Business Value of Digitization: Curse or Blessing?

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ABSTRACT

Converting something from analog to digital form is called "digitization." Another name for this process is "digital enablement." To phrase it another way, digitization is converting an analog process into a digital form without making any changes to the analog process itself that are distinct. The research presents a concise history of digitization on a global scale, focusing on its influence on business research, the difficulties associated with assuring digital service quality, the contribution of digital transformation and mobilization to the scientific and business world, and evidence of the increasing importance placed on digital transformation.

Key Words: Digitization, Digital Transformation, Business Value

INTRODUCTION

The term "digital disruption" refers to developments in digital technologies that occur at a rate and size that disrupt existing ways of creating value, either inside or across markets, social interactions, and, more generally speaking, our understanding and thinking. The act of transforming information into a digital representation is referred to as the digitization process (Medina et al., 2015). The information is stored in this format in discrete data, known as bits, which can be separately addressed. These bits are typically grouped into larger units known as bytes. This is the binary data that may be processed by computers and a wide variety of other devices that have the power to compute, such as digital cameras and digital hearing aids. The world is becoming more digital as new technologies are developed. In the context of this technological progression, three phases are typically discussed: digitization, digitalization, and digital transformation (Fors, 2010). In the following paragraphs, we will discuss the differences between these phrases and establish a connection between the three fundamental ideas behind workflow enhancements.

What exactly is digitalization?

Transforming physical objects into digital representation is called "digitization." Document scanning is a good illustration of this concept. During this process, the text from physical
paper is scanned and then transformed into PDF or digital formats before being saved on the computer (Güth et al., 2013).

When digitized, information is organized into smaller data units known as bits. Digital computers can process, store, and transfer analog information because it has been encoded using ones and zeros. Because the process of digitization serves as the foundation for the capturing of data, it is an essential component of digital technology.

**What exactly does "digitization" mean?**

In digitization, information or digitized versions of physical items are stored in computers, yet the mechanism that uses these data cannot be altered. The primary distinction between digitization and digitalization lies in this aspect. The term "digitization" refers to the utilization of digital technologies and digitized data to either facilitate or improve processes.

In contrast to digitization, which focuses on converting and recording data, digitalization is all about building procedures and modifying workflows in order to improve manual systems. One illustration of this concept is utilizing digitized consumer data from several sources to develop insights based on customers' behavior automatically.

**What exactly does "digital transformation" refer to?**

The fundamental goal of digital transformation, closely related to both digitization and digitalization, is to incorporate technology into most, if not all, of a company's business operations. The goal of digital transformation is to improve the efficiency of operations fundamentally and to generate value for customers through the incorporation of digital technology into all aspects of the organization. The incorporation of digital technologies results in the modification of cultural practices as well as organizational structures and operational procedures. The ability of firms to undergo digital transformation enables them to better adapt to the ever-shifting landscapes and trends of their respective industries.

**HOW IS INFORMATION CONVERTED INTO DIGITAL FORM?**

In most cases, digitizing information requires participation in one or more of the following processes:

- Performing scans. Taking a picture, which could be a picture of some text, with a scanner and converting it into an image file, such as a bitmap.
- Optical character recognition (OCR), also abbreviated as OCR. An optical character recognition (OCR) tool examines a scanned image of text for bright and dark regions to determine each letter and digit of the alphabet and then converts each character into an ASCII value.
- Taking recordings. Recording an audio or video signal onto a storage media, such as a magnetic tape or disk, and then converting it to a digital format using an analog-to-digital converter.
- Taking samples. An analog waveform's amplitude, or signal intensity, is measured by sampling the waveform at time markers that are equally spaced apart. The samples are then represented as numerical values that can be supplied as digital data.

Digitization and digitalization are the steps that need to be taken to achieve digital transformation. This is not a linear process. The highest level, digital transformation, begins with data that is encoded into system (digitization), which is then used by the computer to enable / improve a process through digitalization. This is the most fundamental aspect of
Digital transformation. A digital transformation occurs whenever digital technologies are utilized and their integration into the workflow of an entire business. These three ideas are essential for businesses in order for them to adjust to the dynamic nature of the modern business environment.

**BUSINESS VALUE**

The widespread availability of personal computers and the internet in the late 20th century contributed to the rise in popularity of digitization. Because of technological advancements, it is now possible to convert various kinds of information into digital formats, including text, photos, audio, and video.

The digitization process has brought about revolutionary changes in communication and business and has had a significant impact on virtually every element of contemporary life (Lal, 2015). The process of digitization by itself adds little value to a corporation. On the other hand, it establishes the groundwork for business cases that use the data. Put another way, it is the catalyst for creating corporate value, which relies on data.

"Digitization" refers to enabling, improving, or completely transforming a business process by utilizing digital technology (such as APIs) and digitized data. Therefore, digitalization presupposes digitization in the same sense discussed in the previous section.

**Digitalization in business**

The term "digitization," defined before, refers to using digital technologies to optimize process flows. In the world of business, digitalization is employed to achieve a variety of objectives, including the reduction of costs, the elimination of human error, the maximization of operational efficiency, and the facilitation of data analysis. Through the process of digitalization, businesses have the opportunity to generate new sources of revenue and value.

One sector that illustrates this is the banking sector. Banks have transitioned away from forcing customers to visit a branch to send money to other receivers and have built online banking systems that enable real-time transfers without requiring customers to visit a branch (Medina et al., 2015). The information provided by a person in application forms is digitized and used to facilitate seamless account transfers between parties. It makes workflows easier for the organization and its customers, ultimately leading to increased efficiency in the company.

**Digital transformation in business**

The digital transformation trend has brought about significant changes to how firms function. Integrating digital technology into all facets of a company’s operations to enhance existing customer value or generate new value for those customers is what we mean by "digital transformation." Sometimes, wholly new enterprises are created due to the shift brought about by digital technology (Kurt et al., 2013). For example, Spotify has done away with requiring users to gather CDs to build a music library physically. Streaming services allow users to listen to their preferred music at any time and location with only a few mouse clicks.

One of its most important characteristics is that digital transformation can take on various forms depending on the company undergoing it (Wang & Qin, 2015). Companies need to be
aware of the technologies that apply to them to determine which aspects of their operations they can improve to accelerate growth.

**Digitization in business**

Both digitalization and digital transformation can be built on top of the digitized foundation created by digitization. Businesses have used various digitization strategies to enhance how data can be used and processed. For instance, by digitizing data via scanning paper-based client application forms, information may be saved in computers and eventually be processed to gather customer demographics and insights (Thaduri et al., 2016). This processing can be accomplished through the use of artificial intelligence. Thanks to digitization, businesses can change data and capitalize on it to improve their operations and revenues.

**Examples of Digitization**

The following is a list of instances of information that frequently undergoes the process of digitization:

- textual items, such as books, essays, and legal documents;
- pictures, including photographs, works of art, and diagnostic images;
- audio recordings, including songs, speeches, and interviews;
- video, including movies, television shows, and footage captured on webcams and
- data may include numerical data from sensors, financial data, or weather data.

**Case Studies of Digitization**

In addition to increasing the ease with which information can be accessed and shared, there are several other reasons why a company could choose to digitize its operations, including the following:

- to enhance the overall customer experience;
- to boost the effectiveness of business operations;
- to expand existing revenue streams and
- to break into new market niches.

A solid grasp of the required business goals is essential to achieving a successful digital transformation within an organization. When a company clearly understands these aims, it can select the appropriate digital technology and business partners to assist it in digitizing its operations.

**The Advantages of Converting to Digital Formats**

The process of digitalization comes with a variety of benefits. Information can be easily saved, accessed, and shared in digital format. This is of utmost significance in the modern business world, where information must be readily available promptly and uncomplicated to employees, customers, and partners (Omer, 2012). Another benefit is that digital information can be altered more easily than analog information. This is an advantage that digital information has over analog information. This translates to a simplified process for organizations to use data for analysis and decision-making, ultimately resulting in improved outcomes. The elimination of the requirement for paper documents and other analog materials is another way that digitization can assist businesses in achieving cost savings.
The Drawbacks of Moving to a Digital Format

The process of digitization has its share of drawbacks. Without the copyright owner’s consent, digital content can be easily reproduced and distributed to multiple recipients. Because of this, there have been issues with piracy and intellectual property theft.

Another drawback of using digital information is that it is simple to change or destroy. This can lead to errors and misunderstandings, especially if the information that has been changed needs to be labeled or identified appropriately.

Last but not least, the digitization process might result in an increased dependence on technology, which can be both pricey and difficult to maintain on a large scale. If a company’s digital systems crash, retrieving lost data is challenging.

Digitization vs. Digital Transformation

It is essential to remember that digitization is one facet of the more significant phenomenon known as digital transformation. The process of utilizing digital technologies to produce new or enhanced corporate processes, products, and services is called digital transformation. The act of transforming information into a digital representation is referred to as the digitization process (Gołda-Sobczak, 2013). Although it is a part of digital transformation, it is not the same as digital transformation.

The digital transformation process calls for adopting a strategic strategy that considers the company’s broad objectives and the unique requirements posed by its clients and workforce. It is also necessary for leadership to demonstrate a readiness to embrace change and invest in the development of novel technology and operational procedures.

Conclusion

The creation of a digital representation of a physical object is referred to as "digitization." For instance, to store a paper document as a digital document (such as a PDF), we first take the paper document and scan it. Put another way, digitization converts something not digital into a digital representation or item. This is the end goal of the process. After that, many computer systems can utilize it for various applications.

The process of digitalization is a variety of tactics. In order to establish strategy, the executive team needs first to articulate its digital goals, thereby outlining the nature and scope of the desired business results. Because of this, investment priorities and the relative timing of digital efforts are determined by this factor. The results of digitalization can be broken down into two primary categories:

- The results of digital optimization come from making improvements to already-established procedures and client experiences.
- The outcomes of digital transformation result from the organization reimagining how it serves its market by introducing brand-new goods, services, or business models.

The decision between optimization and transformation is not an either/or proposition. The digital objectives that are most likely to be realized and the digital strategies developed as a result of those ambitions comprise an optimal mix of both sorts of projects across all business units and functions. Despite all the buzz around "digital transformation," it is highly uncommon for a traditional business to undergo a complete transformation. Attempts to do so on a massive scale frequently fail.
Focus on digital business transformation initiatives in several high-potential product/service lines, business units, or corporate functions. Then, focus on digital business optimization initiatives to achieve nearer-term benefits in complementary functions. A more successful digitalization strategy pursues transformation and optimization in parallel.

REFERENCES


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