Why Companies Need People with Entrepreneurial Mindset?

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Abstract

The paper explores the mindsets that are required and, thus, likely to become prevalent in different stages of the development of a business model of a business organization. The implications these different stages and related mindsets have for business operations, human resources and training of future professionals are further elaborated on using the theoretical construct of entrepreneurial orientation (EO) (Lumpkin & Dess, 1996) as a framework. The simple model of the stages of business model development (Christensen & al., 2016) is used as a framework, alongside with *Cynefin* framework developed in IBM company by Dave Snowden for decision-making to theorize on the effects of different developmental stages and business contexts on the mindset and entrepreneurial orientation of those working within companies or business units with their business models in respective stages. TAMK Proakatemia unit of entrepreneurship education in Tampere University of Applied Sciences is discussed briefly as an example of educational model and practices that support the development of entrepreneurial capabilities and the future professionals' ability to work in different kinds of business contexts, including those that require high level of entrepreneurial orientation.

Keywords: Business Models, Entrepreneurship, Entrepreneurial Orientation, Mindset, Vocational Education, Human Resources

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Developmental stages of a business model

In their essay, Christensen, Bartman & Bever (2016) illustrate the three stages that businesses successively undergo with their business model. These successive stages are called (1) *Creation*, (2) *Sustaining Innovation* and (3) *Efficiency*. This paper will argue that these stages in the life-cycle of a business model necessitate very different kinds of mindsets (incl. the view of the world where the business operates) and that they have very different requirements for the entrepreneurial orientation of the people involved. Entrepreneurial orientation (EO) is a theoretical construction used in evaluating the capabilities of a company to engage in entrepreneurial process of launching new ventures. According to Lumpkin & Dess (1996), EO comprises of five dimensions of autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness.

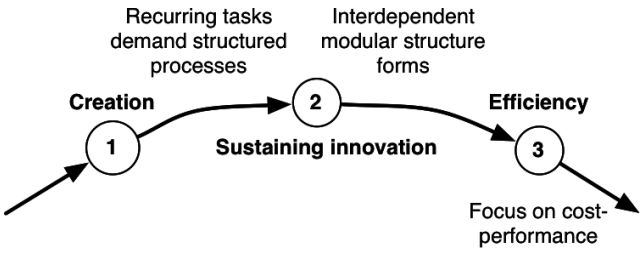

Figure 1. Stages of a business model (based on Christensen et al., 2016)

Businesses in the *creation* stage focus on product or service innovation activities with a goal of creating a new market out of a situation with a high level of uncertainty and engages in critical dialogue about its context of business and the "*job to be done*" (Christensen et al., 2016) for its customers. Emphasis is on decisive action, experimentation and agility in developing new

business based on emerging opportunities. This taking of emerging opportunities requires the company or a business unit to exercise all five dimensions of EO in a high degree to bring into reality and market a product or service that others have either never tried or where they have failed before.

If the business survives the initial stage, it enters the *sustaining innovation* stage in which the emphasis is on sustaining the product or service innovation and scaling the operations to meet the growing demand. In order to do this, the business needs to establish procedures of gathering data on its customers and focus on increasing their loyalty to its already established products. Recurring and routine tasks in day-to-day running of an established business necessitate the emergence of more structured business processes. This is the stage where interdependencies between different parts of the process and modular structures of operations and products start forming to facilitate greater performance. Sustaining innovation still requires the company or the team to exercise all dimensions of entrepreneurial orientation in process innovation but in what may be to a slightly lesser degree than in new business creation. The focus shifts from developing entirely new products or services to developing and implementing new processes to sustain and grow the business and emerging interdependencies may begin to limit the autonomy and proactiveness of the people involved.

When the additional investment in product development no longer generates enough additional profit, the business will need to start focusing more on *efficiency* of its day-to-day operations by reducing their costs and optimizing performance to match available resources. The management will, due to necessities of maintaining and growing business, become more interested in balance sheets and other measures of cost-performance. To maximize the benefits of

highly interdependent processes and modular structure of operations and products, the business model is likely to become more rigid.

Especially in the stage where a business focuses on efficiency, it tends to suppress entrepreneurial activities and initiatives because they often cause unnecessary risks and deviate from the focus on optimizing existing processes. The processes to be optimized are those that yield the greatest return on invested resources or have at least done so in the recent past. In order to be effective, this focus on efficiency requires a view of the world in which measurable actions cause measurable and predictable outcomes.

The developmental stage of a business influences the teams and individuals working in a company or a business unit. When the situation repeatedly calls for greater acknowledgment of interdependencies between highly optimized processes and cost-performance, these interdependencies are likely to become the focus of everyone's thinking, and even the basis of what people see as meaningful in business. Thus, executives and managers will be more likely to emphasize those aspects of business that are relatively easy to measure, predict, control and optimize. For people in efficiency-stage business, the world around the business and its cause-effect relationships will appear more ordered and predictable, as long as the right facts, together with causes and effects are known and acknowledged.

Cynefin framework for decision-making

Christensen, Bartman and Bever's three-stage model of business model's development over time corresponds with different domains in a "Cynefin" framework for decision-making developed in IBM (Snowden & Boone, 2007). As with the different stages of business model development, the different domains in the Cynefin framework require the participants to take

very different approaches that are often contradictory and even in conflict with each other. Cynefin framework consists of four domains for different kinds of situations that require decisions. Beyond different approaches to decision-making and problem-solving, these domains may necessitate the participants to have very different worldviews.

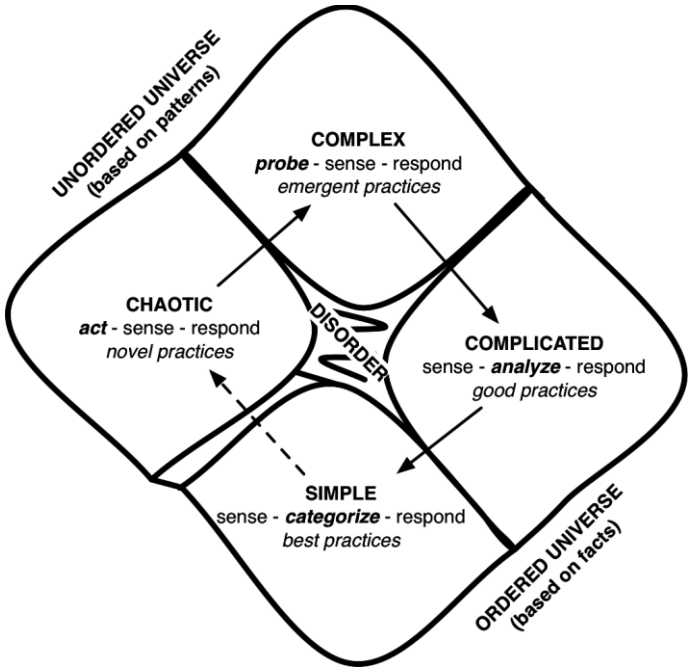

Figure 2. Cynefin framework of domains of decision-making (based on Snowden & Boone, 2007)

In the domain of *simple* contexts, the universe is seen to be fundamentally ordered - a place where the relationships between causes and their effects can be perceived, and where the right answers and decisions can be determined based on facts. The key to figuring out the right decisions is based on the leaders assessing the (perceived) facts in the situation, categorizing them and then making the decisions based on established *best practices* - the ones that will, by causal necessity, deliver the best possible result. This can also be viewed as the domain of maximal efficiency - one where investing in certain aspect of business will cause its profitability

to grow. The main danger in simple domain is unquestioning complacency and remaining too long with a business model that is no longer viable, without investing in developing new business. If this happens, the business can slip, through disorder, into chaotic domain without having developed the mindset needed for rapid action to experiment with an entirely new business model and novel practices.

One example of this slippage into chaotic domain might be a market disruption by a new competitor in the field where there have previously been very restrictive barriers to market. To give an example of this happening, Finnish technology company Nokia had a near monopoly in designing and manufacturing mobile phones until the technology barriers to market (key mobile technologies) were overcome by other companies outside the telecom industry, notably Apple and Samsung. These new actors in the field were more focused on user experience and quickly surpassed Nokia whose user experience had, despite considerable investment in R&D, stagnated due to simplistic assumptions about the customers' needs.

Decisions in the simple domain are tightly constrained and there is no real freedom to act in any other way than the one that is perfectly aligned with all the other tightly integrated aspects of the business. This is the domain of where relatively simple business analytics will yield high return on investment but danger in basing business decisions solely on those lies in not noticing, except after the fact, when the business has moved to other domains. In the case of Nokia, its established market leadership in keyboard-based mobile phones and feature phones led its decision makers to believe that this was what its customers wanted for the future, while Apple and Samsung were already developing products for customers who preferred the touch-display paradigm.

Complicated contexts are the domain expertise and good practices based on analyzing the complicated cause-effect relationships, acting accordingly and uncovering good practices that are likely to result in desired effects based on estimated causes. In complicated contexts, decision-making is governed by constraints resulting from tightly coupled relationships between different activities.

Many Finnish companies, such as Nokia in the early years of 2000s, have done relatively well when their business has remained in the complicated domain and tried to push their core business processes towards the simple domain, as that would appear to bring even greater profits with a great degree of certainty. This push towards less complicated processes and best practices can be seen in the shift in focus of business towards greater level of standardization, contracts and litigation. Good practices in complicated domain often become the best or the only viable practices of the (assumed) simple domain.

In the *complex* domain, the cause-effect relationships cannot be delimited clearly. In other words, they can be said to be "loosely coupled". There may be loose interdependencies between the aspects of business but actions taken on one aspect do not necessarily affect other parts of the company. Complexities can also arise because of the intertwining and entangling cause-effect relationships and emergent, systemic phenomena. In complex domain, causes and effects may become indistinguishable but the few contextual constraints that exist in this domain enable and support focusing on creativity and action in the form of continuous experimentation. Complex domain can typically be seen as the domain that requires companies or business units to establish a culture of experimentation and to build their capacity for systems intelligence (Senge, 2006).

In *chaotic* domain, there are no perceivable cause-effect relationships where managing them would make any sense. When causality does not provide the basis for decision-making,

there are also no meaningful constraints on action beyond regulatory or social norms. Action in chaotic context is de-coupled, meaning that there is no way of predicting if it has a meaningful effect on something. Thus, the only sensible approach in chaotic contexts is to try out something and see is if it has a positive (or negative) effect, and to respond to that effect by changing the action accordingly. The mindset needed for this kind of rapid experimentation in the middle of complete uncertainty is clearly very different from the mindset and a worldview required for efficient running of established business operations.

Automatization is reducing the need for human labor in areas of work where decision-making falls mostly within simple domain. These areas include mostly routine manual labor, and most white-collar professions have been safe or even benefited from increasing automatization. However, with the increasingly fast development of machine learning algorithms and robotics, as well as the increasing ability of algorithms to leverage social media to assist in processes, like management, these professions are no longer safe from radical change or becoming obsolete. Existing studies on human vs. machine work have focused around the theme of routine vs. non-routine tasks, but I would like to suggest that the issue is more connected to difference between work where the process itself adds value, often in the form of meaning, to the resulting product or service, and work where the main goal is to optimize, maximize or minimize an agreed set of variables, such as cost-efficiency. I will call the former type of work "meaning-focused" and the latter "instrumental".

Thus, a more complex picture of the future of human labor emerges: It is easy to see how learning algorithms and robots will be able to carry out increasingly complicated tasks and become superior to humans where instrumental work is concerned like, for example, in managing the cost-efficiency of a business or executing increasingly complicated tasks in a

manufacturing facility but where human labor will be irreplaceable in the long-term will be in work that builds and seeks for new meaningful value or adds meaningful value to the process itself, and where the end product or the service provided carries that meaning within itself. This is most obvious in the creation of new markets and products, as well as in co-design of products and services with the customers but automatization is not threatening all manual or routine labor either. To give an example, there will be a need for human labor in creation of artesan products, where the value of the product is created through its history of having been created by an expert craftsman engaging with the raw material or the components of the end product. Also, in caring professions and in "wellness" the process of engaging with the professional often adds superior value to the service. Compare, for example, the perceived value of sitting in a "massage chair" on an airport to having an appointment with an expert masseuse. It is possible to see the work in any profession as instrumental optimization of few variables. For example, teaching can be seen as a job where the main task is to maximize the number and depth of skills acquired by the individual learners. This view, however, ignores most of the social and ethical aspects of teaching and learning and would ultimately prevent education in any proper sense of the word. Having said that, there are instrumental tasks in teaching, and those can and perhaps should be automated so that the teachers are better able to focus on ethical and social aspects of education.

Implications

As these two models illustrate, different organizational and business contexts necessitate widely different and even conflicting approaches to decision-making and even different world views. Christensen and al. are skeptical whether businesses that are on a specific stage in their development can effectively take on approaches suited for other stages, and this skepticism can

be extended to people working in organizations and formulated into a question of whether people working in a specific context of an organization that is currently functioning on a specific stage of business model development and where the context necessitates certain kind of decision making, can easily shift their world view and approach to decision-making to suit a very different business model stage or organizational context? It is highly doubtful that this kind of shift can be easily accomplished by individuals or teams in a short time.

This is not to say that organizations should only hire people who suit their specific stage or context. On the contrary, to be able to transition successfully from the focus on efficiency to creation of new business, or to survive in a chaotic context, an organization must include people who can work effectively in those kinds of situations. They are needed especially because there is no easy way back from the focus on efficiency to focus on new business creation, or from a chaotic context of decision-making back to the simple context. To remain resilient, an organization needs people who can "reboot" the process of creating new business and bring the organization out of stagnation, chaos and uncertainty.

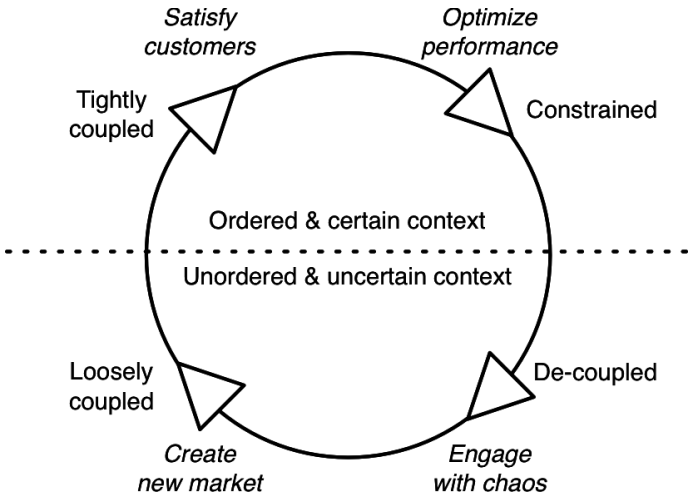

Figure 3. Different stages of a business model as a cycle

What is required of those people is relatively high tolerance for uncertainty and ability and willingness to take risks and experiment with new things and approaches, with no absolute certainty that those will work. Through the two models we approach John Hagel's expanded definition of an entrepreneur as "someone who sees an opportunity to create value and is willing to take a risk to capitalize on that opportunity" (2016). He argues that the "employee" mindset, which he sees as fundamentally passive "just showing up to do a predefined set of task until leadership tells you otherwise", is not enough in a rapidly changing, digital and global marketplace. According to Hagel, companies need people who are capable and focused on identifying new opportunities to create more value than the existing "efficient" practices are creating, and who are also willing to take risks in order to address the opportunities. He emphasizes the shift from scalable efficiency to scalable learning, and organizations where every member is motivated by the need to accelerate learning and improvement of their own performance.

While it is easy to argue that entrepreneurial mindset is needed in most, if not all companies, especially in Finland, it also needs to be acknowledged that it may not be the best mindset to address all situations in all stages of business model development. The entrepreneurial mindset and its associated view of the world are better suited to contexts where the existing business model has stagnated through complacency or long-term focus on cost-performance, or where new markets are being created or innovative ways of addressing the customer jobs are being explored. Where entrepreneurial mindset is not likely to flourish is in contexts that require decision-making based on detailed analysis or repeated recourse to established best practices, and where any alterations would wreak havoc on the tightly coupled processes.

Digitalization and automatization of business also have different implications for work in different stages of business model development. Where rapid full automatization of work and resulting loss of jobs is most likely, is in the third stage of Christensen et al.'s model, where the focus of activity is on optimizing the cost-performance of work processes. In other developmental stages of business, "intelligent" cognitive agents and machine learning may radically augment the capabilities of the teams and individual specialists, but are unlikely to replace them completely in the near future. Work of exploring opportunities of creating value and meaning for human customers, or creating that value and meaning in the process through artisan or care work is likely to be mostly resistant to loss of jobs due to automatization. In fact, effective use of cognitive technologies, machine learning and connected devices and robotics may well increase opportunities for humans to create value in such work processes. The main problem is that, at least in Finland, much of work is still industrial labor where the human aspects of created value are a secondary concern to optimizing cost-performance.

As discussed briefly before, different focuses during different stages of a progressing business model also have an effect on the cognition (problem-solving, decision-making, mindsets, even emotions) of the teams and individual members of the organization. To retain its resilience and capacity for innovation and renewal, a business organization should allow for branching of novel and emergent business ideas that may at first sight seem like deviations from the core business process with its goal of optimizing the cost-performance of the business and ones that seem likely introduce a high degree of uncertainty. Besides allowing for continuous creation of new business models, hiring new, entrepreneurially minded people in the organization and engaging them at the first stages of business model development will help the company to retain its capacity for innovation.

Case example of developing entrepreneurial mindset: TAMK Proakatemia

This section will introduce an example of a learning community that is structured for developing the entrepreneurial mindset in the context of a university of applied sciences in Finland. TAMK Proakatemia is the entrepreneurship education unit in Tampere University of Applied Sciences (TAMK). In Proakatemia, the students found and develop team enterprises (co-operative companies) which they themselves own in teams that consist of 15-20 students (team entrepreneurs). These teams are each assigned a Team Coach (a member of TAMK faculty employed by the university) who will help the team through coaching the team and the individuals as well as facilitating the team learning processes.

Founding and developing a co-operative together with 15-20 people, setting its strategic goals and developing new products and services together is a process filled with uncertainties and complexities. Many aspects of the process depend on people who are participating in it, their interactions and mutual dynamics, as well as their dynamic with the learning community at large, relationships with customers, other businesses and so on. This high degree of interdependence and mutuality adds to the complexity of the cause-effect relationships and makes large parts of the process, especially in its specific details, fundamentally unknowable even to experienced coaches.

Thus, in order for the team enterprise and its members to succeed the team entrepreneurs and their coaches need to become proficient in working in contexts where causal relationships are relatively ordered and certain, such as in accounting and co-operating with regulatory bodies and tax office, to give some examples, as well as in contexts where those relationships are unordered and uncertain.

The level of uncertainty and complexity facing the students, combined with responsibility over managing both their own team enterprise and the whole community, as well as high degree of freedom and ability of students to make decisions over their own education (Nevalainen & Maijala, 2012) are some of the distinguishing aspects of Proakatemia. The organizational culture of Proakatemia also emphasizes continuous development and experimentation on the level of the whole community, the teams and the individuals over maintaining "one-size-fits-all" goals of pedagogic cohesion and standardization. This emphasis on continuous development is perhaps best seen in how the internal marketing and international activities teams that consist of Proakatemia students have, during the last few years, radically improved the visibility and activities of Proakatemia in line with the mission and vision of the community on both national and international levels[1].

In Proakatemia, the student teams have a high degree of autonomy, especially with regard to their business operations. The coaches are not co-owners in the student-owned team enterprises and they rarely interfere in how the teams run their business, as long as they comply with legal regulation and maintain a certain level of ethics in their business practice. In order to create business opportunities the teams regularly need to engage in new product and service innovation and proactively seek opportunities to do business with new or existing corporate customers or consumers. Besides new product innovation, the teams will usually, after a certain period of time, realize the need to establish processes and standards for running their business operations in a

[1] In 2017, Proakatemia had more than 500 international visitors from NNN countries, it has become the preferred section of TAMK for international visitors and its' pedagogical model and team learning and coaching practices have attracted a high degree of international interest.

manner that is both effective and efficient in maintaining suitable levels of both workload and income.

Where there may be room for improvement in the model and supporting structures in Proakatemia is in facilitating risk-taking and competitiveness. Here, however, the challenge lies in being able to maintain a suitable level of personal financial risk for the students who run the team enterprises and a communal culture of personal psychological safety and dialogue. The coaches actively encourage the teams (not necessarily individual team entrepreneurs) to take measured financial risks that do not put the students' personal well-being at risk and build and facilitate a safe and dialogical learning environment and relationships. The supportive organizational culture and the coaches' relationship with the students are reflected in comparatively high evaluations in yearly student satisfaction surveys.

References

Christensen, C. M., Bartman, T., van Bever, D., Strategy, D., & Strategy, E. (2016). The Hard Truth About Business Model Innovation. MIT Sloan Management Review, 58(1), 31–40.

Hagel, J. (2016, September 28). We Need to Expand Our Definition of Entrepreneurship. Retrieved October 10, 2016, from https://hbr.org/2016/09/we-need-to-expand-our-definition-of-entrepreneurship

Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance. *Academy of Management Review*, *21*(1), 135–172.

Snowden, D. J., & Boone, M. E. (2007). A Leader's Framework for Decision Making. (cover story). Harvard Business Review, 85(11), 68–76.