Stremlining the Production Process of Agricultural Enterprises as a Form of Responsible Business Strategy

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Abstract

The presented article provides an insight into the creation of a corporate responsible strategy based on the transformation and stremlining of processes in agricultural enterprises in the Slovak Republic. The process approach to corporate social responsibility represents a new approach to the CSR strategy, instead of the classic understanding of CSR, which is understood as ethical or ecological. The research was provided by a questionnaire survey among agricultural entities in the Slovak Republic. As the process approach of the CSR strategy is not known to agricultural enterprises in the Slovak Republic, it is important to continue the research in the future. The presented article serves as a basis for the application of the process approach in a selected agricultural enterprise to increase the productivity of the enterprise and achieve sustainable business and added value.

Key words: process mapping, six sigma, continuous improvement

JEL code: O01, Q13, Q15

1. Introduction

Today, socially responsible business is the basic philosophy of business in every sector. This is evidenced by the efforts of the Global Agenda 2030, European Union policies and national policies that promote a sustainable approach to business and the environment. Agriculture, as the primary sector, should constantly look for new solutions and approaches to socially responsible business. Socially responsible business takes many forms. The most basic approaches to the CSR are ecology and ethics, however we can approach the issue of the CSR also in terms of stremlining processes and continuous improvement. The presented article deals with socially responsible business of agricultural enterprises in the Slovak Republic within the continuous improvement of production processes. For the purposes of the article, we have divided the problem into the use of six sigma, process mapping and continuous improvement. In examining the six sigma, we focused on waste - transport, inventory, motion, waiting, over-production, over-processing, defects and unutilized talent and its reduction in the production process of agricultural enterprises. We examined process mapping in terms of knowledge of the concept of process mapping and its application in agricultural processes. Continuous improvement as a form of long-term planning and business management. In the article we present the results of nationwide research in the Slovak Republic and proposals for further research in the field of research.

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2. Theoretical background

Socially responsible business is an important part of a sustainable corporate strategy. Agricultural research over the last half-century has contributed many components to sustainable productivity, but its focus in the future will be more on systems, interactions among components, and the impact of the activity on the broader environment and community. Agriculture production cost and production system sustainability are key factors to sustain food production for the growing human race. Achieving zero food, agricultural, and industrial wastes can eliminate environmental burdens and pave the way for closed-loop production (Salleh, 2021). European agriculture and their respective farms have moderate sustainability where the subsidies from Common Agricultural Policy have a positive impact (Santos, 2020). Local environmental conditions determine the needs and potentials for increasing sustainability of agricultural practices. However, the potential for implementation also depends on socio-economic factors, as farmers need to adopt innovative farming practices, and consumer demand affects the economic feasibility (Scherer, 2018). Companies that used continuous improvement are less likely to have product recalls than companies that do not (Scott, 2009). It is possible to approach corporate social responsibility strategy from different angles, usually through environmental and ethical measures, but it is also possible to use a process approach. The process approach to CSR contains continuous improvement, process mapping and use of Lean Six Sigma. Continuous process improvement can be seen as a managerial and operational strategy but has equally important implications for how manufacturing processes are run, and demands deploying systematic methods to (continuously) search for performance improvements (Oliveira, 2011). Lean, Six Sigma and Lean Six Sigma initiatives have been adopted by different industry and service sectors to improve companies’ performance and competitiveness; however, adoption in the food industry is still very low (Costa, 2020). Implementation of six sigma and continuous improvement implementation in the sector is still growing. The use of six sigma was found to reduce costs and increase productivity. Human factors and the food industry characteristics were identified as the main barriers to implementing these initiatives (Costa, 2018). Lean Six Sigma is a hybrid initiative that identifies customer desires, eliminates wastes and reduces variability (Costa, 2021). Six Sigma and continuous improvement used in corporate social responsible business strategy need a strong foundation to build on. Process mapping is an opportunity for business to build this foundation. Business process reengineering is identified as one of the most important solutions for organizational improvements in all performance measures of business processes. However, high failure rates of 70% are reported about using it the most important reason that caused the failure is the focus on the process itself; regardless of the surrounding environment, and the knowledge of the organization. The other reasons are due to the lack of tools to determine the causes of the inconsistencies and inefficiencies (AbdEllatif, 2018). Process maps are covering the wide and diverse spectrum of business process flexibility concepts and relationships (Mejri, 2016). Process map enables coherently integrating two essential dimensions of any organization: the management, with clear responsibility for coordinating the work system and the functional areas, being in charge with executing specialized operations, according to relevant rules, regulations, and procedures (Fleacă, 2016). The global challenges of today are many, and one of the most concerning aspects relates to food production for an increasing global population. The sustainability of doing ‘more of the same thing’ is being increasingly called into question. Several sustainable business model frameworks have been presented in recent years to address these challenges, but our knowledge is limited about the change processes of the agricultural sector (Barth, 2021). Innovation within the development of sustainable business models has become a hot topic but it is affected by a high failure rate due to a lack of reliable and efficient methods (He, 2021). Process tools are the solution for the sustainability and corporate social responsibility of agro-businesses. Even so, the process approach is not a standard way for building CSR strategy, it is combining the opportunity to fix business processes, become more efficient and build a strong and sustainable business model.
3. Materials and Methods

Sufficient data had to be collected for the research. The research involved agricultural enterprises from the Slovak Republic, which we divided according to the number of employees into small, medium, and large. The questionnaire contains questions from the three logical units of the presented article. The first set of questions concerned the use of six sigma on farms. The second set of questions represents questions about process mapping and the use of process mapping in agricultural production, and the third set of questions consisted of questions about the continuous improvement of production processes. An important factor for the research was the collection of a sufficient amount of data and their subsequent comparison. For the needs of the article, the answers of 25 agricultural subjects were collected. 2 large, 10 medium and 13 small agricultural entities. The basic assumptions in the research were: agricultural companies in the Slovak Republic do not use process improvement as a part of CSR strategy, process improvement is ensured by the standard activity in the company and agricultural companies are open to develop skills of six sigma and process mapping.

4. Research results and discussion

The process approach to corporate social responsibility is an innovative approach. In the Slovak Republic, many agricultural businesses still do not have formally written strategy of corporate social responsibility. A process approach to corporate social responsibility provides the company not only with the advantage of sustainable business and values, but also streamlining existing processes, higher profitability and use of assets. In this part of the research, we will focus on the results related to a questionnaire survey among agricultural companies in Slovakia. Process approach in developing strategy of corporate social responsibility is not used by 92% of agricultural businesses. It should be mentioned that 57% of these entities did not even have a formally established corporate social responsibility strategy. Only 16% of the surveyed entities know and can define what the process approach of corporate social responsibility strategy means. The responses confirm that the process approach is not widespread and used among farmers. According to them, the main reason why companies do not use the process approach is the high financial demands and the insufficient amount of information about the implementation of the process procedure in agricultural companies.

Process improvement is the basis of long-term business success. Farm management should therefore at least consider using process approaches. Process mapping is not a simple task, it is even usually necessary to use the services of a professional consultant to start a process mapping project. Process efficiency will increase in most cases. Of the surveyed farm managers, however, in the case of our research, only 20% know the concept of process mapping. Those managers who do not know the concept of process mapping also in 40% never encountered the concept of continuous improvement and did not consider work processes in the company important for long-term success. Most of the interviewed managers answered positively when asked if they would welcome training in the areas of process approach to corporate social responsibility, six sigma and process mapping. Respondents who do not consider work processes in the company to be important saw a negative attitude in the interest in information about the process approach to socially responsible business. Managers who were interested in education in this area would most often choose the form of an online seminar, presentation at a conference, or an information portal with the possibility of consulting an expert. Continuous improvement in a company can be understood from two points of view. The farm may have a formally developed strategy for continuous improvement or continuous improvement may result from business processes and management activities without further specification. 40% of the surveyed entities had a formally created plan, they were medium and large entities in terms of the number of employees. Small farm entrepreneurs did not consider the creation of a formal plan necessary. However, 88% of respondents consider
continuous improvement to be necessary and equally necessary in the field of agriculture. Most managers considered socially responsible business to be a long-term management tool, which, according to them, is related to continuous improvement and interest in long-term goals. Finally, we were interested in the attitude to the implementation of six sigma-quality management. Respondents surveyed agreed in more than 90% that in terms of waste, which is categorized by the six-sigma theory, the most important is the reduction of waste defects, over-production, and transport. These types of waste also have the greatest influence on the strategy of corporate social responsibility of agricultural companies. Respondents agreed that a procedural approach to socially responsible business is a benefit for agricultural holdings not only in terms of standard motives for building a CSR strategy, but also that streamlining processes contributes to business profitability and better business management.

5. Conclusion

Before examining the attitude of Slovak farmers towards the procedural approach of the socially responsible business strategy, we set three assumptions. All assumptions for the research were confirmed. Agricultural companies in Slovak republic do not use process improvement as a part of CSR strategy, process improvement is mostly ensured by the standard activity in the company and agricultural companies are open to develop skills of six sigma and process mapping. Research has shown that farmers' interest in a process approach exists, not only in terms of the benefits that process approach brings to the CSR strategy but also in terms of better management of procedures and processes on farms. The research provided a basis for examining this issue in the future. Further research will be needed to better understand the implementation of the process approach to the farm. propose to create a strategy of socially responsible business for an agricultural enterprise, which will be based on mapping the processes in the company, based on which the strategy of Six Sigma implementation will be built. All actions will be combined with the existing strategy of corporate social responsibility of the agricultural business. Based on the implementation of the processes, the data of key performance indicators, reduction of the number of injuries in the workplace, reduction of waste defined by the Six Sigma theory and economic efficiency will be evaluated. Following the implementation of the process CSR, a plan for continuous process improvement will be established, which will need to be monitored for at least two years. Based on the obtained research data, it will be possible to compare the existing research that the presented article brings with the implementation of the theory in the agricultural business.

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