

THE DIGITAL TRANSFORMATION IN THE SERVICE OF BUSINESS

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Abstract

People, business and the world, are changing at a fast pace. Constantly evolving technologies and how people use them transform their habits of access to information, interaction, and communication. Digital technologies are no longer a reserved part of innovative companies, and ordinary people integrate them seamlessly into their daily lives. What makes the digital revolution exciting is that everything is happening right now, and we are witnessing a historical transition from the traditional to the digital. Consumers are tired of media marketing and are now part of the global world. They want more commitment and more interaction. They spend most of their free time in a digital environment, and creatively oriented digital marketing is the way business will reach them.

This article focuses on transforming entrepreneurial thinking by adapting the business to the new digital conditions and how the process of transforming supports business development.

Keywords: digital transformation; digital ecosystem; digital strategies

JEL Codes: L10, M31, M37

Introduction

The last three decades have marked a radical transformation in thinking, values and lifestyles in response to the growing digitalization of business and society as a whole. There is more and more talk about digital transformation and how it is changing the business landscape. In general, digital transformation is understood as the integration of new technologies in all areas of business, leading to a fundamental change in the way the organization works (Shopov, 2017). Digitalization creates a secondary economy that is

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huge, automatic and invisible, bringing the most significant cataclysms in business since the Industrial Revolution (Arthur, 2011). Digital transformation is an evolutionary process that uses digital capabilities and technologies to enable business models, operational processes, and customer relationships to create value (Stoyanova, 2019, p. 15).

Technology has changed people's lives. Today's consumers have technological knowledge. They demand and constantly look for new offers and innovative solutions. The advent of the digital market has shaken every business. Marketing faces the challenge of radically transforming its approaches to respond to changing consumer habits. It also finds creative ways to reach audiences and manage customer relationships. Marketing additionally exploits consumer potential for collaborative search and realization of solutions and sales automation. The new development of the business environment forms a new business landscape influenced by big data. It intensifies the consumers' demand toward traditional marketing techniques. The change in their information habits and the shift toward building relationships require marketers to learn on the go. It builds an environment that provides opportunities for a more precise definition of consumer needs and predictability in behavior (McKinsey & Company, 2014).

Analysis and discussion

Internet technologies have become an integral part of modern business. They have fundamentally transformed almost every aspect of it and have become the basis of every company's value chain (Evans N., 2017, p. 128). After all, these decades of investment in IT and improvements, the transformation of the business has accelerated. The role of information systems in globalization, improved cooperation and strategic importance for companies is growing. The large-scale change affects both large companies and small and medium-sized businesses, which are much more adaptable and flexible to the changing world. There is also a paradox that IT technologies, which are a factor for success and are crucial for business growth, can also have the opposite effect on conservative businesses or cumbersome and challenging to implement companies, given their complex organizational structure and existing barriers to business - adapting them to business transformation. This destructive innovation creates new markets, but in the long run, disrupts the existing status quo and displaces market leaders. Will this transformation lead to a redistribution of the market and the entry into narrower niches of small and medium-sized businesses, which would primarily meet market needs. Technological innovation holds great promise for the provision of financial services, with the potential to increase market access, the range of product offerings, and convenience while also lowering costs to clients. (Stankovska, Dimitrieska & Stamevska, 2019, p.53)

Digital transformation is more than digitalization. It concerns the overall company strategy and prepares the company for the future. Therefore, digital technology management will address the practices, processes and principles that underpin the effective organization of digital innovation. Digitalization covers entire ecosystems, their business models and the main business functions of the value chain of companies (Aagaard, 2019, p. 2). In this context, we can say that digitalization has affected every company regardless of its field of activity, leading to a review and adaptation of existing processes and company strategies. Strategic foresight and adequate solutions are the basis of a successful business, which is a crucial task for any manager (Filipova, 2010). Practice shows that the focus is increasingly shifting from traditional business models shifting to their digital counterparts. Not surprisingly, the interest in the online environment, given that it provides much more flexible and adequate solutions for companies in their efforts to interact with the audience and adapt their product range structures to customer requirements. Digitalization is forcing all companies to restructure their strategies and processes radically. According to a McKinsey study, companies need to manage and implement digitalization in all company processes because of the lack of such makes companies uncompetitive (McKinsey & Company, 2014). Today consumers are more and more involved in the production and distribution chains. The main effects of this transformation on the business environment are its impact on consumer expectations, product quality, the move toward collaborative innovation, and innovations in organizational forms (Dimitrieska, Stankovska & Efremova, 2018, p. 186).

When we talk about digital transformation, it is necessary to consider that the term "Internet of Things" (IoT) is becoming more critical. The main goal of IoT is to share information effectively in real-time (Yang, Yang & Plotnick, 2013). IoT can communicate over the Internet with a computer and other devices without the need for human intervention, which is even possible to control remotely. In this way, a person and a device can exchange information in real-time. IoT removes time and space constraints. People and devices are connected to everything, anytime, anywhere in the world. With the introduction of intelligent technologies, the technological revolution has seriously affected people's lives by integrating them into every social aspect. Hence the concerns about privacy and security. New economies, markets and business processes are developing. Companies' development of new strategies is inevitable to adequately adapt to new conditions and adequately cope with technological challenges. It is believed that IoT will convey a new meaning to the so-called. "Smart corporation" and "its value is in automating processes, responding to possible problems before they occur, improving asset utilization, optimizing the supply chain" (Geneva, 2017). A boost in IoT development is given by introducing cloud

technologies that offer functional and inexpensive space for data storage and calculations. As mentioned, there are barriers to adopting the IoT that relate to the confidentiality of information. They can be expressed in the following areas (Caron, Bosua, Maynard & Ahmad, 2016):

- Unauthorized monitoring, which collects enormous data on consumer behavior;
- Uncontrolled data generation and use; - Insufficient authentication;
- Risk for security and protection of personal information due to the vast database collected through IoT.

Technological change, known as the Fourth Industrial Revolution, carries the spirit of the new reality. Industry 4.0 was first mentioned in 2011 as part of the German Federal Strategy for High Technology for Digital Production (Concept for digital transformation of the Bulgarian industry (Industry 4.0), 2017). The strategy is defined as one of the critical initiatives, emphasizing the new wave in industrial progress. Industry 4.0 plays a significant role in exploiting the opportunities of digitalization at all stages of production and service systems. It is implemented as a combination of many physical and digital technologies. Regardless of the mechanism used, the main goal is to increase resource efficiency and productivity, increasing companies' competitiveness. The transformation era has necessitated a change in business processes by expanding the concept of smart and connected products by introducing service-oriented business models.

In the new digital market, consumers use various interactive tools to navigate the products and services offered and their relative merits as they decide whom to trust, where to shop, and what to buy. At the same time, businesses are undergoing digital transformations, rethinking the concepts of access to their audiences and what customers value most. It helps create operational models to take advantage of new opportunities to acquire competitive positions based on business and product differentiation (Berman, 2012, p. 16). Digitalization and new business processes introduced into product production "implement" activities that did not exist before.

Digital transformation is a term accepted by the business. It is mainly related to the need to use new technologies to remain competitive in the Internet age, where services and products are delivered, both offline and online. The transformation of online service is seen as a way to improve adaptability and automation through standardization (Andal-Ancion, Cartwright & Yip, 2003). The remarkable and rapid changes found a projection in production and services. It results from the synergy gained from the integration of information technology, manufacturing and the services sector. They lead to increased productivity in both service and production. Over the last two decades, companies have faced the challenges of coordinating and connecting concepts such as communication and

networking, embedded systems, adaptive robotics, cybersecurity, data analysis and artificial intelligence (Cevikcan & Ustundag, 2018, p. 3). It affects business processes, creating new business models. The challenges facing modern companies arise with the construction of complex value chains that require a standardization of production and business in search of a closer connection between them.

The need for digital systems seems inexhaustible, as they contribute to improvements in almost every area in terms of productivity, quality and (resource) efficiency of products and processes. The leap in development is so far-reaching that we can rightly speak of a 'digital revolution' (Neugebauer, 2019, p. 2).

The digital transformation is not really about adapting to new technologies but about directing the organization to be more adaptable to changes imposed by the environment in which companies operate.

Those companies that adopt the new way of thinking and new approaches to work successfully in current conditions. It does not mean that they have to meet the needs of their customers and become more flexible and able to adapt to change in the future (Herbert, 2017, p. 14). Real transformation needs to be done once and is a prerequisite for companies in the digital age.

The growing digitalization of business has caused an absolute explosion in the so-called Big Data, accepted and researched in building a business. According to Perkin and Abraham (Perkin & Abraham, 2017, p. 50), digital transformation has three fundamental truths:

- Digital transformation is inevitable. Change happens whether we like it or not;
- Digital transformation is more than technology. It is also strategy, process, culture, behaviour and people;
- Digital transformation involves fundamental and comprehensive change.

It is the way a company works. According to the same authors, two main measures determine the degree of transformation: digital intensity is defined as investment in technology initiatives to change the way the company works (customer engagement, internal operations, business models) and the intensity of transformation management related by creating leadership skills to drive digital transformation (vision, management, commitment to change, information technology or the business relationships that control it). As a result of these measures, four types of digital maturity of companies are formed:

- Beginners - organizations that have invested minimally in digitalization and have low awareness of its opportunities;
- Conservatives - companies that are wary of innovation, have a unified vision, but are sceptical of the value of digital technology;

- Innovators - follow the digital trends and implement innovations in digital technologies, but do not have a unified vision for digitalization of their business;

- Digitally oriented companies - understand how to manage value chains through the digital transformation of their business. They combine their transformed vision and investment management, innovation and constantly invest in the qualification of their staff, improvement of processes and technologies (Perkin & Abraham, 2017, p. 51).

Technology needs instructions to work. For simple processes, this can be done through manual setup, but in current conditions, this does not meet the needs of companies. Massive databases must be stored and used according to the rules generated in the digital code (Neugebauer, 2019, p. 2). Neugebauer compares digital codes with the human genetic code. He claims that both genetic and digital codes have the potential for protection (storage of information) and the opportunity for innovation. They can be considered in combination, i.e. to build on changes in existing achievements, and this is why digitalization has led to a significant boost in innovation. His claim is based on the potential of evolutionary progress in technology. On the one hand, new digital information can be integrated in a very targeted way, and on the other hand, it can be transported worldwide in real-time via the Internet. Thus, evolutionary improvements in technology can occur instantaneously, hampered only by the limitations of patent law from law and politics.

Mergel, Edelmann and Hoag, whose interests are focused on digital transformation in the public sector, consider the elements of transformation, placing the main emphasis on essential features in digital processes (Mergel, Edelmann & Haug, 2019):

- Use of technologies for transformation of service deliveries;
- Use of technologies for transformation of the organizational culture and the relations with the clients;
- Creating value as a result of transformation.

Presented briefly, we can focus on the most critical aspects of these elements.

✓ The digital transformation efforts result in a change in the delivery of services, but this also expands direct participation and contact with customers. Providing feedback is valuable for companies, as it helps to maximize the adaptation of the products and services offered according to the change in consumer tastes. The emergence of customer communication platforms makes it possible to create the necessary conditions for closer interaction between producers, traders and consumers. Here we are talking about increasing the value covering the possibility of connecting the various counterparties in the market. The digital transformation is becoming visible through the proliferation of intelligent products that allow real-time monitoring and updating of results and transforming production processes and customer relationships. The digital transformation has shifted the

market layers and created an opportunity to redistribute market shares, enter into new markets, and attract new customers.

✓ Digital transformation breaks the paradigm and changes entrepreneurial initiatives. Traditional marketing in current conditions is not enough to reach the target audience. It requires a complete redesign of the company's strategies to expand its business scope. The digital transformation can be seen as a technological revolution that requires adaptation to new consumer habits and expectations for access to high-value digital services. It is seen mainly as a cultural change that must happen in the organization. That provides an opportunity for additional value that companies realize by changing the structure and culture of the organization or engaging and integrating companies to design relationships and relationships with customers jointly. The process of influencing the consumer does not end with the finalization of the purchase. It is a continuous dialogue that aims to maintain relationships, build trust and make customers loyal. Consumers are not only recipients of information; they are also active participants in the sales process.

✓ Creating value is one of the most distinctive contributions of digital transformation to business. That contribution can be sought to implement hyper connection and cooperation between consumers and companies in the scope of supply of a value chain: co-design, co-creation, co-production, co-marketing, distribution and co-financing. (Mergel, Edelman, & Haug, 2019, p. 3). Berman believes that leading companies focus on two complementary activities: reshaping the value proposals for the customer and adapting them to new technologies for more interaction with customers (Berman, 2012, p. 16).

In recent years, companies in almost all industries have taken initiatives to explore new digital technologies to take advantage of them. It often involves transforming critical business operations and affecting products, processes, organizational structures, and management concepts. (Matt, Hess & Benlian, 2015, p. 339) The authors believe that it is necessary to build an approach by formulating a strategy for digital transformation, which will serve as a comprehensive concept for integrating all coordination, prioritization and implementation of digital transformations within the company. In turn, this can be interpreted that the benefits for companies undergoing digital transformation are significant, ranging from increased productivity or sales, innovation and value creation, ways to access customers and more.

Conclusion

Disruptive technologies are essential for digital innovation and digital transformation, which continue to be important factors for companies to respond

adequately to change. Thus, “organisations can adjust or change according to the new requirements that have emerged in their environment” (Filipov, 2020, p. 9). The digital economy requires entrepreneurs to look beyond the desired results and achieve them by adapting their activities to new market requirements. Technological short-sightedness confronts companies with serious problems. The lack of strategic foresight, flexibility and solutions adapted to the technological innovation makes them lagging, dooming them to failure.

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