

“EMPOWERING INDIA THROUGH DIGITAL TRANSFORMATION : A SUSTAINABLE APPROACH”

Volume - III

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Empowering India through Digital Transformation
- A Sustainable Approach, Volume - 3

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Challenging and Risks Associated with Digital Transformation

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Abstract

Digital transformation (DT) and cyber security implications for achieving business resilience include transitioning organizational processes to IT solutions, which can result in significant changes to various aspects of an organization. However, emerging technologies such as artificial intelligence, big data and analytics, block chain and cloud computing are driving digital transformations worldwide, while increasing cyber security risks for businesses undergoing this process. This literature review article highlights the importance of comprehensive knowledge of cyber security threats when implementing DT, in order to prevent interruptions caused by malicious activities or unauthorized access by attackers, aiming to change, destroy or extort sensitive information from users. Cyber security is essential for DT as it protects digital assets from cyber threats. In this research we conducted a systematic literature review using the PRISMA method. Our literature review DT has increased efficiency and productivity but presents new challenges related to cyber security risks such as data breaches and cyber attacks. We conclude by discussing future vulnerabilities associated with TD implementation and provide recommendations on how organizations can mitigate these risks through effective cyber security measures. This article recommends a step-by-step cyber security readiness framework for businesses to be ready to continue digital transformation.

Keywords : Digital Transformation, Risks, Information technology, Challenges etc.,

Introduction

Digital transformation is not only about adopting new technologies, but also about adopting new business models. This means that organizations need to better understand digital transformation and consider every factor, starting with how employees act to impact their customers. Nowadays, almost every organization is considering digital transformation and according to Gartner, 91% of them are already engaged in a digital initiative. As they are pursuing digital technologies and digital transformation, they are making huge investments towards it. By 2025, global digital transformation investment is forecast to reach US\$2.8 trillion, up from US\$1.8 trillion in 2022.

However, while many companies start this journey easily, some of them find it difficult to complete. In fact, according to BCG 70% of digital transformation projects are unsuccessful and fail to achieve their specific goals. Such decisions are massively costly in terms of money, organizational effort and time lost. So, considering all these facts, we can conclude that although digital transformation is sometimes challenging to achieve, its advantages and benefits are almost inevitable in today's industries.

Digital Transformation Challenges

Whenever an organization undergoes fundamental changes, it is expected to face various challenges and difficulties. This also applies to digital transformation, and companies may face certain challenges if the transition is not smooth.

The most common digital transformation challenges are:

1. Lack of Organizational Change Management Strategy

Organizational change management refers to an organized approach to managing change in an organization, in this case, managing digital transformation. This may be difficult, but it is important. Lack of proper enterprise change management can negatively affect the digital transformation of the organization, which is why it is one of the primary reasons for the high failure rate. Also, organizational change management focuses on the various components of an organization rather than just focusing on them. For example, it starts from the top and includes changes to culture, mindset, processes, structures, the entire business model. A strong and effective change management strategy is vital to success because it increases an organization's likelihood of achieving its change objectives.

2. Lack of Expertise

If an organization is aiming for digital transformation, lack of expertise can threaten its journey. Given how complex digital transformation strategies are, it requires the right skill set and knowledge set to implement the necessary changes. According to KPMG, companies have reported talent gap issues that threaten to slow digital transformation. 44% of experts said shortages hindered progress, 32% said adding new talent and new systems was expensive, and 29% said incompetence to implement these systems led to slow progress. Organizations lack sufficient skills in digital transformation practices, cyber security, application architecture and other related IT and non-IT fields.

Some of the most valuable and most in-demand skills are in these areas:

- Cloud computing
- Artificial Intelligence and Machine Learning

- Mobile App Development
- User Experience (UX) Design
- Block chain
- Cyber security

One way to close this digital skills gap is to educate and train employees so that they can successfully adapt to digital transformation.

3. Continuous Evolution of Customer Needs

Customer expectations and demands have advanced as a result of evolving developments and improvements in customer service, and this is challenging for many organizations. Although companies have been striving for digital transformation for years, customers' needs may change over time as they continue to seek more intuitive and advanced services. This means that additional effort is required to implement new digital technologies that meet the continuous evolution of customer needs.

4. Internal Resistance to Change

Despite their fascinating ability to adapt to change, humans naturally tend to enjoy comfort and routine because it gives them a sense of security. Changes, especially big ones, can make people uncomfortable and can cause stress for some, affecting their well-being. That's why when companies undertake digital transformation, they can experience employee backlash. The best way to handle it is to involve employees in the entire process and be transparent with them. Also, leaders need to be aware that even when everything is done right, if the transition period is short, all the rapid changes and all the new tools, processes and technologies

can affect their effectiveness and efficiency. That's why it's important to start with a slow transition, because it helps people change their mindset and prepare for new changes.

5. Security Concerns

As companies adopt remote work, digital processes and cloud-based technology, they face higher levels of risk. As a result, they must implement high security measures and improve their cyber security to defend themselves against threats. Failure to protect a company's data and other valuable assets can lead to enormous risks and negative consequences.

6. Budgetary Constraints

Another challenge of digital transformation is the high costs that come with it. Since this is a big investment, companies need to plan the budget carefully and come up with a strategy that addresses and responds to the needs of customers and companies.

According to digital transformation expert Dennis Ackerman, there are three critical factors to every successful digital transformation:

- Strategy
- Mood
- Skill and technology

A perfect balance between this golden triangle of digital transformation and the transformation of each element is undoubtedly a big step towards a successful digital transformation journey. Companies should have a clear strategy and integrate it into all company processes.

Organizational Change Management

Organizations must employ a number of strategies and actions to implement successful organizational change management.

Some key elements of Managing Organizational Change are

- **Plan** – Organizations should carefully examine their processes, establish priorities, and develop new strategies accordingly. Define digital transformation goals and align them with the company's vision and objectives. Organizations should carefully document an established plan that includes all the details of the changes, such as what processes, resources and phases will be involved, when it will begin, and who is responsible.
- **Start from the Top Management Levels** – Top-management levels are the most important decision-makers, so they should be the ones deciding on investments, technologies, processes, roles and responsibilities. The leaders of the organizations will communicate the proposed changes to all the employees involved, both directly and indirectly. They should explain why the changes are happening and address any expressed concerns of employees, if any. Top management should also encourage and accept regular feedback.
- **Create a Roadmap** – To help employees understand the company's journey, a proper roadmap will help them know where the company is and where it is going. A formal roadmap will set a timeline for each phase of the transition.
- **Monitoring and Measuring** – As change occurs, organizations must continually evaluate the process and measure metrics to ensure goals are being met. Additionally, regular monitoring can help identify potential problems and resolve them quickly. As with many transformations, organizations can gain powerful insights

from data and analytics for digital transformation. They can use this data to overview general and specific process improvement.

Capacity and Recruitment

Lack of expertise is the most common challenge of digital transformation. Organizations need to understand that they need to have skilled employees who can continue the process, and if necessary, they should seriously consider investing in bringing in new employees with the necessary expertise, skills, and knowledge. Adding leaders who are familiar with digital processes and fully committed to the transformation is another fundamental step towards success. Also, employees must be trained and hired to use new tools and prepare for new technologies.

Fulfilling Customer Needs

Digital transformation fundamentally affects customer experiences. In order to meet their ever-evolving expectations and needs, companies need to stay up-to-date with new trends and constantly learn about new ways, methods and technologies developed to improve their experience.

Work Culture Change

The importance of the human factor is now established. According to a Forbes report, the key to digital success for organizations is starting the change process with people, not technology. Organizations need to work on cultural mindset change and the entire organizational culture by creating awareness about the importance of digital transformation and other related elements. A good way to reduce employee resistance to change is to involve the entire team from the beginning and communicate with them frequently and openly.

Digital Transformation Security

Digital transformation is a process fraught with risks and their identification and management are critical to a successful and secure transition. Organizations must implement security controls and policies, invest in new tools and technologies, implement risk management, and train employees.

Digital Transformation Budget Planning

Apart from time investment, digital transformation requires a lot of investment in money, which needs to be carefully planned. Organizations should create a financial roadmap to streamline processes. A budget should be prepared based on overall goals and needs, strategies, priorities, timelines, planned outcomes, return on investments, etc. The budget should be flexible in case any challenges or problems arise. While the challenges of digital transformation may seem daunting to some organizations, with the right mindset, the right resources and the right effort, a successful transformation can be achieved and the rewards will justify all the effort.

Conclusion

In this progress study we found that digital transformation involves more or less profound changes in a company's business model, which may occur in processes, resources, operating methods or culture. This is why how to initiate digital transformation is a long-term framework for the organization. This represents an important strategic decision. Digital transformation is a very rich subject, raising many important issues that are the subject of trans-disciplinary research work. At a theoretical level, digital transformation is of critical interest to the extent that it can modify or revise theories such as the evidence-based view or the theory of institutions.

Reference

- Kohli, R. et S. Johnson (2011), Digital Transformation in Latecomer Industries: CIO and CEO Leadership Lessons from Encana Oil & Gas (USA) Inc, MIS Quarterly Executive, 10 : 4, 141–156.
- Pinzaru, F. et A. Mitan (2012), Social media and marketing of the “popcorn” music wave: the success of romanian commercial musicians analysed through their perceived image on facebook and youtube, Economics & Sociology, 5 : 2a, 125-138.
- Henriette, E., M. Feki et I. Boughzala (2015), The Shape of Digital Transformation: A Systematic Literature Review, Mediterranean Conference on Information Systems, 3-5 October 2015, Samos, Greece.
- Liu, D. (2012), Competitive Business Model in Audio-book Industry: A Case of China, Journal of software, 7 : 1, 33-40.
- Mason, M. (2010, August). Sample size and saturation in PhD studies using qualitative interviews. In Forum qualitative Sozialforschung/Forum: qualitative social research (Vol. 11, No. 3).
