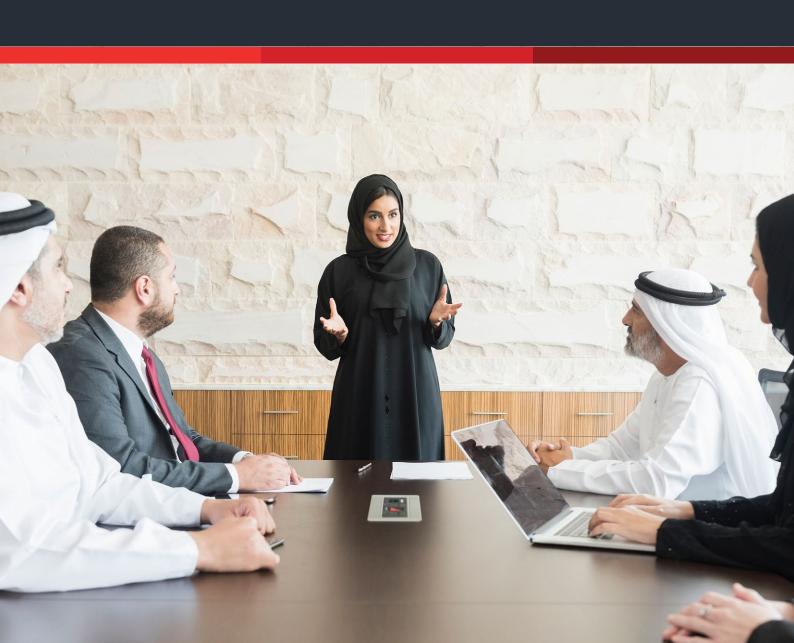




Corporate Governance in the Age of Digital Transformation

Has Digitalization Led to Governance Changes In Organizations?



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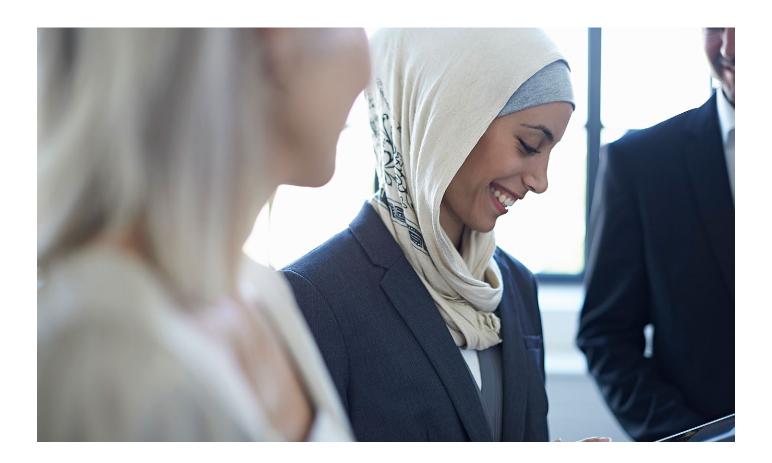
Introduction

The rise of the digital economy is one of the defining features of the 21st century. Digital technologies affected societies and economies in many ways, via new means of communication and collaboration; the role of data as driver of economic growth; the automation of tasks with artificial intelligence (AI); and the emergence of new business models such as platforms. Digitalization is therefore fundamentally transforming the way we live and work together. It has consequences for the well-being and cohesion of society as a whole; as well as deep impacts for businesses in all sectors, through effects on productivity, employment, skills, income distribution, trade and the environment.

The exceptional disruption by COVID-19 and its countless variants is accelerating the urgency for agility, adaptability, and transformation. In most countries, the need to transform models of doing business through the implementation of online economic transactions has become urgent. Needless to say that the implementation of these processes required, in addition to the appropriate IT support, a certain level of knowledge and skills of working in the information environment, both among consumers and business entities to enhance cyber defenses against critical infrastructure breaches or cyber regulations to safeguard data and privacy.

The speed of change due to the exponential nature of technological advances, the great utility of digital technologies in all sectors and industries, and their profound capacity to transform entire systems of production, management and governance bring opportunities but also complexity and uncertainties to the dynamics of development.

It is quite important to realize that digital transformation must start with a readiness assessment, and the plan should be to address these gaps before piling on the impact of an initiative of as great strategic significance as digital transformation. If those gaps in coverage, access and use are properly addressed, digital transformation will play an essential role in the economic recovery and holds the potential to help overcome the persistent challenges and support the sustainable and inclusive development.

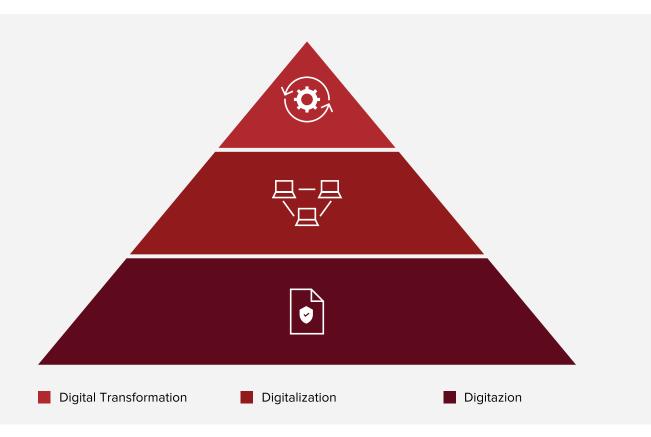




Digital Transformation Pyramid

Difference Between Digitization, Digitalization and Digital Transformation

FIGURE 1: Digital Transformation Pyramid



With dominance of digital technology, new concepts have been created to better understand and manage resources. Therefore, concepts such as "digitization," "digitalization" and "digital transformation" are becoming increasingly common in boardroom conversations, but their exact meaning sometimes gets lost as leaders work to find the best solutions to their business problems.

Today, some people, mainly active in the document and scanning business, still use the term digital transformation while they mean the digitization of documents and processes. Accuracy in communication is one of the most critical communication skills to understand stakeholders' frame of reference.

Starting with the term **Digitization**. Digitization refers to creating a digital representation of physical objects or attributes. For instance, we scan a paper document and save it as a digital document (e.g., PDF). In other words, digitization is about converting something non-digital into a digital representation.

Digitalization refers to enabling or improving processes by leveraging digital technologies and digitized data. Therefore, digitalization presumes digitization. Digitalization increases productivity and efficiency while reducing costs. It also, improves an existing business process or processes but does not change or transform them. It takes a process from a human-driven event or series of events to software-driven.



Digital Transformation goes beyond digitalization by creating a comprehensive change to a company's business strategy. That company might implement an isolated project as a digitalization effort, but a project that has digital transformation, as its goal will create change across all departments.

To be successful in digital transformation, decision makers who are serious about pursuing digital transformation, need to develop business plans that prioritize digital initiatives, define the disciplines this transformation will use to deliver value to their stakeholders. In other words, companies should frame their digital initiatives around specific business strategies and objectives.

Executive Summary

Hawkamah institute in collaboration with Diligent conducted a study on digitalization and how it is implemented in different kind of organizations based in the MENA region and some countries globally (UK, US, India, Pakistan, South & West Africa).

Our survey aims at tackling the impacts and challenges faced in executing digitalization and how it is affecting decision makers and board structure processes.

Our report paints a picture on the impact of digitalization through a governance lens, and from there, to outline the role of the board of directors in providing the relevant oversight of the overall digital transformation process.

We surveyed more than 40 organizations from 14 countries; majorities were listed companies representing 32%, Banks 17% and Government and state-owned business 29%. Overwhelmingly, results shows that digitalization is having a major impact on those different sectors. More than three quarters of the respondents said that digitalization had significant impacts on their overall business processes.

Another key finding of our survey is that companies are at very different stages in their journey of recognizing the impact of digitalization on governance's processes. More than 50% reported witnessing governance changes caused by digitalization on different levels of their companies, while 44% have not seen any notable governance changes.

Our respondents are mainly senior executives; CEO, CFO, COO (24%), board members (21%), and the remaining 55% are professionals and experts in different functions such as IT/Cybersecurity, Advisory, Compliance, Audit and Risk Management.

Global Regulatory Framework and Challenges

Today, regulators and policymakers globally face multiple challenges: they must address the traditional aspects of information and communication technologies (ICTs) and assess their appropriate roles in addressing the regulatory and policy issues arising from the new digital technologies and services.





Some countries are reforming their legislative frameworks to clearly accommodate new digital services, as the European Union has done with the European Electronic Communications Code (EECC), which represents a revision of the entire EU regulatory framework for the telecommunications sector. Another option is to review regulators' competencies to determine whether it is appropriate to expand their mandate or establish a new digital regulator.

While some countries are already seeking to fit digital technologies into their regulatory frameworks, many others have yet to begin the process, outreach and open consultations are crucial to engaging stakeholders while evidence-based decision-making processes are essential for each country to find workable, reasonable and flexible solutions.

The Organization for Economic Co-operation and Development (OECD) recommends that digital transformation policies need to be coordinated among all policy domains and actors affected by (and affecting) digital transformation. The OECD also recognizes that there is no single solution for governance, which must be adapted based on each country's institutions and regulatory culture and capacity, as well as understanding that these structures will continue to change over time.

There are currently two visions for the future of digital technologies that could create two distinct models for digital governance:

- a. An authoritarian vision drives the first model. Most notably, China is emerging as the standard-bearer for this model with its desire to "reinvent the internet." China seeks to champion the concept of "cyber sovereignty," allowing countries to control access to the internet, censor content, and institute data localization requirements, as a pretext to protecting individual national interests. Politically and economically, the spread of this model around the world (especially among developing countries) could lead to long-term stability and sustainability issues undermining the internet's free, open, and interoperable nature that allows the digital economy to thrive. To achieve this outcome, China has leaned on multilateral processes and institutions like the International Telecommunication Union.
- b. The second model is the European Union's General Data Protection Regulation (GDPR), which provides a more democratic concept for digital governance. The adoption of the GDPR has been a turning point for global internet governance as consumers gained unprecedented control over their data in a manner that preserved freedom and openness online. This model primarily seeks to protect the privacy and rights of internet users and online content consumers. Adopted with the overwhelming support of the European Parliament in 2014, the GDPR came into effect in May 2018, giving firms that rely on digital technologies the opportunity to modify their data usage and privacy policies. The GDPR also bolstered the cybersecurity efforts of firms, guarding them against potential data breaches. Ultimately, the level of compliance required by the GDPR proved to be a powerful way for businesses to increase consumer trust.

With a growing middle class, many developing countries face pressure to adopt policies that facilitate science- and technology-led innovation to generate greater economic growth. These countries also face the option of whether to draw upon the Chinese model or the European model.

Digital transformation should occur hand in hand with human capital and legal framework developments. As technological advancements proceed, an economy's productivity gains rest upon the capacity of companies to take advantage of the opportunities offered by new technologies. At the same time, legal codes need to catch up with the digital world and provide certain and simple rules for digital business models (e.g. E-commerce, sharing economy, Fintech). Few countries are already advanced on all aspects as showing in the table below:





FIGURE 2: Top 10 countries on Digital legal framework

United States	>	78.0%	
Luxembourg		77.4 %	
Singapore		76.5 %	
United Arab Emirates		72.5 %	
Malaysia		70.0%	
Estonia		69.3%	
Sweden		67.9%	
Finland		67.7 %	
Germany		67.3%	
Netherlands		65.5%	

Source: World Economic Forum, Executive Opinion Survey 2019-2020 and International Telecommunication Union (ITU), WTDS 2020 database.

Scores are expressed on a 0-100 scale. Digital legal framework refers to the response to the survey question "In your country, how fast is the legal framework of your country adapting to digital business models (e.g. e-commerce, sharing economy, fintech, etc.)?



Perceptions by business leaders of forward-thinking and future preparedness by governments have been on an improving trend in a number of countries before the pandemic, but have flattened out this last two years. There has been progress by governments in creating frameworks to advance the adoption of digital technologies and to implement environmental, social and governance standards.

Policy-makers and regulators should take this digital environment as an opportunity to reassess the need for existing, potentially outdated laws and regulations and should adopt measures — which may include deregulation, self-regulation, or a co-regulatory approach — that will lead to greater innovation, easier deployment of new and emerging technologies, incentivize investment, and focus on inclusivity and collaboration.

A recent study published in *Harvard Business review* on "which economies showed most digital progress in 2020" provides a useful framework for policymakers to better understand their own level of digital development, and explore opportunities for further growth.

The study shares key insights from the latest edition of the author's Digital Evolution Scorecard (a comprehensive analysis of 90 economies based on 160 key indicators of digital development), in which they segment the world's economies into four distinct zones including top stand out and stall out economies.

Stand Out Economies

Economies with both high levels of existing digitalization and strong momentum in continuing to advance their digital capabilities. Three economies are particularly notable: South Korea, Singapore, and Hong Kong. These, along with others, such as Estonia, Taiwan, and the United Arab Emirates, are consistently top performers, and have demonstrated both adaptability and institution-led support for innovation. Interestingly, the U.S. also shows remarkable momentum for an economy of its size and complexity, scoring second in digital evolution after Singapore.

The most successful of these countries prioritized:

- 01 Expanding adoption of digital consumer tools (e-commerce, digital payments, entertainment, etc.)
- **02** Attracting, training, and retaining digital talent
- **03** Fostering digital entrepreneurial ventures
- 04 Providing fast, universal, terrestrial (e.g. fiber optics) and mobile broadband internet access
- **05** Specializing in the export of digital goods, services, or media
- 06 Coordinating innovation between universities, businesses, and digital authorities

Breakout Economies

Economies with limited existing digital infrastructure, but which are rapidly digitalizing. China is a noteworthy outlier in this group: Its digital evolution is significantly higher than that of all other economies, due in large part to its combination of rapidly growing demand and innovation. Indonesia and India are also notable members of this group, ranking third and fourth in momentum despite their large economies. In addition to these large emerging economies, midsize economies such as Kenya, Vietnam, Bangladesh, Rwanda, and Argentina have all displayed increasing digital momentum, suggesting the potential to rapidly digitalize for both post-COVID economic recovery and longer-term transformation.





Breakout economies prioritized:

- 01 Improving mobile internet access, affordability, and quality to foster more widespread adoption
- **02** Strengthening institutional environments and developing digital regulations
- **03** Generating investment in digital enterprises, funding digital R&D, training digital talent, and leveraging digital applications to create jobs
- **04** Taking steps to reduce inequities in access to digital tools across gender, class, ethnicity, and geographic boundaries (though many access gaps still remain)

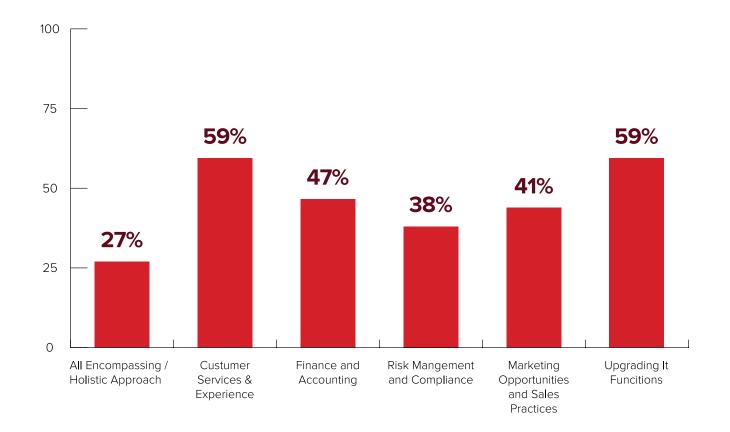
Priorities of these two segments represent possible levers that policymakers, businesses and investors should keep their eyes on and use if they wish to boost digital business in any country.

Finally, not only national regulations matter, but also cross-border restrictions on the movement of data and regulations governing the flows of payments, can govern the growth of digital platforms.

Survey Highlights and Results

01. Two Primary Drivers of Digital Transformation Are Upgrading the IT Functions and Improving Customer Service Experience.

Companies know that digitalization is essential, but the questions that are often asked are "How should I start?" and "Where do I start?", because digital transformation will look different for one company to another, it varies widely based on an organization's specific challenges and demands.



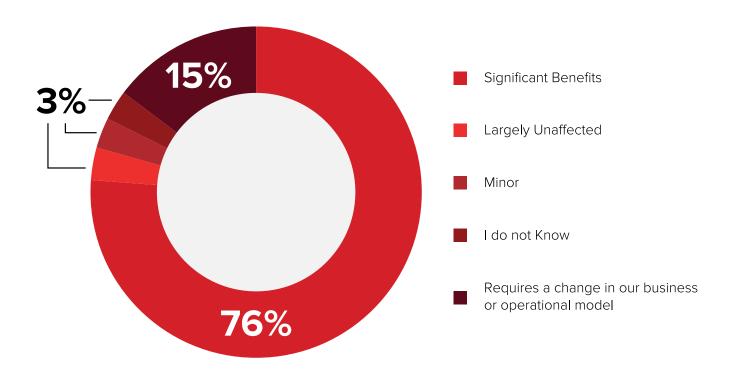




Our survey participants have chosen more than one area, which they have prioritized their digital transformation journey, the top two areas that were equally ranked with a percentage of 59% are; IT function and Customer Service, followed by Accounting & Finance at 47% then Sales & Marketing at 41.2%.

Nowadays, customers from their end as well are demanding better experiences from the organizations they do business with, and companies must take into consideration those demands in their digital transformation strategy to be successful.

02. Digitalization Had Significant Impacts On the Organization's Overall Processes.



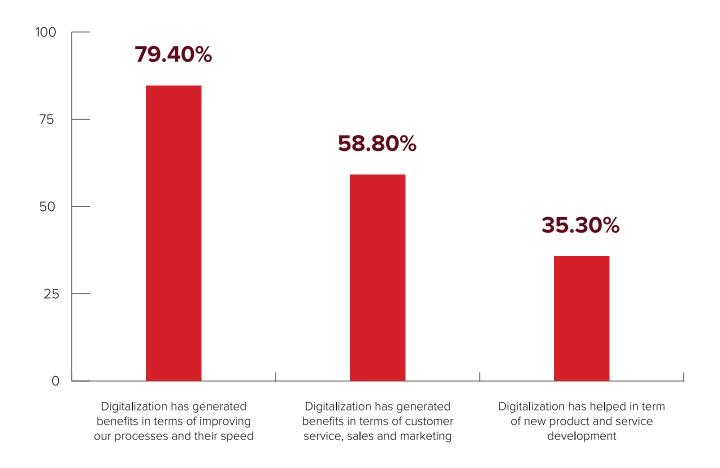
Efficiency improvements are usually expected across all dimensions of the profit and loss chain: revenue generation (new clients, new sales, higher cross-sell ratio, and lower churn), improved costs (automated processes, shorter processing times), and better risk management (improved scoring by using precise and timely data, less operational issues, advanced risk modeling).

Positive impacts of digitalization are already seen in various industries; 76% of respondents considered that digitalization had significant benefits on their organizations. Meanwhile, a group of 15% sees that they still require changes in their current business and operational models to achieve greater impact and 3% have witnessed only minor changes. Another 3% of respondents are still in the stage of figuring out metrics to measure the impact of digitalization in their businesses. In such cases, further work is needed in order to benefit from digitalization.

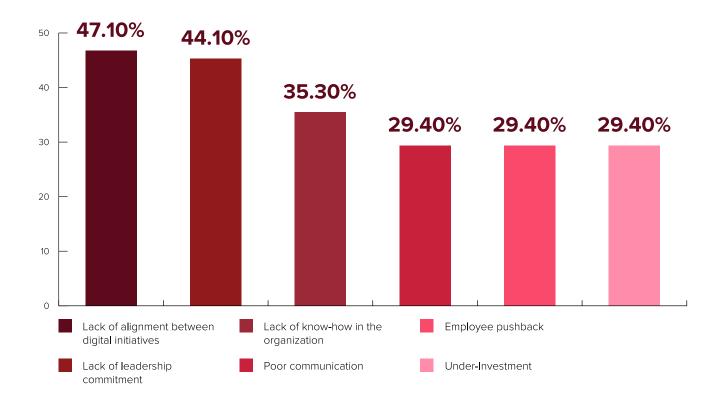
Top positive impacts of digitalization were related to the organization's overall processes and their speed (79%), generation of benefits in terms of customer services, sales and marketing (58%) and for 35% of organizations, digitalization has helped them develop new products and services.







03. Top Digital Challenges and Barriers.







In our survey, we asked the participants to identify the main barriers to digitalization, the results show two barriers standing out as the most significant, with nearly 50 percent of respondents citing the lack of alignment between old and current digital initiatives and 44% mentioned poor communication between different stakeholders.

Digital transformation is about more than technology implementation, it requires seeing old problems and old processes with new eyes. A digital mindset is different from how most organizations approach the world. It is a different way of thinking about stakeholders and communication with them through modern methods; clear communication is critical during a digital transformation. More specifically, one key to success is communicating a change story, which helps employees understand where the organization is headed, why it is changing, and why the changes are important.

35% of respondents reported that one of their main challenges is leadership's lack of commitment to digital transformation, and what usually separates digital leaders from others is a clear digital strategy combined with a culture and leadership poised to drive the transformation. Another group of more than 60% reported employees pushback to such transformation and lack of know-how in the organization.

Given the history of technological advancement is full of examples of organizations focusing on technologies without investing in organizational capabilities that ensure their impact, the senior management role today in every organization is to ensure the allocation of resources and determine responsibilities in dealing with digitalization.

Human resources are a fundamental part of the success or failure of this transformation. Whether due to lack of knowledge, which happens in most cases, or due to malicious actions, employees end up being one of the weakest links and, therefore, one of the main risks to be managed.

Risks and Barriers to Digitalization.

Digitalization brings opportunities and capabilities for growth and value creation. None of these opportunities can be achieved without dealing with the associated risks and managing those risks in the changing era is highly critical to an organization's sustainability. The majority of our survey respondents anticipated that their top threats in the coming two years would be around Cyber-attacks and information security.

An immediate step that organizations should take is to build robust measures around cybersecurity and the easiest approach to that is performing a typical information security and/or cyber security assessments of systems. The question which needs to be addressed here is "is cybersecurity the only risk to a digitally enabled organization?' For an effective digital environment to meet the desired objective, it is critical to consider risk areas beyond traditional risk. For example, social media is becoming an integral part of marketing, thereby, creating risks to brand value and reputation. Similarly, customer profiling is prominent for better customer experience, but then the profiling process should be aligned to protect privacy of customer data.

04. How Digitalization Enhances Corporate Governance?

Currently, governance strategies require technology, knowledge and management processes to promote transparency in organizations that enable them to react to challenges efficiently. Data security on the other hand is one of the main pillars of any corporate governance strategy because any sort of misuse of data can cause a loss of confidence in a company's ability to keep information secure and protected.

Digitalization has many advantages such as the ability to store large quantities of information, the rapid access to it from anywhere in the world, as well as the ability to share information with anyone in real time. More than 70% of our survey respondents consider that digitalization has led to positive changes in their board and committees meeting processes. It has also improved the overall entity management plus it helped identifying and addressing new risks,



especially those related to cybersecurity, while 11% of organizations end up creating a new role of chief digital officer to drive the transformation journey.

Digitalization enables leaders to work more efficiently, with more efficient processes and relevant data, enabling faster decision making and taking advantage of new opportunities with the help of adequate technology. Thereby, achieving better and more efficient corporate governance processes.

Good digital corporate governance does not stop at enhancing the capabilities at the top level. It starts bottom-up, with an advanced strategy to revolutionize how people and processes operate and lay the foundation for a forward-thinking organization.

A good digital strategy will connect processes, people, and performance seamlessly and ensure that leaders are in better control of the company direction. At the core of digital corporate governance is the ability to empower the company boards with tools to make better strategic decisions, and some of these decisions could very well revolve around improving the company's digital strategy.

Savings in cost, effort, time, and resources are certainly the primary administrative advantages of digital corporate governance solutions.

Capabilities of Digital Corporate Governance Solutions.

Corporate governance technologies enable organizations to move a large part of their manual and paper-based workflows to online processes. Board portals and e-Meeting systems, which enable virtual meetings, are some of the ways to implement digital corporate governance.

The use of integrated solutions provided by a single service-provider at the company level will ensure seamless data sharing, reduced security risks, and improved user experience. Digital corporate governance solutions come with the following core capabilities:

- Seamless transfer of manual/paper-based board meeting processes to a secure digital platform.
- Instant cloud-based access to board materials with granular file-level control.
- · Virtual work groups for committee collaborations, commenting and discussion tools, project boards.
- Board pack creation, agenda building, attendance recorder, minutes publication, and action items management capabilities.
- Online proxy appointment/online voting.
- · Virtual meeting capabilities.
- · Meeting management solutions to simplify administration of large-scale meetings like AGMs.

05. What Is the Role of Leadership in Digital Transformation?

Digital transformation is rapidly changing how companies do business. Board members from their end must have a clear understanding of the consequences of digitalization of their company, industry and society. Boards of Directors have many issues competing for their attention, but digital transformation is quickly rising to the top of their agenda. Our survey results shows that 82% of digital issues are discussed at the board level or/and board committees; Audit & Risk Committee and IT/Digitalization committee.

The exponential changes that drive digital transformation challenge the established models of leadership and governance. In the new digital era, leaders are required to make decisions more quickly in the face of a constant evolution in the art of the possible. In this challenging environment, 63% of our survey respondents believe their leadership understands the implications of digitalization on the business operational model, 30% reported that their





leadership is providing the necessary guidance on the digitalization process and 39% reported that their leadership is keeping close follow up with the executive management on the implementation of digitalization.

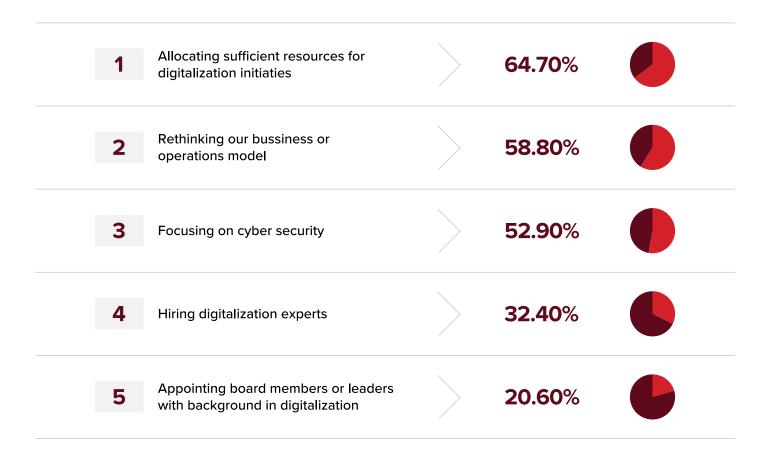
Successful leadership needs to assemble expert teams, forge strong partnerships, seek clarity for predictive data analytics, identify and build digital measures into decision-making, and turn dispersed data into relevant insights for improved decision making. At the core of this transformational change lies trust with the leadership team, to whom employees and the extended ecosystem can turn to and find a focused execution path.

With deep insights, clarity of focus and a clear framework for digital transformation, leadership at companies can create new business models to drive business value.

06. Top Five Future Priorities for Digital Transformation.

As the pressure to innovate faster continues to rise, organizations will seek even greater agility and a single source where stakeholders can get the right data in the right context at the right time, therefore, security by default will become a need to have to ensure the sustainability of the company's assets.

We surveyed our participants about their digitalization priorities for the next 1–2 years with the possibility to choose more than one priority and the results came as below:



According to the results, most senior leaders and executives understand the importance of strategically shifting resources. Companies that actively and regularly reevaluate where resources are allocated tend to create more value and deliver higher returns to shareholders by shifting money, talent, and management attention to where they will deliver the most value.



With businesses expansion, operations become more complex. As a result, productivity becomes a key issue. Digital technologies create efficiencies that drive additional levels of operational productivity, improving the bottom line, and giving decision makers extra time to spend on tasks that are more important.

Prioritizing cybersecurity is a critical part of digitalization. Both public and private sectors are victims of a surge in ransomware attacks. With cybercrime set to cost the world \$10.5 trillion annually by 2025, businesses need to view cybersecurity as an integral part of their digital transformation strategies. Not only are cyberattacks dangerous as they expose confidential data, but they are also costly and time-consuming to mediate. By protecting their data, organizations can focus on innovating and staying operational.

Another critical part in this digital journey is upskilling employees for a transforming economy. Our economy transforms; therefore, people will need to learn new skills. Governments and businesses both need to upskill the workforce to keep up with the pace of digital transformation. At the same time, the shortage of tech talent means we need to incentivize people early in their careers to pursue jobs in critical tech roles, such as cybersecurity.

Organizations should prioritize investing in infrastructure technology and skill building. As we shift from response to recovery, there is a huge opportunity for the world to prioritize a digital transformation underpinned by sustainability to future-proof the global economy.

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About Hawkamah

Hawkamah, Institute for Corporate Governance in the Middle East, works with governments, regulators, companies, boards, and other corporate governance stakeholders to push for better corporate governance practices in the region.

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