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Sustainable Business Management and Digital Transformation:
Challenges and Opportunities in the Post-COVID Era

FEASIBILITY ASSESSMENT OF DIGITAL TRANSFORMATION PROJECTS IN AGRICULTURE

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OBJECTIVE

The United Nations, as the leading international organization that brings member country governments to cooperate in the fields of international law, global security, economic development and social equality, has defined 17 sustainable development goals to reduce poverty and hunger in the world, healthy life, better and more accessible education, environmental protection, etc. One of the ways to achieve the set goals is the digital transformation of society (United Nation, 2022). Digital transformation projects in certain areas are not simple, and therefore it is necessary to draw conclusions with great care and adequate feasibility assessments of their implementation. There are significant challenges in determining all the effects of these projects, because in addition to quantitative, easily measurable, there are also qualitative effects that are very difficult to measure in money. Traditional methods of feasibility assessment do not take into account qualitative effects, which can significantly affect the abandonment of digital transformation projects, which are extremely important and can be very successful (Chen, 2001). The aim of this paper is to investigate and analyze the way in which digital transformation projects in the field of agriculture can be measured and evaluated. The basic specificity of agricultural production in relation to other branches of the economy is that agricultural production largely depends on climatic conditions and the quality of the land itself. This is a consequence of the fact that in agricultural production the climate is difficult to predict. Also, the climate is something on which the whole agricultural production depends, much more than in other branches in which it mostly affects indirectly, and the profitability of growing a crop directly depends on the place of cultivation. Better climatic conditions and land means higher yield, and therefore the production will be more profitable. Furthermore, the specificity of agricultural production is that the time period from the beginning of the investment to the arrival of the first results is much longer than in other branches of the economy. In addition, the total income is not evenly distributed over the months, but arrives once a year, or in very short intervals.

METHODOLOGY

Interpretive analysis was used to obtain the results of this research. It is a methodology that leads to research results by interpretation and inductive conclusion based on different theoretical concepts and considerations of other authors in existing sources dealing with the same or similar topics as the research conducted (Bhattacherjee, 2012). which are called secondary sources (Vartanian, 2011). Secondary sources used in this research were scientific papers written on the topic of digital transformation and project success. Also, the method of case study analysis was used to study the specific real situation and present the evaluation of the project named *Digitalizing Municipal Land Management*.

RESULTS

Making a feasibility study and feasibility assessing of a digital transformation project in agriculture is a complex undertaking, but it allows the investment decision maker to consider all possibilities, all aspects that affect an investment and thus decide whether the investment is profitable or not. In addition to the effects that such

investments directly bring, it is necessary to measure indirect effects and effects that contribute to increasing the value of total business (Mihic et al. 2012).

It is necessary to identify critical success factors, opportunities to improve business activities and assess the benefits and costs that the organization or individual will face in applying the target technology. Feasibility analysis and assessment should help decision makers to identify business benefits that justify the use of resources and consider possible risks during change. Analyses should be conducted quickly given the speed of market movements and changes (Mihic et al. 2014).

In the project *Digitization of Municipal Land Management* implemented by GIZ ORF MMS and BFC SEE, the results of the situation analysis in Bosnia and Herzegovina and Montenegro show that agricultural production on publicly owned land leased to farmers is poorly controlled and not managed on planned way. In order to improve municipal land management, TeleGroup, together with its subsidiary Greensoft, has developed a unique IT platform - AgroLIFE - for automatic management of agricultural production for all land types. The case study presents a feasibility assessment of this software that allows agronomists and farm owners to efficiently plan, organize and manage agricultural production, while increasing yields, total revenues and reducing operating costs.

CONCLUSION

The profitability of an investment depends on many factors such as: the current market situation, competitors, technology development, market development, development opportunities in a market as well as the financial and social evaluation of a particular project. When talking about the cost-effectiveness of a project, it is important to analyze everything that a project implies, but also to take into account the indicators that are specific to projects related to digital transformation. The effects of the digital transformation project in agriculture that can be easily measured in money are savings resulting from process improvement and direct increase in yield, while qualitative effects that can be difficult to measure in money can be increased customer satisfaction, availability, relevance and timeliness of information and increased efficiency business along the supply chain (Chen, 2001). Based on the feasibility analysis of the digital transformation project and the implementation of AgroLife software, we can conclude that similar, but also other digital transformation projects in agriculture are extremely justified in terms of selected financial indicators. We can also conclude that this justification grows with the introduction of qualitative effects. This means that excluding such effects when evaluating digital transformation projects can lead to wrong conclusions and rejection of these projects only because their most significant effects are difficult to measure in money. Wrong rejections of these projects can be great mistake because they can be very significant in terms of economic viability and contribution to society which is the primary goal of digital transformation in agriculture.

Key words: *digital transformation, agriculture, feasibility assessment, measuring quantitative and qualitative effects of projects*

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