

## Digital Board of Directors: Futuristic Corporate Governance

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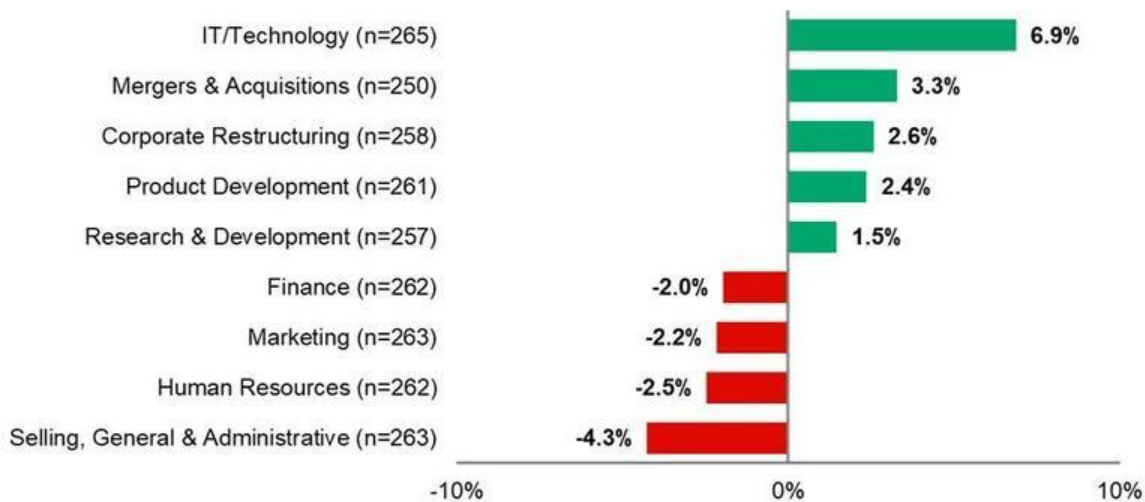
### Abstract

Digitalization is a long-lasting development that will have a profound effect on both cultures and organizations. The way a firm approaches the problem of digitization determines whether or not it can keep up with it, which is critical to its future success. The Board of Directors have a significant say in an organization's lead for adapting to its changing strategic requirements. Various boards have also previously been believed to be reliable, but this study shows that the efficacy of boards is dubious. So today's boards have the skills to help companies predict and build value in the future? A critical research issue is discussed through the introduction of a system where digitalization is expected to affect two specific board functions. It is our findings that the board would no longer consist of centralized groups of people with constant monitoring and correction requirements, but a decentralized network of experts where interventions from those on the ground are preferred. Additionally, we find boards should keep their agendas dynamic and use corporate challenges and opportunities as catalysts for decision making. The committee structure defines the terms of reference of the committee activity, and the activities are conducted according to the group's various plans, projects, and initiatives within the committee boundaries. A framework is proposed which has the objective of helping organizations understand what is required to keep boards current, given that organizations exist in a constantly changing environment. This is the first time in the field of board-to-research history that contributions to board theory have taken place by exploring the question of how boards need to change to fit into the current post-pandemic times. The practical importance of different requirements that go hand in hand with theory creates a theoretical needs for expanded definitions of what boards can and how they are built.

**Keywords:** Digitalization, corporate governance, futuristic board of directors

**Introduction**

As always happens in the complex world, the Corporations of this twenty-first century endured a long, stressful year with complex issues, unforeseen problems, including the COVID crisis, unprecedented workplace changes, and volatile business, and the topic of climate change, and (the real kind) in 2020. These events transformed the market environment significantly. We wonder if the boards we see today will provide value for enterprises and society tomorrow in a quickly moving environment where digitization has and continues to affect society's, corporate, and individual behavior. What will boards of directors look like in the future, how will they gain knowledge and skills, what will they do, and what topics will they address in the corporate world? We want to talk about these concerns and start a discussion so that we can create the groundwork for research that will assist boards of directors in better prepare for the Directors of the New Age of Corporate Governance. According to a Gartner report, about a third of board members believe their companies' business models would alter as a result of the pandemic. Sept 2020.



Average Budgetary Changes in 2020 as a Result of COVID-19 Impact

Source: Gartner

A recent survey by Gartner claims that 69% of BoDs initiated digital business acceleration in the face of lockdown due to pandemic. Because of the pandemic, nearly half of those surveyed expect their organization’s business models to shift. From May to June 2020, Gartner polled 265 directors or board members from the United States, Europe, and Asia-Pacific. The purpose of the study was to learn how board members view digital business transformation in their organizations, as well as the role of the CIO and other executive leaders in it, particularly in light of the COVID19 problem. There is currently a digital revolution, often known as the "Information Age" or the Third Industrial Revolution. (Brown & Marsden, 2013). "Digitalization" includes the availability of vast volumes and types of data (big data), enhanced analytical and processing capacities based on algorithms (algorithms), and crowd/sensor approaches that increase the flow of knowledge. A growing amount of digitalization is affecting both society and businesses, and this means that companies' strategic characteristics are changing over time. The impact of digitalization was demonstrated when the

Banking CEO made a statement that “the industry is in the midst of a transition that happens once every century.” (Hirt & Willmott, 2014). This emphasizes the importance of businesses responding to risks and opportunities in a changing environment to maintain or increase their competitive advantage. John Chambers, Chairman of Cisco, demonstrates the potential impact of these developing issues and opportunities (McKinsey, 2016). He asserts that "technology has the potential to become a corporation," and he emphasizes the fundamental change and disruption that digitalization will bring about in organizations. Digitization has a ripple effect throughout the organization, not just in the information technology department (IT) (Valentine, 2014). Another one of the most significant effects of digitization is the shift in how different companies compete with one another in this regard, which is one of the most significant effects of digitization. (Riasi & Pourmiri, 2015). In the modern marketplace, digitalization has created an environment more dynamic as compared to its history. (Ansari & Riasi, 2016). Only those corporates with the resources and knowledge to capitalize on these advancements will be able to thrive in this highly challenging climate. (Ansari & Riasi, 2016; Riasi & Pourmiri, 2015).

The Board of Directors, which sits at the top of the corporation, is a major lever for responding to these shifting organizational situations. Boards of directors may be the most powerful organizational entity in terms of impacting corporate performance and actions. They participate in the planning process at various stages and have an impact on corporate decision-making. (Huse, 2007). Nothing, according to Leblanc and Gillies (2005, p.6), is more important to a company's success than its board of directors. As a result, boards of directors in the digital era must place a greater emphasis on implementing instrumental change, even if other organisational bodies, such as the top management team, have influence over how changes are implemented. To study how digitalization can affect boards, we take a multi-theoretical approach based on dynamic skills and claims from a variety of theoretical backgrounds, including team production theory and shared leadership theory.

Hirt and Willmott (2014) identify digitalization as having the potential to "rewrite the rules of competition," and this gives clear evidence that the effects of digitalization are huge, but it also presents huge risks. This was vividly proven, as Elkind (2015) points out, in the example of Sony Pictures, when "the cyber-invasion knocked Sony Pictures to their knees and horrified corporate America." The company's management team was fully uninformed of what had happened as a result of the theft of secret corporate information, and their failure to respond promptly led to the film's cancellation and a big financial loss. Taking an indifferent approach to digitization can expose firms to a variety of dangers, including those posed by competition, as well as financial, legal, and reputational problems. (Nash, 2012; Valentine, 2014).

## **Objective**

The main goal of this review article, titled "Digital Board of Directors: Futuristic Corporate Governance," is to identify and discuss emerging difficulties originating from digitization technologies and their implications for corporate governance. The objectives of our introduction to this special issue are twofold:

- To explore the effect and impact of digitization on the Board of Directors in the Boardroom.
- To explore the key challenges of corporate governance concerning digitization.

## Methodology

Scholarly papers reviewed in this paper were found by searching journal databases like Mendeley and subject-specific technical websites like Google Scholar. When looking for articles, keywords used like digitization, corporate governance, and digital board of directors. The inclusion requirements for selected papers mandated that they be specifically relevant to the subject of digital boards of directors and corporate governance. We looked at both qualitative and quantitative papers. Qualitative articles shed light on the issue by assisting in the understanding of causes, views, and motives. Quantitative articles, on the other hand, make use of measurable data to shape evidence and uncover future trends in corporate governance.

### 1. Literature Review:

In today's world, digital board of directors and board governance are not for the faint of heart. Board directors must understand how to govern in an era of growing digitization, which has resulted in new and difficult concerns such as a volatile economic and social climate, as well as disruption. When we consider the problems posed by innovation and globalization, it's evident that board members must be able to think quickly on their feet, be inquisitive, and respond to a range of situations. In today's business world, it's not uncommon for new enterprises to pop up out of nowhere, threatening to push long-established businesses out of business in no time. Today's boards of directors are faced with the challenge of dealing with public scandals, cyberattacks, data breaches, sexual harassment, and a slew of other hot-button issues while also strategizing to stay one step ahead of the competition and competing with new types of businesses. To the list of mainboard issues, we can add activist investors, a competitive market, and public worry about fraud. These and other concerns have made it more difficult for shareholders and other stakeholders to have faith in boards of directors and other business leaders.

- a. Examine how digital may affect the economic model:** Only a small number of board members are familiar with the digital demands and issues that are threatening their existing business models. However, boards must pay attention to these demands and understand customer experience while designing business models that take people's needs into account. Company executives should be encouraged by their boards of directors to investigate and explain their company's digital assets, such as data patterns, machine learning, and big data. Companies should investigate whether their managers are utilizing digital tools to obtain knowledge, develop plans, and develop lines of goods, among other things. (Adámek, P. Meixnerová, L. 2020) create proposals for the increased demand for innovation and flexibility for the resilience business model to respond to the new modified “post COVID” business environment.
- b. Bridge the gap in perspectives:** Once you expand the board beyond digital directors, additional responsibilities are needed. There are expectations from customers, firms, particularly e-commerce-based companies, for mobile, digital, and security technologies. Moreover, there is also a corresponding desire for increased knowledge and experience amongst investors in the aforementioned platforms: from e-commerce, Internet of Things (IoT), and big data, specifically. If individual lines of product features are concerned, board members should be given access to digital skills that can be added to a training initiative to enable stronger, wider boards. Creating, specialist subcommittees and advisory boards may also provide further input on this Board's

decisions. A different technology council can make a bold proposal to restructure the business around consumer relationships. McKinsey's analysis shows that, in key areas of the business model, firms' digital technology adoption speeds up by three to seven years in months. This newest data indicates that the speed of fundamental business practices, which was thought to be the fastest throughout most of 2018, is now slower than average. Companies with the strongest technological endowments operate at a more rapid speed (McKinsey. 2021, May 26).

- c. Involve strategy and risk more and more frequently:** Rather than simply meeting on an annual or quarterly basis to discuss policy, board members should be more involved in the operations of their companies. An instructive example is the digital damage caused by a small cyberattack that results in a company's capitalization shrinking by a third within a single day, and on the other hand, a significant competitor quickly takes over a product category with a new product that they introduce in less than six months. Another advantage of the board's involvement in bridging the gap between short-term results and long-term goals is its relevance to overall organization strategy. (McKinsey & Company 2016) advises boards of directors to start asking management strategic questions like "When do you know that your product is gaining on with the customer base?" "When do you expect to raise client awareness and decrease customer acquisition costs?" and "How will you improve customer adoption and lower customer acquisition costs when that happens?" This is the digital age risk analysis and discussion has to be prioritized, larger importance should be placed on it. Some current board directors believe they have the required controls, metrics, and reporting in place to deal with hacking assaults, while the majority do not believe this. Using a Digital Dashboard with key operational performance indicators (KPIs), the board of directors of a global bank tracked the percentage of daily service transactions that were completed without human intervention. Directors used these KPIs to assess the digitized delivery of financial services, which was frequently provided by new competitors. (Sarrazin & Willmott 2016). To close the knowledge gap, both parties must work together to give useful numbers. In order to keep directors "outside," digital media must remain a nerd's play area where exclusive insights are generated. Dashboard reporting can be made valuable to boards with the help of significant input from the technology side.
- 2. Key Challenges of futurist Corporate Governance in digitization:** Since nearly 50 years ago, most boards have rubber-stamped management decisions (Mace, 1971). Then, there has been a lot of controversy about the specific goals of boards and who should be held responsible for them. Some of the guidelines adopted today, however, also emphasize the independence of directors in order for them to effectively control management in interest of shareholders (Fama & Jensen, 1983). After the financial crisis in which companies find themselves, the issue is more pertinent than ever before as to how board members will generate corporate value in a highly competitive and rapidly evolving market climate. As companies will change in the future, these discussions are becoming increasingly important. With these shifts, we might begin to see organizations going through various closure and/reconfiguration pathways where the importance of a board to value creation has shifted (Tihanyi, Graffin, & George, 2015). As a result of these shifts, scholars have begun to question the ability of boards of directors to carry out control functions efficiently (Boivie, 2015), and even the significance of boards of directors in terms of organizational significance in general. (Gillespie & Zweig, 2010). This is the next stage of

development and to embrace new ideas and techniques, we must let go of our entrenched attitudes and routines. If this issue is not addressed now, while the changing business climate and its impact on boards are ignored, boards may have no impact at all. As "boards' attention has switched more and more to compliance instead of quality" around the world, this trend may have already begun. (Heidrick & Struggles, 2014).

While it is impossible to predict future changes with confidence and must rely on specific indicators of change, current trends point to the following digitalization consequences. While other concerns are more likely to be introduced, we believe that these are the most significant challenges that businesses will confront and must overcome to maintain or increase their competitive advantages. We believe that, in the future, practically all organizations will be impacted by digitization, forcing them to change and allocate their resources to meet the demands of the new contexts in which they will operate. In the following paragraphs, we will discuss how an ever-changing competitive environment, short-term strategy, and the availability of large amounts of data will affect and challenge those companies.

- a. *Expansion of Strategic Scope:*** Digitalization creates rapid shifts and more challenges within the competitive landscape and thus greatly affects the way companies do business (Ko & Fink, 2010). Entrance barriers are lowered while simultaneously challenging and uprooting the value chains, industrial structures, and business paradigms. (Schwab, 2016). As a result, global competition increases as competitors who have concentrated and moved quickly into markets can compete more easily. (Hirt & Willmott, 2014). As a result, having a varied skill set is a vital factor for corporates success. (Lasi, Fettke, Kemper, Feld, & Hoffmann, 2014). Digitalization, on the other hand, might pose substantial concerns due to the high amount of transparency provided by developing technologies, making it easier to compare pricing, service levels, and product efficiency. This can result in the loss of a knowledge monopoly and the emergence of a "strictly competitive game" among enterprises. (Ernest & Young, 2011). Due to this constant change in the competitive business environment, temporary advantage portfolios can be developed as opposed to long-term competitive advantages, which can quickly deteriorate. (Kriz, Voolab, & Yukselb, 2014).
- b. *Handling Large Data Sets:*** The way information is formed by the data made available to companies changes dramatically as a result of digitalization. According to Constantiou and Kallinikos (2015), A database known as "big data" can be defined as follows: "Big data is information that is derived from massive amounts of data available online and on traditional digital media ecosystems, and is also known as "big data mining." Businesses will be impacted in different locations, as well as different functions within the business, thanks to big data. (Dahlberg & Nokkala, 2015, Zuboff, 2015). It might "become a major basis for competition," according to the report. (Manyika et al., 2011). This is because the availability of such data, as well as firms' ability to absorb and use it to commercial objectives, and hence the utilisation of their absorption capacity, has an impact on how businesses conduct strategy and decision-making. (Constantiou & Kallinikos, 2015; Newell & Marabelli, 2015). Clients who employ Big Data and Analytics to stay competitive and effective in today's market environment are also subject to modern audit commitments. Customer service is now interwoven with cloud, IoT, and external data sources like social media. Furthermore, several collaborative clients are

increasingly merging Big Data with sophisticated and nuanced business analytical tools to generate information for decision-making. This circumstance presents practically limitless opportunities for the board of directors, as well as a pressing need for sophisticated analytics.

- c. Short-Term Strategic Planning:* Consumer needs and competitive situations generate data and information on a regular basis (Dreischmeier, Close, & Trichet, 2015), and incorporating these data as inputs to the strategy process allows for a faster understanding of and seizing of possibilities. In this setting, businesses must be able to respond in real time to strategic difficulties, which usually rely on large data "acquired through structured and intentional processes that fulfil distinct knowledge demands." (Constantiou & Kallinikos, 2015, p.4). Due to the increasing difficulty in forecasting future developments and delegating responsibility for executing a long-term strategy in an environment where strategic environments are constantly changing, traditional strategic tools to make long-term strategic forecasts are being challenged. (Dreischmeier et al., 2015). Instead, businesses are shifting their attention to short-term strategic planning, where the ability to respond quickly to ad hoc requirements as well as the ability to adapt to constantly changing requirements is becoming increasingly important. (Constantiou & Kallinikos, 2015).
- 3. Depersonalization of Organization Structures:* Newell and Marabelli (2014) propose that awareness and information exchange can occur outside of organizational boundaries, in line with the promises of the crowd method. It is only internal information and knowledge flow that can be replaced by processes in which external actors are involved in a way that result in shared value being generated as a result of their interactions. (Newell & Marabelli, 2014). Companies must form strong collaborations with partners, organizations, and customers in order to disrupt virtually every customer-centric industry using disruptive technology. (Dreischmeier et al., 2015). They have designed a plan to achieve this goal by establishing relationships with other companies, working together within a corporation, and temporarily acquiring the ability to accomplish joint goals. Firms must develop their knowledge-based skills, learn from partners, and absorb information into firm-integrated knowledge to build such collaborations across wider digital environments, which can become key to strategizing. The impossibility of clearly delineating company boundaries means there is an inherent conflict between spreading knowledge and protecting one's core competencies. The ability to manage strategic paradoxes successfully (Smith, 2014) may become a significant success factor. We believe that boards of directors, which serve as the organization's primary decision-making body, will have a substantial impact on their organization's capability to expand its dynamic capabilities (O'Reilly & Tushman 2007; Teece 2007) and adapt to the aforementioned digitization repercussions. (Valentine, 2014). In order to generate value for their enterprises, we urge that boards of directors actively participate in the strategic decision-making process connected with developing technologies. According to recent study, boards of directors no longer have the option to disregard or postpone critical strategic choices concerning digital technologies. (Jewer & Mckay, 2012; Valentine, 2014). By testing core assumptions, ensuring that investment decisions and digital technology goals optimise returns while avoiding risks, and grabbing technological opportunities before they fully materialise, boards of directors involved in these decisions can offer tremendous value. (Valentine & Stewart, 2013). If boards adopt a limited, protective

approach to these challenges, they run the risk of "flying blind." (Carter & Lorsch, 2004). Furthermore, by actively participating in these issues, they can acquire credibility as change agents, which can influence how different organizational levels cope with change and how firms develop dynamic capacities. (Huy, Corley, & Kraatz, 2014). The problem of how digitalization will influence organizations and challenge their competitive edge is linked to how boards will contribute to corporate value generation in the future. The advances discussed lead us to consider how the boards will be influenced by digitalization and how they will respond. Our goal is to set up a structure and make ideas in two major areas where we believe adaptation is possible. We argue for these repercussions and solutions in the following chapter, proposing (i) that boards can expand into networks and (ii) that a board agenda can take the role of board tasks.

**4. *Board of Directors Initiatives to put digitization in practice:*** Board roles other than management have been highlighted for a long time (Zahra & Pearce, 1989), and boards may be employed as strategic decision-making committees instead. (Forbes & Milliken, 1999). With the purpose of better understanding the role of boards in various activities and tying this to organizational outcomes, a significant amount of work has lately begun to look at the multiple dynamics within and beyond the boardroom. (e.g. Huse, 2005; Minichilli, Zattoni, Nielsen, & Huse, 2012; Zattoni, Gnan, & Huse, 2015). Approaches based on onboard protocols have been employed to explain their actual actions. (Finkelstein & Mooney, 2003). These in-depth research have undoubtedly improved our understanding of boards of directors and paved the way for corporate governance principles and best practice norms aimed at increasing organizational value. In this climate, particularly in light of technology improvements, we believe that the role of independent directors in properly regulating management will become less important as a deciding factor for board nominations. Whereas in the past, knowledge sharing was primarily internal, today's world sees information being shared across organizational boundaries. Through feedback and comments, the crowd gathers and shares information and awareness about organizations, which is then made readily available to the general public. (Newell & Marabelli, 2014). These types of reviews and comments have been identified as having an impact on how stakeholders perceive organisations and how organisations and the Executive Team operate. (Orlikowski & Scott, 2014). In cases when information about a corporation is widely available, the crowd can consequently exercise indirect influence over management. The increase in digital traces and the accessibility of additional information mean that companies will see it as open to the public and change their behavior.

**a. *Role of AI in CG: Digital Structures that incorporate AI:*** A more digital form of machine learning is reshaping computing. Google's machine translation software, Google Translate, underwent a rapid, unexpected transition to being an AI-based system in November 2016, and this switch resulted in a marked improvement. One hundred languages increased to over 500 million monthly users, which reached nearly all of Google's global, European, and U.S. users in just nine months. (Lewis & Kraus, 2016). Another example is the five-fold increase in better Arabic-to-German translations as a result of the recent European migration crisis. With regard to the cumulative gains of Google Translate software, the advances made by this machine learning AI system are approximately equal to the progress made so far. Artificial general intelligence (AGI) is based on the objective of developing artificial intelligences that use implicit and



interpretive knowledge to accomplish goals, without being told how to do so. A neural network, just like a baby, uses trial and error to learn about the environment, and then tries to become versatile like a human. Therefore, computers learn by observing and analyzing data rather than by observing and analyzing models (from rules). With its Google Brain initiative, Google decided to reorganize itself around AI, resulting in an industry-wide concentration on machine learning. Executives (and, most likely, board members) are being prepared for future AI business applications involving self-programming robots by management consultants. (Lewis & Kraus, 2016). Because AI is so good at processing enormous amounts of data, even those who don't have regular access to it can finish their task swiftly and efficiently. Unaffiliated directors, audit committees, accounting firms, liquidation commissioners, and arbitrators are examples of these. In the opinion of Professor Mosco, artificial intelligence (AI) will usher in a new era of strategic and operational management: one that is small and open, digitalized, and centered on innovation. (Mosco, G. D. 2020).

- b. *Corporate dashboards:*** According to McKinsey & Company and Lev/Gu, the systematic disclosure of information should be focused on the fundamentals of doing business in this digital age. A set of forward-looking success and growth indicators that emphasize the company's strategy and progress, as well as the challenges it faces, is a viable alternative to historical financial statements. This type of data is commonly published in a haphazard or inconsistent manner, in annual reports, for example, investors' quarterly Wall Street conference calls, meetings, and discussions, and management analyses in Wall Street conference calls all year round. Other businesses do not have access to this information, making it impossible to make competitive comparisons. Einstein also cautioned, "Counting everything doesn't guarantee that it's measurable, and measuring everything is impossible." "Not everything that counts can be counted," says the narrator.
- c.** One approach, in addition to the traditional Balanced Scorecard methodology, that would help you is to organize digital dashboards like the comprehensive Balanced Scorecard methodology, which includes the financial, customer, internal business, innovation/learning, and risk management categories, as well as the recently added risk management category. (Frigo, 2012). Such information should be included into industry-specific, comparable strategic information systems, which should reflect the organization's strategy and execution success, as well as the production of value. (Lev & Gu, 2016).
- d. *Redefining traditional bookkeeping:*** Baruch Lev and Feng Gu said in their new book, *The End of Accounting*, published in June 2016, that obscure accounting procedures do not serve investors well and that new ways of measuring a company's success are needed. In this new era of digitization, the Digital Dashboard, a new solution for corporate executives and boards of directors, would be beneficial. "Old-economy" companies like oil and steel companies, automobile manufacturers, and other traditional manufacturing businesses, the authors claim, are subject to an arcane set of accounting rules and regulations that do not reflect economic realities. For "new economy" businesses like technology, software, biotechnology, and internet service providers, new indicators are required. In this digital age, new measures are necessary for both "conventional" and "new-economy" enterprises, thanks to the introduction of digital 3D/AM technologies. In the context of traditional financial accounting, the reported financial results

present an alternate reality that fails to adequately explain the main forces that affect a company's well-being or decline. It is necessary to invest the most valuable value-creating investments in patents, brands, information technology (IT), and other intangible assets, rather than just representing future worth or benefits, in the same way that salaries and rentals are spent in the same way. A company's earnings are comprised of both long-term and one-time sustainable growth in addition to temporary profits and losses. Projected bad debts, potential pension commitments, stock option expenses, and asset impairments or write-offs are just a few of the subjective management assumptions and estimates that go into reported results. As a result, the authors stated that all of this reporting leads to backward-looking accounting statements that don't reveal anything about a company's future growth and competitiveness. Researchers have observed a rising gap between profits reporting and share prices, notably among new-economy technology and science-based firms. Earnings no longer have the power to anticipate future firm performance, which is how investors utilize them to do so. (Lev & Gu, 2016).

- 5. *Disruptive digital strategies:*** Amazon maybe recreating a grocery shop, indicating the digital revolutions that McKinsey & Company has warned about. A grocery shop format that functions without checkout lines is now being tried in Seattle. Customer enter the store by scanning a new app called Amazon Go, and sensors will capture the items selected by the customer and automatically upload them to the Amazon app. Returning goods to customers will disqualify customers from receiving a refund. As well as foods such as bread and milk, the store also offers ready-to-eat meals. Amazon has been conducting various experiments with the \$800 billion food and beverage industry, trying out various new approaches. Amazon Prime Now, which provides one- or two-hour delivery of last-minute items, is also a good service for those who want to buy food. "We are delighted by Amazon's presence in this industry," one financial analyst said, "which we regard as ripe for future disruption, given that younger demos increasingly consuming food and beverages through digital channels." (Associated Press, 2016). Amazon made history in December 2016 when it made the first drone delivery to a live customer. Amazon received a patent in April 2016 for airborne filling centers, which are gigantic flying warehouses (AFCs). In and out of AFCs, which will be located approximately eight and a half miles above urban areas and serve as drone home bases, drones will fly in and out of urban areas. At the moment, Amazon Prime Air drones can carry up to five pounds of cargo. According to the patent, each AFC is a self-powered conductive or lighter-than-air aircraft that can transport freight, warehouse personnel, and drone launch platforms. Drones can fly to nearby ground-based materials handling facilities after delivering AFC cargo to clients. Drones, additional supplies, and possibly personnel would be sent back to the AFC by a replenishing shuttle, a smaller airship. The AFC is not tied to a specific location and can relocate based on a variety of factors such as weather and anticipated or actual demand, such as for the Super Bowl or World Series. (Castelluccio, 2017). According to the plan, Amazon will use unmanned aerial vehicles (drones) to deliver small packages across the city, which could reduce the cost of small package delivery in the city to \$1, compared to the current options of UPS, FedEx, the U.S. Postal Service, and delivery services, which contribute \$82 billion to the market. (Levin & Soper, 2016). Another challenge for Amazon is the 6.2 million employees that work in businesses such as General Merchandise, Apparel and Accessories, Furniture and Other Sales (GAFO) stores, which are located in malls or shopping centers. A \$1.8 billion decline in GAFO store revenues took place in 2016, and over the

last two years, over 125,000 retail workers were laid off. Meanwhile, internet sales grew by \$14 billion in 2016, with Amazon accounting for a significant share of that growth. From 2014 to 2016, internet sales rose by 19 percent, with Amazon being responsible for about a fifth of that growth. A spokesperson predicts that Amazon will cut more jobs than China, which cut 2 million over the course of its history.

**6. Conclusion:** With this paper, we hoped to suggest a potential research agenda that would focus on how boards of directors could add value to organizations that were dealing with challenges in the digital age, and in doing so, we intended to make great progress in the areas of corporate governance and boards of directors. Other academics are encouraged to follow the study's recommendations and contribute to a shared understanding of how boards of directors are responding to future difficulties as a result of their findings, according to the authors. It's tough to predict how they'd look in depth. There is a scarcity of study on the impact of digitalization, and little is known about how it affects firms in general and boards in particular. As a result, we must base our research on certain broad assumptions about how businesses will operate in the future. The modern era of corporate governance, on the other hand, has reached a watershed moment in its development. This could eventually lead to artificial intelligence completely replacing members of governing bodies and taking over the management of the company. He can work at any time of day or night, process any data he has access to, call and use that data almost instantly, and perform his duties without being compensated (Möslein, F. 2018). Armor and Eidenmueller claim that in the case of highly specialised subsidiaries, which can serve as a transitional step between fully autonomous organisations and their parent company, this can happen rather quickly. (Armor, J., & Eidenmueller, H. G. 2019). Armor and Eidenmueller have used AI to enable the establishment of a taxi fleet in the form of a group of autonomous automobiles, with the AI managing all actions. For instance, AI may drive a cab while also processing orders, invoicing, and communicating with consumers. Due to the significant changes that we anticipate taking place, academics will be forced to rethink and challenge their assumptions about boards of directors and corporate governance. It is impossible to overestimate the value of recalling past lessons, but in today's more complicated and fast changing environment, it may be even more vital to look ahead and anticipate future subjects of relevance. Developing an understanding of future boards of directors as well as predicting their position within organisations and the corporate governance system is necessary in order to make a genuine contribution to practise as well as to society. In the long run, it is possible that continuing to use current general corporate governance methods will be of little benefit. (Ahrens, Filatotchev, & Thomsen, 2011). This is why we believe it is time to start discussing this now. In this context, we are especially pleased to see that this essential topic has recently attracted growing scholarly attention across a wide range of disciplines and has been discussed at some of the world's most prestigious management conferences, both locally and internationally.

Finally, the study's goal was to serve as a starting point for further investigation into boards of directors by providing a starting point for analysis and practice. The approach we took to this assessment, we both believe, was broad, taking into consideration probable organizational changes that could have an impact on boards of directors in the (near) future. This is a study limitation, we acknowledge, because we do not limit our proposals to any particular global civilization, and there

may currently exist policies and legislative arrangements that are diametrically opposed to what we recommend in our study. To pursue this approach, future research should adopt and adapt our structure for the purpose of further investigation. Direct digital capacity, like the director's digital capacity, and boardroom use of technology are not covered in depth in this report, meaning future research in this area could be very significant. In addition, rather than providing a comprehensive overview of all changes that may occur, we intend to make specific recommendations about areas that we believe should be further investigated in the future. We keep our research to a narrow set of hypotheses. Therefore, we avoid looking into topics that will not change, such as executive nominations, salaries, and layoffs. There is a strong possibility that other researchers will contribute to this list and assist us in developing a more comprehensive understanding of boards of directors and their operations. It is also possible to operationalize, empirically evaluate, and conceptualize the propositions outlined in this study in greater depth than they have been thus far. If board research is conducted in this manner, it has the potential to have real-world and practical implications. Boards of directors will be better prepared to respond to the demands of a digitalized world in the future, and they will be able to make a positive contribution to the creation of value and the development of long-term competitive advantages within their organizations.

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