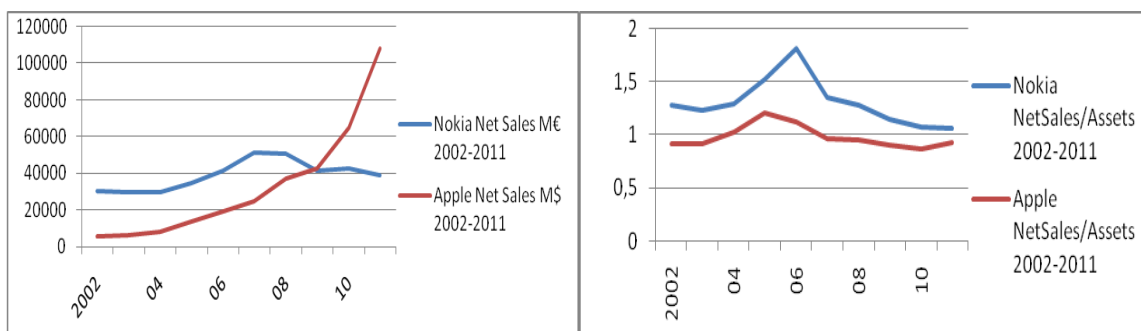


Figure 4: Net sales and net sales per asset for Nokia (€) and Apple (\$) during 2002-2011.

Nokia's capital structure as per December 31, 2011 shows an equity level of 13,916 million euros and 22,289 million euros of total level of liabilities. The amount of current liabilities is 17,444 million euros (72%) and for non-current 4,845 million euros (18%). Nokia's net sales were 38,659 million euros in 2011 (non-audited). Compared to the starting year, Nokia has increased only by 29 per cent in net sales compared to Apple's increase of over 1000 per cent over the period. The difference between Nokia's highest net sales (51,058 million euros in 2007) and the lowest (29,371 million euros in 2004) is 21,687 million euros. Nokia's net sales have dropped by 24 per cent between 2007 and 2011. The analysis of Nokia's capital structure shows some interesting results. When comparing the leverage ratio of debt/equity over the period of 2002-2011, we find that during 2002-2006 the equity is the major component (debt/equity < 1), but after 2006 the role of debt is increased and seems to be in increasing trend thereafter (debt/equity > 1). Nokia has been using more debt compared to equity in financing its business operations after 2006. The current debt/equity ratio in December 31, 2011 is 1.60, namely the capital structure indicates 38 per cent of equity and 62 per cent of debt (0.23 for industry in 2011 and 0.20 for industry average during 2002-2011). This type of high leverage is common for efficiency oriented businesses and industries. However, Nokia is currently competing against companies, especially Apple and others, which operate in the field of market orientation, referring to smart phones industry. It is notable that Nokia is originally an efficiency orientated company, but they have intentionally got involved in market orientation competition by strategic decisions towards innovative smart phones productions. Such strategy would probably stipulate much more powerful financial capabilities (high equity, low leverage linked to market orientation) than Nokia's current capital structure allows (high debt, low equity linked to efficiency orientation). This type of financial position makes it very challenging for Nokia to keep up with the key players in the smart phone competition.

4.3 Upper Echelons of Apple and Nokia

One of the main contributions of Upper Echelon theory is that even if the cognitions, values, and perceptions of TMT members are hard to measure the managerial characteristics can act as proxies for identifying underlying differences in cognitions, values, and perceptions (Carpenter et al. 2004). Apple's CEO Tim Cook has background in production and can be described more like an efficiency focused leader. Chairman of the board is Arthur D. Levinson whose background is heavily in research. Also, interestingly Levinson have also served as a member of Google's board of directors. Levinson was CEO of Genetech from 1995 to 2009. Genetech was purchased by Hoffmann-La Roche 2009. Also, a new board member has been nominated from Walt Disney who has done a few big company acquisitions lately.

Nokia's CEO Stephen Elop has a background in periphery functions and can be more seen as efficiency oriented. Elop has been involved earlier in multiple takeovers and company mergers. Nokia's Chairman is former CEO Jorma Ollila whose background is in financing, first in Citibank and then in Nokia. From 1992 to 2006 Ollila served as CEO of Nokia.

Apple has all the technology and expertise within itself and it has not made any major acquisitions. However, if it wants to have a bigger role in starting cloud computing markets it needs to have a wider customer base. Apple has also identified the need for and meaning of clouds and it has announced its own iCloud for its own customers. From a technological point of

view Apple has all the required technologies in its own hands: OS, connection to cloud, processing, databases and content.

Interestingly Apple's capital structure allows it to select whatever strategy it wants. It has nearly no long term debts and it has about \$100 Billion in its disposal. Currently, a large market base for cloud service usage is needed. It has hundreds of millions of content users in iTunes service but only a fraction of users of computers and smart phones. This can be done, however, with the aid of a new chairman of the board and new board member from Walt Disney with capabilities to see potential in large acquisitions. There is a possibility that Apple is getting ready for some big acquisition that will improve its market position in cloud computing. One possibility is Amazon.com which has become quite a nuisance with its Kindle.

Nokia has earlier been an undisputed leader in smart phones only to slide to number three with ever steeper downhill in front of it. It has stopped to develop its own OS's (Meego & Symbian) and trusts Microsoft's Mobile OS. Also it is building up its own ecosystem around Microsoft's expertise. We can see that Nokia is quite heavily dependent on Microsoft at the moment, and if it is not careful it might slide to the same kind of role as other bulk manufacturers that rely on e.g. Google's Android OS. If we look at Nokia's role from the point of cloud computing it comes quite apparent that its role is to support Microsoft's vision. It is hard to imagine that in this scenario Microsoft allows Nokia to operate independently and it can be seen that at the end of this road Microsoft will acquire Nokia.

Nokia's future will be determined by the success of Lumia series phones. If Lumia does not create enough sales Nokia has to come up with new ways to finance its R&D. They must be able to acquire money for development and there is only a very slim chance to attract debt money for this purpose with Nokia's current capital structure. Also, getting equity might prove to be hard. So, if Lumia does not succeed there is a dark future. On the other hand, if Lumia succeeds the future is not much brighter. In case of success one has consider if Microsoft is willing to bet on Nokia as an independent company when real competition between clouds starts, probably not. In this case Microsoft is quite likely to acquire Nokia.

4. Conclusions

In this study we have examined strategic choices and their creation by top management and how the availability of choices is affected by industry and capital structure. We developed a model and test it using two mobile companies, Nokia and Apple. Our model helps to identify the strategic choices that are suitable for these companies.

We have created the Strategic Choice Sets (SCS) model, which combines theories of Upper Echelon, Industry Strategies and Capital Structures. Upper Echelon theory states that companies are reflections of their management team, and management team bases its strategic choices on their own background. Industry Strategies includes those strategies that are in use in a specific industry. And Capital Structure reflects the level of equity and debt and thus provides specific financial possibilities for different strategic choices. In any given industry, there exist a set of feasible strategies. Each and every strategy needs some kind of financial resources to be

implemented, and it is the top management that invests capital to implement those strategic choices.

The SCS model is able to identify suitable strategies that work for a focal company. Our main contributions are the following. Firstly, the SCS model combines three theories about strategic choices, namely upper echelon, capital structure and industrial strategies. Secondly, the model can explicitly point out suitable strategies for a company. Thirdly, the model can identify new strategic possibilities and requirements for pursuing them. And fourthly, the model can identify strategies that quite likely will not work for a company.

Top management team can use this model to identify the implement ability of a strategic choice. The model shows if something is missing in order to implement the choice, regarding to financial and management capabilities. Every strategic choice needs three things, (i) it has to work in the industry, (ii) the company has to have the resources to implement it and (iii) management team has to know how to implement it. However, sometimes you might want to try to create a new strategy in the industry. In this case, you need to have resources and capability of the management in order to try something new in industry. The model doesn't guarantee that you succeed, but it reveals if you have a genuinely new strategy in the industry.

We recognize at least the following limitations. First of all, the strategic sets might not be the final ones. However, the SCS model gives possibility to identify other sets to be applied. The assumptions used in the testing of the model, i.e. the cloud computing, might be dead wrong. But, that doesn't change the fact that the model is usable. We use the categorization with only two classes - market orientation and efficiency orientation – which is of course very coarse. This simplification is, however, testable and based on literature.

For further research, the presented model may be the basis for an entire research programme. This is a lot said, but we feel that there is already so much empirical research done in the areas used in the model. However, some of the areas need more thorough examination. For example, the connection of upper echelon and capital structure is very thin and needs to be fortified. In addition, what are the life cycle and/or dynamics of a strategic choice and a strategic set? The application of the set theory might bring interesting results. Furthermore, there are intriguing conflicts in the mechanism of capital structure. Thus, analyzing how the top management team affects the capital structure decisions might resolve some of the conflicts. Finally, for future research, linkages between behavioral finance and strategic choices set model are evident and need to be emphasized.

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