The Rise of Digital Business Models: Thriving in the Post-COVID Era

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The COVID-19 pandemic has become an undeniable reality and has forced the world to seek out a "new normal" as we move forward into a post-pandemic era. In the face of this crisis, businesses are now confronted with the difficult task of adapting their business models to fit this new reality, which has been directly influenced by the pandemic. These challenges are the direct result of the pandemic, and this research aims to explore the key obstacles that businesses must overcome as they navigate the post-COVID-19 environment. Additionally, we will discuss several fundamental transformative methods that firms can adopt to not only survive, but thrive in this "new normal" and beyond. We will also examine the importance of technology and the digital transformation that companies must undergo in order to remain competitive in today's technology-driven world.

Keywords: business model, COVID-19, virtual revolution, porter's model, pandemic, digital strategy

INTRODUCTION

In the wake of the COVID-19 outbreak, the world underwent a massive transformation as people were forced to adapt to a new way of living and working in isolation. This "virtual revolution" prompted businesses to adjust to the heightened digital preferences of customers, with many companies seizing the opportunity to strengthen their digital offerings. As the pandemic continues, companies must reflect on their actions and learn from any mistakes, using pandemic-inspired reforms to steer their sectors in new directions. To do so, it is crucial that companies maintain their focus on customer-centric, data-enabled digital transformation strategies, as this has become an essential part of the "information revolution."

The global economy has been profoundly impacted by COVID-19, leading companies to reassess their operations and invest in digital infrastructure and processes that can withstand future disruptions. In the post-COVID era, businesses must create robust business models that can adapt to unexpected events and invest in cutting-edge technologies such as AI, ML, and RPA to increase their agility and resilience.

To survive in the post-COVID world, companies must develop a solid digital transformation plan that includes solutions for managing business difficulties, optimizing operations, preparing their workforce, and exploring new opportunities. Moreover, firms should undertake a "reinvention program" to overcome uncertainties while reopening and alter their existing business models to better align with the newly-evolved sensibilities of stakeholders. The pandemic has presented a unique opportunity for companies to strengthen

their digital and data-driven capabilities, and those who embrace this opportunity are most likely to thrive in the post-pandemic world.

The study conducted by Malhotra and Malhotra (2021) delved into the major challenges faced by businesses during the COVID-19 era. The research also examined the crucial steps that companies must take to embark on a digital transformation journey and attain a certain level of digital maturity to succeed in a post-pandemic world. Building upon previous studies, this research aims to explore the primary actions that companies can take to navigate the digital transformation journey and attain digital maturity that is essential for thriving in a pandemic-stricken world.

While individual companies in different industries may face unique sets of challenges, the pandemic and the disruptive global economic environment have highlighted generic problems that seem to affect all businesses at a macro level. In this paper, we analyze the existing value chain to identify the primary obstacles presented by the pandemic. Additionally, we propose a digital transformation strategy and business model that companies can adopt to address these concerns. The subsequent sections of this article are structured to present these analyses and recommendations in detail. In Section II, a summary of the relevant literature is presented. Using Porter's approach, Section III investigates how the rise of digitalization has affected industries that rely heavily on information (Porter and Millar, 1985). In Section IV, we highlight the new digital strategy and business model, as well as the influence that the changing model has on various types of businesses and sectors. In the end, Section V presents a conclusion and a summary of the research.

LITERATURE REVIEW

As the pandemic disrupted traditional ways of doing business, companies had to adapt and pivot to new strategies to survive. This led to an acceleration in the adoption of digital technologies and a shift towards remote work and e-commerce. Companies that were able to quickly adapt to the new reality were more likely to survive and even thrive in the pandemic, while those that were slow to adapt or resistant to change struggled. The pandemic has also highlighted the importance of agility and resilience in business operations and the need for companies to be prepared for unexpected events that can disrupt their operations. The COVID-19 pandemic has been a pivotal event in human history, and businesses, sectors, and nations are all working to develop effective response plans. This "Black Swan" event has caused significant challenges for companies, but it has also led to innovation and the discovery of new business models that have helped firms weather the crisis. The pandemic has had a profound impact on business, with the beginning of a global recession and the identification of business enablers as a potential solution for the economic well-being of countries.

Seetharaman (2020) uses Porter and Millar's (1985) information intensity matrix to understand the consequences of COVID-19. The author considers two dimensions - the information intensity of the product or service and the information intensity of the process or value chain - and introduces a third dimension - the essential character of the product or service. The concept of "information intensity" was originally proposed by Porter and Millar (1985), and subsequent studies have explored the topic further (Glazer, 1991; Palmer and Griffith, 1998; Bhatt, 2000; Andal-Ancion, et. al; 2003). Porter and Millar (1985) illustrate how information technology can play a strategic role in an industry that relies heavily on information throughout the value chain or process, as well as in the product or service itself (see Figure 1).

FIGURE 1

ROLE OF INFORMATION TECHNOLOGY IN AN INDUSTRY CHARACTERIZED BY THE PREVALENCE OF INFORMATION AT ALL STAGES OF THE VALUE CHAIN OR PROCESS, AS WELL AS IN THE PRODUCT (OR SERVICE)

		INFORMATION CONTENT OF THE PRODUCT		
	HIGH	OIL REFINING AUTOMOBILES	BANKING NEWSPAPERS	
INFORMATION INTENSITY OF THE VALUE CHAIN			RETAIL AIRLINES	
	LOW	CEMENT		
		LOW	HIGH	

Source: Adapted from Porter and Millar (1985)

The level of information processing required to efficiently and effectively manage a company's value chain or business processes is commonly referred to as the information intensity of those operations. Additionally, the term product information intensity is used to describe the extent to which customers of an organization rely on information when making decisions related to the selection, purchase, usage, and maintenance of its products and services (Sabherwal and Vijaysarathy, 1994). In this regard, physical products such as agricultural produce or cement fall on the lower end of the continuum of product information intensity. This is because these items have no inherent information content and their value is primarily determined by their physical properties rather than any informational attributes. Industries that deal with products such as textiles tend to have a higher amount of information content related to the size, color, pattern, and other features when compared to other products (Palmer and Griffith, 1998). In contrast, some industries such as banking, education, and media deal with information-heavy goods (Porter and Millar, 1985; Hu and Ouan, 2005; Shih and Fang, 2006; Consoli, 2008; Macada et. al., 2012; Koo, et. al., 2013; Seetharaman, 2020). The level of process information intensity also varies across different industries. For instance, industries such as construction and mining have lower information intensity compared to automobile manufacturing and oil refining, which have a higher information intensity (Figure 1). Banking and other financial services are positioned in the upper-right part of the figure due to their high information intensity and process information intensity (Hu and Quan, 2005). Experts in information systems argue that businesses operating in information-intensive sectors, such as banking and financial services, tend to benefit more from IT expenditures than businesses operating in less information-intensive sectors like energy, mining, and construction.

Porter and Millar (1985) state that information systems can be found at any point along the value chain and have the ability to impact the value operation process and interactions between activities within the chain. Each activity within the chain consists of both a physical and informative component. While the physical component underwent a significant transition during the Industrial Revolution, the "Information

Revolution" is primarily influencing the informative component of activities. Figure 1 highlights the strategic role of information systems but notes that this position varies across different industries. One crucial metric to assess a company's ability to benefit from IT investment and digitally make or deliver its products or services is an evaluation of the information intensity of its existing and potential products and processes. This evaluation serves as a measure of the information intensity of the company's products and processes. Companies strive to increase their information intensity by including information content in their products or modifying their business processes. The automotive industry, which has historically relied on technological advancements for differentiation, is moving closer to the upper right corner of the information-intensity grid. The industry is focusing more on developing intelligent vehicles with information-intensive features such as remote monitoring, smart sensing, and educating the driver, with the ultimate goal of developing fully autonomous vehicles. As a result, a company's degree of digitalization is the primary factor that sets it apart from competitors.

The outbreak of the pandemic caused significant disruptions across all aspects of business operations, prompting companies to adopt digital means of conducting business. As per Porter and Millar's (1985) and subsequent studies, companies should strive to increase their information intensity by moving towards the upper-right corner of the grid. Digital transformation strategies should be prioritized to modernize business models to cope with the challenges brought about by the COVID-19 situation. The world transitioned rapidly from the digital revolution to the virtual revolution. Akmaera et al. (2020) examine the tactics Russian companies should adopt to develop after the crisis. They demonstrate that prior to the crisis, business models changed as disruptive digital technologies were integrated into all aspects of business activities, shortening the time horizon for strategy development and introducing more flexible organizational forms of work. The study suggests that digital business model-dependent Russian enterprises are better positioned to adapt to the post-crisis environment. With customers increasingly immersed in the digital and virtual worlds, a company's digital tolerance quotient is becoming critical to its success. The pandemic has accelerated the trend of decoupling products or services from customary business procedures. Based on the research, the quality of digital unbundling is critical to a company's success in the postpandemic age and beyond.

DIGITAL TOLERANCE QUOTIENT AND THE POST-PANDEMIC VALUE CHAIN

Porter and Millar (1985) argue that the "Information Revolution" has a significant impact on a company's value chain activities, mainly due to the growing reliance on intelligent decision-support techniques, such as machine learning, process automation, big data analysis, and distributed systems. This dependence on technology has increased over time, leading to improved coordination of business operations within an organization and among various stakeholders. As stated earlier in this article, technology will continue to play a crucial role in an organization's overall strategic approach. However, the COVID-19 pandemic has prompted companies to revise their business strategies to survive and prepare for the aftermath of the crisis. With the world grappling with COVID-19 and more information about its effects becoming available, organizations have adapted and changed their business models. The pandemic has also highlighted the world's reliance on technology, as evidenced by the unprecedented increase in internet activity during this period.

This study proposes the use of a metric called the digital tolerance quotient to evaluate the impact of information intensity on both product content and the value chain. The likelihood of a firm's survival increases with higher levels of digitalization in products or unbundling from traditional methods of working, processing, or distribution in the value chain. The study argues that the ability of a firm to adapt to the postpandemic world will depend on its digital tolerance quotient, as this will determine its ability to conform to the new way of life and the permanent changes that have been made. The study justifies this rationale using the fundamental concept that the world has been permanently altered by the pandemic, and that firms must adapt to survive in the new landscape. Furthermore, we can use the digital tolerance quotient to analyze various industries. However, some industries such as the hotel industry, transportation industry, and traditional entertainment do not currently have digital distribution options available. Within the hospitality

industry, this includes fine dining establishments, quick-service restaurants, and eateries. The mobility sector encompasses the taxi business, airline industry, ridesharing services like Uber and Lyft, and rental vehicle companies such as Hertz, Enterprise, and Avis. Meanwhile, traditional entertainment comprises cinemas, sports, concerts, theater, theme parks, and other similar forms of entertainment. These industries have been severely impacted by the pandemic, resulting in many of them coming to a complete halt. Even after the company reopened, customers still lacked the assurance they needed to sign up for the services. However, during the pandemic and post-pandemic time, the degree of digital tolerance in the provision of products and services will be the most significant pushing force, alongside the automation of business processes [Porter and Millar (1985)]. Several industries, including banking and finance, have shifted to the top left portion of Figure 1 due to the widespread use of computerized delivery networks. This transformation has already been seen. Nonetheless, given the danger the epidemic presents to public health, we are already witnessing fast changes in service delivery that are dependent on the degree of digital tolerance present in a given population.

Prior to the onset of the epidemic, we had already begun to experience the digitalization trend. This trend is accelerating as a direct consequence of the global pressure to indulge in social disengagement. As a result of customers' altering preferences toward digital platforms, all businesses accelerated their efforts to modernize their business models by streamlining operational procedures. Using the degree of digital tolerance as the primary metric, however, various businesses were able to relocate to the upper right quadrant of the screen. The hoteling industry, which is a subsector of the hospitality industry, is experiencing negative or stagnant development due to its low digital tolerance in relation to the delivery of final products. Due to the rise of internet ordering, restaurants and establishments switched to curbside, contactless delivery while also accepting online orders. As a consequence, restaurants have moved toward a higher information intensity regarding their products and procedures.

Similarly, the traditional leisure industry (movie theaters, amusement parks, athletics, and so on) lacks digital patience and has experienced major financial loses as a result. However, due to the full unbundling of the product from the tangible value chain and digital distribution, streaming services such as Netflix, Amazon Prime, and Disney Plus, among others, have witnessed enormous development. As a result, these services may provide a greater diversity of material than ever before. Furthermore, a number of film companies distributed films that were initially meant for theater dissemination using a tweaked variation of the pay-per-view business model that utilizes streaming platforms. Changes were also being made to cinema house business structures. American Multi Cinema venues, for example, struck a deal with Universal Studios to decrease the exclusive cinema window from 28 to 17 days. (as opposed to 90 days). AMC will also receive a portion of the new income sources generated by subscription video on demand (https://www.cnbc.com/2020/07/28/amc-strikes-historic-deal-with-universal-shortening-number-of-daysfilms-need-to-run-in-theaters-before-going-digital.html). This is a significant advancement for the cinema theater companyIn the same manner, the healthcare industry is presently undergoing a period of declining growth. A recent study conducted by Frost and Sullivan in 2020 (https://www.marketresearch.com/Frost-Sullivan-v383/Post-pandemic-Global-Healthcare-Outlook-13471750/) has revealed that the industry is projected to experience a reduction in growth from 5.3 percent to 0.6 percent in 2020. This trend is expected to persist, resulting in healthcare revenues in the United States continuing to fall short of the \$2 trillion benchmark.

Furthermore, the advent of telemedicine as a disruptive innovation in healthcare delivery, coupled with advancements in health information technology particularly in analytics and interoperability, is expected to propel the growth of digital health at a rate of 7.9 percent in 2020 according to a study by Frost and Sullivan (2020) (https://www.marketresearch.com/Frost-Sullivan-v383/Post-pandemic-Global-Healthcare-Outlook-13471750/). The level of unbundling, digital conveyance, and tolerance will once again play a crucial role in determining the pace and extent of growth in this sector.

The education industry has undergone a massive transformation overnight due to the pandemic, forcing educational institutions of all types worldwide to implement online education programs to protect their students from potential harm. Governments of various countries have temporarily shut down educational institutions to prevent the spread of COVID-19. As of July 27, 2020, approximately 1.72 billion students

worldwide had missed school due to the pandemic, with 106 countries implementing statewide school closures and 55 countries enforcing local school closures, affecting about 98.6 percent of the global student population, according to UNICEF monitoring (UNESCO, 2020). The key factors that have made this possible are once again the unbundling of education delivery and the increasing digital tolerance of the general public. While online education has gained popularity over the past decade, the pandemic has taken the online classroom to an entirely new level.

Moreover, even before the pandemic, e-commerce websites such as Amazon.com, Walmart.com, and Flipkart were gaining market share. This trend is expected to continue. Additionally, food delivery websites like Instacart and supermarket websites have experienced tremendous growth and success. During the pandemic, there was a record increase in the use of food delivery platforms such as GrubHub, DoorDash, and Uber Eats, as customers avoided retail spaces and dining establishments due to the ongoing risk of the epidemic. Even after the lockdown, these companies reported high double-digit sales growth. As a result, the COVID-19 crisis presented significant challenges for corporate enterprises, many of which were struggling to survive. The COVID-19 pandemic has forced businesses to take quick action, and as the virus becomes endemic, society is being forced to adopt new procedures and ways of life. In this environment, companies have a unique opportunity to develop new business models or improve existing ones by leveraging digital tolerance or unbundling goods and services from their value chain as a guiding principle. To thrive in the COVID era and beyond, companies must implement a new digital strategy, which is broken down in Section IV, outlining the most important aspects that need to be considered.

NEW DIGITAL STRATEGY

COVID-19 has not only caused immense suffering but also dealt a devastating blow to economies worldwide, proving to be an unavoidable component for any organization. The pandemic has wreaked havoc on health, social, and economic fronts, profoundly influencing the way business is conducted. As the world moves closer to endemicity, we are already seeing the early stages of a global recession. Business and organizational leaders face the daunting challenge of identifying and refining the business enablers essential to the economic well-being of countries. This new era is marked by shifting cultural norms, social values, changing attitudes, diverse viewpoints, and priorities, which are ushering in a new normal as the world rises from the ashes of the epidemic.

The COVID-19 pandemic has presented businesses with a unique opportunity to reset and reorganize their business operations to thrive in the new normal and survive in the gradual normal. Developing a digital transformation strategy to shift to data-enabled, digital technology is crucial for businesses to remain competitive and customer-centric in the digital age. Companies should also take advantage of the digital tolerance of their customers to engage with them through digital platforms, such as online purchasing, remote working, and online learning. Moreover, businesses should re-examine the value chain of their products and services and consider unbundling them to better cater to the needs and preferences of their customers. By doing so, businesses can become more agile, resilient, and adaptable to changing market conditions and consumer behaviors. Ultimately, embracing digitalization can help businesses not only survive but also thrive in the new normal and beyond. The COVID-19 epidemic has created a unique window of opportunity for businesses to adopt a new business model. With the transformed socioeconomic environment, enterprises can reset and reorganize their business operations, which will enable them to succeed in the "new normal" and adapt to the "gradual normal." To achieve this, companies need to develop a digital transformation strategy that involves the adoption of data-enabled, digital technology. Although such technology has been in the pipeline for a while, it was previously deferred due to issues such as scattered efforts, legacy systems, cultural barriers, or other factors. By embracing digital transformation, businesses can establish customer-centric processes that meet the demands of the changing market.

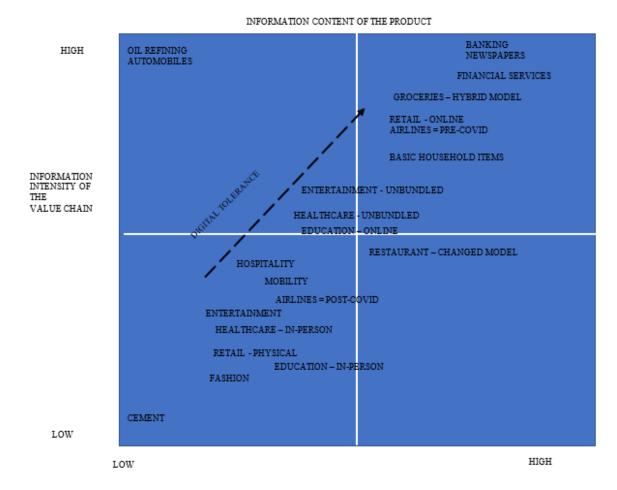
To effectively enable digital transformation, data-driven decision-making, and cloud-based infrastructure, organizations must prioritize creating new technology talent that aligns with their needs. As the adage goes, "digital acceptance will be the new standard," and businesses must strive to develop these new technological competencies. By adopting flexible cost structures, agile operations, and automation with the help of digital empowerment, firms can position themselves as leaders in their respective industries. These refined business procedures may serve as the foundation for the development of enhanced capabilities in e-commerce, which is expected to be the preferred mode of commerce in the "new normal." Additionally, digital capabilities can be leveraged to improve security and address supply chain disruptions caused by the pandemic. The globalized supply chain management methods have been exposed as flawed due to the extensive disruptions. After the COVID-19 crisis ends, industry leaders should prioritize the adoption of digital capabilities to optimize and safeguard their supply chains from future disruptions. As we move towards the "new normal," businesses should prioritize investments in cutting-edge technology such as blockchain and artificial intelligence (AI) systems, including machine learning and intelligent automation, to improve supply chain resilience. In the face of potentially catastrophic events like the COVID-19 pandemic, these technologies have proven effective in sustaining commercial operations. Rather than just focusing on supply chain efficiency through sourcing from low-cost countries, companies should redirect their efforts towards developing supply networks that promote supply chain resilience, including diversifying their geographic regions. Moreover, with the continuing "digital trend," businesses should also concentrate on enhancing the "digital experience" of their customers, especially through more personalized experiences such as product recommendations and communication. As the "digital trend" continues into the "new normal," businesses must prioritize undergoing a "digital transformation" to create a supporting technology platform that aligns marketing, operations, and sales teams with analytical techniques for sales forecasting and customer data analysis throughout the customer life cycle. Additionally, as consumers become more accustomed to using digital business models for shopping, learning, and entertainment, companies must rethink their supply chain models to adapt to this trend and leverage their digital technology platform to support the growing digital activities of consumers. However, it is important to supplement operations involving the development of enhanced digital business models with improvements in the digital skills of the workforce. Enhancing the digital abilities of employees is equally essential for creating a flexible and resilient company model that is tailored to the "new normal."

Connectivity is a crucial factor for both the new business model and the digital transformation plan, in both the "gradual normal" and the "new normal." Technological advancements such as 5G and edge computing are expected to play a significant role in the global economic recovery and the transition to the "new normal." The evolution of the business model to include wired and wireless technologies has been driven by the communications industry over the past decade. Even before the pandemic, organizations were digitizing their business procedures to take advantage of various digital activities. The pandemic has accelerated the development of technologies like 5G, despite the commercial case for switching to faster digital infrastructure technologies already being strong. The adoption of technologies such as 5G can enhance the digital capabilities of businesses, allowing them to strengthen revenue models, speed up important procedures, optimize operations, and solve difficulties posed by the "new normal." Given the critical role digitization plays in a company's redesigned business model, improving connectivity will be an important consideration across all sectors.

Finally, the level of "digital tolerance" among customers is another critical factor that will influence the future development of the business model. As we have seen, customer behavior has changed significantly since the onset of the pandemic, and people have become more accustomed to working and living in a digital environment. This has led to a growing acceptance of digital business processes and a higher digital tolerance level. As a result, businesses are exploring various approaches to separating their products or services from their physical value chains. There is a wide spectrum of possibilities, ranging from industries where it is challenging to unbundle key services for front-line personnel, leading to low digital tolerance, to industries where workers in the technology sector can perform their duties and produce results using only digital methods, leading to a high digital tolerance quotient. Most businesses fall somewhere in between these two extremes, and their success will depend on their ability to adapt to changing customer expectations and meet their digital needs. For instance, in the field of education, the quality of unbundling is poor for K-12 schools since social contact is an essential part of the educational paradigm. This is the case for elementary, middle, and high schools as well. On the other hand, there is the possibility of partial unbundling for undergraduate students, who tend to place a higher importance on

traditional classroom settings than they do virtual ones. The increased maturity of graduate students, many of whom are already employed full-time, makes them an ideal demographic for online learning environments. As a consequence of this, students in grades K-12, and particularly those in elementary and middle school, find that online instruction is highly challenging. The HIFLEX approach, which is a blend of in-person and synchronous online teaching, is one that many institutions have adopted for graduate students. Synchronous online teaching is another model that many universities have embraced. In the same vein, we should only anticipate a short-term transition to the digital model in the fashion business since the unbundling quotient in this sector is rather low. Because direct hands-on experience with a product is such an essential part of the retail business, digital tolerance is quite low. Due to the importance of hands-on product experience in the retail industry, there is a low tolerance for digital alternatives. However, the financial services sector has already detached all of its services from physical chains and moved to digital platforms, even before the pandemic. With the decrease in cash usage and the rise of Blockchain technology, the idea of currency has evolved. As a result, the financial services and technology industries have high digital tolerance, allowing for a complete shift to digital platforms. Similarly, e-commerce has transformed the retail sector, but during the lockdown, the entire industry relied on third-party logistics and shipping companies like FedEx and UPS by transitioning to online-only models. The perishables and food goods industry has a low digital tolerance quotient as customers prefer a physical connection with these products. Thus, we can expect this industry to shift back to a physical process. However, in the "new normal," a hybrid model has emerged where grocery shops pack food for online orders and place them in a slot box for delivery. Customers receive a postal box number and password to retrieve their orders. Other retail businesses are also adopting hybrid formats. For products that do not require a physical connection, customers have a high digital tolerance quotient and will likely continue to use digital activities for purchasing. The healthcare industry has unbundled majorly due to the pandemic and changing consumer preferences, resulting in an increase in telemedicine usage. Similarly, the education sector has already transitioned to online models for graduate degrees. The computer software sector has been an early adopter of remote work and is now implementing a hybrid model with a three-day "return to office" plan. Figure 2 shows the digital tolerance quotient and information intensity matrix for various sectors, indicating the placement of each industry's value chain on the quotient.

FIGURE 2
INFORMATION INTENSITY MATRIX WITH ADDED DIGITAL TOLERANCE
QUOTIENT



SUMMARY AND CONCLUSIONS

The emergence of COVID-19, a 'black swan' catastrophe, caught the global community off guard and caused a significant disruption to commerce. The worldwide lockdown brought economic activity on national, regional, and global scales to a halt. To better prepare for such calamities, firms should focus on innovation and adapting their business models. The relevance of digitalization, which was already a trend before the pandemic, is highlighted in this research. We also discuss how the business model has changed in the aftermath of the pandemic, and how digital-business procedures have been implemented to prioritize public health and safety. As companies gradually reopen, they will navigate a "gradual normal" and continue to implement pandemic-related safety measures. We anticipate that a "new normal" will emerge once the pandemic is no longer a threat and companies return to pre-pandemic levels. This "new normal" is a result of the knowledge gained from implementing intense digital procedures during the pandemic, mostly out of necessity. Additionally, many of the new behaviors that customers adopted during the pandemic are likely to remain, pushing companies to innovate in order to survive and grow in the postpandemic era. As the digital trend continues, organizations will need to prioritize digital acceptance in order to develop strong business models that are supported by a robust digital backbone and agile processes that can quickly pivot to changing circumstances. A fresh approach has emerged to guide organizations in developing resilient business models powered by a strong digital foundation. As companies recognize the dire consequences of relying solely on supply chains from nations with cheap labor costs, it's likely that future supply networks will be more diversified and robust. In order to bolster their digital infrastructure, companies will likely make substantial investments in cutting-edge artificial intelligence technologies such as machine learning and intelligent automation, as well as other digital technologies like blockchain. To prepare for the so-called "new normal," it is recommended that companies create a digital transformation plan. The pandemic may serve as a catalyst for businesses to innovate and reinvent themselves, especially those with outdated digital infrastructure prior to the outbreak. Research has shown that a new digital strategy customized to the client's latest digital initiatives will be essential for survival in the post-pandemic era. Additionally, it is essential to adopt new technologies, especially connectivity, and to improve the digital skills of the workforce.

This study argued that the pandemic is a phenomenon that can be viewed from two distinct perspectives. Despite causing significant disruptions to society and the economy, the current crisis presents unique opportunities for businesses to relaunch themselves in the new era of competitiveness with the "new normal." To take advantage of digitalization opportunities, businesses need to develop data-enabled, customer-focused, and adaptable business models. The research findings suggest that a consumer's "digital tolerance" towards change may be linked to the degree of digital unbundling in a product or service's value chain, which the study investigates further. The study also highlighted the varying stages of digital growth across different industries as companies undergo digital transformation. Some industries, like financial services and technology, have successfully developed digital business models, while others are actively revising their existing models to make the shift.

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