





















# ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES

ISSN 2345-0282 (online) http://jssidoi.org/jesi/aims-and-scope-of-research/ 2013 Volume 1(2): 67-80 http://dx.doi.org/10.9770/jesi.2013.1.2(1)

# TOWARD UNDERSTANDING RESOURCES, COMPETENCIES, AND CAPABILITIES: **BUSINESS MODEL GENERATION APPROACH**

# Mike Wahl<sup>1</sup>, Gunnar Prause<sup>2</sup>

<sup>1,2</sup>Tallinn School of Economics and Business Administration, Tallinn University of Technology Akadeemia tee 3-365, 12618 Tallinn, Estonia

E-mails: 1mike.wahl@ttu.ee; 2gunnar.prause@ttu.ee

Received 5 September 2013; accepted 25 October 2013

Abstract. Understanding internal sources of competitive advantage has become a major area of research in strategic management. Resources are a business's assets, capabilities are the ability to exploit its resources, and competency is a cross-functional integration and coordination of capabilities. But the problem of not understanding what is really meant by resources, competencies, and capabilities still arises. Toward understanding what is really meant, MEKTORY - business model generation competition case studies are analysed. The main purpose to develop a better understanding has reached. It can be stated that the overarching goal of strategic management and also business model generating is creating and capturing value for core stakeholders. Strategy is here defined as a series of goal-directed plans and activities that align a business's structure, culture, and resources with the opportunities and threats in its environment. The main implication of the current research is the understanding that resources are always means, competencies powers, and capabilities abilities. Methodologically the research is valuable used modern text analytics for an innovative way to present, and to garner deeper insight from text. It is recommended that further research should include evolutionary approaches, which are not explicitly used as a theoretical framework in strategic management. Further normative value research might investigate what should be the ownership values for successful companies.

Keywords: Business model generation, capabilities, competencies, text analytics, resources, strategic management, values.

Reference to this paper should be made as follows: Wahl, M.; Prause, G. 2013. Toward understanding resources, competencies, and capabilities: business model generation approach, Entrepreneurship and Sustainability Issues 1(2): 67-80. http://dx.doi.org/10.9770/jesi.2013.1.2(1)

JEL Classifications: M1, M2

## 1. Introduction. A brief review of MEKTORY

MEKTORY is the acronym for Modern Estonian Knowledge Transfer Organization for You. It is an interdisciplinary intellectual and tangible innovation centre that actively engages companies, entrepreneurs, students, and faculty in project implementation. It has project expertise in three divisions; they are design and product development; mobile services and media; and business models. The divisions are all connected with each other by infrastructure, network and innovation projects. It works in a way that representatives of companies and companies' research and development employees work as consultants and experts together with supervisors from university who are responsible for project success. They are also mentors among scientists and alumni. Students are project team members working with equipment operators who assure operational safety. Performers in projects are post graduate- and PhD students, faculty and companies. It offers many benefits for companies, students, and faculty. It has global ambitions, and has partners like Aalto Design Factory (Aalto University), Swinburne Design Factory (Swinburne University of Technology), University of South-Carolina, and International companies (Mitsubishi Motor Corporation, Ericsson Estonia, ABB Group Ltd, Samsung Electronics, and Electrolux).

#### 1.1. Business model

Hunger and Wheelen (2011) describe the business model as a company's method for making money in the current business environment. In fact many different methods exists e.g. customer solutions model, multicomponent system, advertising model, switchboard model, efficiency model, and time model. We choose the Business Model Generation approach of Osterwalder and Pigneur (2010) where a business model describes the rationale of how an organization creates, delivers, and captures value. The model was co-created by 470 strategy practitioners, from 45 countries. Their challenge was a simple, relevant, and intuitively understandable concept, while not oversimplifying the complexities of how enterprises function. They believed that a business model can best be described through nine basic building blocks that show the logic of how a company intends to make money. The nine blocks cover the four main areas of a business – customers, offer, infrastructure, and financial viability.

We focus in our paper on the most challenging building blocks, namely values, resources, and capabilities. It is obvious that enlightened, competent, professional ultimate owners know what results they want to have from the company in the long run – diverse personal, social, political, and economic values; they succeed in a dynamic environment only if they invest those same values (Wahl 2012). The "enlightened shareholder value" approach represents an attempt to strike a balance between shareholders' primacy and corporate stakeholders' interests (Andreadakis 2011; Hilb 2006; Pichet 2011). An ultimate owner is an institutional unit that is at the top of the ownership chain of an enterprise and is not controlled by any other institutional unit; they are ultimate controllers of the votes (La Porta *et al.*1999). Business model generation is like a blueprint for formulating strategy to be implemented through programs, budgets, and procedures.

Resources are a business's assets, capabilities are the ability to exploit its resources, and competency is a cross-functional integration and coordination of capabilities. But the problem of not understanding what is really meant by resources, competencies, and capabilities still arises. The main purpose of this descriptive-explanatory research is to develop a better understanding concerning resources, competencies, and capabilities.

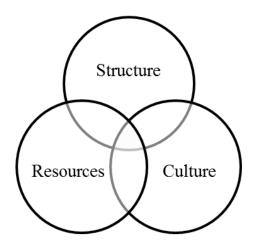
The present paper is organised as follows. Section 2, "Theoretical framework" begins by defining the key constructs that underscore the business model generation approach from a holistic perspective. Relevant theories and evidence relating to the constructs are reviewed. Section 3, "Research methodology" tells us about the philosophical considerations, research approaches, and research design. Section 4, "Data collection and analysis methods – techniques and procedures" explained used techniques and procedures of material and data collection into a case database. Technical findings, results, interpretative analysis of meaningful relationships are explained. Section 5, "Implications" covers discussion about general implications. Section 6, "Conclusions and recommendations" concludes by describing the main insights and locating potential for the further research.

#### 2. Theoretical framework

### 2.1. Resources, competencies, and capabilities

Understanding internal sources of competitive advantage has become a major area of research in strategic management. Strategic management is a set of managerial decisions and actions that determines the long-run performance of a corporation. This is a process for internal and external environment scanning and strategy formulation, implementation, and evaluation. The overarching goal of strategic management is creating and capturing values. Strategy is defined as a series of goal-directed plans and actions that align a business's structure, culture, and resources with the opportunities and threats in its environment (Figure 1).

Resources are a business's tangible and intangible assets, capabilities are the ability to exploit its resources, and competency is a cross-functional integration and coordination of capabilities (Hunger and Wheelen 2011). With identifying and developing an organization's resources and competencies deals organizational analysis - internal scanning. This analysis of strengths and weaknesses is focused on organizational structure (chain of command), corporate culture (behaviour, attitudes, norms, value judgments, and values), and organizational resources (assets, skills, knowledge). The ability to sense and then seize new opportunities, and to reconfigure and protect knowledge assets, competencies, and complementary assets is dynamic capability (Augier and Teece 2009), achieving a sustained competitive advantage needs dynamic capabilities.



**Fig.1.** Strategic alignment of structure, culture, and resources *Source:* Author's illustration

The key resources building block by Osterwalder and Pigneur (2010) describes the most important assets required to make a business model work. Every business model requires key resources. These resources allow an enterprise to create and offer a value proposition, reach markets, maintain relationships with customer segments, and earn revenues. The value configuration describes the arrangement of activities and resources that are necessary to create value for the customer. Different key resources are needed depending on the type of business model. Some business models call for financial resources and financial guarantees, such as cash, lines of credit, or a stock option pool for hiring key employees. Key resources can be owned or leased by the company or acquired from key partners.

Goergen (2012: 116) argues that "classic economic theory predicts that a country's economic growth depends on its initial allocation of resources... However, there are also three theories that link financial systems to economic growth and competitive advantage in particular industries... These theories are the information collection theory, the renegotiation theory, and the corporate governance theory." Licht *et al.* (2005) argue that culture is the true driver behind differences in corporate governance across countries. Hall and Soskice (2001) found that economic systems are not just about investments in assets and technologies, but also about investments in human capital such as the development of workers' skills and competencies. La Porta *et al.* (1997) mentioned that according to theory about the quality of law, the main driver of economic growth is investor protection. Other factors driving economic growth include trust and religion (La Porta *et al.* 1997).

The mostly applied theoretical approach is still the resource-based view (RBV) of the firm (Barney 2001). By Hack *et al.* (2012) drawing on Wernerfelt, the resource-based view provides the perception of corporations as a broader set of resources from a strategic perspective, i. e. a basis to address key issues when generating the corporation's strategy. Regarding the specification of the resource itself, Wernerfelt understands by a resource anything that can contribute to a strength or weakness of a given corporation (Wernerfelt 1984). Barney takes this a step further and provides a more detailed notion of the resources of a firm. Accordingly, to the potential resources of a particular firm he allocates all assets, capabilities, organisational processes, firm attributes, information, knowledge etc., i. e. all potential that, in turn, when controlled by this firm allows it to recognise and implement strategies that improve the firm's efficiency and effectiveness (Barney 1991). Regarding differentiation of resources, there can be differentiated tangible, for

instance, machinery, personnel etc., and intangible resources, such as knowledge, brand names etc. (Wernerfelt 1984). This categorization can be enhanced by bringing in the distinction of resources, as provided by Barney. In this respect, Barney differentiates between physical capital resources (technology, equipment, geographical location of a firm, and its access to raw materials), human capital resources (experiences, relationships, and insights of individual managers and employees in a firm), human resources are crucial in knowledge-intensive and creative industries, and organisational capital resources (a firm's formal reporting structure, its planning, controlling, coordination systems, as well as information relations among groups within a firm and between a firm and those in its environment (Barney 1991). As emphasised by Wernerfelt, resources can generate profits to a specific firm (Wernerfelt 1984). With regard to competitive advantage, Barney differentiates between competitive advantage and sustained competitive advantage, where the former emerges when a firm is implementing a value leading towards a strategy that cannot simultaneously be implemented by any current or potential competitor. The latter one implies the same attributes as the former one, but in contrast to this presupposes that a particular current or potential competitor is unable to duplicate the benefits of this particular strategy implemented by a firm (Barney 1991). What is of essential importance in this context is the identification of resources that carry with them potential to generate competitive and sustained competitive advantage. Following Barney, the focus should be concentrated on strategically crucial resources that are valuable, rare, imperfectly imitable and nonsubstitutable. Provided that a given firm possesses such resources, it is therefore able to develop resourcebased advantages that can be sustained over time (Barney 1991).

But the resource-based view has a key shortcoming, it works well in a static environment, but today's world is extremely dynamic, therefore the concept of dynamic capabilities (DC) arose. Helfat *et al.* (2007) suggest that the transformation of an organisation through additions, deletions, or modifications to its resource base entails processes for achieving these changes. It is not enough that we know what organisations do, which markets they enter, which products they introduce, how fast they grow, which firms they acquire, but also how they do it.

Hunger and Wheelen (2011) defined a competency as a cross-functional integration and coordination of capabilities. Regarding differentiation of competencies, there can be differentiated discretionary, realization, and control competence. Core competencies are a collection of competencies that cross divisional boundaries. Core competencies are widespread throughout the corporation and are something the corporation does exceedingly well. Distinctive competencies are core competencies that are superior to those of the competition. By Danneels (2002) contributes product innovation to the renewal of the firm through its dynamic and reciprocal relation with the firm's competences. Products are created by linking competences relating to technologies and customers. Hack et al. (2012) find that a clearer notion of resources can be generated by confronting the perceptions of resources and capabilities, as outlined by Amit and Schoemaker (1993). By drawing on their observations, capabilities refer to a firm's capacity to deploy resources by incorporating organisational processes and are generated by a firm to provide enhanced productivity of its resources as well as a strategic flexibility and protection for its final product or service. Moreover, in contrast to resources, capabilities are based on developing, carrying, and exchanging information through the firm's human capital (Amit and Schoemaker 1993), Capabilities, like resources, can be differentiated as well. Amit and Shoemaker (1993) distinguish between tangible or intangible capabilities and to the bundle of capabilities allocate information-based organisational processes and intermediate goods and invisible assets. Dynamic capabilities directly impact the competencies and resource base of the firm, which in turn is the source of the firm's competitive advantage (Ambrosini and Bowman 2009).

The key activities building block by Osterwalder and Pigneur (2010) describes the most important things a company must do to make its business model work. Every business model calls for a number of key activities. These are the most important actions a company must take to operate successfully. Like key resources, they are required to create and offer a value proposition, reach markets, maintain customer relationships, and earn revenues. A capability is the ability to execute a repeatable pattern of actions that is necessary in order to create value for the customer. Like key resources, key activities differ depending on business model type. Key activities can be categorized as production-, problem solving-, platform-, network key activities. Production activities relate to designing, making, and delivering a product in substantial quantities and/or of superior quality. Production activity dominates the business models of manufacturing firms. Problem solving key activities relate to coming up with new solutions to individual customer

problems. The operations of consultancies, hospitals, and other service organizations are typically dominated by problem solving activities. Their business models call for activities such as knowledge management and continuous training. Business models designed with a platform as a key resource are dominated by platform or network-related key activities. Networks, matchmaking platforms, software, and even brands can function as a platform. Key activities in this category relate to platform management, service provisioning, and platform promotion.

Wahl (2012) find that considerations such as how resources are developed, how they are integrated within the firm and how they are released have also been under-explored. Dynamic capabilities (DC) attempt to bridge these gaps by acting as a buffer between firm resources and the changing business environment. It is plausible that the specific dynamic capability, whether problem formulation, problem solving, or solution implementation, may depend on the nature of the changing environment (Nickerson et al. 2012). The essence of dynamic capabilities is a firm's behavioural orientation in the adaptation, renewal, reconfiguration and recreation of resources, capabilities and core capabilities responding to external changes (Teece et al. 1997; Wang and Ahmed 2007). Both capabilities (DC) and resource-based view (RBV), uses routines and resources as the units of analysis. Routines are defined as behaviour that is learned, highly patterned, repetitious or quasi-repetitious, founded in part in tacit knowledge (Winter 2003), Behavioural assumptions, bounded rationality and opportunism, represent a superset of assumptions for the capabilities, dynamic capabilities, and governance perspectives (Nickerson et al. 2012). While the resource-based view (RBV) emphasizes resource choice or the selecting of appropriate resources, dynamic capabilities (DC) emphasize resource development and renewal. More generally, capability development entails improvement over time in carrying out the activity as a team, these improvements are likely to stem from a number of factors, including but not limited to learning-by-doing (Helfat and Peteraf 2003). However, dynamic capabilities do not just appear from nothing, but instead they are typically the outcome of experience and learning within the organisations (Kuuluvainen 2012). Learning organization is an organization skilled at creating, acquiring, and transferring knowledge and at modifying its behaviour to reflect new knowledge and insights (Hunger and Wheelen 2011).

# 2.2. Defining the main constructs with focus on values

A construct refers to a verbal definition of an abstract idea. A construct in the philosophy of science is an ideal object, where the existence of the thing may be said to depend upon a subject's mind, as opposed to a real object, where existence does not seem to depend on the existence of a mind (Bunge 1974). Constructs are particularly meaningful in qualitative research because they enable to define and explain the research phenomenon, and to focus on examining how various phenomena are being conceptualised.

The goal of strategic management is creating and capturing value. Values are deeply rooted, abstract motivations that guide, justify or explain attitudes, norms, opinions and actions (Schwartz 1992) in the analysis they can provide predictive and explanatory power. Moreover, values can reflect a major social change in societies and across nations (Schwartz 2003). Cardinal values (wealth, order, truth, transcendent, virtue, and beauty) are values that are fundamental to rest of the moral system, the values from which all other values spring (Zetterberg 1997). The value propositions building block by Osterwalder and Pigneur (2010) describes the bundle of products and services that create value for a specific customer segment. A value proposition creates value for a customer segment through a distinct mix of elements catering to that segment's needs. A value preposition is an overall view of a company's bundle of products and services that are of value to the customer. Here values may be quantitative (e.g. price, speed of service) or qualitative (e.g. design, customer experience).

Stakeholder theory begins with the assumption that values are necessarily and explicitly a part of doing business. It asks managers to articulate the shared sense of the value they create, and what brings its core stakeholders together. It also pushes managers to be clear about how they want to do business, specifically what kind of relationships they want and need to create with their stakeholders to deliver for their purpose. Stakeholder theory concerns values and beliefs about the appropriate relationships between the individual, the enterprise, and the state (Tricker 2009). Freeman *et al.* (2004: 366) tell that "Shareholders are stakeholders; creating value for stakeholders creates value for shareholders. How else could managers create shareholder value other than by creating products and services that customers are willing to buy, offering

jobs that employees are willing to fill, building relationships with suppliers that companies are eager to have, and being good citizens in the community? Creating value for stakeholders is important." A careful exploration of the concept of values, uncovers differences indicating that organizational values adopt a number of forms. Bourne and Jenkins (2013) make the case that there are four distinct forms of organizational values — espoused, attributed, shared and aspirational. These partial, but related, forms encompass variation in temporal orientation and levels of analysis. They use these forms to reveal the dynamic nature of organizational values by delineating the evolution of gaps and overlaps between them. They set out a series of propositions, originating from institutional, organizational and managerial sources to explain the nature of movement between these distinct forms of values and the potential implications for organizational behaviour and performance.

In conclusion it can be stated, through the authors, that strategic management is a set of decisions and activities that determines the long-run performance of a business. The overarching goal of strategic management and business model generating is creating and capturing value for core stakeholders. Strategy is defined as a series of goal-directed plans and activities that align a business's structure (chain of command), culture (behaviour, attitudes, norms, value judgments, and values), and resources (tangible and intangible assets, skills, knowledge) with the opportunities and threats in its environment. The Nickerson *et al.* (2012) problem-finding and problem-solving approach considers four activities: problem finding, framing, and formulating; problem solving; solution implementation; and operating implemented solutions, as necessary for creating and capturing value. Resources are means, competencies powers, and capabilities abilities.

## 3. Research methodology

## 3.1. Philosophies and research approaches

Research philosophies tells us about the philosophic assumptions the authors have about the world, the nature of knowledge and knowing, the role of values, and how to go about studying the phenomena. Every research tradition makes four key assumptions: ontological, epistemological, axiological, and methodological. The nature of the research problem is the guiding star when deciding on the methodology.

Current work is based on constructionism; it is in the early stage of development as a research paradigm and is distinguished from the others by its relativist stance, which holds that realities are apprehensible in the form of multiple, intangible mental constructions that are socially and experientially based (Guba and Lincoln 1994). Interpretive ontological assumptions are that the world is complex and dynamic and is constructed, interpreted and experienced by people in their interactions with each other and with wider social systems. People experience reality in different ways. Reality is constructed by people based on beliefs, feelings and experiences; multiple local and specific "constructed" realities exist (Hine and Carson 2007). An interpretive epistemological assumption is that knowledge is based not only on observable phenomena, but also on subjective beliefs, values, reasons, and understandings. The researcher is a "passionate participant" in the world being investigated. Values are an integral part of social life – no values are wrong, only different (Hine and Carson 2007). Theories are constructed from multiple realities; they are shaped by social and cultural context. Interpretive research focuses on the full complexity of human sense making as the situation emerges (Kaplan and Maxwell 1994).

The two main research approaches are Deduction – theory and hypotheses are developed and tested, and Induction – data are collected and a theory developed from the data analysis (Saunders *et al.* 2009). The third way is Abduction – the principle of abduction aligns with the constructionist view of the world. Abduction is the process of forming an explanatory hypothesis; by Peirce (1931) it is the only logical operation which introduces a new idea.

# 3.2. Research design – strategies, choices and time horizons

Research design turns the research problem and objectives into a project that considers strategies, choices and time horizons. The chosen case study strategy is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially because the boundaries between phenomenon and context

are not clearly evident (Yin 2009). Case studies provide a rich understanding of a real life context; using and triangulate multiple sources of data.

All research, whether quantitative or qualitative, is based on some underlying assumptions about what constitutes "valid" research and which research methods are appropriate. Both qualitative and quantitative researches have associated ethical issues. Negotiating access and research ethics are critical aspects of research; therefore potential ethical issues should be recognised. Also data protection legislation requires complying with legal requirements. Research projects may be cross-sectional or longitudinal. The chosen research strategy is case study, using mixed methods, and it can be categorised as an explanatory, cross-sectional research project.

### 4. Data collection and analysis methods – techniques and procedures

Techniques and procedures are miscellaneous material or data collection and analysis methods. Although a clear distinction between data gathering and data analysis is commonly made in quantitative research, such a distinction is problematic for many qualitative researchers. The process of data analysis and collection is necessarily interactive. Qualitative data refer to all non-numeric data or data that have not been quantified and can be a product of all research strategies (Saunders *et al.* 2009). The data type constrains the presentation, summary and analysis techniques that can be used.

MEKTORY has organized 2012 the second business model generation competition, all competitive case studies (n = 38) are analysed. All students were able to form up teams and participate in the competition, compete for valuable prizes and, most importantly, gain experiences in managing teamwork, sharing and presenting ideas.

All material and data are entered into a MS Excel 2010 case database. All chosen cases (n=38) are thoroughly described and coded, starting with old and new key resources (OR, NR), key activities (OC, NC), and value propositions (OV, NV). Material is entered as a matrix and recorded using numerical codes. Codes are entered for all data values. Existing coding schemes enable comparisons. Data are checked for errors, cleaned, pre-processed. Thematic case analysis and case contrasts were done before analysis of empirical regularities. For computer analysis Microsoft Excel 2010, The Waikato Environment for Knowledge Analysis WEKA 3.6.2 (Hall *et al.* 2009), Feinberg's Wordle (2013), Steinbock's TagCrowd (2013), and Text is Beautiful (2013) the modern text analytics for an innovative way to present, and to garner deeper insight from text were used.

We identify emergent concepts and utilise a rich array of metrics to highlight meaningful relationships and real insight into our text. This deeper context is simply unavailable to many tools that rely solely on word counting. We live in a world where the importance and volume of information being collected and made available is increasing quickly. Despite the availability of large quantities of free-form text, much of the information is only considered in a quantitative context. We often tend to omit qualitative analysis and exploration. We are able to compete with the pretty visuals made using quantitative data, and it is more about helping to understand the text. Text is Beautiful (2013) integrates concept clouds, concept webs, and correlation wheels. In this visualisation (Figure 2), Concept Cloud for the examined categories and subcategories of resources, competencies, capabilities, and values, the concepts are positioned randomly to keep the visualisation nice and compact.



**Fig. 2.** Concept Cloud for the examined categories and subcategories of resources, competencies, capabilities, and values *Source:* Author's illustration

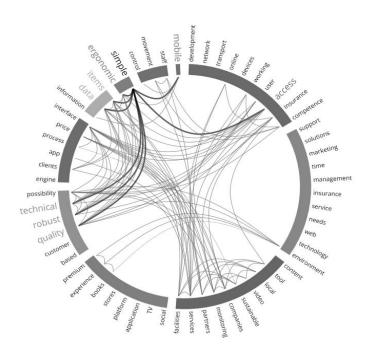
The size of a concept denotes how frequent it is within the text. The Concept Cloud groups concepts into categories. In original categories are denoted by colour. Concepts that have the same colour belong to the same theme and are closely related.

In the Concept Web (Figure 3), the position of concepts matter. Concepts that are more related will appear near each other. Concepts that aren't much related will appear further apart. As with the Concept Cloud, related concepts are grouped into categories. They are denoted by colour.



**Fig.3.** Concept Web for the examined categories and subcategories of resources, competencies, capabilities, and values *Source:* Author's illustration

Correlation Wheel (Figure 4) is used to visualise which concepts are highly correlated with each other. Two concepts are highly correlated if they appear together in the text often and appear apart rarely. The correlation is symmetric. This means that concepts which appear large in the Concept Web will most likely not be highly correlated with any concepts. We use this visualisation to identify underlying categories in our text.



**Fig.4.** Correlation Wheel for the examined categories and subcategories of resources, competencies, capabilities, and values *Source:* Author's illustration

In our text simple and quality, robust, technical, data, items, ergonomic, mobile, access are highly correlated. Deeper analysis is done for resources witch by definition are means, competencies as powers, capabilities as abilities, and values.



**Fig.5.** Concept Cloud for the examined categories and subcategories of resources *Source:* Author's illustration

The correlation between categories and subcategories of resources visualised as Concept Cloud (Figure 5) was tested in Weka 3.6.2. A comparison of the two results reveals high similarity, the top 5 ranking is human, brand, patents, people, and employees.



**Fig.6.** Concept Cloud for the examined categories and subcategories of capabilities *Source:* Author's illustration

The correlation between categories and subcategories of capabilities visualised as Concept Cloud (Figure 6) was tested in Weka 3.6.2. A comparison of the two results reveals high similarity; the top 5 ranking is marketing, development, sales, production, and distribution.



**Fig.7.** Concept Cloud for the examined categories and subcategories of values *Source:* Author's illustration

The correlation between categories and subcategories of values visualised as Concept Cloud (Figure 7) was tested in Weka 3.6.2. A comparison of the two results reveals high similarity; the top 5 ranking is time, book, free, information, support, management.

The examined categories and subcategories of resources, competencies, capabilities, and values should be not only described but also "understood" and "explained", therefore the meaningful relationships that form the basis of the empirically founded groups and combinations of attributes were analysed.

#### 5. Implications

The appraisal of the outcome of the business model competition allows an analysis of the perception space of the MEKTORY students revealing the links and interactions between the resources, competencies, capabilities, and values. The highlighted words in the diagrams express the most important entrepreneurial categories and their relations in the perception space of the business model creators. In the sequel we will order the outcome into well-known results of business research.

The first observation concerns the linked perception of development, production, distribution and marketing revealing a holistic view on four main business categories. This result is quite surprising since the traditional business plan approaches are rather stressing financial and marketing aspects. A second observation shows an interaction of the categories workforce, patents and branding revealing strong links between innovation

and human capital equipped with an interpretation of branding which opens a role beyond marketing by emphasising also internal aspects as a part of the internal innovation culture of the company.

Already these two observations bear strong similarities to the world of hidden champions which were brought into the scientific discussions by Simon (Simon 2007; Venohr and Meyer 2007). Hidden champions represent a special group of SME which are highly successful with a single or only a few products in global niche markets. Hidden champions are companies which are among the top three in global markets enjoying a revenue below 3 billion € and which work under low public awareness.

As a result of the focus on small niche markets it is usually necessary to deal on the global market to be able to benefit from economy of scale effects. Such a strategy requires well developed and effective distribution, marketing and innovation processes as well as a high level internationalisation. Due to the high dependency on the single product there exists a high cooperation and closeness between the hidden champions and their customers. The market leadership of hidden champions is based usually on high quality strategies related with high pricing and a high production depth in order to safeguard the quality level and to protect the know-how during the manufacturing process.

The typical homeland of the ca. 2000 hidden champions is Germany where around 2/3 of all companies are located. The average growth rates is about 25% per year and innovation is one important driving force of hidden champions which can be expressed by a research and development rate of 6% and a number of 30 patents per 1000 employees which is double and 5 times higher than in average companies. It has to be mentioned that innovation is not restricted to technology; also marketing and distribution are target areas for innovations.

Finally the strategies of hidden champions are impacting also the field of personnel management where employees are regarded as assets enjoying regular trainings and continuous qualifications so consequently the fluctuation rate only reaches 2.7% which is only about 1/3 of normal companies and CEO's stay in the average 20 years compared to 5 years in DAX companies. This stresses the existence of a brand strategy which is coherently communicating internally and externally the values of innovation and quality as well as the importance of cultural values and issues for the underlying organisations.

But since the starting point of our research is related to start-up sector it makes sense to add some remarks on the relationship with young fast growing start-up companies which Birch called "gazelles" (Birch and Medoff 1994). More recent studies show that "gazelles" need not to be necessarily young companies (Dautzenberg *et al.* 2012) and compared to hidden champions they are relative numerous, so only Germany counts more than 13000 gazelle companies. In any case gazelles can be characterised by their fast growth, especially in employment, they appear very often in knowledge intensive branches, and they are highly innovative and internationalised. From this point of view it is surprising that the categories internationalisation and culture are totally missing in the considered business models.

Especially the underdeveloped perception of internationalisation is not only neglecting the reality in hidden champions and gazelles, it is also underestimating the influence of cultural variety and diversity on innovation. In a famous study of Niebuhr (2010) it turned out that cultural variety has a significant positive impact on the innovation power of regions. In this context companies which are enjoying international operations are rather able to attract and integrate well-educated migrants and so they benefit from their intercultural diversity (Prause and Hunke 2012).

Coming back to our research results it turns out that the observed semantic clusters are fitting well to the characteristics of hidden champions. In this sense the results based on the entrepreneurial concepts of MEKTORY show a strong affinity to the categories of hidden champions which is not really surprising since the entrepreneurial concepts of MEKTORY are focussing on needs and configurations guaranteeing high growth and innovation driven developments for new and young technology companies acting with a single product on markets which could be even global.

#### **Conclusions and recommendations**

The conducted research allows making conclusions and recommendations. The problem, set by the authors, of not understanding what is really meant by resources, competencies, and capabilities is solved. The main purpose to develop a better understanding reached.

In conclusion it can be stated through the authors that strategic management is a set of decisions and activities that determines the long-run performance of a business. The overarching goal of strategic management and business model generating is creating and capturing value for core stakeholders. Strategy is defined as a series of goal-directed plans and activities that align a business's structure (chain of command), culture (beliefs, expectations, norms and values), and resources (tangible and intangible assets, skills, competencies, knowledge) with the opportunities and threats in its environment. The Nickerson *et al.* (2012) problem-finding and problem-solving approach considers four activities: problem finding, framing, and formulating; problem solving; solution implementation; and operating implemented solutions, as necessary for creating and capturing value. The main implication of the current research is better understanding that resources are means, competencies powers, and capabilities abilities. Methodologically the research is valuable used modern text analytics for an innovative way to present, and to garner deeper insight from text.

Interpreting the results, it is important to keep in mind that MEKTORY has organized only just the second business model generation competition. The most important limitation lies in the fact that our case database consists only few competitive case studies (n = 38). Organizational success is related to growth and development. It is recommended that further research should include evolutionary approaches, which are not explicitly used as a theoretical framework in strategic management, although the evolutionary perspective is consistent with it. Further normative value research might investigate what should be the ownership values for successful companies. Strategic management has become a major topic in the world of business, politics, and academia, in Estonia and throughout the world. It has important implications not only for business, but for the wider economy and society.

### References

Ambrosini, V.; Bowman, C. 2009. What are dynamic capabilities and are they a useful construct in strategic management?, *International Journal of Management Reviews* 11(1): 29–49.

Amit, R.; Schoemaker, P.J.H. 1993. Strategic Assets and Organisational Rent, Strategic Management Journal 14: 33-46.

Andreadakis, S. 2011. Towards an enlightened shareholder value: The tension between shareholder and stakeholder models in modern corporate governance. Paper presented at the European Institute for Advanced Studies in Management (EIASM) 8<sup>th</sup> workshop on corporate governance. Brussels.

Augier, M.; Teece, D.J. 2009. Dynamic Capabilities and the Role of Managers, Organization Science 20(2): 410-421.

Barney, J. 1991. Firm resources and sustained competitive advantage, Journal of Management 17(1): 99-120.

Barney, J.B. 2001. Is the Resource-Based View a Useful Perspective for Strategic Management Research? Yes, *Academy of Management Review* 26(1): 41–56.

Birch, D.L.; Medoff, J. 1994. Gazelles, in Solmon, L.C. and Levenson, A.R. (Eds.). Labor markets, employment policy and job creation. Boulder: Westview Press, 159–168.

Bourne, H.; Jenkins, M. 2013. Organizational Values: A Dynamic Perspective, Organization Studies 34(4): 495-514.

Bunge, M. 1974. Treatise on Basic Philosophy, Vol. I Semantics I: Sense and Reference. Dordrecth-Boston: Reidel Publishing Co.

Danneels, E. 2002. The dynamics of product innovation and firm competences, Strategic Management Journal 23(12): 1095–1121.

Dautzenberg, K.; Ehrlinspiel, M.; Gude, H.; Käser-Erdtracht, J.; Schultz, P.; Tenorth, J.; Tscherntke, M.; Wllau, F. 2012. *Study on fast growing young companies (Gazelles)*'. Berlin: Federal Ministry of Economy and Technology.

Feinberg, J. 2013. Wordle. Available on the Internet: <a href="http://www.wordle.net/">http://www.wordle.net/</a>>.

Freeman, R.E.; Wicks, A.; Parmar, B. 2004. Stakeholder Theory and The Corporate Objective Revisited, *Organization Science* 15(3): 364–369.

Goergen, M. 2012. International Corporate Governance. Harlow: Pearson.

Guba, E.G.; Lincoln, Y.S. 1994. Competing paradigms in qualitative research, in Denzin, N.K. and Lincoln, Y.S. (Eds.). *Handbook of qualitative research*. London: Sage, 105–117.

Hack, A.; Prause, G.; Maknyte, L. 2012. Design Management and Branding for SMEs: Experiences from the DesignSHIP Project, in Prause, G.; Muravska, T. (Eds.). *European Integration and Baltic Sea Region Studies: University- Business Partnership through the Triple Helix Approach.* Berlin: Berliner Wissenschafts-Verlag, 130–150.

Hall, M.; Frank, E.; Holmes, G.; Pfahringer, B.; Reutemann, P.; Witten, I.H. 2009. The WEKA Data Mining Software: An Update. Available on the Internet: <a href="http://www.kdd.org/explorations/issues/11-1-2009-07/p2V11n1.pdf">http://www.kdd.org/explorations/issues/11-1-2009-07/p2V11n1.pdf</a>

Hall, P.; Soskice, D. 2001. Varieties of Capitalism: The Institutional Foundations of Comparative Advantage. Oxford: Oxford University Press.

Helfat, C.E.; Peteraf, M.A. 2003. The dynamic resource-based view: Capability lifecycles, *Strategic Management Journal* 24: 997–1010.

Helfat, C.E.; Finkelstein, S.; Mitchell, W.; Peteraf, M.; Singh, H.; Teece, D.J.; Winter, S.G. 2007. *Dynamic Capabilities: Understanding Strategic Change in Organizations*. Oxford: Blackwell Publishing.

Hilb, M. 2006. Integrierte Corporate Governance: Ein neues Konzept der Unternehmensführung und Erfolgskontrolle. Zweite Auflage. Berlin: Springer-Verlag.

Hine, D.; Carson, D. (Eds.). 2007. Innovative Methodologies in Enterprise Research. Cheltenham, UK: Edward Elgar.

Hunger, J.; Wheelen, T.L. 2011. Essentials of strategic management. Fifth edition. Upper Saddle River (N.J.): Prentice Hall Publishing.

Kaplan, B.; Maxwell, J.A. 1994. Qualitative research methods for evaluating computer information systems, in Anderson, J.G.; Aydin, C.E.; Jay, S.J. (Eds.). *Evaluating health care information systems, methods and applications*. Thousand Oaks, CA: Sage, 45–68.

Kuuluvainen, A. 2012. International Growth of a Finnish High-Tech SME: A Dynamic Capabilities Approach, Research in Economics and Business: Central and Eastern Europe 4(2): 26–40.

La Porta, R.; Lopez-De-Silanes, F.; Shleifer, A. 1999. Corporate Ownership around the World, Journal of Finance 54(2): 471–517.

La Porta, R.; Lopez-de-Silanes, F.; Shleifer, A.; Vishny, R. 1997. Trust in Large Organizations, *American Economic Review* 87: 333-338.

Licht, A.; Goldschmidt, C.; Schwartz, S. 2005. Culture, Law, and Corporate Governance, *International Review of Law and Economics* 25: 229–255.

Nickerson, J.; Yen, C.J.; Mahoney, J.T. 2012. Exploring the Problem-Finding and Problem-Solving Approach for Designing Organizations, *Academy of Management Perspectives* 26(1): 52–72.

Niebuhr, A. 2010. Migration and innovation: Does cultural diversity matter for regional RandD activity? *Papers in Regional Science* 89(3): 563–585.

Osterwalder, A.; Pigneur, Y. 2010. Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers. Hoboken (N.J.): Wiley.

Peirce, C.S. 1931. *The Collected Papers Vol. V: Pragmatism and Pramaticism.* Available on the Internet: <a href="http://www.textlog.de/peirce\_pragmatism.html">http://www.textlog.de/peirce\_pragmatism.html</a>.

Pichet, E. 2011. Enlightened Shareholder Theory: Whose Interests Should Be Served by the Supporters of Corporate Governance?, *Corporate Ownership and Control* 8(2-3): 353–362.

Prause, G.; Hunke, K. 2012. University – Business Interaction in the Context of Demographic Change, in Prause, G. and Muravska, T. (Eds.). *European Integration and Baltic Sea Region Studies: University- Business Partnership through the Triple Helix Approach.* Berlin: Berliner Wissenschafts-Verlag, 190–203.

Saunders, M.; Lewis, P.; Thornhill, A. 2009. Research Methods for Business Students. Fifth Edition. Harlow: Prentice Hall.

Schwartz, S.H. 1992. Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries, in Zanna, M. (Ed.). *Advances in Experimental Social Psychology*. New York: Academic Press, 1–65.

Schwartz, S.H. 2003. A Proposal for Measuring Value Orientations across Nations. Chapter 7 in the Questionnaire Development Package of the European Social Survey.

Simon, H. 2007. Hidden Champions des 21. Jahrhunderts: Die Erfolgsstrategien der unbekannten Weltmarktführer. Frankfurt/Main: Campus Verlag.

Steinbock, D. 2013. TagCrowd. Available on the Internet: <a href="http://tagcrowd.com/">http://tagcrowd.com/</a>>.

Teece, D.J.; Pisano, G.; Shuen, A. 1997. Dynamic capabilities and strategic management, *Strategic Management Journal* 18(7): 509–533.

Text is Beautiful. 2013. Available on the Internet: <a href="http://textisbeautiful.net/">http://textisbeautiful.net/</a>>.

Tricker, B. 2009. Corporate Governance: Principles, Policies and Practices. Oxford: Oxford University Press.

Venohr, B.; Meyer, K.E. 2007. The German Miracle Keeps Running: How Germany's Hidden Champions Stay Ahead in the Global Economy', *Working Papers Business and Management* 30: 1–31.

Wahl, M.F. 2012. Ownership Typology: Four Basic Human Values and Will Based Ideal Types, *Research in Economics and Business: Central and Eastern Europe* 4(2): 61–83.

Wang, C.; Ahmed, P.K. 2007. Dynamic Capabilities: A Review and Research Agenda, *International Journal of Management Reviews* 9(1): 31–51.

Wernerfelt, B. 1984. A Resource-Based View of the Firm, Strategic Management Journal 5: 171–180.

Winter, S.G. 2003. Understanding dynamic capabilities, Strategic Management Journal 24: 991–995.

Yin, R.K. 2009. Case study research: Design and methods. 4th ed. Thousand Oaks, CA: Sage.

Zetterberg, H.L. 1997. The Study of Values, in Swedberg, R. and Uddhammar, E. (Eds.). *Sociological Endeavor. Selected Writings* Stockholm: City University Press, 191–219.

Dr., asociate professor Mike Wahl, PhD from Tallinn School of Economics and Business Administration, Tallinn University of Technology is interested in Food Sciences, Management of Enterprises, and Corporate Governance.

Visiting Professor, Dr. Gunnar Prause, from Tallinn School of Economics and Business Administration, Tallinn University of Technology works in the fields of SME – Management, International Business and Logistics.