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Master's thesis

WERCHEM, spol. s r.o. – small family firm in open
innovation

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Summary

The purpose of my thesis is to analyze small Slovak family firm WERCHEM, spol. s r.o. by using theory about open and closed innovation in a connection with small and medium-sized enterprises and family business. Analyzing method was fulfilling innovation canvases, namely Open innovation canvas and Collaborative innovation canvas which I chose according to main topic, open innovation. The reason for my research is that the company is really close to me and I spent here few summers as a part-time worker and I would like to help to open more possibilities and push this firm to open innovation. Furthermore, the topic about open innovation is very actual and the new point of view and approach can be very useful, but also open new ways in a future of this firm.

The thesis is composed of two main parts that are theoretical and analytical part. Theoretical part deals with different aspects of open and closed innovation but also explain more detailed themes like small firms, family business and innovation canvases. In addition, analytical part follows and use this theory to explain situation in WERCHEM, spol. s r.o. and the future according to open innovation.

The first sub-part of theoretical part focus on explanation of innovations, open innovation, closed innovation and the strategy, challenges and types of open innovation firms. Second sub-part defines two kinds of innovation canvases. The first one is Open innovation canvas which is better to use for current collaborations or innovations in a firm On the other side Collaborative innovation canvas should be used for future collaborations or innovations in ever firm. Next sub-part offers the most important information about small firm like definition, typology, system or problems. The last sub-part of theoretical part is about family business and the challenges, advantages and threats in this type or system of firm.

Analytical part of my master dissertation consist of three sub-parts. Each of them is in connection with small Slovak family firm WERCHEM, spol. s r.o. Methodology shows by words and tables which methods were used to analyze the firm.

After methodology is part about introduction of firm and her history, area of working, family members as employees and the main suppliers and customers. Next sub-part is about innovation canvases applied to firm WERCHEM, spol. s r.o. I made three Open innovation canvases according to firms with special relationship with WERCHEM, spol. s r.o. like exclusive contract of supplying screws and nuts or exclusivity of selling products of few firms on Slovak and Czech market. Collaborative innovation canvases I used to define my two ideas of future innovation and collaboration of mentioned family firm. First idea was to make web discussion board and the second was to collaborate with LEGO Slovakia. Based on these analyses I made the last part of my thesis which is open innovation plan for future of WERCHEM, spol. s r.o.

Conclusions are drawn in open innovation plan and epilogue. The main aim of the thesis is to bring for firm WERCHEM, spol. s r.o. new ideas and steps for innovations and collaborations which can be followed and improve the way of thinking. Because they have to know that open mind can bring more success than fear and staying with stereotypes. I suggest to follow my innovation ideas and start to think about new possible collaborations with same sized or bigger firms that can help to WERCHEM, spol. s r.o. grow and get higher brand awareness.

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List of Abbreviations

OI	Open innovation
CI	Close innovation
OIC	Open innovation canvas
CIC	Collaborative innovation canvas
SMEs	Small and medium sized enterprises

THEORETICAL PART

Introduction and problem statement

This master's dissertation seeks to explore main differences between open and closed innovation in SMEs and also advantages of open innovation for them. Open innovation (OI) is a few decade years old conception introduced by Henry Chesbrough. It is based on idea that innovation should come from outside of boundaries of firm because we can not expect that we employ the best people and the firm is owner of the most useful knowledge. That is the reason why firms should look outside for new possibilities of innovations.¹ Based on literature we recognize 3 possible kinds of open innovations which are outside-in, inside-out and coupled OI.² On the other side, we recognize four distinct OI strategies like innovation seeker, innovation provider, intermediary and open innovator.³ When the firm has clear strategy the goals are easier to achieve.

In a case of open innovation, very useful method how to recognize open or closed innovation in a firm is usage of innovation canvases. Canvases in general are used for analyzing company from internal and external sides. Based on these analyses firm get to know what is necessary improve to achieve the strategic goals. In a case of innovations, the best option is using of Open innovation canvas (OIC) for current innovations/collaborations and Collaborative innovation canvas (CIC) for future innovations/collaborations, which are the key to analyze firm's innovations and go side by side. Both of these canvases are based on the idea of Osterwalder's and Pingneur's Business model canvas.⁴

In this thesis will be examine small Slovak family firm WERCHEM, spol. s r.o.in detail, that is why is necessary to include the theory about small firms and family business.⁵

¹ CHESBROUGH, Henry. *Open innovation*, pages xxvi, xxviii.

² CHESBROUGH, Henry et al. *New Frontiers in Open Innovation*, page 18.

³ TIDD, Joe. *Open innovation research, management and practice*, pages 70, 71.

⁴ Open innovation canvas. *Canvanizer* [online].

⁵ MEGGINSON, et. al.. *Successful small business management*, page 30.

People who decide to create small firm usually tend to have autonomy that often results in virtues of small business like innovations and conduce to great flexibility. Also they hope in realization of goals that are provide by risk.⁶ Ever owner-manager of small company have to have overview about ever part of firm like marketing and selling, quality control, product development, best suppliers and of course about financial management, because he or she is the only one person who after this monitoring decide about the changes or improvements.⁷ Usually, more than half of small firms have the CEO and few employees who are members of same family.⁸

Mentioned theory will be use as a background but also apply for firm WERCHEM, spol. s r.o. The central research question is also focusing on this firm, and how to help her with OI and collaborations. The answer for this important question will be include in OI plan for WERCHEM, spol. s r.o. Hereby, the central research question is formulated like:

- *How to build a strong OI network for small Slovak family firm WERCHEM, spol. s r.o.?*
-

I added few sub-questions to support and get more information to answer central research question. Based on these questions can be finally made OI plan:

- *Which is the current status of WERCHEM, spol. s r.o. in a case of innovations?*
- *What innovations and collaborations WERCHEM, spol. s r.o. already made?*
- *Which are the best suitable possibilities for open innovations and collaborations of WERCHEM, spol. s r.o. in a future?*

Sub-questions will be step by step answered in analytical part and help to get information necessary to answer central research question. For these sub-questions will be necessary to make few interviews with family members employed in a firm and person from supplier or customer company.

⁶ MEGGINSON, et. al.. *Successful small business management*, page 30.

⁷ RESNIK, Paul. *The small business bible: the make-or-break factors for survival and success*, page 6, 7.

⁸ POZA Ernesto J. et. al. *Family business*, 2nd edition, page 7.

According to interviews with them will be fulfilled OI canvases. Collaborative innovation canvases I will fulfill with my ideas about the best possible innovations or collaborations for future of WERCHEM, spol. s r.o. Only the central research question will be fully answered at the end of my master's thesis.

This master dissertation consists of two main parts, theoretical and analytical part. Theoretical part will be divided into four parts which will explain the theory necessary to understand before reading analytical part. If we look at the topic of this thesis we can understand why these parts are Innovations (OI, CI), Innovation canvases, Small firm, Family business. Analytical part will consist of introduction of WERCHEM, spol. s r.o., using of Open innovation canvases to cases of four firms, using of Collaborative innovation canvases to introduce my own ideas for future and finally I will make a future OI plan for WERCHEM, spol. s r.o.

Literature Review

1 Innovation

Spence define the innovation like something what has never previously existed or something quite new to personal situation and also as ability of having new use during the time that we become aware about it. Furthermore, a lot of our decision-making processes can be influenced by features of the innovation, which arise from the attributes and the way of possible improvement or advantage.⁹ On the other hand, Rogers sees an innovation as an idea, practice or subject which is perceived new by individual and other unit during adoption. In his opinion we can not forget to newness of the idea determines his or her reaction to it. Consequently, it is innovation if it seems new for this individual person. Newness in a way of innovation which can be phrased as a knowledge, persuasion or decision to adopt.¹⁰

In a firm perspective we recognize two types of innovation, which are closed innovation and open innovation. Table 1 shows the main differences between Closed innovation and Open innovation models which will be explained by details in particular parts of following text.

⁹ W. R. SPENCE. *Innovation: the communication of change in ideas, practices and products*, page 26.

¹⁰ ROGERS, Everett M. *Diffusion of innovations*, page 11.

Closed Innovation	Open Innovation
The smart people in our field work for us.	Not all the smart people work for us (working with smart people inside and outside our firm).
Discover, develop and ship R&D ourselves => profit from R&D	External R&D create significant value; internal R&D claim some portion of value.
First firm on a market with innovation will win.	Build better business model is better than be get to market first.
Firm create the best ideas on her own => win	Firm make the best use of internal and external ideas => win
Low labour mobility	High labour mobility
Little venture capital (VC)	Active VC
Few/weak start-ups	Numerous start-ups

Figure 1- Differences between CI and OI¹¹

1.1 Closed innovation

Closed innovation or CI is based on internally focused logic of firm that follow three rules. First rule is to hire brightest, best and smartest people in a firm to work for our firm. Second rule of closed innovation is to develop and discover ourselves before bring new product or service to market and also be first on a market and lead the market. The last rule is based on controlling firm's intellectual property (know-how) in order that competitors don't profit from firm's ideas.¹² Approach of closed innovation means that ideas which prosper from actual internal infrastructure and capabilities.¹³ According to Chesbrough, the introduction of firm's own ideas to market will be protracted while new marketing, production, service, distribution, financing and support systems are built inside or obtained and classified.¹⁴

¹¹ CHESBROUGH, Henry. *Open innovation*, pages xxvi, xxviii.

¹² Same source, page xx.

¹³ SLOANE, Paul. *A guide to open innovation and crowdsourcing*, page 5.

¹⁴ CHESBROUGH, Henry. *Open innovation*, page xx.

Furthermore, during using of this kind of innovation the entrepreneurs think, that successful innovation requires control. That is the reason why they are patrolling the boundaries of the firm very well.¹⁵

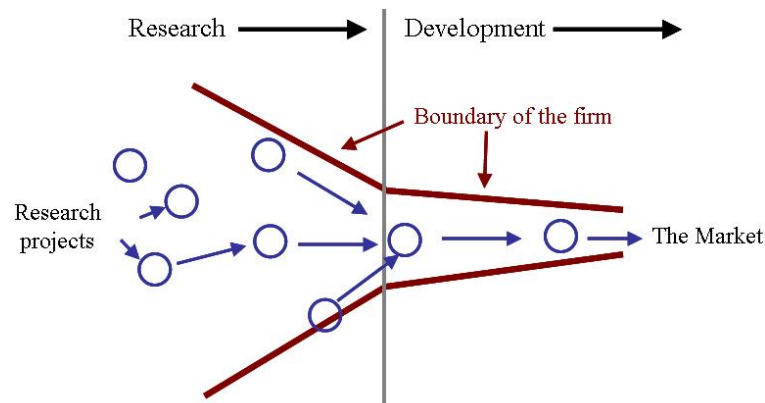


Figure 2 - The closed innovation model¹⁶

Figure 2 shows us the main system of closed innovation model with research projects, strong boundaries of the firm and specialization only on one market.

Of course, based on literature, real life situations and innovations in a firm, the closed innovation model is not sustainable in a long-term planning. There are some factors which impact closed innovation model. For example, *growth of mobility of highly skilled and experienced people* which means that new employer doesn't pay any compensation to previous employer for training of employee. Secondly, *growth of presence of private venture capital (VC)* is about creating new firms with commercial external research and transform them to growing (valuable firms). Furthermore, these start-up firms are formidable competitive for large firms (feed off own firm leadership with new ideas). Next factor is *short time to get products and services to market* which is challenge for firms used CI logic because they can get to a market later Last factor is about *increasing of knowledge of customers and suppliers* that means challenge ability of firm to make a profit from their knowledge silos.¹⁷

¹⁵ CHESBROUGH, Henry. *Open innovation*, page xx.

¹⁶ INNOVATION. *SBLifecycles1011*, [online].

¹⁷ CHESBROUGH, Henry. *Open innovation*, pages xxii, xxiii.

In a case when these erosion factors influenced a firm, the logic and supposition which made CI as effective approach is often no longer applied. Moreover, the occur of fundamental technology breakthroughs can make engineers aware about outside option that is formerly lacked and they decide to pursue their own new start-up. Sometimes are these start-ups successful and they use the knowledge and make attractive prices of product based on external technology to commercialize. But on the other hand, they can also fail and stay as Rest in Pease (RIP) as is shown on Figure 3.¹⁸

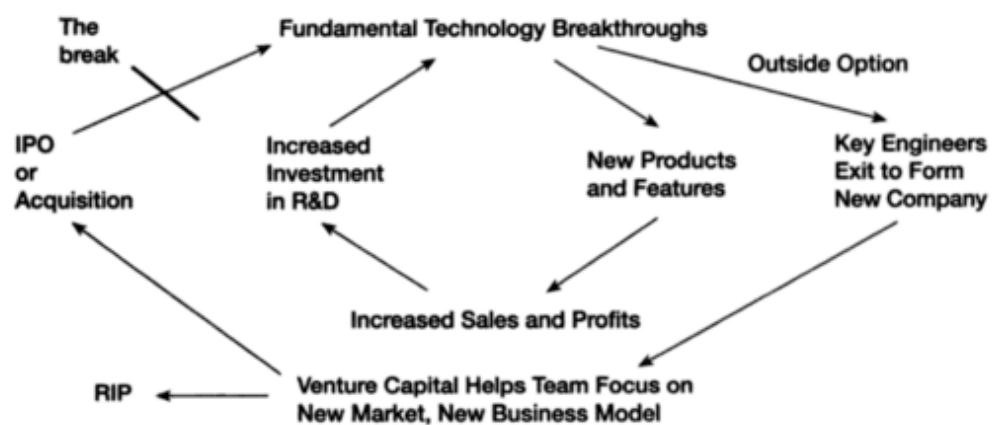


Figure 3 - The virtuous circle broken¹⁹

As a result of this situation, affected by mentioned factors, is best option that a new approach called open innovation (OI).

1.2 Open innovation

Open innovation (OI) in Vanhaverbeke's opinion is using of valid external and internal knowledge to accelerate innovation in a firm and expand the markets for external use of innovations.²⁰

¹⁸ CHESBROUGH, Henry. *Open innovation*, pages xxiii, xxiv.

¹⁹ Same source, pages xxiii.

²⁰ VANHAVERBEKE, Wim et al. *Open innovation: researching a new paradigm*, page

Also treats R&D like open system and ideas can come to company from inside or outside the firm's boundaries and go to a market from inside or outside of firm. This definition is based on Henry Chesbrough's book about OI.²¹ Lindegaard agree with this definition but on the other hand, he think that real OI goes deeper like just involving others in the idea generation phases and more than only partnership where firm has to pay for specific services. Also from his view the definition can be different for ever separate firm. There are benefits and challenges from using OI model. First benefit is higher speed of R&D of new service or product to increase revenues and market share.²² On the other side, in OI is shorter time to get new product or service to market and accelerate profits. Moreover, OI offer reduction of direct costs spent on R&D. Very often firms in OI improve the success rate of new service or product. The biggest challenge to open mind for current managers and leaders who are habituated work in a closed innovation environment.²³

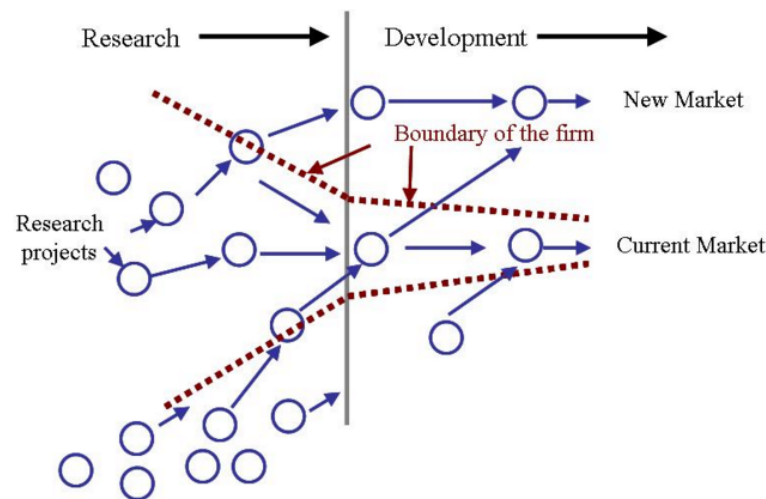


Figure 4 - The open innovation model²⁴

Figure 4 shows us principle of OI and how new ideas come to firm from outside the firm's boundaries and also from the company to external environment.

²¹ VANHAVERBEKE, Wim et al. *Open innovation: researching a new paradigm*, page

²² LINDEGAARD, Stefan. *The open innovation revolution*, page 5.

²³ Same source, page 5.

²⁴ Open innovation: a major change in corporate cultures. *Econocom*, [online].

Moreover, we can see how can firm operate on current market or get to a new market, as well. Based on literature we recognize 3 possible kinds of open innovations which are outside-in, inside-out and coupled OI.²⁵

Outside-In (inbound) model involves open up firm's innovation process to external inputs and contributions.²⁶ In addition, inbound model is defined mechanisms which helps to firm manage inflows of knowledge (inlicensing, scouting, university research programs, collaboration with intermediaries, suppliers or customers and funding start-up firms).²⁷

Inside-out (outbound) type of OI claim firms to enable underutilized and unused ideas and gains to go outside of firm's boundaries to let others use them in their business models and business, as well. Business model is usually different in a firm where it came form as in a firm that use these ideas and try adapt to chosen market.²⁸ For managing outflows of ideas (knowledge) from the firm is necessary mechanism that include spin-outs, corporate venture capital, outlicensing intellectual property and technology, donating IP and technology, corporate incubators, alliances and joint ventures.²⁹

Coupled OI is last type of OI which combine outside-in and inside-out OI processes. Coupled kind of OI include linking purposive outflows and inflows of knowledge to cooperant develop or commercialize innovation.³⁰ Coupled OI can involve whatever combination of mechanisms from outside-in and inside-out OI where firms may implement mechanisms (with complementary partners) like joint ventures, consortia, networks, strategic alliances, platforms and ecosystems.³¹

²⁵ CHESBROUGH, Henry et al. *New Frontiers in Open Innovation*, pages 18.

²⁶ TIDD, Joe. *Open innovation research, management and practice*, page 140.

²⁷ CHESBROUGH, Henry et al. *New Frontiers in Open Innovation*, pages 18, 19.

²⁸ SPITHOVEN, André et al. *Managing Open Innovation*, pages xiii, xiv.

²⁹ CHESBROUGH, Henry et al. *New Frontiers in Open Innovation*, pages 18, 19.

³⁰ GARCIA MARTINEZ, Marian (ed.). *Open innovation in the food and beverage industry*, page 57.

³¹ CHESBROUGH, Henry et al. *New Frontiers in Open Innovation*, pages 19, 20.

1.2.1 Typology of Open Innovation strategies in SMEs

The most of firms implement strategies to adopt new business models to position them better with honour in changing in their external environment.³² This positioning is efficacy with OI in the flow of non-firm's knowledge, firm's product life cycle and activities performed within firm's value chain. Following text introduce four distinct OI strategies.³³

Innovation seeker is firm which looks for innovation outside of its boundaries and purchase technological solutions to complement or supplement exist technology portfolios (software firms which operate in open-source communities to get access to innovative solutions).³⁴ Furthermore, this strategy is based on leverage user-based innovation, innovation outsourcing and strategic alliances and integrate acquired firms, which are mechanisms of exchange employed by OI.³⁵

Innovation provider is a counterpart to innovation seeker as a firm that distributes innovation solutions and exploit their technological discoveries rather to sell them as a product to partners who complete and commercialize them as a final products.³⁶ OI providers widely fall under large global firms and SMEs (including non-profit organizations).³⁷

Intermediary or innovation broker is a product of innovation seeker and innovation provider exchanges. This strategy helps explain huge growth of OI by firms across industries in different economic regions.³⁸ Intermediaries search and make market for innovation rather than investment banks make markets for trading different commodities.³⁹

³² TIDD, Joe. *Open innovation research, management and practice*, pages 70, 71.

³³ Same source, pages 70, 71.

³⁴ BREM, Alexander a Joseph TIDD. *Perspectives on supplier innovation*, page 49.

³⁵ TIDD, Joe. *Open innovation research, management and practice*, pages 73, 74.

³⁶ BREM, Alexander a Joseph TIDD. *Perspectives on supplier innovation*, page 49.

³⁷ TIDD, Joe. *Open innovation research, management and practice*, page 76.

³⁸ BREM, Alexander a Joseph TIDD. *Perspectives on supplier innovation*, page 49.

³⁹ TIDD, Joe. *Open innovation research, management and practice*, page 78.

In addition, innovation brokers have role in formal innovation networks and systems and also in diffusion of cutting-edge technology.⁴⁰

Open innovator is aggregation of innovation seekers and innovation providers strategy because it creates synergies between external and internal knowledge creation activities.⁴¹ Open innovators are most often large global firms that have dedicated R&D and at same time look for external technologies to incorporate. They also possess both access to technology, gaps in their innovation system and requisite capabilities that make their buyers and sellers innovate.⁴²

1.2.2 Open innovation and collaborations in SMEs

Collaboration is a working practice of two firms, where individuals work together to a common purpose to achieve business benefit. The life cycle of collaboration includes awareness, motivation, self-synchronization, participation, mediation, reciprocity, reflection, and engagement.⁴³

SMEs have a higher needs to make collaboration with external partners than larger firms, because they are confronted with their limitation, their smallness and shallow nature of knowledge and their scarcity of resources. Moreover, they need to get a brand awareness in possible future customers. The larger companies are usually opposite case of these boundaries and offer a lot of advantages in collaborations with SMEs. For sure, larger firms could collaborate with companies of same size but the risk of failing is much bigger than with small companies. In a collaboration between SMEs and large company, they can complement, support and bring values to each other.⁴⁴

⁴⁰ TIDD, Joe. *Open innovation research, management and practice*, page 78.

⁴¹ BREM, Alexander a Joseph TIDD. *Perspectives on supplier innovation*, page 50,51.

⁴² TIDD, Joe. *Open innovation research, management and practice*, page 79.

⁴³ What si collaboration. *The Global Community of Information Professional* [online].

⁴⁴ *Collaboration without risk*. Page 33.

2 Innovation canvases

Canvases in general are used for analyzing company from internal and external sides. Based on these analyzes firm get to know, what is necessary to improve to achieve the strategic goals. In a case of innovations, the best option is using of Open innovation canvas (OIC) and Collaborative innovation canvas (CIC) which are key for analyze firm innovations and go side by side. Both of these canvases are based on the idea of Osterwalder's and Pingneur's Business model canvas. They simply took a relatively muddled and exhaustive subject (business model generation) and made easy visually understandable page. OIC focus more on the current situation and innovations, in a comparison with CIC which focus more on future innovations.⁴⁵

2.1 Open innovation canvas

The Open innovation canvas helps firm reflect on innovation efforts. Than firm can see missing components and better gather to connections. Open innovation canvas (OIC) consist of 9 building blocks, which are generally divided to two main categories internal/strategy efforts and external/market efforts. Furthermore, the best is fulfill canvas from outside-in. For beginning fulfill Strategy and Market and then continue with Trends, Products, Network, Technology & IP, Process, Culture and at the end fulfill the building block People. When the analysis dives deeper the order becomes less and less relevant as you have now a full system in front of you.⁴⁶

Following Figure 5 shows open innovation canvas with all nine building blocks and relationships between them. But for better understanding the blocks are explained in following text.

⁴⁵ Open innovation canvas. *Canvanizer* [online].

⁴⁶ Open innovation canvas. *Canvanizer* [online].

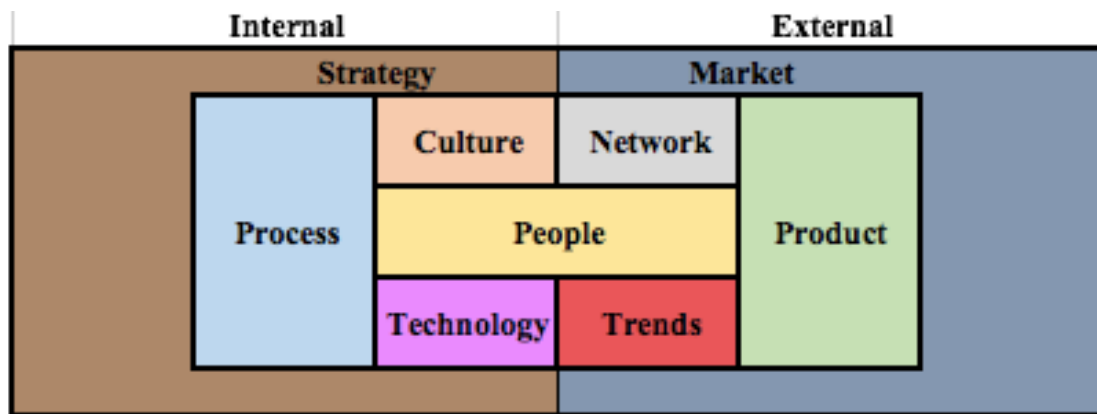


Figure 5 - Open innovation canvas⁴⁷

Building block **strategy** reflect firm's existing strategy and strengths (DNA of firm) and specify goals behind the project or effort. To define strategy right for canvas, the most often are used questions like: What are firm's core competencies?, Which DNA is the basis of all our actions?, Are goals and values of firm like a innovation and openness anchored in firm's strategy? or What firm want to achieve with effort or project?.⁴⁸

Market block describes the market which is target by firm or product. Moreover, also some markets which could introduce new technology, know-how or ideas into our market. The most often answered questions are: Which target groups does firm address in it's market?, How well firm now it's market and the environment (legal and sociocultural framework conditions, competitors)?, Are the new markets where firm could be interested in according to it's know-how?, Are there a new markets which influence firm's market?.⁴⁹

In building block **trends**, we use a trends which influence firm and markets. But also investigate how the firm makes use the trends. To find real trends of firm firm should answer following questions.⁵⁰

⁴⁷ Personal made table

⁴⁸ Open innovation canvas. *Canvanizer* [online].

⁴⁹ Same source. [online].

⁵⁰ Same source. [online].

Which trends (political, economical, social, technological, environmental and legal) influence firm, it's products and markets?, How does firm gather trends from the environment?, Does firm observe and assess trends systematically?, How does firm utilize these trends regarding to it's strategy, processes, networks, technology and IP, and products?⁵¹

Which value do **products** of firm deliver (value proposition) and which needs do we fulfill with it?, Do the values of firm's products complement each other?, Which roles do technology push and market pull play for firm's products?, Where are firm's products on the Technology S Curve?, Which technologies, IP and knowledge does the firm use for it's products? Where does firm get them from?. All of these questions help to company analyze the block of products in canvas, where the manager of firm looks at services and products that are already offered or want to be offered.⁵²

Next block in Open innovation canvas is **network** and include all partners that firm might be working with in a time of development of firm's products. In addition, include activities that push these networks inside. Ideal questions to ask for fill in this block are: Which partners does firm have in own network and which roles do they fulfill?, Which processes for scouting and partner treatment does firm foster?, Which partners could support firm's network reasonably?, What is the structure of firm's network? (width / depth, formal / informal).⁵³

On one hand, technology block shows **technology** and **intellectual property** which firm already has or is necessary in order to successful development of product. On the other hand, looks for how firm works with it. In this case the suitable questions are: Which technologies or IP does firm have or need?, How does firm use technology and IP? Are there internal processes and structures useful for handling of technology and IP? (especially external sources and Inside-Out approach), Who brings new technologies and IP into the firm?⁵⁴

⁵¹ Open innovation canvas. *Canvanizer* [online].

⁵² Same source. [online].

⁵³ Same source. [online].

⁵⁴ Same source. [online].

Process block shows innovation process at all and make connections between the rest of building blocks of this model. The best questions to be ask: How do the processes for product development, idea management and business model development looks like?, How does firm's innovation controlling look like?, Do the processes connect firm's people, knowledge and networks with respect to firm's strategy and culture?, How and when are external partners (customers, suppliers, research facilities, competitors) and their knowledge included in the product development process?⁵⁵

Next to the last block is **culture** building block that includes shared values and mindsets. Moreover, describes visions of firm's people and their tie to the process. This flows into the answering question such as: Is there a common appreciation of values, behavior, norms and attitudes?, Which possibilities do we offer our employees to work creatively, across departments and with self-initiative?, How important are technology orientation, market orientation, entrepreneurial orientation (entrepreneurship) and orientation towards learning in our organization?, Which role plays failure inside our organization?, Is our culture mirrored in our processes?⁵⁶

People is the building block that is good to fill in as last one from Open innovation canvas. Furthermore, describes teams, departments or individuals who are needed from external environment of the firm and also represent connections between other building blocks. The most suitable question for this block are: Which organizational roles and responsibilities are assign?, Which roles do people have operate outside our network? Are there people in the firm who represent defined points of intersection with firm's network?,⁵⁷

To conclude, OIC helps to recognize firm's weaknesses according to open innovation process and make the firm to focus more on this parts to be successful and achieve strategic goals.

⁵⁵ Open innovation canvas. *Canvanizer* [online].

⁵⁶ Same source. [online].

⁵⁷ Same source. [online].

2.2 Collaborative innovation canvas

Collaborative innovation canvas (CIC) helps firms to come with better orientation about innovation and collaboration. This model, same as OIC, is divided to to building blocks but now just to eight blocks. They are grouped under three driving forces to Alignment, People and Process as is visible also on Figure 6.

Strategy, Resources, Stakeholders, Audience, Communications, Decision making, Execution and Measurements are the core of CIC.

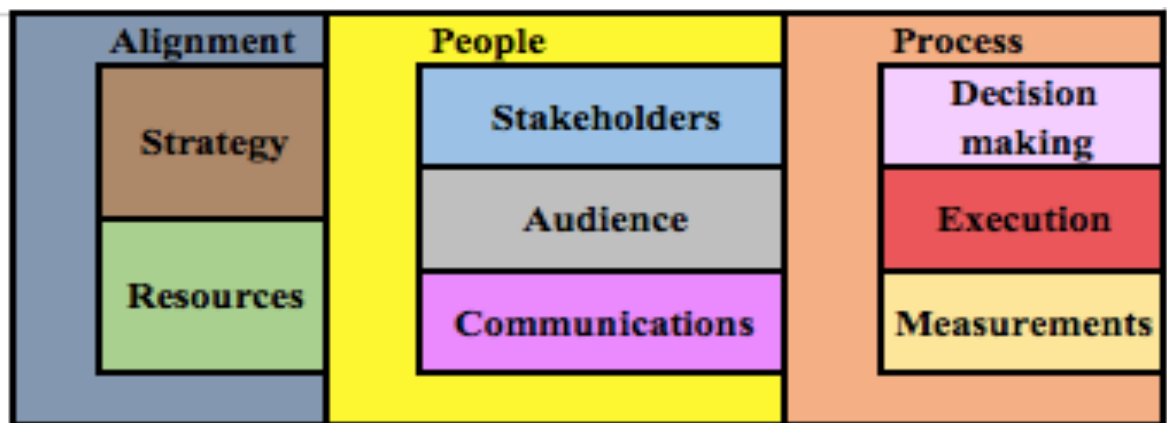


Figure 6 - Collaborative innovation canvas⁵⁸

Strategy block is first step of fulfilling CIC. Firm can use it to provide focus on strategic areas which are interesting for their business. Questions to be answered could be: What does firm wish to achieve with an innovation platform? What does success look like for the firm in the short, medium, and long term?⁵⁹

The second building block are **resources** that firm has access to or provide to push your program forward. The main resources are usually innovation team members and methods or tools that will provide the audience and also innovation budgets available for firm.⁶⁰

⁵⁸ Personal made table

⁵⁹ Collaborative innovation canvas. *Hypeinnovation* [online].

⁶⁰ Same source. [online].

One of the most important thing in business is content end user of firm's the product or service. But the support has to come from top management and lead these people to manage everything to succeed. Sometimes is good to consider innovation advocates, who will be really critical to your success but brig to firm another side of view (**stakeholders**).⁶¹

In block of **audience** firm has to define the targeting group of people. It could be employees, customers, specific business units, partners, academia, general public, cultural groups or departments (IT, HR) and the others. Before this decision the managers of company should understand to audience and know their needs and expectations.⁶²

Communication is necessary to get attention of audience. To set out a communication plan is necessary to think like a marketer. Following questions can be also useful to fill in the block: Can you launch it virally? Who are the key hubs in the organization to help spread the word? What materials do you need to produce: posters, flyers, fun gifts?⁶³

During **decision making** process there are many possible features in the tool to support it according to new innovation/collaboration. Firm needs to select the best one that work for it and provide offline reviewing options for particular scenarios.⁶⁴

The building block of **execution** is very important for innovations. Execution in a form of process, ideas, costs and methodology. Because never just ideas are fully formed and ready to be implemented but the most often ideas need the way cross the firm to allow them to grow and thrive.⁶⁵

⁶¹ Collaborative innovation canvas. *Hypeinnovation* [online].

⁶² Same source. [online].

⁶³ Same source. [online].

⁶⁴ Same source. [online].

⁶⁵ Same source. [online].

Measurements include the main blocks of CIC and relationships between them to build strong network based on arguments that support firm's success. The most important is have ability to define and fill in the key performance indicators, that matter.⁶⁶

⁶⁶ Collaborative innovation canvas. *Hypeinnovation* [online].

3 Small firm

First small firms started to exist when people decided to exchange goods for other goods. Vitality of small firms has been critical factor of each economy since the advent of currency. McVicker characterized small firms as a firms that are unique and have unique qualities and no more as a smaller version of big firms where quantity of assortment could be huge but quality is often lower.⁶⁷ Megginson stated that small firms come in many types, sizes but the main definition in their opinion is the independently owned and operated firm without dominance in field of operation.⁶⁸ Resnik agree with her opinion and adds general cognition about distinctive traits of small firms that claim special management understanding and skills.⁶⁹

People who decide to create small firm usually tend to have autonomy that often results in virtues of small business like innovations and conduce to great flexibility. Also they hope in realization of goals that is provided by risk.⁷⁰

Companies sometimes experiment with intrapreneurship but small firms set up need to be independent without corporate structure.⁷¹ But in this case can also come a lot of limitations. Furthermore, because of limitation of resources in small firm, only owner-manager can determine values, overriding purpose and identity of the business based on need of effective managing. Ever owner-manager of small company have to have overview about ever part of firm like marketing and selling, quality control, product development, best suppliers and of course about financial management, because he or she is the only one person who after this monitoring decide about the changes or improvements.⁷² Unfortunately, no all of entrepreneurs have these knowledge or disposition to manage firm in right way.⁷³

⁶⁷ MCVICKER, Mary Frech. *Small business matters: topics, procedures, strategies*, page 267.

⁶⁸ MEGGINSON, et. al.. *Successful small business management*, page 12.

⁶⁹ RESNIK, Paul. *The small business bible: the make-or-break factors for survival and success*, page 5.

⁷⁰ MEGGINSON, et. al.. *Successful small business management*, page 30.

⁷¹ MCVICKER, Mary Frech. *Small business matters: topics, procedures, strategies*, page 268.

⁷² RESNIK, Paul. *The small business bible: the make-or-break factors for survival and success*, page 6, 7.

⁷³ MCVICKER, Mary Frech. *Small business matters: topics, procedures, strategies*, page 269.

But also firm under this direction can be successful if he or she built team consist of intelligent, adroit people with necessary experiences and knowledge. Employees are usually looking for career, opportunities and benefits during the work in a management of small firms.⁷⁴

Moreover, intelligence of management is formed by a real understanding and awareness of critical make-or-break requirements for operating in business. One of the most important thing to build good business is to be objective and don't exempt to self-delusion. Because just honest and dispassionate thinking about weaknesses and strengths of firm and management can lead to achieve the goals. Also focusing on simple decisions is usually the most effective in small firms. That means concentration of efforts and resources where the profits and impact are greatest and never cash out products or service with low profit. Besides necessary is offering of distinctive goods and service based on customer's wants and needs and determine how to reach them. Ever small firm should formulate the goals that are critical, challenging about also achievable and convert them to productive activities of motivating management team. At least really useful is to understand the firm inside out and manage her expansion.⁷⁵

For small firms the most important and sometimes the most difficult activity for success is planning. Importance of planning is because managers and owners have to know, how far from achieving of goals they are and what is the next step to achieve them before the action. But a lot of owners or employees in small firm neglect planning. Day-to-day activities are the reason why they usually have no time for planning. Planning in small firms defect on strategic level and operational level. Strategic or high-level of planning is based on long-range, setting or establishing firm's mission and objectives and determining strategies as methods to achieve these objectives. On the other hand, operational planning is necessary to realize strategic plans and setting polices, methods, procedures, standards, budget and always are short-time oriented.⁷⁶

⁷⁴ MCVICKER, Mary Frech. *Small business matters: topics, procedures, strategies*, page 269.

⁷⁵ RESNIK, Paul. *The small business bible: the make-or-break factors for survival and success*, page 3, 4.

⁷⁶ MEGGINSON, et. al. *Successful small business management*, pages 154, 155, 156.

Furthermore, every firm has to be prepared for changes in management of the company to come with new ideas and improving strategic plans. Because every owner prefers to employ a person who has a lot of experience and a high level of trust. In this case, the final result is to employ some member of a family with few experiences but a level of trust that is really high and this small firm becomes a family business.⁷⁷

⁷⁷ MEGGINSON, et. al. *Successful small business management*, page 760.

4 Family business

Definition of family business is patchwork based on **each** author of publication. Neubauer sees the family business as a firm where family members are owners, control element or head of management who look after non-family employees.⁷⁸ In a comparison Megginson shares the idea that members of family in this case are more oriented on success and usually take more risks and responsibility for the decisions of non-family employees.⁷⁹ One more opinion brings Poza, who define the family firm as a business where family members don't need to be necessary employees just in top management of a firm but also on an operational level of management. Moreover, family business can consist of more families and firm can exist by more generations of this families.⁸⁰ To conclude, all of them share the opinion, that the most often the CEO and a few employees are members of a same family.⁸¹

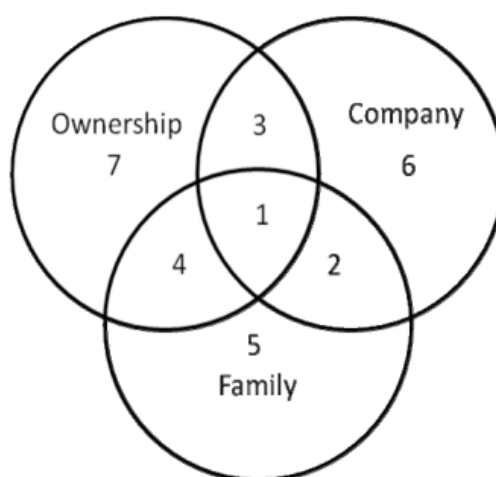


Figure 7– The system theory model of family business⁸²

⁷⁸ NEUBAUER F. et al. *The family business: its governance for sustainability*, page 5.

⁷⁹ MEGGINSON, et. al. *Successful small business management*, page 757.

⁸⁰ POZA Ernesto J. et. al. *Family business*, 4th edition, page 2.

⁸¹ POZA Ernesto J. et. al. *Family business*, 2nd edition, page 7.

⁸² Same source, page 7.

According to Figure 7, you can see the connections between three parts that build a family firm. Individual perspectives of family members and firm will be understandably different that depends on position they have in a system. For example, CEO as a parent and 100 % owner of a firm (position 1) can see things differently in a comparison with a family member who is not a part of management or all business (position 5). Same problem in this situation can happen with a non-family manager (position 6) because of his/her unique placement in a family firm system.⁸³ Researchers usually have tendency to stay with a boundaries of chosen circle and just rarely make linkages with people from other traditions.⁸⁴

All firms or family firms need successful planning to reach the goals. Each of them is unique a have to come with its own strategy that can be based on previous experience of succession or failure and reasons why it happens.⁸⁵

Succession of management is based on formal transfer of power from successee (outgoing generation) to successor (incoming CEO). The best interests of family and business should be accomplished between generations to enhance management succession plan.⁸⁶

Conservative, rebellious and wavering are three main patterns of ineffective succession that happens most often in family-owned or controlled firms. In a case of *conservative*, the firm and strategies stay locked in a past because next generation manages the firm by a parent who exited the firm. Furthermore, fear of challenge win and family members continue in the parental shadow. On the other hand, sometimes firms become *rebellious* and overreacting to control of previous generations and new generation launches totally different approach to a firm in believe that they will be more successful.⁸⁷

⁸³ POZA Ernesto J. et. al. *Family business*, 2nd edition, page 7, 8.

⁸⁴ NEUBAUER F. et. al. *The family business: its governance for sustainability*, page 5.

⁸⁵ POZA Ernesto J. et. al. *Family business*, 4th edition, page 8.

⁸⁶ NEUBAUER F. et. al. *The family business: its governance for sustainability*, page 134.

⁸⁷ POZA Ernesto J. et. al. *Family business*, 4th edition, page 8.

Finally, traditions, business model and legacies are destroyed because of their “secret of success”. *Wavering* is the third rule of failing because next generation stays paralyzed by indecisiveness and cannot adapt the firm to current competitive conditions. Because they are worry about future of the firm if they make a bad decision. Also, fails near trying to make mark and assume leadership effectively.⁸⁸

To assume each firm should brush aside of this three generation rule next to trying to improve family business and make successful planning to achieve their strategic goals.

Family firms are sensitive to suffering the consequences of blurred boundaries between three subsystems (family, ownership and company) that were mentioned beforehand. Rational decisions are seldomly supported and emotions can more often lead to behaviors and actions, that usually easily override the logic of ownership rents or management of business. Families and firms hope in family business continuity and always make effort to optimize ownership, management system and family at same time in desire to get bigger value.⁸⁹

Family-owned firms with a team of very capable nonfamily managers also build values and a firm culture which show a deep comprehension of powerful effects of common optimization. Family-owned and professionally-managed firms are family acting to firm’s best interest and believe in integrity, no walls, tenacity, profitability, improvement and service. Firstly, *integrity* means that firms do what they say they will do. Secondly, *no walls*, firms have no barriers of communication. *Tenacity*, in the sense that firms have an unrelenting determination to reach objectives. According to *profitability* firms are committed to some performance and results. Moreover, very important is an *improvement* because firms are never fully satisfied with. And finally, *service* in a way that firms respect the customers and are loyal to them.⁹⁰

⁸⁸ POZA Ernesto J. et. al. *Family business*, 4th edition, page 8.

⁸⁹ POZA Ernesto J. et. al. *Family business*, 2nd edition, pages 10, 11.

⁹⁰ Same source, page 12.

Family firm owners are aware of increasing individualism of the next generation that relate to an extended family and legacy. But on the other hand, younger generation members usually worry about what they apprehend as the entrenchment of an actual-generation CEO. Moreover, both generations worry about growing complexity and severity of tax and estate tax. This situation usually can predispose owners to make tax minimalize a priority to the detriment of important agility and corporate control. Also, competitors can face to this challenges but success depends on the rapidity and effectivity of problem solving.⁹¹

To move ahead to these challenges is easier with strong competitive advantages. Each firm during making a business naturally makes or gets a resources, which can make their competitive advantages. These resources are referred to as organizational competencies (embedded in internal processes), intangible assets or human resources can provide firm with competitive advantages in some circumstances. Other unique resources for family-owned or controlled firms could be customer-intense relationships which are in connection to high quality of goods and service.⁹²

Last but not least, these resources may be transferred to knowledge and skills from one generation to another and make them sustain to improve a firm performance.⁹³ Following the unique resources family firms can call on to create a competitive advantage. *Overlapping of responsibilities of managers and owners* to make family firms be enable according to rapid speed to market. Also, *concentrated ownership structure* is a long-time promise to invest in innovation and people, and lead to higher firm's productivity. In addition, firms should focus on customers and labour, which results in higher returns on investment (ROI).⁹⁴

⁹¹ POZA Ernesto J. et. al. *Family business*, 2nd edition, page 13.

⁹² POZA Ernesto J. et. al. *Family business*, 4th edition, page 16.

⁹³ POZA Ernesto J. et. al. *Family business*, 4th edition, page 16.

⁹⁴ POZA Ernesto J. et. al. *Family business*, 2nd edition, page 14.

On one side, *ambition to protect a family name and reputation* is really necessary. This often transform into a high quality of a product/service, higher ROI and brand equity (be a name brand produces and high-quality leader). On the other side, *the nature of a family unity, ownership commitment and family-ownership-management interaction* is bracing up lower administrative costs, skills/knowledge transform across generations, patient capital and vitality in fast changing markets.⁹⁵

In addition, there are three main competitive advantages which family- owned firm enjoys. First one is *efficiency* with lower administrative costs (owner-manager overlap). Second competitive advantage is a *social capital* with a transformation of knowledge and benefits that build network and relationships. The last competitive advantage included here is an *opportunistic investment* that is based on agility and speed of a face of new opportunities and innovations.⁹⁶

⁹⁵ POZA Ernesto J. et. al. *Family business*, 2nd edition, page 14.

⁹⁶ POZA Ernesto J. et. al. *Family business*, 4th edition, page 17.

ANALYTICAL PART

1 Methodology of the analytical part

The analytical part of my master's thesis will be made by using Innovation canvases which were explained in the theoretical part. Namely Open innovation canvas according to four companies and Collaborative innovation canvas where I will explain two new open innovations for WERCHEM, spol. s r.o. Moreover, after these canvases I will evaluate the firm from my point of view according to the mentioned theory and introduce a plan of OI in WERCHEM, spol. s r.o. for future.

First of all, I will start with Open innovation canvases and introduction of a firm, I have to make two interviews. Firstly, I will interview members of family employed in a small Slovak family firm WERCHEM, spol. s r.o. The second interview will be made with Peter Jezik, who is a purchase commodity manager of EMERSON Slovakia, to get stronger argumentation and opinion from the other side of firm's borders. Both interviews and e-mail with translated approval from Peter Jezik (EMERSON Slovakia) will be included in attachments of this master thesis.

In the first part of my analytical part, I will introduce the Slovak family firm WERCHEM, spol. s r.o. and I will collect information and focus on history, market, employees-family members and competitors who operate in same region. Some of information I will get from website of a firm and the rest will be included in Interview 1.

Open innovation canvases will be filled in, according to four companies in three separate canvases. Two of the companies are in similar connections with WERCHEM, spol. s r.o., because of it I will use the same canvas for both of them. OIC will be applied for current innovations and collaborations of WERCHEM, spol. s r.o. Furthermore, I will fulfill building blocks by information which I will get from interviews.

In this interviews family members of WERCHEM, spol. s r.o. (Figure 8) and Peter Jezik (Figure 9) will answer the questions about important details of current innovations and collaborations according to this family firm. As a next step, I will use Collaborative innovation canvases for possible future innovations and collaborations of WERCHEM, spol. s r.o. Moreover, my two ideas will be analyzed in detail by explanation in eight building blocks. For inspiration, I will search for examples of open innovations and collaborations of small and big companies.

Finally, I will make open innovation plan suitable for Slovak family firm WERCHEM, spol. s r.o. Here, I will use information from Collaborative innovation canvases and answer the central research questions. For better understanding, all methods which I will use in my analytical part are also elaborated in the following visual aid with a short explanation (Figure 10). There you can see methodology of my work step by step, systematically and much more clearly. Moreover, I will make a table where the dates and places of interviews will be visible.

Respondents	Date of interview	Number of answered questions	Position in WERCHEM, spol. s r.o. and family	Interview type
Jozef Kucerak	06.05.16	5	CEO	Personal
Matej Kucerak	06.05.16	5	sales manager and a son of CEO	Personal
Maria kucerakova	06.05.16	5	purchase manager and a wife of CEO	Personal

Figure 8 - Interview with family members employed in WERCHEM, spol. s r.o

Respondents	Date of sending interview questions	Date of recieving answers of questions	Position in EMERSON Slovakia	Number of answered questions	Interview type
Peter Jezik	22.06.16	22.07.16	Purchase commodity manager	3	Written document

Figure 9 - Interview with employe of EMRSON Slovakia.

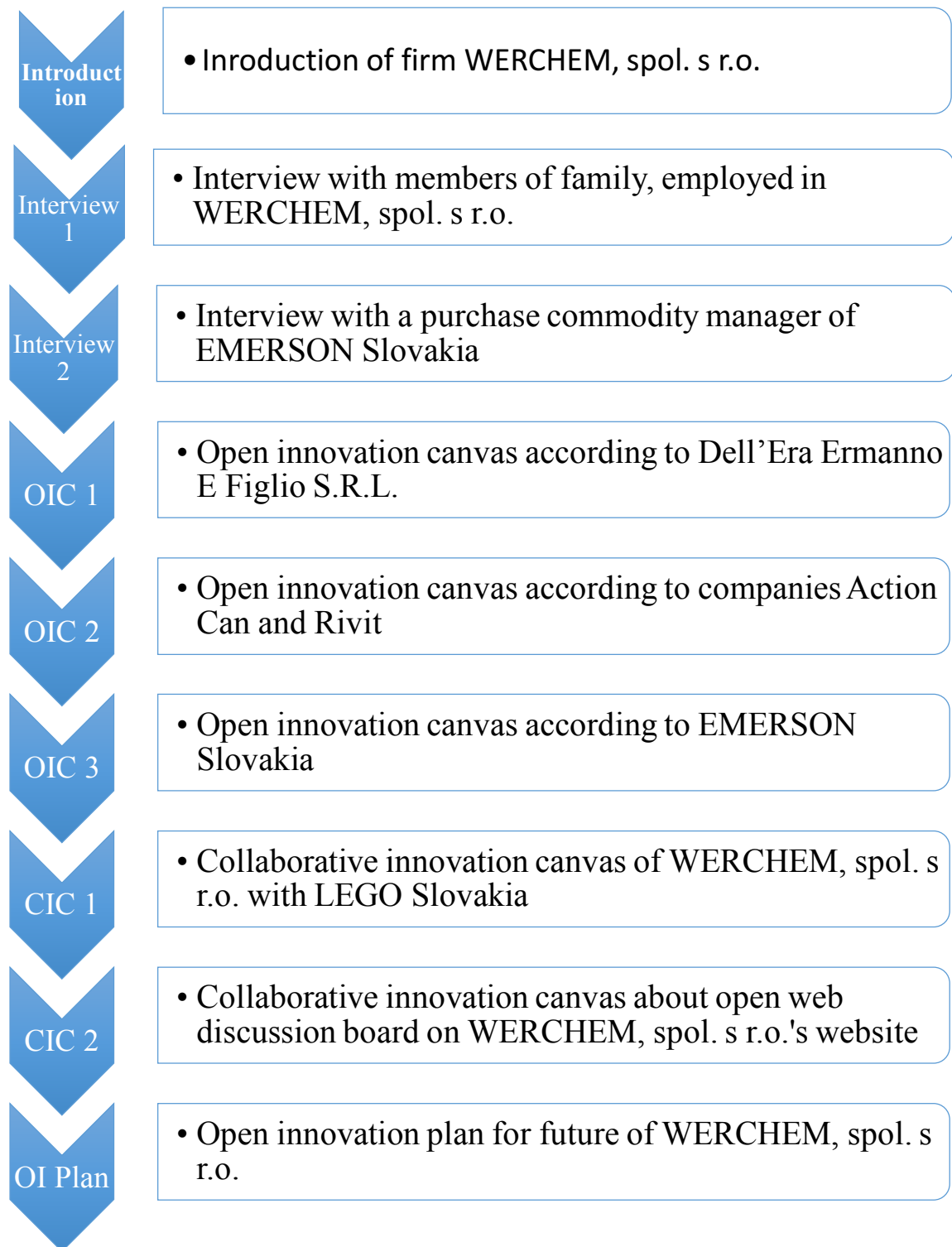


Figure 10 - Methods which I will apply for analytical part

2 About WERCHEM, spol. s r.o.

Firm WERCHEM, spol. s r.o. is Slovak family company, which specializes in a supply of connection accessories/material (screws and nuts) and it has been building a considerable role in the Slovak engineering industry. Besides, the supply in Slovakia it also covers the needs of customers from abroad. Supply of goods consists of standard products that are recognized by DIN/ISO/STN norms but also of products based on customer's draw documentation.

A part of customers of firm WERCHEM, spol. s r.o. composes of important international concerns, because of the flexibility and a high level of provided above standard services. One example is KAN-BAN system (for easier control and procurement of production) and some others. KAN-BAN is used as a card for orders (initiative for construction of products) but on the other hand it is used as identification card for new produced products. Firm WERCHEM, spol. s r.o. focuses on a complex supply of goods. That's why the firm tries to reach the broadest supply content for customers. The main goal of the firm is to grow in new possibilities of assortment and services provided to customers.⁹⁷

Firm WERCHEM, spol. s r.o. was founded in 1997 on a street Janosikova 4 in Nove Mesto nad Vahom. In area of connection material like tools (hammers, drills) and industrial chemistry (sprays, glues) it mainly operates on markets in Slovak and the Czech republic. In 2000 shop and stock house of the firm moved to Piestanska street 1202/44 in Nove Mesto nad Vahom. New building offered possibilities to open bigger shop and spreading of warehouse stock. Assortment of firm WERCHEM, spol. s r.o. is growing each year by new commodities and by that it becomes comprehensive supplier.

In 2006 firm became an exclusive supplier of Italian producer of rivet products and technology from company RIVIT for Slovak market. In the same year the firm got an exclusivity of English producer industrial sprays Action Can for Slovak and Czech market.⁹⁸

⁹⁷ *Werchem* [online].

⁹⁸ Same source. [online].

Nowadays, there are seven additional similar firms in the same region: Metalvis Slovakia, spol. s r.o., Visimpex, s.r.o., FDS spol. s r.o., Tofas, s.r.o., Fer-Kad, s.r.o., Rados - Ivan Hrnecar. Firm Metalvis Slovakia, spol. s r.o. focus on selling screws, nuts and threaded rods. Screws, pins, rivets, nuts sells firm Visimpex, s.r.o.. FDS spol. s r.o. sells just fastening technology from different suppliers. Next competitor is a firm Tofas, s.r.o., which sells the same assortment as Visimpex, s.r.o. plus electric drills. Firm Fer-Kad, s.r.o. supply primary screws and silicones. A firm Rados focuses also on the same assortment – Ivan Hrnecar and moreover it sells industrial sprays.

The most of the competitors focus on industrial sprays, threaded rods or mechanical implements. Firm WERCHEM, spol. s r.o. offers the same assortment and besides that offer, there are more kinds of different assortments mowers or abrasion wheels. Based on exclusivity of supplying assortment from abroad WERCHEM, spol. s r.o. offers higher quality connection material for lower prices and competes with bigger chains like Baumax or Hornbach.

WERCHEM spol. s r.o. is more-less based on informal side of management because it presents itself as a family firm. Three members of the same family work on different work positions in different departments of the firm. In regards to this situation it sometimes flows into exchange of opinions which are often based on the family relationship problems. This influences also the rest of employees, who could have feeling, that supervisors are all members of family.

CEO Jozef Kucerak has been managing the firm from beginning, till now. From foundation of the firm, he worked almost on all positions and based on skills and knowledge which he got, he motivates employees and shows them the right directions how to perform their jobs. But his approach to purpose and system of working is sometimes old school, because each innovation looks so risky to him.

The firm tries to retain qualified personnel, but it also gets the employees which are trained by the firm during the all existence.

For better being of the firm, employees have to feel co-responsible and be loyal and proud of the firm.

Maria Kucerakova (wife of CEO) works in the administrative department. She takes care of payment of invoices, cash register and payment of wages. She has worked in this department since the firm was founded. This position is the most close to keep a knowledge about all financial resources and it is reasonable that she works on this position. She knows a lot about actual financial situation of a firm. Therefore, the financial situation is not a secret for the rest of employees. On the other side, sometimes these kinds of sensitive information could be misappropriated by the rest of employees. Maria is from the same generation as Jozef and she feels risky and sometimes hard to follow any change or innovation. She is also afraid of changing habits which are usually more time consuming than new innovative systems.

We can call the position of Matej Kucerak (son of CEO) the top manager or the right hand of CEO. He has been managing and controlling all the employees for eight years. Moreover, the main purpose of his work is to manage orders from customers and make appropriate prices for them according to relations with WERCHEM, spol. s r.o. (payment of invoices on time, long-time customers or customer with ordinary high quantity orders). On the other hand, he also takes care of marketing, searching for new customers and handling the meetings. Of course, he is not alone for this job but he is responsible for all members in a team of employees. He sometimes tries to be more innovative and rebellious than the rest of family members because he is younger and knows that trends are changing every day.

As a conclusion, altercations are sometimes necessary to build in the new innovative system. For sure a new approach can be risky and need an investment of money but finally can help to a firm to move ahead, earn more money and make a harmony inside and outside of boards of the firm. Parents should be more open to innovations and new things. The son should listen and obey arguments of skillful parents.

3 Innovation canvases of WERCHEM, spol s r.o.

In this part, I use innovation canvases to detect where are the blind spaces/points in current innovations and what should be ideal innovations and collaboration for WERCHEM, spol. s r.o. in a future.

3.1 Open innovation canvas of WERCHEM, spol. s r.o.

For current innovations I use Open innovation canvas. Here I introduce four companies and analyze them separately in three Open innovation canvases. First company is Dell'Era Ermanno E Figlio S.R.L., Italian producer of specific (custom-made) or ordinary types of screws and nuts on demand. Second OIC analyze two companies together because the system of working is the same in a lot of building blocks of this canvas. Namely Italian company RIVIT that sells rivets and English company Action Can which sell industrial chemistry (sprays, glues). In a case of RIVIT, as was mentioned before, WERCHEM, spol. s r.o. is exclusive supplier for Slovak market. On the other hand, for Action Can, WERCHEM, spol. s r.o. is an exclusive supplier for Slovak and also Czech markets.

Last analysis is according to company EMERSON that has warehouse right next to WERCHEM, spol. s r.o. In 2012 firm WERCHEM, spol. s r.o. won a price competition and made a contract with EMERSON where is stated that WERCHEM, spol. s r.o. is a main supplier of connection material (screws, nuts) for following five years. For stronger argumentation for this innovation canvas are used information from interview with purchase commodity manager of EMERSON Slovakia Peter Jezik.

3.1.1 Open innovation canvas according to Dell'Era Ermanno E

Figlio S.R.L.

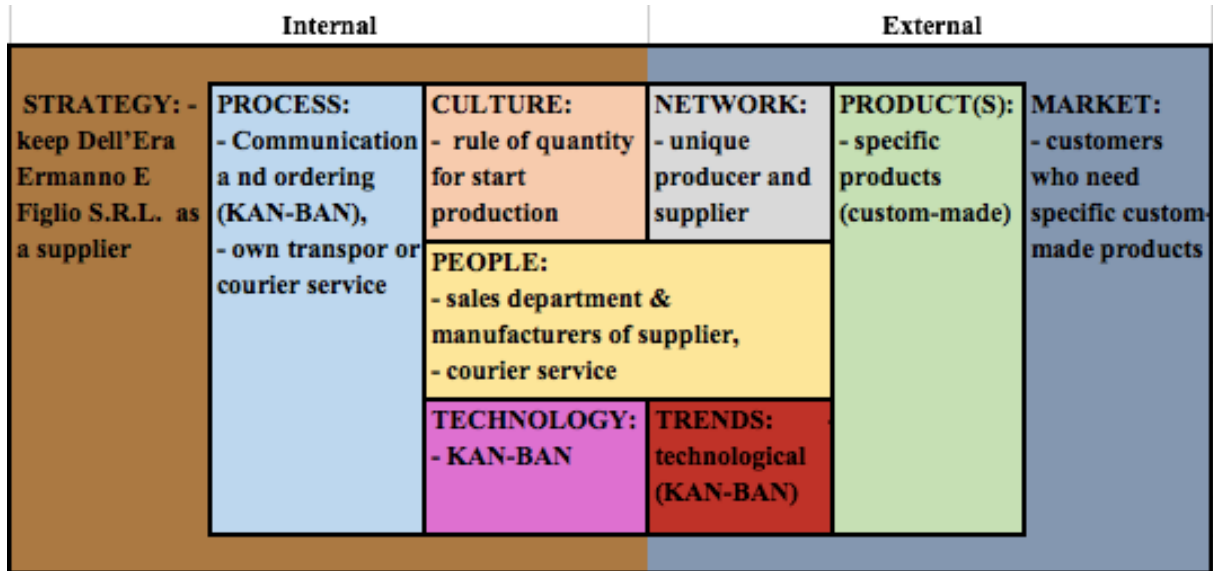


Figure 11 - OIC according to Dell'Era Ermanno E Figlio S.R.L.

The main strategy for firm WERCHEM, spol. s r.o. in this case is to keep this supplier and collaborate with it in terms of signing contract for following years. Contract should include exclusivity for WERCHEM, spol. s r.o. to be only one supplier of these specific custom-made products on demand for Slovak market with connection material. Nowadays, targeted market is a market of customers who need specific connecting material which is not usually in a stock, but has to be produced in a factory suitable for each customer (type, size, material). Dell'Era Ermanno E Figlio S.R.L. use KAN-BAN system to start a production of specific screws and nuts. This technological trend WERCHEM, spol. s r.o has to follow to work with this Italian supplier. Big economical advantage is that the currency in Italy is euro, same as in Slovakia. Products which WERCHEM, spol. s r.o order from this Italian company are usually very specific and final user has to wait for production two or three weeks. However, a customer can choose which size (bigger/smaller than normally), material or face lift (aluminium, iron...) and type of a product is best for his/her needs. A role of Dell'Era Ermanno E Figlio S.R.L. in the network of WERCHEM, spol. s r.o. is to be a unique producer and supplier of specific connecting material.

Based on working system of Dell'Era Ermanno E Figlio S.R.L, the firm has to use a special KAN-BAN system, which was also mentioned before, for easier ordering of production of these screws. Also KAN-BAN is an identification card for new screws that were not in a system because they were not produced it before (to specific). In a case of this Italian producer WERCHEM, spol. s r.o need to main processes. First one is for communication and ordering of products (KAN-BAN) and second one is for delivering products to WERCHEM, spol. s r.o or to an end-user. If the order is big enough producer delivers the product by its own car. If not, a firm has to pay for an additional courier service. Dell'Era Ermanno E Figlio S.R.L. has a rule for quantity for starting a production process of crews or nuts (culture). It is really necessary to know that for a start of production, a customer has to order the whole box or package of the product. The reason is a production tax. Quantity of screws in a box is different according to size of a product (at least between 100-1000 pieces).

To do best business is necessary to know useful people from outside of boarders of firm. In this case, that are people from sales department and manufacturers in Dell'Era Ermanno E Figlio S.R.L. and also couriers to for transport.

3.1.2 Open innovation canvas according to companies RIVIT and Action Can

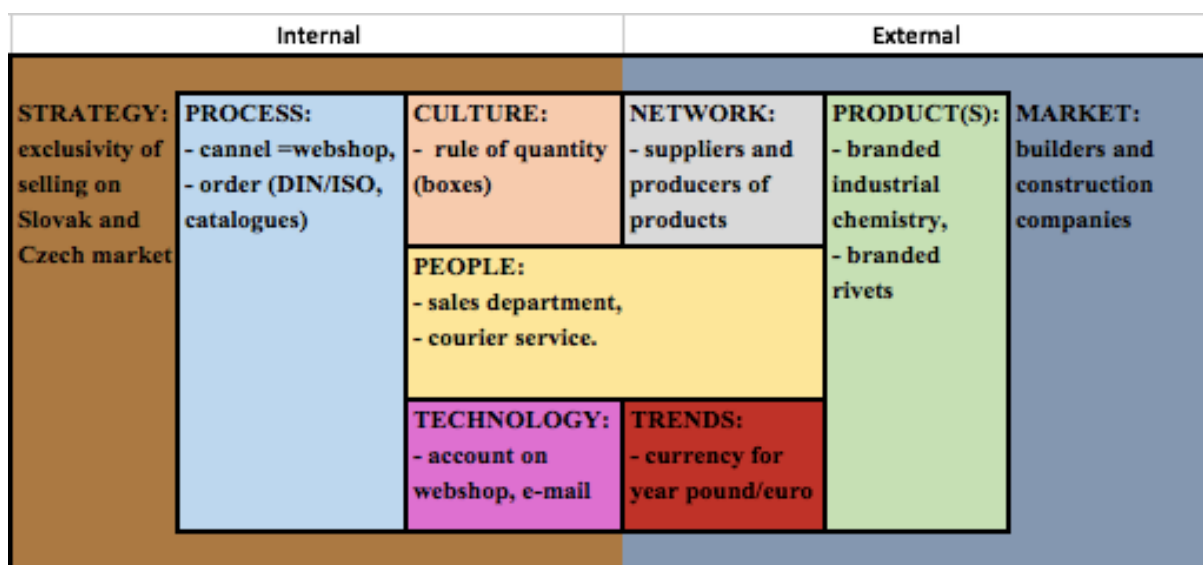


Figure 12 - OIC according to RIVIT and Action Can

The strategy of making business with these two firms is based on exclusivity of supply products from RIVIT and Action Can in a Slovak market and in a case of Action Can also to a Czech market. The main goal is to get the exclusivity for another markets abroad and stay in this collaboration with these companies. WERCHEM, spol. s r.o., with rivets from RIVIT and industrial chemistry (sprays, glues) from Action Can, target home and Czech market of builders and construction companies. In a case of Italian company RIVIT there are no special political, or economic trends because Italy is in European Union and the currency is euro. Different situation comes with an English company Action Can because in England, where the currency is pound. However, each January WERCHEM, spol. s r.o and Action Can define the currency for them for the whole year. We can suppose that the quality of these products is really high because they don't need to sell industrial chemistry and rivets to firms in Slovakia and Czech Republic. But buying power of customers is strong enough according to the exclusivity of only one supplier for two markets. According to a network of WERCHEM, spol. s r.o, companies RIVIT and Action Can are on a side of suppliers and producers of this firm.

Their products WERCHEM, spol. s r.o sell to the end users or to another firms. Firm WERCHEM, spol. s r.o. has an exclusive customer own account for ordering from e-shops of these companies with special prices. The rest of communication is based on classic technologies like e-mail and phone communication. To make process working and do a business, the most useful channel is e-shop for both companies. Because by using this channel, employees of WERCHEM, spol. s r.o order products faster and don't need to waste their time with searching for products and DIN/ISO in a catalogues or in invoices from past. Ordering products from RIVIT and Action Can is based on norms for order. It is not possible to order only one glue, spray or a river. Everything is packed in boxes according to price and size of products. Usually 9-12 sprays in the box or 100-1000 rivets in each box (culture). From both supplier companies WERCHEM, spol. s r.o. needs to cooperate with people from their sales department and employees who take care of logistics. Perhaps, it may consider to order external courier service.

3.1.3 Open innovation canvas according to company EMERSON Slovakia (division Energy systems)

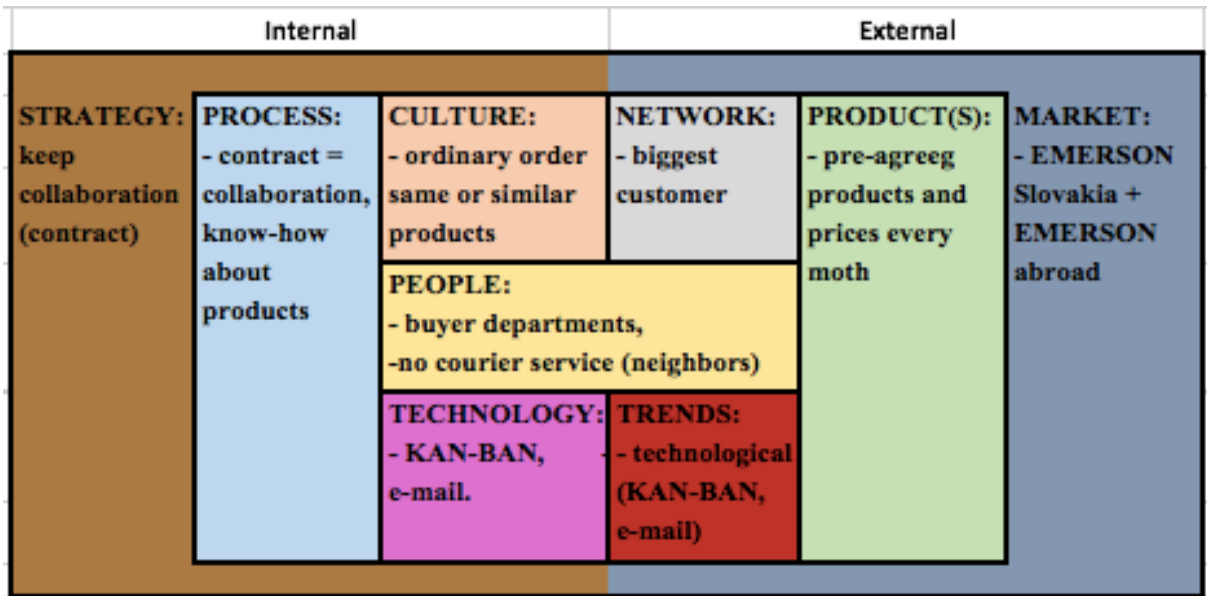


Figure 13 - OIC according to EMERSON Slovakia

A strategy according to the company EMERSON Slovakia is to stay in collaboration and to be an exclusive supplier for this company. It also aims to win the next competition and sign the same contract for exclusivity to be only one supplier of connection material for this company. EMERSON Slovakia is one part of network of this Italian company. Nowadays, WERCHEM, spol. s r.o makes a business just with a subsidiary on a Slovak market but there is a big opportunity to make a business with EMERSON abroad. In order to supply products to EMERSON Slovakia it is not necessary to follow any special trends (political, economic) because this company is in the same country and a town as WERCHEM, spol. s r.o. Also special technological trends are not used. Adapting to the needs of Emerson Slovakia is very important because firm supply them all necessary product in pre-agreed prices based on contract. Some products are delivered every month in same quantities.

In a words of Peter Jezik, who is a purchase commodity manager of Slovak division Energy systems: “Goods are transported according to contract, there is written expected quantity of screws and nuts for each year and month separately. Also, EMERSON Slovakia can order additional screws and nuts from WERCHEM, spol. s r.o. in the same price.” (products). In a network of WERCHEM, spol. s r.o., EMERSON Slovakia is one of the biggest customers sometimes with special needs. That is the reason why WERCHEM, spol. s r.o has to order these products in advance by mentioned Italian producer Dell’Era Ermanno E Figlio S.R.L. For EMERSON Slovakia does not need any special technology. Communication is based on e-mails and products are ordered by EMERSON Slovakia by KAN-BAN or DIN/ISO number of each product. The contract with the company EMERSON Slovakia is some kind of collaboration and connection between employees in these firms. They get know-how from each other and WERCHEM, spol. s r.o. knows more about the usage and quality of sold products. Culture according to EMERSON Slovakia is again based on contract and ordinary ordering similar or same products. Contract warrants similar quantity of products each month or for all year (process).

People from outside of boarders of the firm WERCHEM, spol. s r.o., which are necessary for making this business are employees from a purchasing department of EMERSON Slovakia because they order products. In a case of EMERSON Slovakia it is Peter Jezik who was also interviewed. EMERSON Slovakia orders products from WERCHEM, spol. s r.o. because this family firm is the best option in all of their main criteria for a contract. As a responsible purchase commodity manager Peter Jezik mentioned in interview one of the most important criteria is that these two firms are neighbors (short delivery time) and division Energy systems can sustainable continue in construction of converters.

3.2 Collaborative innovation canvas of WERCHEM, spol. s r.o.

For future possible innovations and collaborations of firm WERCHEM, spol. s r.o. I use Collaborative innovation canvas (CIC). I make two canvases for my two ideas of future innovations in a firm WERCHEM, spol. s r.o.

First CIC is about collaboration with LEGO Slovakia to help each other. LEGO has already made plenty of different types of plastic building kits. Than lego parts for “Small builder” with logo of WERCHEM, spol. s r.o. could be a very good advertising for this small family firm. On the other hand, WERCHEM, spol. s r.o. could give LEGO building kit as a present to customers who will do personal purchase in a store WERCHEM, spol. s r.o. for more than X euro. This collaboration could be a really good support for a store which doesn’t earn that much money as a distribution alone.

Second CIC is based on the idea of an open discussion for customers on a website of firm WERCHEM, spol. s r.o. According to customer’s needs and new ideas WERCHEM, spol. s r.o. can change the system or adapt innovations.

3.2.1 Collaborative innovation canvas based on collaboration of WERCHEM, spol. s r.o. with LEGO Slovakia

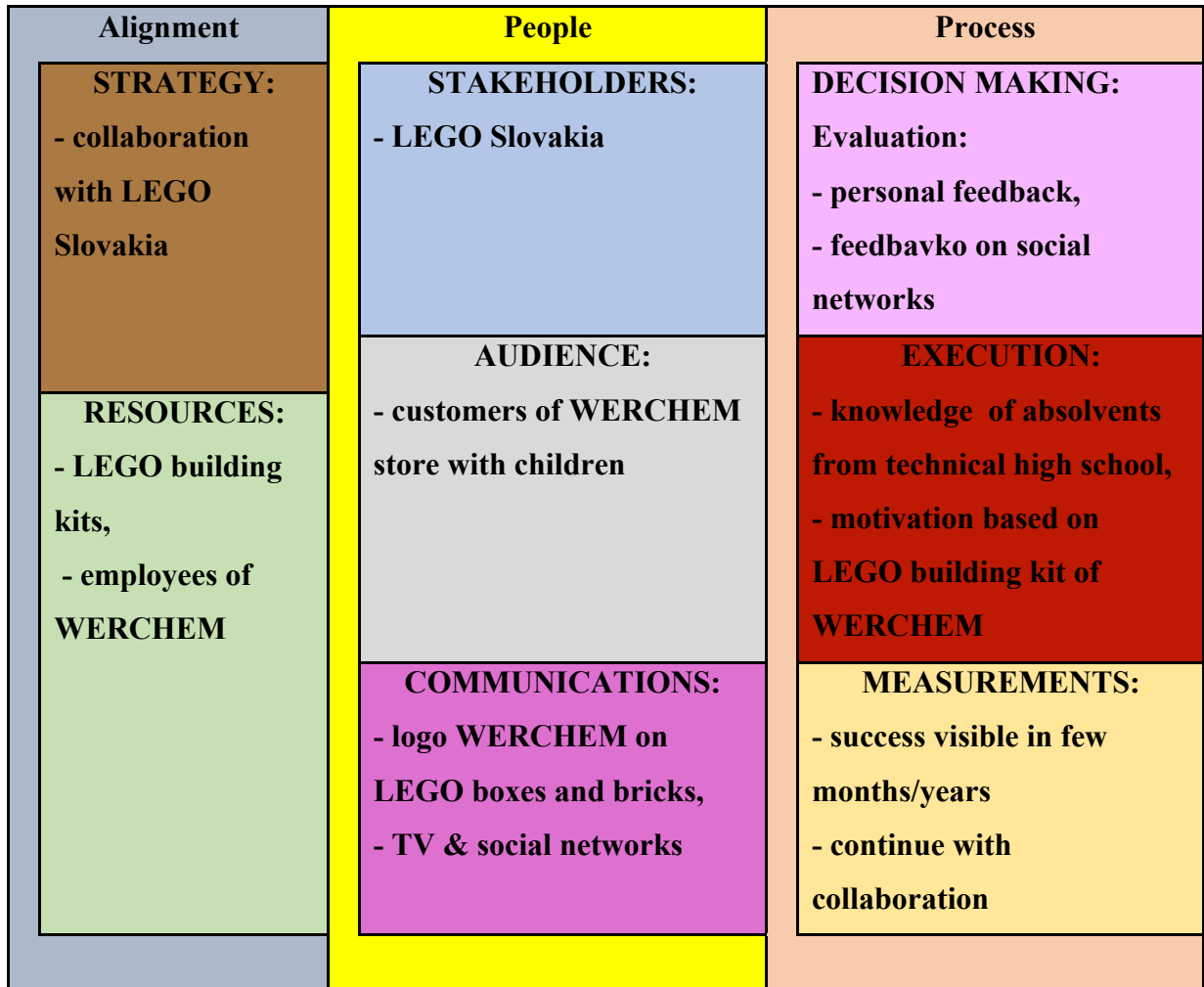


Figure 14 - CIC collaboration with LEGO Slovakia

Alignment:

Main strategy is to make collaboration with the well-known company LEGO for a Slovak market. Furthermore, to make customers with small children visit WERCHEM, spol. s r.o.'s store and to make them to purchase there. The most important resources are LEGO building kits as a present to customers for purchase in WERCHEM, spol. s r.o.'s store. Also employees from the firm could advertise this possibility of this donation of LEGO building kits for "small builders".

People:

LEGO Slovakia will be used as a partner and main a stakeholder to advertise WERCHEM, spol. s r.o. Building kits form LEGO could include a logo of WERCHEM, spol. s r.o. and children could make screws, nuts or drills from plastic LEGO bricks. The audience in this case will be customers of WERCHEM, spol. s r.o. store who have children. Parents can buy connection material and children can learn how and where to use them by playing with it and so learn from it. Moreover, in a future, children can visit the same store with the knowledge what and why they need in terms of a connection material. An advertisement like logo on LEGO boxes or on a bricks can be used as a communication channel and a brand awareness of WERCHEM, spol. s r.o. will grow very fast. Very important is also television advertising of LEGO with the mentioned collaboration with WERCHEM, spol. s r.o. and place where customer can visit the store. In addition, WERCHEM, spol. s r.o. should use content marketing to advertise this collaboration on their own website and by using a link also on social networks.

Process:

Decision making in the process part is based on evaluation which could be based on personal feedback from customers and reactions on social networks. On the other hand, based on this knowledge, children could make relations to manual work based on the visit of a technical high school and learn basics for their future career in technical directions. A number of people with technical knowledge for work has decreased a lot during last few years and WERCHEM, spol. s r.o. has to train every employee on its own. According to their knowledge from a high school these people could bring new ideas to the current situation of WERCHEM, spol. s r.o. (execution). Success will be visible in a few months or years. Of course in the following years the family firm WERCHEM, spol. s r.o. should continue with this collaboration and include another ideas how to increase purchasing in a store and how to attract more customers to buy connection material here (measurements).

3.2.2 Collaborative innovation canvas about open discussion on website of WERCHEM, spol. s r.o.

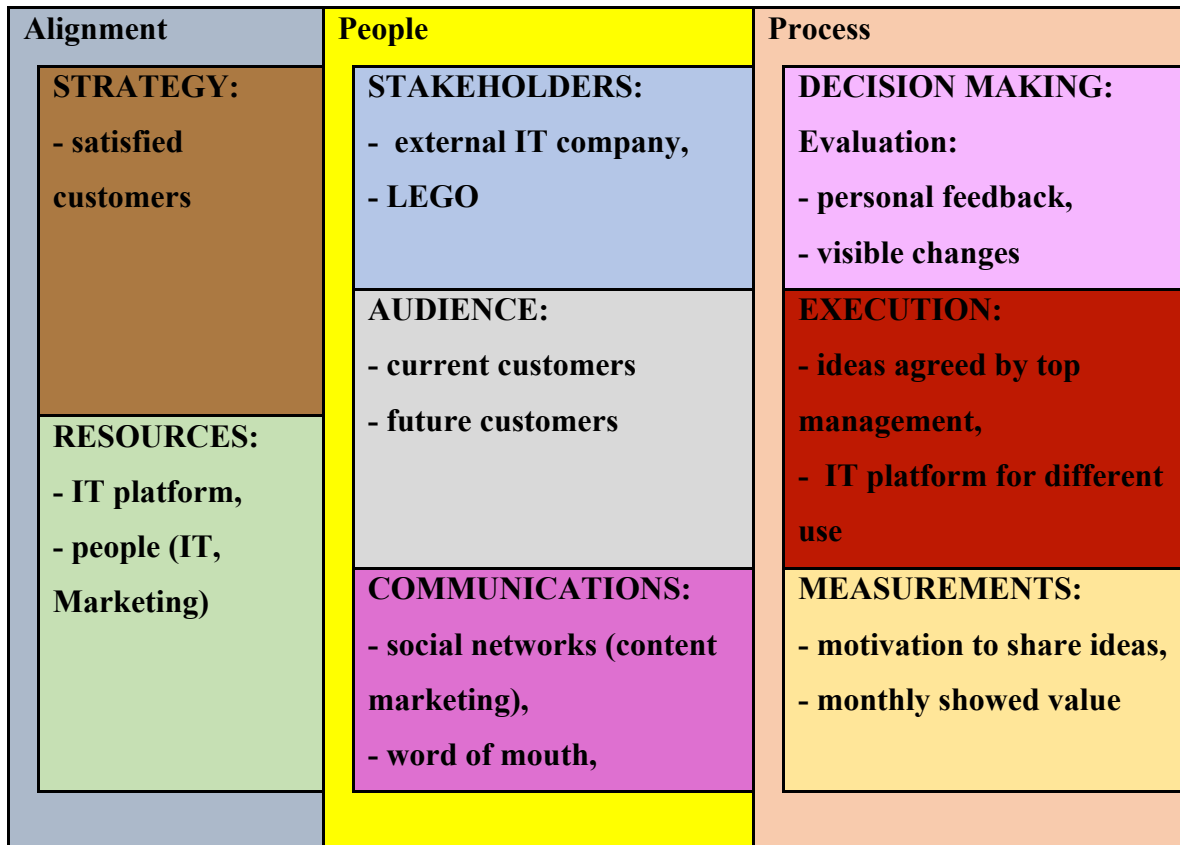


Figure 15 - CIC open web discussion

Alignment:

For a long time strategy, the small family firm WERCHEM, spol. s r.o. wants to know the main needs of customers. The main goal of this strategy is the satisfaction of customers according to their needs. Open web discussion will be based on the ideas from outside of WERCHEM, spol. s r.o. and will be seen by the firm. To realize that an open web discussion is necessary to make supplement to current website of WERCHEM, spol. s r.o. This new IT platform allows the customers to make a discussion or put the comments with ideas how and what to improve according to their needs and also bring the resources to the firm. IT specialists are also very important resource in terms of building this platform.

Marketing will be provided by the employees of this firm and also by very popular social networks.

People:

External partner will be an IT company which will allow customers to use open web discussion on website of the firm. If the collaboration with LEGO will be successful, then LEGO Slovakia could be another partner. LEGO will advertise on their website the possibility for customers to write their comments about ideas how to improve WERCHEM, spol. s r.o. with a link to their website (stakeholders). In this case WERCHEM, spol. s r.o. will focus on current and future customers. They should be satisfied because their ideas will be realized and their needs will be met by the next purchase (audience). Communication with customers will be provide by social networks (content marketing), and word of mouth, from selling employees in the store. If mentioned collaboration is successful, the best idea from discussion, in some period of time, could be awarded by LEGO bricks or products from WERCHEM, spol. s r.o.

Process:

Evaluation could be based on personal or online feedback from customers. Also as an evaluation can be used numbers of realized changes by WERCHEM, spol. s r.o. according to needs of customers found on the open web discussion on website of the firm. New ideas from outside of the firm have to be agreed by the top management of the firm and consequently realized. Furthermore, this will help the firm to grow and thrive in a future. Also, the IT platform can be used in a different way in a future (execution). Success of this open web discussion is mainly based on customers and their motivation to share the ideas. On the other side, firm could make analysis from customer's feedback and show monthly the value, which innovation brought to firm (measurements).

4 Open innovation plan for WERCHEM, spol. s r.o. discussion and epilogue

As a result, from Open innovation canvases a small family firm WERCHEM, spol. s r.o. is already somehow in an open innovation, but not enough. Family members still want have firm a little bit independent but innovative. But we can see that WERCHEM, spol. s r.o. made collaborations with two suppliers and one customer, just naturally. In a reality, by this steps or approach they got the firm to coupled OI. This means that contracts about exclusivity of WERCHEM, spol. s r.o. to be unique supplier for Slovak and Czech market (RIVIT, Action Can) or contract to be exclusive supplier of connection material for EMERSON Slovakia brought this firm to collaborations with mentioned companies. Moreover, the firm got a lot of information and trends from supplier's or customer's companies which makes WERCHEM, spol. s r.o. an innovation seeker. On the other hand, in a situation with supplying of produced special custom-made screws and nuts from Italian company Dell'Era Ermanno E Figlio S.R.L. the firm WERCHEM, spol. s r.o. is an open innovation intermediary. Because WERCHEM, spol. s r.o. and also customers of this firm have to use KAN-BAN system to enable ordering of specific screws and nuts from the company Dell'Era Ermanno E Figlio S.R.L. I recommend, that WERCHEM, spol. s r.o. should keeps these innovations and develop them, for example get exclusivity to be only supplier on markets in abroad.

This current OI situation of firm WERCHEM, spol. s r.o. simply show also Figure 16. The same figure explains relationships of this firm with two supply firms (Rivit and Action Can), one producer od special screws and nuts (Dell'Era Ermanno E Figlio S.R.L.) and one customer firm (EMERSON Slovakia).

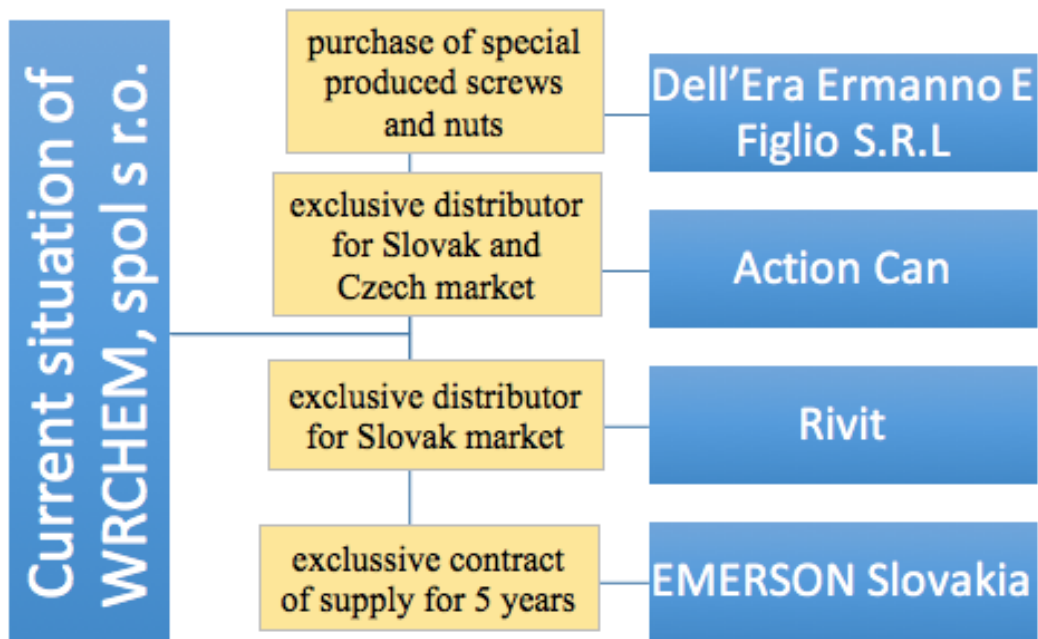


Figure 16 - Current OI situation of WERCHEM, spol. s r.o.

I used Collaborative innovation canvasses to bring another value, ideas and innovations for small Slovak family firm WERCHEM, spol. s r.o. This kind of canvas was used for future innovations. Figure 17, in a comparison with Figure 16, come with two possible innovations and collaborations, collaboration with LEGO Slovakia and discussion board on website, which could be used for firm WERCHEM, spol. s r.o. in the following months and years. Based on these ideas and their success after realization, the firm can start thinking about any other innovations and collaborations. Moreover, the firm start to be more creative and maybe also open for another firms. Both of them are included in Figure 17 and explained in details in the following text.

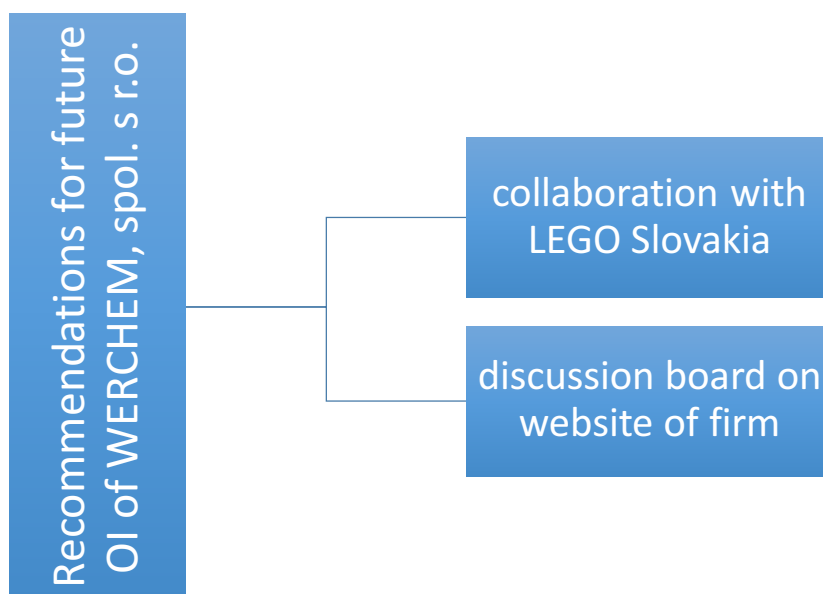


Figure 17 - Recommendations for future OI of WERCHEM, spol. s r.o.

First one is to make a collaboration with the company LEGO Slovakia. This company could make special edition of LEGO bricks with a theme of connecting material like screws, nuts or drills. On a box and bricks of LEGO could be logo of WERCHEM, spol. s r.o. Also in a Slovak TV, radio, newspapers and links on social networks (content marketing) could be an advertisement of these collaboration. On the other side, WERCHEM, spol. s r.o. could donate this LEGO bricks as a present for higher purchase in their store and motivate customers with children to buy connecting material here. Another value could be for children to learn how to use these products in a future. Furthermore, these children could be the next generation of employees in a technical branch. Collaboration with LEGO Slovakia should bring to WERCHEM, spol. s r.o. a higher brand awareness and later maybe targeting new markets abroad. LEGO got from this coupled open innovation new idea for edition of LEGO bricks and partner for business.

My second idea of open innovation is to make online discussion on website of WERCHEM, spol. s r.o. Customers could put here their ideas how to improve the store, services or sold products (packaging).

WERCHEM, spol. s r.o. will get the ideas from outside of the boundaries of firm which will be match the customer's needs. This solution should bring the value to customers because they will be more satisfied. In addition, customers could get to know about an open discussion on firm's website by a word of mouth from employees in a store, links on social networks and also on LEGO website (if collaboration will be successful). In this case in some periods of time the best ideas from current or future customers could be awarded with a special edition of LEGO bricks or some product from WERCHEM, spol. s r.o. One necessary step that WERCHEM, spol. s r.o. has to do is to pay to IT company to make special platform for discussion on a firm's website.

I believe that WERCHEM, spol. s r.o. decide to follow my ideas about future open innovations and get new knowledge, skills how to be open to innovations and collaborations. Moreover, WERCHEM, spol. s r.o. could grow much faster than before and target different markets (home, abroad) with different products or services. All family members should realize the following trends and be open to the world around (new partners). It could be more useful for the business than being afraid and stay locked in same place. Perhaps also trying to find the best options just inside of the borders of firm is not a very good solution for a long time period. Furthermore, I hope that small Slovak family firm WERCHEM, spol. s r.o. starts with realization of my open innovation ideas as soon as possible.

According to central research question "How to build a strong OI network for small Slovak family firm WERCHEM, spol. s r.o.?" I divided my master thesis into two main parts a theoretical part and an analytical part. The theoretical part was made as a background for better understanding of theory which was applied to small Slovak family firm WERCHEM, spol. s r.o. in an analytical part. The theoretical part is divided into four main parts as innovation, innovation canvases, small firm and family business in order of importance. The most important part is the first part. To answer the central research question in a best way I made additional three sub-questions that were answered systematically in the analytical part. The first sub-question "Which is the current status of WERCHEM, spol. s r.o. in a case of innovations?"

This is answered in the analytical part, 1 About WERCHEM, spol. s r.o., where were explained history, suppliers, family members and competitors of this firm. Furthermore, some of these information were also used for answering the next sub-question “What innovations and collaborations WERCHEM, spol. s r.o. already made?”. The most important information for this sub-question is in three open innovation canvases. I fulfilled them according to two interviews. First interview I made with members of family who work for WERCHEM, spol. s r.o. and the second with Peter Jezik who is a purchase commodity manager from a customer firm EMERSON Slovakia. I made this interview because I wanted to get the information and opinion also from outside of borders of this family firm. Unfortunately, EMERSON Slovakia was the only company who had time to make an interview with me. The rest of canvases are fulfilled just from the information which I got from employees and simultaneously family members of WERCHEM, spol. s r.o. The last research sub-question “Which are the best suitable possibilities for open innovations and collaborations of WERCHEM, spol. s r.o. in a future?” is in a connection with Collaborative innovation canvas and Open innovation plan of WERCHEM, spol. s r.o. where I put my ideas for possible open innovations and collaborations for this family firm in a future. In my opinion the main goal of the master’s dissertation was achieved and a firm knows which are the best possible open innovations and collaborations for future.

In addition, after making analyses in a form of canvases some questions came to my mind:

- What if the recommended innovations and collaborations will not meet with success?
- What if the relationships with firms of current OI will break out?
- What if customers will lie on discussion board?
- What if LEGO Slovakia will not agree with the collaboration?

There are many questions which starts with “What if” something will be wrong or happen. But WERCHEM, spol. s r.o. has to believe that this plan will meet with success. Firm should not give up with OI if something will happen. For example, at least try improving some parts of the plan or make a new plan based on their opinion and experience with customers and suppliers.

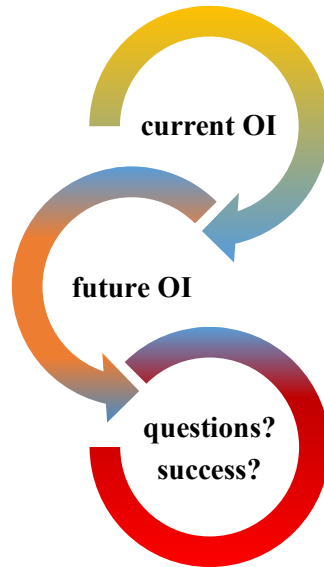


Figure 18 – General content of my master’s thesis

Figure 18 shows the general steps and direction of my master’s thesis. At the end of the fourth part I discussed the succession or failure and possible questions about current or future OI situation of firm WERCHEM, spol. s r.o. However, decision makers are family members employed in WERCHEM, spol. s r.o. and only they can influence and decide the future steps of the firm. OI can bring to this family firm much more than take, as they might know from current collaborations and exclusive contracts. I believe that WERCHEM, spol. s r.o. will be successful with recommended OI plan and initiative in a future OI.

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Attachments

Attachment 1

Interview with family members of WERCHEM, spol. s r.o.

Interviewer: Nina Kucerakova

JK- Jozef Kucerak

MK – Matej Kucerak

Mrs. K – Maria Kucerakova

1. What is your name and relationship according to this small family firm?

JK: My name is Jozef Kucerak and I founded WERCHEM, spol. s r.o. in 1997 with my friend Luboir Fabian. He left the firm in 2012. In addition, I am a head of my family that has four members including me. Wife and son have a full-time job here and my daughter has been helping us as a part-time worker during last few summer holidays.

Mrs. K: I am Maria Kucerakova, a wife of Jozef Kucerak. So, I have worked with him since it the firm was found.

MK: My name is Matej Kucerak and I am a son of Jozef Kucerak and Maria Kucerakova and I have started to work for WERCHEM, spol. s r.o. eight years ago, right after my high school graduation.

2. Which is your work position in WERCHEM, spol. s r.o.?

JK: I have been a CEO since 1997.

Mrs. K: Administrative officer with fixation to finance but without accounting.

MK: My position is not really specified because I work in top management of the firm. I am also a right hand of CEO.

3. What is the purpose of your work?

JK: As a CEO I have been managing a firm from beginning, till now. From foundation of the firm, I worked almost on all positions. Based on my skills and knowledge I am trying to motivate employees and show them the right direction how to perform their jobs.

Mrs. K: I take care about payment of invoices, cash register and payment of wages. My position is most close to managing general knowledge of all financial resources. I think that it is reasonable why I work on this position. I have an overview about last and current financial situation in a firm. Financial situation is not a secret for the rest of employees. However, this kind of information are more sensitive and could be misappropriated by the rest of employees.

MK: Hmm. The main purpose of my work is to manage orders from customers and make appropriate prices for them. I make prices according to relations and loyalty of customers to WERCHEM, spol. s r.o. (payment of invoices on time, long-time customers or customer with ordinary high quantity orders). But I also take care of marketing, searching for new customers and handle meetings. On one side I am not alone for this job. But on the other side, I am responsible for all members in a team of employees.

4. Do you think that WERCHEM, spol. s r.o. is open to innovations? If yes, how? If no, why?

MK: I would like to answer this question before my parents. From my point of view, my parents are really afraid of innovations. I know that they have been the resources of this company from 1997 and success of firm is based on them. But they have to wake up and follow trends because technology, way of communication with customers and suppliers were different than in 1997 or 2005. Everything is more digital and open. Be open to innovation is always more or less risky but how to be successful without a strong brand name based on growing network and

following the best players in the market? Or without making collaboration with them? I am glad that at least sometimes they listen to me and we can move ahead.

JK: I agree with Matej in some points, but the reason of my worries came in 2008 when financial crisis influence firms and all the market. During the crisis we had really hard times because we had to still searching for different solutions of suppliers or customers. Nowadays, the situation is better but in my opinion we don't have to be the leaders of innovations. WERCHEM, spol. s r.o. is too small to do these big steps before the others. I am open to innovations, why not? But sometimes it is better to wait, look for the competitors and if innovations will work in their firm we can also try it. I know that each innovation is based on risk and we can risk, but not too much. What if...?... But maybe if you Nina come with any new idea or reasonable innovations/collaborations why shouldn't we try to apply it?

Mrs. K: I think that we are open to innovations but not to all of them. Because everything costs money without a guarantee of return. This is my financial view and also habits are habits and I think that we are a little bit in stereotype with some customers or suppliers. But we know each other and nobody expects changes from us. Moreover, I agree with Jozef. If you Nina come with something really good and innovative. You can also work on it with Matej. You could be very good team. We could believe you because you are our children and once this firm will be yours.

5. Did WERCHEM, spol. s r.o. make a collaboration with any other firm in Slovakia or abroad?

JK: We made a strong connection with company Dell'Era Ermanno E Figlio S.R.L. This Italian company is a producer of specific screws and nuts. The system is based on custom-made orders. Final user has to wait for production for two or here weeks. But customer can choose which size (bigger/smaller than normally), material or face lift (aluminium, iron...) and type of product is best for his/her needs. Based on working system of Dell'Era Ermanno E Figlio S.R.L,

firm has to use a special KAN-BAN system for easier ordering of production of these screws. Also KAN-BAN is an identification card for new screws that were not in a system because were never before produced.

MK: Our firm made a collaboration with an Italian company RIVIT that sells rivets and English company Action Can which sell industrial chemistry (sprays, glues). In a case of RIVIT, WERCHEM, spol. s r.o. is exclusive supplier for Slovak market. On the other hand, for Action Can, WERCHEM, spol. s r.o. is the exclusive supplier for Slovak and also Czech markets.

Mrs. K: Last company is EMERSON Slovakia that has warehouse right next to WERCHEM, spol. s r.o. In 2012 firm WERCHEM, spol. s r.o. won the price competition and made a contract with EMERSON Slovakia. In a contract is stated that WERCHEM, spol. s r.o. is a primary supplier of connection material (screws, nuts) for following five years.

Attachment 2

Interview with an employee of EMERSON Slovakia

Interviewer: Nina Kucerakova

PJ - Peter Jezik – a purchase commodity manager

1. What is your name and position in EMERSON Slovakia?

PJ: My name is Peter Jezik and I have been working as a Purchase commodity manager of division Energy systems of company EMERSON Slovakia for more than seven years. During these years I have worked with a lot of suppliers of connection material from the region and I know their prices, what quality of goods and how fast they can supply. As a result, we decided to make a competition for suppliers in our region and choose the best one for **single** exclusive contract for five years. This division of original Sweden company operating in IT and telecommunication networks (construction of current converters) and is settled in Nove Mesto nad Vahom, Slovakia.

2. Why did you decide to make a competition for exclusive contract?

PJ: As I mentioned before, in past EMERSON Slovakia ordered connection material from different supplier but sometimes the delivery dates were late and we could not work by the plan because we did not have necessary goods. Contract seemed to be the best option for ordinary supply of goods according to our criteria. EMERSON Slovakia asked four firms to participate in competition. Each firm has to make the best offer based on quality, delivery date and price of screws and nuts which were chosen by EMERSON Slovakia.

3. What is your connection with WERCHEM, spol. s r.o.?

PJ: WERCHEM, spol. s r.o. is our supplier of connection material (screws, nuts). Both firms are settled in the same town and on same street, which makes easier transportation of ordered

goods. The small family firm WERCHEM, spol. s r.o. is a winner of our competition of exclusivity of supply the connection material to EMERSON Slovakia for five years (2013-2017). Goods are transported according to contract, where is written expected quantity of screws and nuts for each year and month separately. Also EMERSON Slovakia can order additional screws and nuts from WERCHEM, spol. s r.o. for the same price. Furthermore, contract guarantees that the prices from WERCHEM, spol. s r.o. will be the same for the whole duration of the contract. On the other hand, EMERSON Slovakia cannot order the same connection material as is in contract from another supplier for the whole duration of contract. In this case the exclusive contract is convenient for both firms.

Attachment 3

E-mail of agreement with using interview details in master's thesis (translation from Slovak language)

From: peter.jezik@emerson.com

Subject: Agreement of using details in master thesis

Dear Ms. Kucerakova,

I write to you according to an interview which I did with you about an exclusive contract of supply connection material to EMERSON Slovakia by the supplier WERCHEM, spol. s r.o. All mentioned details are correct and shared by myself as a responsible person from EMERSON Slovakia.

Moreover, this information is in private ownership of EMERSON Slovakia, but the rest of competitors, from competition about exclusive contract, know that the name of winner was firm WERCHEM, spol. s r.o.

I, as a responsible person for this exclusive contract, agree with using information from interview in the master thesis WERCHEM, spol s r.o. – a small family firm in open innovation, of student Nina Kucerakova for UHasselt.

Kind regards

Peter Jezik

Purchase commodity manager

EMERSON Slovakia.

Auteursrechtelijke overeenkomst

Ik/wij verlenen het wereldwijde auteursrecht voor de ingediende eindverhandeling:
WERCHEM, spol. s .o. - small family firm in open innovation

Richting: **Master of Management-International Marketing Strategy**
Jaar: **2016**

in alle mogelijke mediaformaten, - bestaande en in de toekomst te ontwikkelen - , aan de Universiteit Hasselt.

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Voor akkoord,

Kucerakova, Nina

Datum: **19/08/2016**