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# A Review on Digital Technology in the Business Field

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## Abstract

The advent of digital technology has caused profound shifts in how we work, play, communicate, and even go about our daily lives. The implementation of digital transformation has the potential to increase profitability, accelerate the time it takes to bring goods to market, and convert consumer happiness into brand loyalty. The era of digital technology is the one in which we presently find ourselves. We've seen a wide range of amazing advancements over the course of so many years thanks to the relentless march of technological progress. For instance, we have progressed from using horse-drawn carriages to semi-automated autos, in addition to the myriad of other significant advancements that have substantially raised the bar for our levels of productivity, communication, and general quality of life. The world of business has also been profoundly influenced as a direct result of these events. The digital transformation has resulted in enhanced experiences for customers and employees alike, as well as in increased efficiency across a wide range of tasks.

Businesses that operate in the digital space rely on technology to generate new forms of value in their business models, the experiences they provide for their customers, and the internal capabilities they use to support their primary business functions. This word refers to conventional players as well as digital-only firms that are undergoing a transformation of their operations thanks to the use of digital technology. The adoption of digital transformation strategies is essential for all sizes and types of organisations, from startups to multinational corporations. This is a point that is driven home in almost every keynote address,

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panel discussion, article, and research that addresses the topic of how organisations may stay competitive and relevant as the world gets more digital.

*Keywords:* Digital, Technology, Business, Digital Business, Digitalization

## 1 INTRODUCTION

Digitization has exploded in recent years, with more and more people using it all around the world. The widespread adoption of smartphones and the subsequent access to information, social networks, and audiovisual entertainment has made it possible for a significant portion of the world's population to benefit from ubiquitous and uninterrupted connection. Digital gadgets and apps using cloud computing, big data analysis, blockchains, or artificial intelligence have become commonplace because of the rapid pace of technological advancement in digital technology. An excessive amount of economic and political power is held by no more than twenty or so businesses located in two or three world powers. This is an all too small group of enterprises with market capitalizations that are near to or more than a trillion dollars. The technological revolution has joined with a shift in the tactics of the companies that are at the forefront of the use of digital technology to substantially expand the role of global platforms. The upshot is that the technological revolution has greatly increased the role of global platforms. A huge section of the world's population is excluded from the advantages of digitalization because their salaries are too low to afford meaningful connectivity (i.e., high-quality access), gadgets, fixed home connections and the capacity to utilise them every day. Thus, there is a significant supply-demand mismatch since coverage is sufficient but connections and use are lacking. It's not only false news and cyber-attacks that have become worse, but so has the threat to personal data security and privacy, as well as the manufacturing of electronic trash.

Vertically integrated enterprises that hire full-time workers to work eight- to nine-hour shifts in a company's own office, campus, or factory are the conventional model that many successful business leaders are using at the present moment to run their operations. However, the old business model is rapidly becoming antiquated. In today's technologically advanced world, people and businesses are reshaping their work practises as a result of the exponential expansion in computer power accessible to both consumers and businesses, as well as almost universal Internet connection. Organizations are reaping the benefits of rising digitalization in the workplace, including higher productivity, cost savings, a more mobile and agile workforce, and more flexibility and adaptation in an ever-complex marketplace. Enterprises are interacting more worldwide and with a more diversified and global workforce. Working anywhere in the globe is now possible thanks to high-speed Internet access. While this has been a boon for businesses, it has also shifted the balance of power in the employer-employee relationship in favour of the employee more often than before. Because of the ease with which workers may work from any location using mobile devices such as smart phones and tablet computers, the firms they work for are unable to keep up with digital developments as quickly as their employees. This new digital workplace also has its own set of obstacles, including security, establishing a new form of digital etiquette to

demands for workers, and the propensity for the expectation of constantly being "on," which may lead to fatigue and retention issues. Not only can the introduction of digital technology into the workplace wreak havoc on the productivity of employees, but it also gives rise to a new culture that has the potential to have an effect on both the culture that existed in the workplace before and the overall experience of working. Adapting to the new ways of working and communicating, as well as the new technology that allow them, will be a challenge for everyone in the workplace because of these changes.

Firms may take use of a wide range of advantages provided by digital technologies. Transaction costs are reduced through digitalization, which makes it easier for businesses, suppliers, and networks to exchange data. Small and medium-sized businesses (SMEs) may benefit from lower transportation and border operation expenses and a wider range of services available for trade as a result of this technology's use. Peer-to-peer financing, training, and recruiting channels, as well as government services, are increasingly accessible on the internet. In addition, it encourages enterprises to create data and analyse their own operations in new ways in order to enhance performance, and it gives them more access to innovation assets in the process.

It's no secret that the industrial sector is becoming more digital in nature. This trend has been hastened by the COVID-19 pandemic, which has spread around the world. It is no longer an option to meet the demands of an ever-increasing global population; rather, DT has become a must. DT has introduced new processes and procedures that may have a significant impact on the structure of a company's business model as a result of this development. Companies who do not promptly create and execute DT strategies are unlikely to maintain pace and compete in the new digital world. The major goal of DT is to address difficulties involving efficiency and effectiveness. However, the shift into this new reality is not one that should be taken lightly since, just like any other process of change, it involves a number of potential dangers and difficulties.

## 2 Digital transformation in business and management

The term "digital transformation" (DT) is quickly becoming one of the most important topics of discussion among businesses all over the world. It is projected that businesses that are unable to adapt to the digital world would surely fall prey to "digital Darwinism," in which incumbents may vanish and only the most adaptable organisations, sensitive to technology trends, will survive to stay on the competitive landscape. This is because incumbents have a significant advantage in terms of resources and knowledge. However, the history of firms' technical advancements has been rife with failures that concentrate only on technology without considering larger strategic decision areas. A large number of companies are struggling to keep up with the new digital era and managers are unsure of the strategic considerations for their digital transformation efforts.

Modern digital technologies are seen as the primary productive resource that determines the increase of social welfare in the new paradigm of global economic development. Modern computer and

information systems must be used by organisations and, in particular, by businesses in the real economy sector if they are to operate well in a digital one. There must be a dramatic change in the quality of management of both technological processes and decision-making processes at all levels, based on modern methods of production and further use of information about the state and forecasting of possible changes in managed elements and subsystems, in order to increase the efficiency and sustainability of an enterprise. However, most recent research does not properly reflect the substance of such categories as "digitalization" and "digital transformation;" as of right now, procedures for evaluating the efficacy and feasibility of adding financial digital technology into the operations of businesses and organisations have not yet been developed.

Attempting to do so will not be an easy task. The digital transformation imperative ushers in an age of extraordinary change since technology is at the heart of all digital transformation. However, digital transformation is not only about technology. Instead, it leverages technology as a means to a goal and goes beyond business. Digital transformation (DX) is as much about changing the way people operate and the culture of businesses as it is about changing the technology. Its most difficult mission is to modify our mindset. Every company, not just those like Uber or Airbnb, is affected by digital transformation today... In order to avoid being supplanted by the next hot startup, even established industry giants must be inventive.

In particular, the economy is being impacted by the digital revolution. New digital technologies such as social networks, smartphones, big data, the Internet of Things, and other developments like blockchain are allowing businesses to dramatically rethink their business models. Companies should establish management techniques to carry out these complicated transformations, which primarily entail changes to the company's fundamental activities and modifications to goods, processes, and organisational structures, as well. Since digital technologies are now widely used across all marketplaces, society as a whole is undergoing a sea shift as a result of their rapid advancement. Companies are under even more pressure to go digital before their competitors do so they can survive and achieve competitive advantages, on top of the growing desire from customers. The topic of digital transformation has been investigated in great depth across a variety of academic fields, which has led to the production of a simplified overview of the area. What is currently missing is a clear definition of digital transformation of business models, a methodology for digitising business models, the phases and instruments that should be taken into consideration, and the models and empowering influences that already exist.

A veritable explosion in the quantity of so-called big data that is made accessible and that may be adopted and investigated in the process of corporate growth has been prompted by the growing digitization of enterprises and society in general. The largest social revolution since the Industrial Revolution is taking place as a result of digitalization, which is establishing a second economy that is huge, automated, and invisible. Due to the sheer volume of transactions carried out by millions of consumers and businesses across many ecosystems, data is now collected on a daily or hourly basis rather than just once a month.

## 3 What is Digital Business?

While IT's function in a business model is mostly focused on value creation in non-digital businesses, in digital businesses, IT has a substantial and integrated impact on all aspects of the business model, including value proposition and value delivery.

Two distinct business models may be distinguished in this context:

- A "digital business model," in which digital technology plays a substantial role in the value proposition (in particular, the service portfolio or customer experience or both) in the manner that was stated,
- A "digitally enabled business model" is any business model in which at least one of the components is substantially facilitated by and based on digital technology.

The more components of a business model are based on digital technology (that is, the more a firm is digitally enabled), the more the model transforms into a digital business model.

Sustainable Development Goals may be achieved with the help of digitization, which has a significant impact. There will be no sustainable solution to the future's economic and environmental concerns unless present enterprises are transformed. Digitalization and digitization-related concepts like "digital business model," "digital transformation," and "digital entrepreneurship" are causing a lot of misunderstanding.

The availability of a "digital duplicate" of the complex machinery that is being provided, in conjunction with ongoing monitoring of all of the components and operations of the machinery, has resulted in the development of fundamentally new business models. For example, organisations that produce high-tech equipment convert from a delivery business model to a service one when it is not the equipment and its technical assistance that is sold, but rather the assurance of its trouble-free functioning or readiness for use that is offered (for example, flight hours or volumes of pumped air). Not only does a comprehensive digitization of an organization's internal value chains (design, manufacturing, logistics, technical assistance, and product support), but also the formation of tight relationships between the organisation and all of its counterparties is required for digital business models. Such a profound relationship requires the construction of a single information and communication environment. Integrating the information space may be done, for instance, by using the same "digital duplicate" of the product and making arrangements for coordinating the flow of orders all the way along the value chain. In addition, many of the chain members' regular contacts may be converted into digital services supplied by third-party providers (analytics, references, applications, offers, contests, call centers).

## 4 Literature Review

Through innovation and cost-cutting in many business processes, the continuous digital transformation promises to boost productivity performance in the long run. But at the same time, the rise

of productivity in our economies has slowed down, which has sparked an active discussion over the potential for digital technologies to increase productivity. In the same way that there was a contradiction of fast technology progress and sluggish productivity growth in the 1980s, when Nobel Prize winner Robert Solow famously quipped: "we see computers everywhere except in the productivity figures," there is once again a paradox of rapid technological advance and poor productivity growth. (OECD, 2018)

Additionally, digital technologies are revolutionising how companies connect with consumers and partners, modifying internal processes, and offering up new avenues to develop and execute new means of distributing goods and chances to monetize services. Previously tangible items and procedures have been transformed into digital ones. Prior to the advent of digital printing and distribution, newspapers were produced by day at a printing plant and transported by truck to be sold at newsstands and stores. In the digital age, news may travel across the globe in a matter of seconds. Additionally, before time-consuming and reliant on paper documents, internal business operations are now greatly facilitated by the use of digital technology that enable remote collaboration and other forms of social contact. Sensors, for example, may be used to collect digital data that can then be digitised. Additional information may be generated by the analysis of this data. (Averina et al., 2021)

It has also exposed the globe to new methods of obtaining, developing and managing people and work, and has changed the way work is dispersed and supplied. In addition, it is transforming people's conceptions of work and working, and the entire culture of the workplace itself. An organization's capacity to manage a worldwide talent pool and one that is continually changing is dependent on its ability to manage and mine enormous data pools. Over the last several years, a slew of new freelancer, open source, and product markets have sprung up. Companies and employers may access, evaluate, rate and analyse millions of data on individual activities, projects, and people thanks to the analytics provided by this. At the same time, this shifts the balance of power in favour of all workers. This data and technology is being used by current, contingent, and future workers alike, who are learning to exploit it for their own benefit.

Already, digital technologies have had a significant influence on workplace culture. Employees who are younger, more connected, and more mobile are increasingly managing their careers on their own terms and often operating outside of the categories that have characterised the workforce for decades. This type of workers is expanding in number. Modern employees place more emphasis on their personal and professional goals as well as the integration of their work and personal lives. As a result, they are used to juggling their personal and professional lives in the same manner, frequently merging the two. More employees of all ages are wanting more of a work-life balance, which may include more time spent caring for family members, living farther away from city cores, or just avoiding peak travel hours. Using digital tools to assist oneself and their larger ambitions is part of this balancing act for them. (Jennifer Buchanan et al., 2016)

The term "digitalization" refers to the notion of automating and digitising corporate processes. Every piece of information has been digitised and is now more readily available than it was before. Therefore, the growth of automation made possible by robots and artificial intelligence provides the promise of increased levels of productivity as well as improved efficiency, security, and convenience. Additionally, this development has the potential to revolutionise the world of work by establishing new forms of digital or virtual work. Entrepreneurship is being transformed in two ways as a result of this digitization. The first change is the shifting location of entrepreneurial possibilities in the economy, and the second is the shift in entrepreneurial activities. The concept of "digital disruption" was coined by the same author to refer to the profound effect that the proliferation of digital technologies and infrastructures has had on the way in which businesses, economies, and societies function. Small and medium-sized businesses (SMEs) may benefit from this digital upheaval in terms of expansion and globalisation. As with Kodak, if they do not embrace digitization, they will be left behind and ultimately go out of business. (Pereira et al., 2021)

Companies who at the beginning of their operation had an analogue business model at its core and throughout the course of their work acquired large knowledge about their clients were able to monetize their data via the company's systematisation and processing of their data utilising BIG-data technology when they underwent digital transformation. According to Citigroup, a separate organisation was founded to promote insurance company marketing initiatives via their channels of operation with customers. Smaller, more agile firms that have effectively integrated digital technology into their operations are able to outperform their more established counterparts and compete successfully on an equal footing. For the last 20 years, it took the firm an average of 20 years to get to a billion dollars in revenue. Google, for example, achieved this goal in eight years, while Uber, Snapchat, and Xiaomi were able to do it in four years or less. Successful digital technology utilisation was a major factor in their achieving these rates. According to study conducted by Digital IQ in Price Waterhouse Coopers, 57 percent of IT executives polled felt that enhancing the firm's digital prospects should be a key priority for the organisation in order to increase revenue. (Ablyazov et al., 2018)

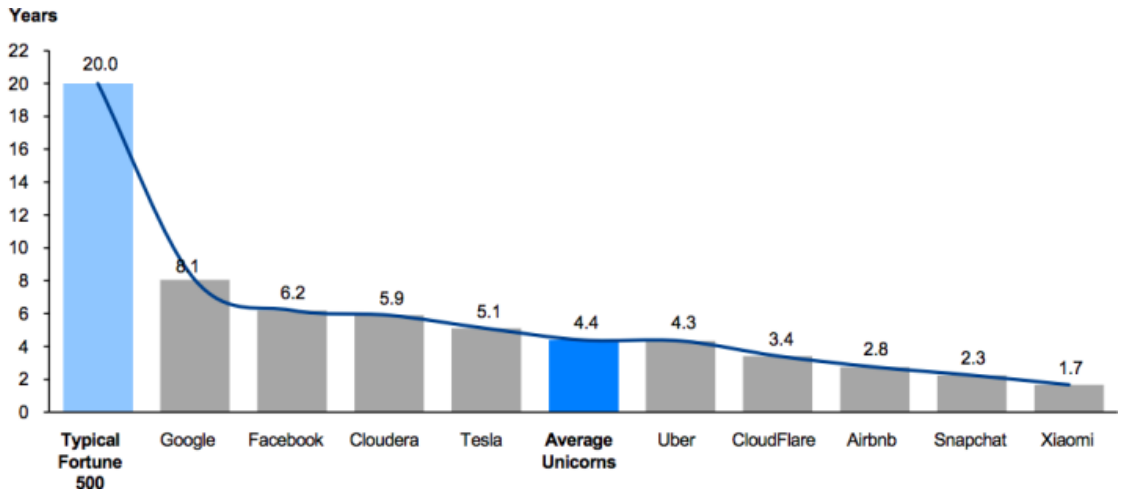


**Figure 1.1 Time to reach a market valuation of $ 1 billion or more**

## 5 Conclusion

E-Business, or digital business, is a wide-ranging and sophisticated endeavour. Technology and business are part of the meaning of the term. Businesses and technological experts alike contribute to its evolution. Digital workplace norms need that companies adopt a more inclusive corporate culture. Business executives are increasingly concerned about topics such as company culture, engagement, and staff retention. Companies under greater pressure than ever before to foster a healthy, productive digital culture, thanks to a hitherto unseen level of openness. These concerns are well-recognized by organisations. Organizational culture and engagement is cited as a major difficulty by 87% of firms, with 50% describing the issue as "extremely critical." Every member of an organisation must strive toward the same goal, regardless of whether they are working in an office or on the internet. Whatever stage a company is in the digital transformation process, leaders may take efforts to build a supportive and adaptable workplace for the individuals who can help their firm advance to its next level.

Over the last several years, the significance of digital transformation has grown. The integration of technology tools into corporate practise and strategy, as well as the challenges that come with adopting new technologies, is the primary emphasis of this research. Entrepreneurship has undergone a series of changes as a result of new ideas, concepts, and principles. Both start-up entrepreneurs and large corporations are rethinking their growth strategies as digital technologies continue to evolve. Digital indicators, which describe the possibility to deliver extraordinary speed of scaling and development, play an important role in addition to the major economic indicators of the performance of firms. With the advent of digital technology, the way people and things in social and economic relationships communicate and interact has changed dramatically. New business and operational models are being formed as a result of the increased demands of customers and the growth of digital technology as a new focus of development strategy.

If companies don't change their ways of thinking about people's work and the workforce, they'll be unable to keep pace with the changing landscape of the workplace. Work is something individuals do, not something they go. Digital talent platforms will be increasingly used by companies to connect and cooperate with independent experts and freelancers on a distant basis. There will be new forms of association to support these new organisational structures, such as digital freelancer unions and revised labour market legislation. For policymakers, the mobility of protections and benefits across occupations and the equal treatment in law of diverse kinds of labour and employment types are significant considerations for the implementation of these rules. Automated businesses must still have a need for their products or services. An artist may use a 3D printer to manufacture their own things, but they must still have a market for them. As more individuals are able to pursue their goals, demand may rise. It's simpler to rent out your room or apartment before the area becomes a popular destination for tourists, as many who use Airbnb have learned.

When it comes to automating their business processes, business leaders and their organisations will need to become more aware about how technology has evolved through time and how it may be used for future growth. While visiting global innovation hubs and reading about new technologies can provide "book knowledge," it is the application of that "practical knowledge" that comes from putting time and money into experimenting with new technologies on real-world problems and then scaling up those that show promise. Human capital must be prepared and adapted to operate in synergy with technology in order for automation to be a success, maybe the most critical component.

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