# Business analysis in digitalization and optimization of management processes

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*Abstract: The last decade has seen a huge change in our and the world's economy, with many businesses completely transforming or digitizing some of their processes. Unchanged for years, successful business models are undergoing transformations, leading to completely new companies in a different field of activity. Business analysis is increasingly used to improve the efficiency of companies by optimizing processes, production and delivery of products and services to customers. The article presents the relationship between digital transformation and process optimization by using business analysis, necessary to identify the need for change and its introduction in data processing, product production and customer service, regardless of the type of company.*

*Keywords: business analysis; management; digitalization; optimization*

*JEL: M10, M15, M16*

## 1.    INTRODUCTION

Business analysis is used to identify the need to change the way organizations work by providing new solutions to optimize business models and processes at all levels of corporate governance in order to make the company more competitive. The relevance of this topic is due to the era of rapid technological and digital transformation, in which we find ourselves and the need to adapt modern business with these changes. Transforming the business model through the use of business analysis provides new opportunities for companies to reduce their costs for personnel management, production through the use of digital technologies and digital management skills.

The aim of the article is to explore the role of business analysis in the digital transformation and optimization of processes in the management of modern companies and their impact on market segments, product production and service delivery, marketing channels used to reach customers, cash flow management and cost structure optimization.

The methodology used for the implementation of the research is content analysis as a reliable method for objective research.

## 2.    BUSINESS ANALYSIS AND DIGITAL TRANSFORMATION

The digital transformation poses various challenges to modern companies, which they have to deal with if they want to maintain their market position and be competitive (Boneva, 2018). If they want to stay in the market, companies should analyze their existing

business processes and models, as well as the behavior of their customers to assess what needs to change in interactive communication with customers in the process of sales and digitalization of as many processes as possible, to facilitate and optimize this communication.

A study by Capgemini Consulting and MIT (Capgemini Consulting, 2011) concludes that digital transformation goes through three initiatives in each company:

- Customer Experience: using customer communication experience to analyze the need for digital transformation requires in-depth study of market segments and customer behavior in the online marketing space, their loyalty to the specific product and the benefit they seek in new products.

- Business processes – includes optimization and automation of the processes of development, production and distribution of the company by digitizing the daily processes of data collection and processing. The actual data obtained from the interaction with the customers provide an opportunity for faster decisions related to marketing, product production or customer service, which allows rapid development of the company.

- Business models: introduction of a new digital business model, which with the help of technology will bring added value to the company. These processes take place by adding digital content to existing products and services and the introduction of new digital solutions, which provides an opportunity to reduce management costs of human resources, production and advertising.

The digital transformation is the result of continuous innovation in the IT sector, in order to transform business processes in a way that will improve customer service, employee performance and interaction with partners; by improving existing or introducing new business models.

Business analysis provides an opportunity to analyze the need for change in business models and processes of companies, product production, service delivery. Business analysis provides information about the necessary software and hardware, with which companies can improve the efficiency of their processes and add value to their customers. Companies should carefully analyze the data provided by the business analysis and apply it to their ideas, technologically feasible process changes and, of course, the reasonable use of resources (Fors, 2012). In turn, the business models of each company is a system of interconnected activities, determining the way of interaction with customers and partners (Amit and Zott, 2012). Changes in business models through digitalization of processes is the optimization of resources and their replacement with digital technologies, which completely changes the business model and sometimes leads to a completely new field of activity and development of the company.

With the help of business analysis, the digital transformation in any company can be done in two ways - either by changing the existing business model or by creating an entirely new innovative business model. If the organization chooses to perform a digital transformation, following the direction of change of the existing and already established business model, it only implies a change of the existing business processes in the

organization (Vuksic, 2018). Regardless of which of the two methods is applied to be a successful digital transformation, it is important to automate the existing business processes in the organization through careful analysis of the data provided as a result of the application of business analysis (Rachinger, Rauter, Muller, Vorraber and Schrigi, 2019).

An example of digital transformation of some of the processes can be given with one of the largest banks in Bulgaria, such as DSK Bank, which through digitalization of customer services leads to the creation of an entirely new banking product - a virtual check for payment by individuals. The example with the bank shows the use of both methods of digital transformation as a result of business analysis. The bank finds it necessary to change its customer service by providing new mobile services, changes its business processes and models and after a while creates a completely new product, which it might not have created if it had not applied the initial digitalization of its processes.

There is no doubt about the role that the structured data obtained from business analysis, together with making the necessary change and ensuring the best processes for the company, play in the implementation of the digital transformation.

### 3. BUSINESS ANALYSIS IN PROCESS OPTIMIZATION

Business analysis encompasses a variety of approaches to improving business processes, such as business process reengineering, business process redesign, business process management, which provide knowledge of methods, tools and techniques that allow process transformation, as well as consider the principles and methods for assessing the effects associated with the transformation of business processes (Grant, 2016). The analysis of business processes allows to identify the problems of the processes themselves, to develop changes in the process and to assess the effect of the application of these changes. (Montilva, Barrios and Besembel, 2014).

The business process must undergo significant changes to achieve productivity improvement through the following steps of business analysis:

- Choice of analysis system – the whole business model or specific processes will be studied.
- Identify difficulties that hinder efficiency.
- Offering opportunities to improve existing processes or create entirely new ones.

In order for business analysis to be effective, it should determine what is not appropriate in the business processes used and how these processes or individual elements of the processes can be changed with the help of digitalization. Business process analysis involves the use of different approaches, methods and techniques so that their choice is most effective in identifying problem processes and activities of the company according to its field of activity and specifics (Williams, 2007). Depending on the approaches, different types of process analysis are known: observational analysis, validation, verification, analysis and evaluation of efficiency, etc. (Sileyew, 2019). SWOT analysis is also used, as well as MOST analysis, which determines the mission, goals and strategy of the company, as well as the tactics taken by it to implement the strategy. The use of these two types of analysis

ensures that the organization maintains a focus on the mission, which is the critical factor for the success of the organization, and does not focus on achieving other goals.

In order to perform effective business analysis, it is important to identify the most important business processes that are important for substantiating business enterprise management decisions, strategic business decisions and process assignment decisions. The identification of key, critical, strategic processes is based on defining criteria for process efficiency and their connection with the strategic goals and success factors of the company (Farhan, 2018):

First, business analysis should be performed by professionals. To deal with this problem, companies need to look for trained people to manage business processes, especially if they do not have the necessary resources to perform the analysis.

Second, technical barriers are the second reason for business analysis failure. Without the necessary information technology, it can be a challenge to provide superior process improvements for the benefit of the entire organization (Ahmad, 2007). However, this does not mean that process improvements cannot be achieved without technology.

Like any major big change in business, business analysis takes time both at the level of implementation and at the level of results, as well as the commitment to the resources (human and material) that must be invested in the process (Alfaro, 2019). However, efforts to fully transform processes into digital pay off largely at the company's profit level. From the many positive aspects of business analysis in terms of digital transformation and business process management, several can be deduced that summarize the main benefits of using analysis and turning a business into a digital one.

The ability to reach new markets is one of the first advantages that we can mention as a result of applying business analysis. Communication is fundamental to expanding any business (Markovic, 2018). The digital world has made it possible to break down cultural and organizational barriers to communication that have been unimaginable in previous decades.

An example of this is the automotive giant Volkswagen which intends to invest $ 4 billion by 2025 to digitize. The massive investment will not only allow Volkswagen to appeal even more to its customers, but will also help the company enter new markets that will increasingly connect the Internet and its connection to the car, making it easier to pay for parking and even shopping. At the same time, as a result of a digital transformation, the company in 2019 introduced an entirely new service called "WeShare", through which 2,000 electric cars can be shared by different people on the streets of Berlin. With this new service, the company opens a whole new market for its consumers who are not interested in owning used cars (Zigurar, 2020).

Using the digital transformation of business processes to meet new markets implies not only sales in new geographical areas, but also opportunities to create new products and enter new market segments. Business analysis allows the use of various data for strategic decision-making by companies in relation to existing and new markets such as competition, potential customers, risks of inability to sell and more. By using business analysis tools, companies can provide more flexibility and at the same time improve their way of

communicating with customers as a result of the feedback they receive about the product/service offered. (Cain, 2008). These are the steps taken by the Swedish furniture manufacturer IKEA, which in 2017 launched its application IKEA Place, an augmented reality tool that allows consumers to visualize how the furniture will look in their own home, which makes it easier for consumers to choose furniture.

Process automation allows to increase productivity, ie. the use of technology to automate internal processes, which are:

- repeating
- consistent over time
- and those that must be error-free.

Through business analysis, repetitive processes can be identified in which errors can occur, and through digitalization and automation they can become less susceptible to errors, and human resources can be directed to activities that cannot be performed. from machines. (McKinsey, 2017).

As a result of the business analysis, the activities performed by the employees are also improved, allowing the restructuring of the work processes in order to reach new markets and providing the opportunity for teams from a distance to serve various remote markets (Cascio and Montealegre, 2016). The data from the business analysis, necessary for the development and planning of the distribution or provision of a service, are the first necessary condition for the development of a successful digital transformation of the business processes and the organization.

## 4.    CONCLUSION AND RECOMMENDATIONS

Business analysis allows companies to:

- Improving customer service.
- More effective achievement of the business goals of the organization. Business analysis allows you to provide information on how far short-term, medium-term or long-term goals have reached.
- Increasing efficiency – increasing efficiency is one of the main goals of any company. To ensure that this happens, improving the process is key.
- Elimination of the main reasons for failure of companies – with the reengineering of business processes can identify the shortcomings of the processes of each company and find a solution to eliminate them.

One of the main reasons for using business analysis is related to analyzing the structure, dynamics in the development of the company and current problems in the organization of processes (Azeroual and Theel, 2018). Business analysis helps to identify potential for improvement and recommend solutions that allow the organization to achieve its goals.

The company LEGO also takes advantage of the opportunities of business analysis, which by developing various mobile applications and games manages to attract new customers. An updated digital strategy of the company allows its customers to participate in

its business processes by providing their own ideas for new products and voting on the proposals of other customers they like the most. If a project receives 10,000 votes, LEGO reviews the idea, selects a winner and creates a new LEGO kit that is sold worldwide. This means that LEGO realizes that customers are the biggest source of new ideas and innovations. This digital approach helps the company to continue to develop its product portfolio, while maintaining communication with its customers around the world (Zigurat, 2020).

For business analysis to be effective, it must be an ongoing process. Improvements introduced to business processes after the first analysis should be included in a broader framework of how all business processes are organized, from production to efficiency monitoring (Battistoni, 2013). For example, in terms of tracking the overall user experience from the first contact with the product to the purchase, it varies considerably, but there are some constant elements: physical advertising of the product (in stores, print advertising), digital customer service, initial customer contact with the product and its purchase.

There are many activities that can interrupt the customer's purchase, complex payment processes, difficult website navigation, poor service by call center operators and much more.

However, thanks to the processes of business analysis and digitalization, it is possible to analyze the negative factors for refusal to purchase, while improving business processes and reducing company costs for technical support.

Because it is the constant contact and improvement of customer service, due to digitalization allows companies such as LEGO, for example, to continue to develop and reach new markets.


## 5.      CONCLUSION

Managers of more and more companies are worried that their companies are lagging behind in technological development compared to new competitors and innovative business models that distort market demand and put them at a disadvantage.

Although the digital transformation is barely entering and most companies are not yet aware of its benefits, this is the future that will change our market economies. Increasingly, there are differences in productivity and efficiency between companies announcing technological change and those increasingly lagging behind.

In this market environment, effective and strategic business analysis is increasingly becoming an extremely important need of every company. Managers will need to take a more strategic and business-oriented approach and expand their skills in areas such as product management, process improvement and digitalization in customer service. Many changes in customer interaction caused by digitalization require changes in business processes. Digitalization at the company level represents a wide range of technological, cultural and organizational changes, leading to improvements in internal efficiency and a greater response to external stimuli.

Therefore, business analysis is not just analyzing problem processes and providing tools and technologies to solve and improve them, but becomes a profound change in the

way companies do, see and think, which require new ways to approach the market and the customer, new organizational and management structures in the production chain or in the provision of services, as well as new ways of managing employees.

**References**

1.      Ahmad, H., 2007. Business process reengineering: critical success factors in higher education. Bussiness Process Managment Journal. http://emerald.com [Accessed February, 12th, 2021].

2.      Alfaro, M., 2019. Conceptual Framework for the Strategic Management: A Literature Review. Journal of engineering. [online] Available at http:// www.hindawi.com [Accessed February, 12th, 2021].

3.      Amit, R. and Zott, C., 2012. Creating value through business model innovation. Mit sloan. [online] Issue 53. Available at http://aproaingenieria.com. [Accessed February, 12th, 2021].

4.      Azeroual, O. and Theel, H., 2018. The Effects of Using Business Intelligence Systems on an Excellence Management and Decision-Making Process by Start-up Companies: A Case Study. International Journal of Management Science and Business Administration. Issue 3. Available at http://aproaingenieria.com. [Accessed February, 12th, 2021].

5.      Battistoni, E., 2013. An Analysis of the Effect of Operations Management Practices on Performance. International Journal of Engineering Business Management. Available at http:// andreafc.com [Accessed February, 12th, 2021].

6.      Boneva, M., 2018. Challenges Related to the Digital Transformation of Business Companies. Inovation, management, enterpreeuship nad substaintability. pp. 102. Available at www.researchgate.net. [Accessed February, 12th, 2021].

7.      Capgemini Consulting, 2011. Digital transformation: a roadmap for billion-dollar organizations. [online] Available at www.capgemini.com [Accessed February, 12th, 2021].

8.      Cain, C., 2008. Organizational Workflow and Its Impact on Work Quality. Available at www.ncbi.nlm.nih.gov [Accessed February, 12th, 2021].

9.      Cascio, W. and Montealegre, R., 2016. How Technology Is Changing Work and Organizations. Annual Review of Organizational Psychology and Organizational Behavior. Available at www.researchgate.net. [Accessed February, 12th, 2021].

10.      Farhan, M., 2018. Overcoming business process reengineering obstacles using ontology-based knowledge map methodology. Future Computing and Informatics Journal. Issue 1. [online] Available at www.sciencedirect.com [Accessed February, 12th, 2021].

11.      Fors, A., 2012. The ontology of the subject in digitalization. Handbook of Research on Technoself. pp. 45-63 Available at https://www.researchgate.net [Accessed February, 12th, 2021].

12.      Grant, D., 2016. Business analysis techniques in business reengineering. Business process management journal. Available at https://www.researchgate.net [Accessed February, 12th, 2021].

13.      Harmon, P., 2016. The State of Business Process Management. BP Trends. Available at https://www.researchgate.net [Accessed February, 12th, 2021].

14.      McKinsey, 2017. A future that works: automation, employment and productivity. Available at https:// www.mckinsey.com [Accessed February, 12th, 2021].

15.      Markovic, M. and Salamzadeh, A., 2018. The Importance of Communication in Business Management. Available at https://www.researchgate.net [Accessed February, 12th, 2021].

16.      Montilva, J. Barrios, J., Besembel, I. A Business Process Model for IT Management Based on Enterprise Architecture. Clei electronic journal. Available at http://www.scielo.edu.uy [Accessed February, 12th, 2021].

17.     Rachinger, M. Rauter, R. Müller, C., Vorraber, W., Schirgi, E. Digitalization and its influence on business model innovation. Journal of Manufacturing Technology Management. Available at https:// /www.emerald.com [Accessed February, 12th, 2021].

18.     Sileyew, L., 2019. Research Design and Methodology. Journal of Business & Economic Research. Available at https://www.intechopen.com [Accessed February, 12th, 2021].

19.     Vuksic, V., 2018. A prelimenary review of digital transformation. Conference proceedings. Available at www.academia.edu [Accessed February, 12th, 2021].

20.     Williams, C. Research metods. Journal of Business & Economic Research. Issue 5. Available at https://www.intechopen.com [Accessed February, 12th, 2021].

21.     5 Companies With the Most Remarkable Digital Transformation Strategies. Zigurat. Available at https://www.e-zigurat.com [Accessed February, 12th, 2021].