

## Strategy Consciousness of Hungarian SMEs The Lessons of an Empirical Survey

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### Abstract

This study aims to examine how our environment affects the creation and modification of the strategy of Hungarian Small and Medium Enterprises (SMEs). After a detailed literature review, three hypotheses will be set up. For data collection a question-based survey was conducted. The questions were directed towards the conformity of the companies' "Strategy" and their readiness on "Digitalisation". Responses were collected from Hungarian SMEs with focus on the highly industrialised North-Western region of the country. The survey was answered by executives of companies in production-, commerce- and service sectors. The methodology applied for analysis of the data acquired was empirical analysis (SPSS). The current paper will highlight how far the cooperation with other SC members will influence the creation/modification of these companies' strategy.

Keywords: strategy consciousness, Small and Medium Enterprises, digitalization, supply chain

## INTRODUCTION

In all countries economic growth is strongly supported by SMEs as the backbone of the economy. Few examples of SME contribution are 1) job opportunities 2) being able to act as suppliers of goods and services for large companies and organizations. SMEs in the 'non-financial business economy' in Hungary account for slightly more than half of total value added. It has been observed that SMEs have been the main players in Hungarian economic activities, as they account for more than 99.8% of all companies and employ 69.7% of the Hungarian workforce (SBA Fact Sheet, 2016).

The majority of the SMEs still have simple systems and procedures. They run the business more flexibly, have immediate feedback, short decision-making chain, better understanding of, and quicker response to customer needs compared to larger companies (Singh et al., 2008a). SMEs are competing with one another from all over the world due to globalization and liberalization which levelled up in the area of world economy. This situation puts SMEs under intense pressure to stay up to date and innovative. Digitalization is one form of globalization that affects almost every aspect of human activities today. This affects not only companies' strategy, but also their communication patterns, work styles, transportation systems, and even the manufacturing processes including Supply Chain Management (SCM) (Schwab, 2015).

Since the biggest proportion of the companies in Hungary are SMEs, the majority of active workforce in Hungary is also employed by them. Additionally due to their significant contribution to the government economy it is important to ensure that SMEs can manage their businesses efficiently. This can be achieved by adopting company strategies matching the current globalization changes in the business environment, and by implementing digitalization in their business processes.

This study will try to examine how SCM affects the strategy creation and modification of Hungarian Small and Medium Enterprises (SMEs), through a review of a questionnaire conducted with Supply Chain (SC) members in SME organizations. In the next section we

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review relevant literature on our subject and develop our hypotheses towards “strategy cautiousness” of the SMEs, and whether they include our examined areas of “digitalization” and “SCM” into their (written) strategies.

## **1. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

Hypothesis is a starting point for further analysis in any research. Several previous pieces of research related to strategies in organizations helped in the development of our hypothesis. In this literature review, we will speak about 3 different hypotheses. Those are organization strategies that relate to globalization, digitalization and supply chain/logistics.

### **1.1. FREQUENCY OF CHANGES IN THE STRATEGY IN THE ERA OF GLOBALIZATION**

Strategy is defined as the adoption of a company towards competitiveness in its environment. Some strategies are more successful in relation to organizational performance than others (Hambrick, 1980). This study focuses on how SMEs change their business strategy in a competitive market in relation to globalization, digitalization and SCM.

Globalization is a term that is currently on the trend towards a world economy integrated with all dimensions, namely economics, technology, politics and culture (Wagner, 2005). On the other hand, globalization is a growing interdependency in terms of economic growth which includes several actors, namely consumers, producers, suppliers and governments worldwide. Relevance of market boundaries between domestic and international sectors is reduced if their business develops overseas. Several researches have shown the effects of globalization in some companies and identified the attributes which is supported in a complex environment. The real issue these companies are facing is how to balance between global integration and local responsiveness (Yongjiang, 2003). Most of the SMEs worldwide still have a local mind-set.

Changes in environmental factors greatly affect companies, so there is a strong urge for the organizations to implement changes in their strategy. Strategy development and implementation is the key to SME's success the world of globalization (Porter, 1980). The company's strategy reflects the short and long term challenges and opportunities within the actual business environment.

For a small scale company the positive effect of changing the strategy is the improvement of its global competitiveness. This happens due to improvements in their product quality and reduction of delivery lead time (Singh et al., 2010). However, SMEs are facing several challenges related to globalization which also impact their organization's strategy changes. The areas concerned are more emphasized towards the need for improved management skills, managing their global logistics, dealing with cultural and language differences, increased cost, increased need for regularization, etc. (Prater-Ghosh, 2005). Several SMEs find that these factors make their organization more stagnant unless they change their strategy. This leads to the following hypothesis:

H1: SMEs don't pay enough attention to their strategies.

In this part, we were focusing on SMEs that have not changed their strategy in 3 or more years or actually they don't have a written strategy at all. To prove that they don't pay attention to their strategy, we have collected their answers about the last time they changed their organization strategy.

## **1.2. WILL DIGITALIZATION APPEAR IN YOUR STRATEGY?**

The effects of technology development are characterized by shortened product life cycles, changed market forces and consumer behavior that make the companies face new challenges on the global competitive landscape (Livari, 2015). The advancement of Internet and Information Technologies impact every aspect in the organization, many business organizations including SMEs started to implement digitalization in their strategy as a tool to improve their market and operational efficiency (Li et al., 2009).

The positive impacts of the internal organization's digitalization lead to increased efficiency including improved business processes, attaining better accuracy and quality, and consistency by eliminating manual steps. Real time data can be accessed by using digitalization integrating structured and also unstructured data, providing better views on organizational data, and integrating data from other sources (Parviainen et al., 2017).

This research examines how SMEs include digitalization in their strategy. Some SMEs have a difficult time undertaking digital transformation. Organizations face struggles such as transformation on lower levels which is not accompanied by the top management level, or higher costs of implementing new internal processes reflecting in the product value. Based on these facts, another hypothesis for digitalization is:

H2: SMEs usually do not include digitalization into their strategy.

Digitalization is nowadays a strategic priority, it is crucial to set up large scale of initiatives in any organization, society and industry. However, we had an assumption that SMEs still not prioritize it to be inputted in their strategy, rather than other aspects. To measure it, we are asking whether they already include this digitalization in their strategy currently.

## **1.3. WILL SUPPLY CHAIN APPEAR IN YOUR STRATEGY?**

Global competition is currently rising; therefore it is required for companies to always innovate the process of managing their suppliers. Nurturing good partnerships with suppliers is able to make the company more secure. SMEs are more vulnerable to environmental changes due to limited resources, technology and lower bargaining power which make them less likely to develop compared to big enterprises (Kumar et al., 2014). In this case, supplier relationship management (SRM) plays definitely a major role in SCM.

Productivity increment that occurs in manufacturing organizations is caused by the implementation of lean production which eliminates unproductive practices within the organization. Former ineffectiveness could have been caused by several aspects, such as poor supplier performance, not sufficiently specified customer demand, and uncertain business environment. Integration carried out by internal organizations with other parties (suppliers and customers or distributors) is referred to as SCM. SMEs have a significant impact on SCM where they can play a role as suppliers, distributors, producers and customers (Singh et al., 2008b).

Based on case studies that occurred in Indian SMEs, it was shown that several issues can occur due to insufficient management of on supply chain; e. g. absence of good indigenous supplier, fluctuating customer demand, necessity to invest in finished goods inventory. However, studies show that SMEs focusing more on internal business and profit maximization, working with limited finance and technological capabilities do not improve their SCM process sufficiently (Thakkar et al., 2012). Consequently the third hypothesis below is:

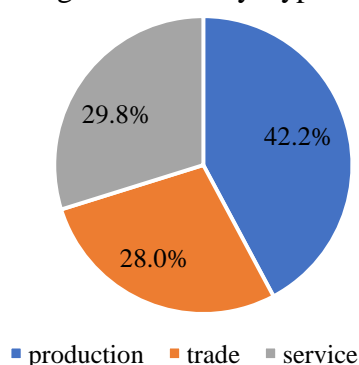
H3: SMEs generally don't build specific Supply Chain Function into their strategy.

It is a fact that SMEs are playing significant role in the country's economy, usually in the manufacturing industry, SMEs play the role of a supplier, a vendor or a distributor. They are basically part of big enterprises' supply chain system. However, we had an opinion that they do not consider supply chain when building their strategy. To prove our hypothesis we were asking whether they include supply chain in their strategy or not.

## 2. RESEARCH METHODOLOGY

In order to identify the effects of SCM on SME strategy, this research will conduct an inferential statistical analysis. The sample in this study embraces micro, small, medium companies and large corporations in Hungary. These belong to the industrial fields (Figure 1) of production (42.2%), commerce and trade (28%), and services (29.8%).

Figure 1 Industry Type



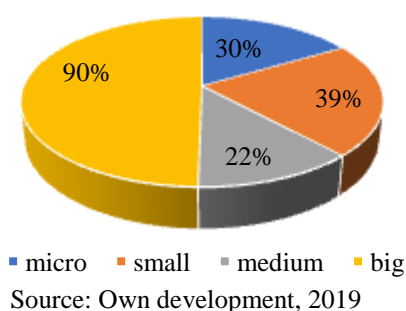
Source: Own development, 2019

The European Commission defines micro companies as those with 9 or less employees, small companies those with between 10 and 49 employees, whereas companies with between 50 and 249 employees are designated as medium-sized enterprises, furthermore the ones with more than 250 employees shall be called big enterprises (Eurostat: Structural Business Statistics, 2019).

Following this definition, a question-based survey was conducted. As SCM is of central importance in the process of corporate strategy change, being the function where corporate strategy change is initiated, therefore the questionnaires are able to capture valuable insider opinions, which can explain how digitalization or globalization affects SMEs. The questions were directed onto the conformity of the companies' "Strategy", their (external) "Supply Chain" and their readiness on "Digitalization". The questionnaire was conducted with strategic leaders of these companies. A cover letter explained the details of the survey, contact information and also instructions for completion of the survey. Respondents were also informed that all information provided would be treated in the strictest confidence and that only aggregated findings would be reported. A selection of 274 companies were interviewed by the students of the Széchenyi István University throughout 4 months in 2018. Those valid responses were collected from Hungarian SMEs, with focus on the highly industrialized North-Western region of the country. The collected data is sufficient to be able to do further analysis and make some conclusions.

Descriptive statistics are used to examine the division by company size (Figure 2). From the total number of companies, we have 30% micro-, 39% small enterprises, 22% medium size and 9% big corporations.

Figure 2 Company Size



The questions aimed to reveal the strengths of the corporate strategy by naming the functions in the organizational chart, as well as the interpretation of the supply chain by defining the time of strategy changes. The analysis of the data acquired was done by empirical analysis (SPSS). We are aware of the limitations of our research. For example, we did not distinguish between SMEs acting in the FMCG sector vs. industrial goods sector. The unique structure (the overrepresentation of micro-enterprises) of the SME sector in Hungary makes benchmarking results also uncertain.

### 3. RESULT AND DISCUSSION

Most of the questions contained multiple choice questions. Additionally, we asked the respondents to rate their agreement with statements on a 5-point Likert scale (1 = rather not, 5 = yes): “How do you rate your company’s strategy-consciousness?” Table I shows responses, differentiating between the groups of company’s sizes. Considering the high number of respondents, the cross table divided respondents in too many groups, which was not quite suitable for the analysis of the correlation. We decided to set up two categories for the companies, we labelled the first group with employees who marked 1, 2 or 3 on the Likert scale “rather not conscious” group, and the second group indicating 4 or 5 as “rather conscious” of strategy. Based on the amount of responses received for the individual evaluations within the scale, we could detect significance ( $p=0.013$ ).

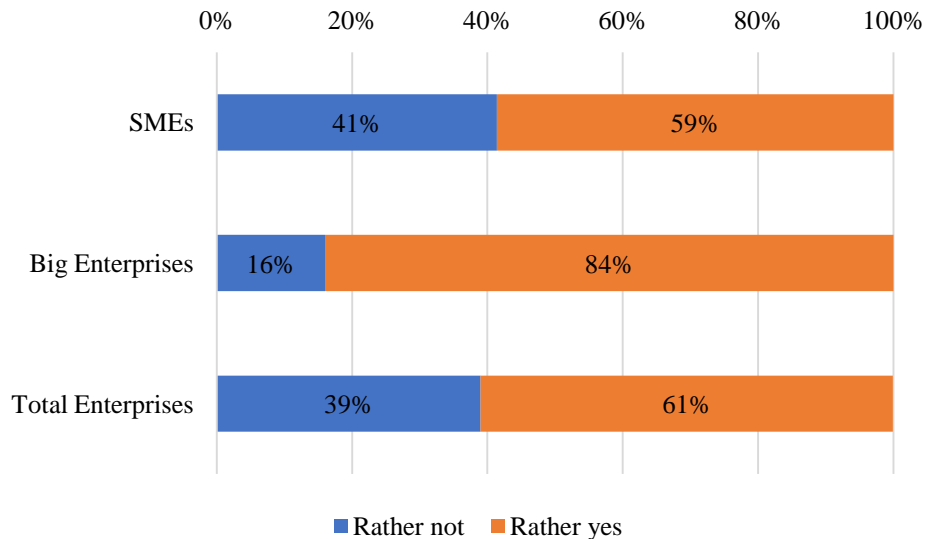
Table 1 Companies’ Strategy Consciousness towards Company’s Size

			Companies’ Strategy Consciousness		Total
			Rather not	Rather yes	
Company's size	SMEs	% within Company's Size	41.4%	58.6%	100.0%
	Big Enterprises	% within Company's Size	16.0%	84.0%	100.0%
Total Enterprises		% of Total	39.1%	60.9%	100.0%

Source: Own development, 2019

The visualization of companies' strategy consciousness represents in Figure 3.

Figure 3 Companies' Strategy Consciousness towards Company's Size



Source: Own development, 2019

Based on Figure 3, it can be seen that SMEs' rate of strategy consciousness was 58.6%. However, the result was not significantly different compared to the SMEs that were not conscious with their strategy (41.4%). We can summarize that the result did not support H1, nevertheless most of the SMEs were still not rule out strategy for their business. **Therefore, we can accept our first hypothesis: SMEs do not pay enough attention to their organization strategy.**

The second hypothesis about digitalization, respondents were asked whether they include digitalization in their strategy or not: "Does the organizational chart include Industry 4.0 or digitalization functions?". The results are shown in Table 2. The response profile suggested that SMEs do not include industry 4.0 or digitalization in their company strategy (77.4%). On the other hand, it can be seen that big enterprises are more likely to consider industry 4.0 or digitalization into their strategy (64.0%). The result was found quite significant ( $p=0.000007$ ). **This finding supports our second hypothesis that states digitalization is not included in the organization strategy.**

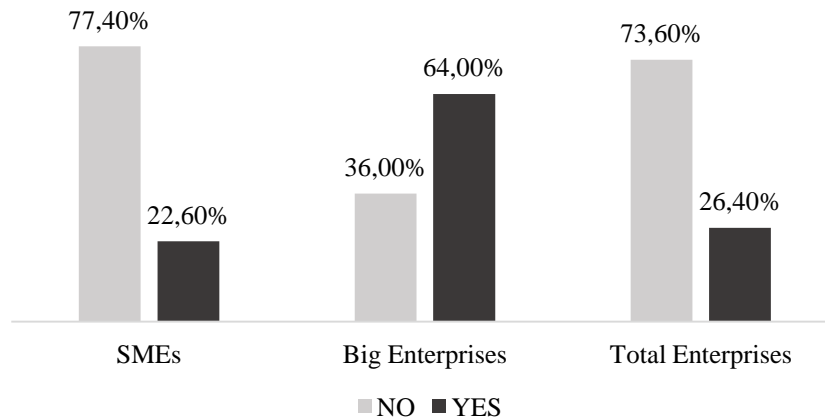
Table 2 Strategy of Industry 4.0 or digitalization towards Company's Size

			Strategy – Industry 4.0 or digitalization		Total
			No	Yes	
Company's size	SMEs	% within Company's Size	77.4%	22.6%	100.0%
	Big Enterprises	% within Company's Size	36%	64%	100.0%
Total Enterprises		% of Total	73.6%	26.4%	100.0%

Source: Own development, 2019

If we translate into graphic, Figure 4 below shows well the visual from previous data above.

Figure 4 Strategy of Industry 4.0 or digitalization towards Company's Size



Source: Own development, 2019

It looks very prominent that most of SMEs still not put digital in their strategy focus. It makes the average population of Hungarian companies leaning towards that thing. It can be a source of innovation in the future for management to strengthen their digitalization in their organization's strategy.

According to our third hypothesis, we have asked whether SMEs build specific Supply Chain Function in their organization strategy or not. The related question was "Does your strategy include logistics and/or supply chain chapter or sub-chapter?" Based on Table 3, it is visible that 55.6% of SMEs do not have these chapters/sub-chapters in their strategy. On the other hand, we can also see that 72% of big enterprises have considered supply chain/logistics to be part of their strategy. The larger size of the company, the more aware on Supply Chain Function to be included in their organization strategy. At this point, we can summarize ( $p=0.008$ ) that **our third hypothesis is relevant: SMEs generally don't build specific Supply Chain Function in their strategy.**

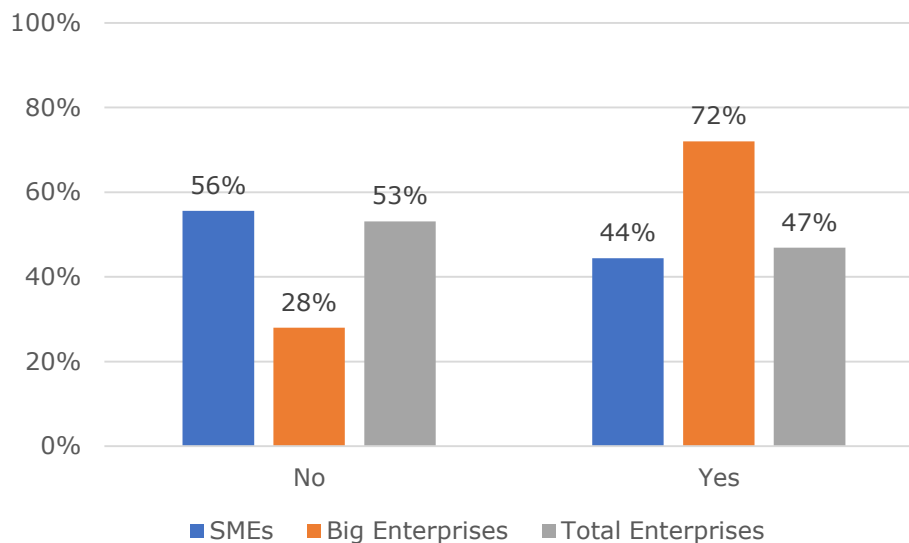
Table 3 Strategy of Supply Chain/Logistics towards Company's Size

			Strategy - Supply Chain/Logistics		Total
			No	Yes	
Company's size	SMEs	% within Company's Size	55.6%	44.4%	100.0%
	Big Enterprises	% within Company's Size	28.0%	72.0%	100.0%
Total Enterprises		% of Total	53.1%	46.9%	100.0%

Source: Own development, 2019

However, in general, it is still half of the companies in Hungary build specific Supply Chain function in their strategy. Several advantages by implementing SC function which will bring opportunities to the companies in the future should be made as a priority in the future for SMEs and also big enterprises. The visualization from the data above can be seen in this below Figure 5.

Figure 5 Strategy of Supply Chain/Logistics towards Company's Size



Source: Own development, 2019

## CONCLUSION

Benchmarking the SMEs Company's strategy reveals an interesting paradox towards SC and digitalization implementation. The survey findings reveal that SMEs in Hungary still do not pay enough attention to their company strategy compared to larger business, especially SC and the digitalization function. This finding has been well supported by a previous study by Fawcett et al. (2009) stated that SMEs are not actively pursuing SCM as a strategic weapon. However, this current result still does not change their competitive advantage in the market, showing that SMEs are still part of the big SCM loop, whether they are in the role of supplier, distributor or retailer.

Our study offers three contributions: First, this study is among the few to research the relation between a company's strategy, its SC and digitalization functions. Several findings above should become a benchmark for decision makers. They should be aware of the challenges SMEs are facing when cooperating vertically or horizontally with other SC member companies. International research benchmarks show that an appropriate strategy change has high impact on each company's performance. Secondly, practical implications can be used by strategic-level management in SMEs to better understand what tools their company could use in SCM operation, and whether they need to reiterate their strategy to fit market needs in the age of globalization and time based economy. Thirdly, this research contributes to the enhancement of study related to SMEs business management in Hungary.

When interpreting this study's findings, its limitations should also be considered. We didn't distinguish between SMEs acting in the FMCG sector vs. industrial goods sector. The unique structure of the SME sector in Hungary makes benchmarking results also uncertain. It will lead to future research that the research will need to fine-tune the given chain's dominance influencing factor.

Another idea of future research is the enhancement of research methodology by including refined methodology. Triangulation could also bring additional considerations in future research. It is a powerful technique that facilitates validation of data through cross verification from two or more sources. To elaborate insights and experiences we could use qualitative



method of case study or small group discussions with practitioners working in enterprises. This way we could make sure that quantitative result from this study is also being verified by practitioners.

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