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Innovation Processes of the Finnish SMEs: Corona Challenges Speed up Innovations

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Abstract: This research studies innovation processes of companies during the corona crises. Interest was to see if the corona as disruption impacted companies' innovativeness, sources of innovations and motivation of entrepreneurs. The studied entrepreneurs were applied and received 110 000 euros support for new developments from the Business Finland during the year 2020. Altogether the seventeen entrepreneurs of various fields were interviewed. Results indicated that part of the entrepreneurs developed totally new functions due to the corona crises. Benefits of crises were partially new aspects to businesses were found and also development of the business was fast. All the entrepreneurs said that development was part of the company's daily work and despite the crises the possibility to innovate gave to them motivation to work.

Keywords: entrepreneurship, innovativeness, leadership

1. Introduction

As Johnson et al. (1997) have said companies must be innovative in order to survive changing ecosystem. The corona crises brought suddenly new challenges to companies. The methods for preventing the disease for spreading around have had direct and indirect effects for entrepreneurs. Finnish government supported companies in different ways to enhance survivor from the corona-time. Interestingly, the situation also gave benefits to some companies, like companies focusing on home decoration and spa furnitures (see e.g. Brandt, 2020).

Continuous innovation and development are common nominators for successful companies (Kuratko, 2009) and innovations clearly impact on performance (Deshpande et al., 1993; Yamin et al., 1997). According to Hult et al. (2004), the successful companies are connected with capacity to innovative as well appreciation of innovativeness supported by cultural preparedness. Innovativeness is important to foster the competitiveness (Chesbrough, 2003), and bringing the competitive advantage (Porter, 1985).

The innovative entrepreneurs are more successful than their less innovative colleagues (Kropp, 2006) innovative behavior of employees has great significance for the company (e.g. West et al., 2004). Due to the importance of the innovativeness, there is plenty of studies how to enhance creativity and innovativeness in organizations. Organization which have strong innovative culture support development of new and useful ideas, challenge old ways of doing things and encourage employees to learn from others inside and outside from organizations (Pillinger & West, 1987; Van der Vegt et al., 2005). In case of leadership, it has been noted that it is important to notice and support entrepreneurial minded employees who notice new opportunities and innovate and thus improve company's competitive advantage and profitability (Kristiansen, 2019).

This research studies innovation processes of companies during the corona crises with the companies who received the innovation funding. The situation with the companies during corona loaded considerably huge amount of stress towards innovativeness and thus the research had good possibilities to study the subject with entrepreneurs from various fields. We were interested entrepreneurs motivation in difficult times, leadership style in case of innovativeness and sources of innovations and development ideas.

2. Innovativeness and entrepreneurship

Innovations can be related to e.g. new technologies (Christensen 1997; Sainio et al., 2012), products (Christensen & Raynor 2003; Markides 2006) or business models (Chesbrough 2003; 2010; Markides 1997, 2006; Hamel 2000; Christensen ja Raynor 2003; Bouwman et al., 2009). In western countries first innovation thoughts were produced by Schumpeter (1934), when innovations related to economic growth were connected to new products, processes, markets and materials. In the business the innovation means tendency and willingness

towards creativity and experiments when developing new products and services (Lumpkin & Dess, 2001). Innovation is new, unique and important. It produces new releases to markets and ecosystems (Frankelius, 2009). Innovativeness means breaking down the security or traditions, willingness to try new ideas, and inventiveness (Csikszentmihalyi, 1996; Rogers & Shoemaker, 1971). Curiosity and enthusiasm to problem solving are regarded as first signs of innovativeness (Amabile; 1997; Root-Bernstein 1989; Stefik ja Stefik, 2004). For example, problem solving can be totally new way of producing new customer solutions (Sandberg ym, 2013).

At the following chapters we build the hypothesis for the study:

H1. Entrepreneurs are driving force for innovations

H2. Entrepreneurs have leadership style that enhances innovativeness and implementation

H3. Entrepreneurs are open to new ideas and gather ideas from wide sources

2.1 Innovative entrepreneurs model the way

The motivation and personal attitude of the self-employed in carrying out their business activity has been considered as an influential factor on innovation and other energizing initiatives of SMEs (e.g Romero & Martinez-Roman). Innovative behavior has been argued to be largely a motivational issue (Amabile, 1988). Plenty of research shows that entrepreneurs are regarded as creative and innovative (Carland et al., 1984; Drucker, 1985; Fairly & Holeran, 2011; Schumpeter; 1934; Timmons et al., 1985) even in the light of the research some entrepreneurs are more innovative than others (Cliff et al., 2006; Koellinger, 2008). Plenty of research show that innovativeness is distinctive factor from entrepreneurs from leaders (Carland & Carland, 1991; Stewart et al., 1999; Timmons, 1990). Leaders usually have more adaptative than innovative style (Buttner & Gyskiewitz, 1993) and usually they are guided toward innovativeness than effectiveness (Schein, 1985; Schumpeter, 1934). It has been noted that highly innovative persons have same qualities than entrepreneurs, like capacity to take risks, high tolerance of uncertainty, high persistence and self-esteem (Howell & Higgins, 1990; Hurt et al., 1977; Rogers, 1983). Personality of entrepreneurs are toward intuitive and spontaneous (Brandt & Helander, 2020) which are regarded innovative personalities as well, as Routamaa et al. (2016) concluded when they studied personalities of innovative entrepreneurs. Additionally, they have openness to changes, curiosity and interest of problem solving (Howell & Higgins, 1990; Rogers, 1983; Root-Bernstein, 1989; Scott & Bruce, 1994). Based on the earlier studies, we suggest that:

H1. Entrepreneurs are driving force for innovations

2.2 Enhancing innovative culture via leadership

It has been noted that leadership impacts on innovativeness at working community. Leadership impacts clearly on organizational culture and companies with highly innovative culture support developing new ideas and challenge old ways to do things. Those cultures also encourage employees to learn from others inside and outside of organization (Pillinger & West, 1995; Van der Vegt et al., 2005). In case of different leadership styles, the transformational leadership enhances innovativeness (Jung et al., 2003; Uusi-Kakkuri et al., 2016).

Innovative culture is defined as common view of practices, processes and behavior, which enhances creation and development orientations and noticing new useful ideas (Van der Vegt et al., 2005). This kind of culture impacts on individuals' creativity and teams' innovativeness. For example, Kant et al. (2016) studied CEOs and leaders, and they noticed that innovative culture was positively and indirectly connected to employees' innovative behavior in certain situations. Additionally, proactive culture as well supportive culture for risk-taking strengthened individual's interest on innovativeness and creativity.

Besides creating culture that enhances the new ideas and innovative thoughts the selecting and implementing the chosen alternatives is important phase and needs support from leadership (Hammond et al., 2011). It may easily happen that good ideas are just talked but nobody has time or energy to implement those. It is understandable that highly novel ideas are more difficult to implement than moderately novel ideas due to their out-of-the-box, risky nature (Baer, 2012).

Based on the earlier studies the hypothesis is formed:

H2. Entrepreneurs have leadership style that enhances innovativeness and implementation

2.3 Sources of innovations

As Nonaka and Takeuchi (1995) have suggested that the increase of the diversity of creative individuals in work places provides a platform to create and exchange diverse sources of original knowledge and experience. Networks inside the organization are important sources of innovation according to some studies (Pennings & Harianto, 1992; Powell et al., 1996). Networks enhance technological innovations (Holmen et al., 2005) and company's innovativeness overall (Hausman, 2005). The customer interface is useful source of innovations, when changing the views of knowledge, information, experiences, opinions, cultures and resources is possible (Yliherva, 2006). The activation of customers and end-users is very easy nowadays with the help of technology and also because people are more and more willing to participate on development work (Bovaird & Loffler, 2012). Based on the research we suggest the following hypothesis:

H3. Entrepreneurs are open to new ideas and gather ideas from wide sources

3. Methodology and research process

We took random sample of SME-entrepreneurs from the list of funding received from the Business Finland. This funding given supported new innovations and development ideas in order to enhance the opportunity to development business during the crises. Support from Business Finland was divided from two phases. Firstly, firms could apply 10 000 euros for investigating different possibilities of new innovations, secondly they could apply 100 000 euros to implement the ideas. Altogether at the list there were 250 companies who received maximum amount of 110 000 euros.

We conducted interviews with 17 entrepreneurs, five of those were women. Those were representing different areas like producing, marketing, producing furnitures or softwares and e.g. offering therapy. The amount of the employees varied from 1 to 40, and turnover varied from half million to four million euros. The interviews were made at Finnish and each interview took 30 minutes to one hour.

Research team was modifying the questions and discussed about those carefully before locking them. We did use half-structured method when conducting interviews and the following questions were asked:

- How did the idea of the innovation and development started? Did you had the idea already before applying the funding?
- Did you had team for progressing the idea? If what kind of team?
- How the development orientation is seen in the daily life of your firm?
- How do you lead innovativeness in your company? What does it need to enhance innovativeness?
- How do you benefit from customers' and partners' views in development work?

The interviews were recorded and transcribed and the transcribed texts were content analyzed based on the themes.

4. Results

Results here are divided into the following order, first the beginning situation is described, what was the starting point to act, secondly general innovation behavior at companies and how it is lead.

4.1 Starting point: Impact of the corona to innovativeness

Most of the entrepreneurs told that idea for development was already ready before applying the funding, but the corona-situation did either force to act or the Business Finland funding gave opportunity to foster the function of the company. The situation came fast to all companies, and some companies were in the point that they had to make the decision if they will try to survive with doing something or not. The funding was important possibility for many.

"When corona stopped Finland, we applied right away the funding for investigation of possibilities. From those possibilities, us as owners of the firm, eliminated best ideas which we were sparing with the board of directors and then we did forward those to implementation"

"It was that, at spring everything stopped and there were no activities. We could not do anything. We were some time only thinking, that should we do something or not. Then we decide to do. And then the news came, that this kind of support can be applied"

"It (innovation) did come just because of the corona"

"It was because of this, that we were thinking how to adapt on this situation"

Even some had had the innovation ideas already, the priority had been in other things. Some commented that, lack of resources in micro- and small companies forces to choose carefully ideas that will be developed forward. For example, one entrepreneur commented that at the beginning of the firm, there was too much innovation and ideas and not enough selling, and thus they decided to have a pause in case of innovations to focus to gain some cash flow. Some said that due to the corona-pause for business, there was good time for development and innovations, even the idea did have been long time in the mind. The digital leap had been in mind of some entrepreneurs, and now it was right time for action. This digital leap did change the mindset of the people and customers and in that way enhanced some companies work.

"Corona did bring totally different jump here how to build the business. The thoughts have been but the corona forced to act"

"Years ago I had been thinking this kind of function, but it felt that world was not ready yet"

"People are more open to different kind of services and meetings. I experience, that it is the huge help. It has societal impact as well, because it is cheaper"

4.2 Inner motivation helps during the crises

Many entrepreneurs said that possibility to innovate is the main motivation of their work, and that they enjoyed the variety of their life despite the challenges that entrepreneurship brings some times.

"I would say that this innovative field is the thing why we wake up every morning and go to work. Of course, it is nice that we have good teams, but the other thing is that field is so fast changing, that we must be awake all the time, so that we see where the market is going and where the next threat of possibility comes"

"My own curiosity is reason for innovations. I start to feel that I need new people and places. I am not rewarded by routines, I need stress and speed"

"We do it every day when we are at startup-phase and product development phase, and when developing the processes and functions. I have the interest to belong on those (innovations), absolutely."

4.3 Enhancing innovativeness

Leading development ja innovative actions varied from spontaneous actions more structured way of processing, however in every case the innovative thinking was encouraged by leadership. Some said it is very informal way of leadership and in some cases it was lead systematically. Working style was non-hierarchical and employees and entrepreneurs worked as a team. With low hierarchy the new and different thoughts are gained, which is usually prevented by hierarchical leadership and even encouraging people to disagree with them. According to research, transformational leadership has impact on innovativeness at organizations, when leaders constantly encourage for new thoughts and thinking and questioning the status que (Jung et al., 2003; Uusi-Kakkuri et al., 2016).

"First encouraging thing is that, you should not have too negative or closed mind and you should not discard presentations and thoughts. If you have very closed mindset, nobody wants to present anything."

"It is lovely, if I get feedback, that the decision was not good and they need to take another decision. I think it is great that they have courage to do that".

"We have fast company with low hierarchy, that it is just that lets take Teams-meeting and then lets decide what we will do"

"The development is done all the time and we function as a lean-way. The personnel form a team and we do not have hierarchy. We have systematic development days four per year."

“We don’t have any plans for innovation, we do not put those in the calendar. It is more like artistic-style. We get the inspiration and then we let just try this”

Some entrepreneurs noted that they themselves should be cautious when they can be restrictions in case of new ideas, as thinking themselves as limitation with burden of history.

“The biggest risk is that we as owners, who are two persons, that we start to behave as restrictive elements. We have the restrictive weight from history, and when somebody tries something new, we just say that it did not work earlier. However, it may be that it would work now.”

Time and resources were mentioned by some entrepreneurs. It is important to give time and book time to enhance new developments and innovations. Even it costs a lot to start ups and small companies to arrange meetings that are not strictly related to cash flow, respondents regarded that the time should be every case given.

“You should always give time for innovation, that is the first thing. If you are doing all the time your daily work the risk is it that your brains do not turn to other side (innovation). The time should be given, if there is not that, then you can forget everything. When we book before the time, then you cannot do anything else, and this is the only thing to work this forward”

“We have endless wish lists as where are all the ideas from different areas. Then we start working with those, and consider resources and profits. It should not be too often, because it takes time in this kind of 15-persons company, but once a month the small workshop has been arranged. It is only 2 hours, not too long and artificial”

“It is also part of the culture, that sometimes we sit down and think what is new and what has came up from customer cases and needs, and what kind of opportunities...it is like continuous process, how we forward that..”

Usually innovative ideas were further developed just with the open discussion and spontaneously, but in some cases there were clear processes. For example, ideas gained from “the field” are raised to discussion in weekly meetings, and after that entrepreneurs themselves are considering and developing the idea further. After this they will consider innovation with board of directors. Spontaneous action could be seen just taking the moment and trying to do. Some companies do not do some much process based, they just act when getting inspired.

4.4 Sources of innovations: Customers

Companies were very eager to take feedback and development ideas from customers, partners and colleagues from co-operative companies. Even employees were innovating and developing also, the roots of many innovations were coming from customers. At some cases, team leaders forwarded the ideas from customers to general discussion and then the ideas were processed via more systematic process. Part of the entrepreneurs regarded customer relationships more like partner relationships and in one company customers are included into second phase of innovation process. Benefit for having customers as developers as well, is that then they engage to the company even more, so it is also the way to get loyal customers. Feedback gathering and questionnaires are one way to activate the customers.

“Due to the business, we have very active customers and team leaders. We get a lot of ideas and thoughts, and from customers it is minimum to get yearly feedback and development ideas. Also around the year we get ideas with exit-interviews also. Once a year we have with every customer group discussions, and this information is shared with team leaders. We discuss about feedback and ideas. This is continuous process; all the time colleagues are telling for each other what could be done”

“We have co-operation companies, who are doing the same work. And together we can utilize others’ ideas in our work”

“We take continuously feedback and ideas from customers. The relationships are more like partnerships.”

“Sources of ideas have been co-operation with companies, and with some employees and around the Finland colleagues and also with customers.

"Many ideas come from customers. They know that we are eager to develop things, and from their side come plenty of ideas. And also they affiliate the product more when having being part of the development process"

"Quite much those has been done with wishes and temptations of customers. Sometimes there can be tens of customers testing and piloting the product"

Usually there was team which started working with the idea forward which was selected based on company's mission which impacted which idea were chosen. For example, one company's mission was to reduce costs for society (besides doing profitable business), so this helped the process of choosing. Some companies had consults in order to solve the process and customer needs. Also, the main customers were contacted to get their views of the next steps.

"We had the questionnaire for customers to get ideas for working idea forward"

"We had about 4-5 persons core team who were participating on this, and also we used help from consultant during the idea forming phase. Some parts of the projects were bought as subcontracts from others"

"Also in this funding, the customers have been very active in the process"

5. Conclusions

Based on this study, all the hypotheses were supported. The corona crises gave speed to innovative processes of the companies. At some companies the ideas and thoughts were ready, but received funding gave resources and also duties, which helped action. In some cases, the situation was forced, so there was not any other choice than develop something new if the company wanted to survive. All the companies were very open to development and innovativeness, and in some cases the corona situation was approached as any problem-solving situation which needs innovative thinking. It can be noticed, that disruption caused by corona, was very difficult to predict, but adaptation and innovations were still done very fast speed in the companies. The fast action was key to survive and some even could take benefit from this disruption. For the comparison it would have been interesting to get chance to interview also those entrepreneurs who did not get innovation funding. If they were they less innovative in their actions. Here the leadership and personal qualities of entrepreneurs had created cultures that enhanced innovativeness. In the future it would be interesting to interview also the employees, in what ways they experience enhancements of innovations. Additionally customers' point of views would be interesting to study – how do these open innovation systems motivate them.

Not just in the case of corona, but all the time the innovativeness was experienced crucial for companies and it was part or the organizational culture. In the daily leadership the active customer feedback was used and customers were also affiliated to company even stronger in this way. Leadership styles based on low hierarchies, showing example, collecting actively feedback and open mindset for new thoughts. The resources and time were given to new thoughts. The motivation of work came for innovation and development and this was shared for all organization.

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