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Influence of Digital Transformation on Cybersecurity

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Abstract: **This article highlights the influence of digital transformation on cybersecurity and how the rise of digital transformation has increased cyber risks within organizations, especially due to the high dependency on third party services. On the other hand, the article mentions how this rise has enhanced cybersecurity within organizations through increased focus on CISO role and risk functions, as well as, through building a robust cybersecurity strategy.**

Keywords: **digital transformation, cybersecurity, cyber risks, CISO role.**

1. INTRODUCTION

Digital transformation occurs when digital technology is incorporated into a company's products, operations, and assets to improve client experience, increase operational efficiency, move into novel markets, and control risk. Some corporations may struggle with digital transformation (Samartsev & Dobrygowski, 2021). Nonetheless, the growing usage of digital technologies like big data, Artificial Intelligence (AI), the Internet of Things (IoT) and Cloud across more aspects of organizations and society at large has demonstrated that digitalization is the crucial approach if corporations wish to gain a competitive edge. This presentation explores the rise of digital transformation and how it contributes to the strengthening of cybersecurity.

The Rise of Digital Transformation

While the digital revolution provides many possibilities for modern organizations, it also introduces new problems. Some of the most common are the changing security requirements that come with growing one's digital presence (Samartsev & Dobrygowski, 2021). The digital transition is fundamentally changing security requirements. Here are a few modifications to be aware of.

Increasing Cyber Risk

The growing acceptance of digital transformation has altered the landscape of cybersecurity. This is associated with an increase of data breaches, cyberattacks alongside different cyber incidents as the risk surface expands and organizations embrace more digital technology in many sectors of their industry in search of new business platforms and improved consumer experiences (Samartsev & Dobrygowski, 2021). As a result, the effect of these data breaches is growing, leading to massive costs and a significant impact on company sustainability.

High Dependency on Third-Party Services

As companies accelerate their digital transformation, they depend on third-party suppliers like robotics and process automation, cloud providers, and IoT to fuel these projects (Samartsev & Dobrygowski, 2021). Due to the flexibility with which business divisions beyond IT may embrace new technology, there has been a surge in shadow IT, making evaluating the institution's risk profile significantly more complex. While third-party services and products may substantially improve an organization, without a robust vendor risk management policy in place, the additional risks might be more hassle than the advantages are justified.

How the Rise of Digital Transformation Strengthens Cybersecurity

The surge in digital transformation enhances cybersecurity in the following ways:

Increased Focus on CISO's Role and the Risk Function

The increasing cyber risks linked to digital transformation have compelled the management of organizations to give more importance to the chief information security officer's (CISO) role and general risk function. The approach is to ensure a company-wide cybersecurity plan is crafted and should align with the set organizational goals (Matthews, 2019). Digital transformation has influenced cybersecurity program within organizations to ensure the secure adoption of emerging technologies, while improving the collaboration at both operations and senior levels.

Robust Cybersecurity Strategy

Heavy dependency on third-party services during the digital transformation is key to enhancing cybersecurity. Organizations should ensure they manage risks and threats resulting from the adoption of cloud services such as: data exposures (Matthews, 2019). Risk management practices in the current digital revolution help corporations protect their reputation and avoid financial loss. The cybersecurity personnel must develop a clear policy to facilitate the vetting process of the overall third-party services and enable evaluation of the data sensitivity they handle (Matthews, 2019). Amid digital transformation, it is critical to tackle third-party threats with the same rigor and care as internal risk management procedures.

Training Staff

Skills gaps in relation to cybersecurity and digital technologies have the potential to expose organizations to risks. As a result, the current digital transformation has compelled firms to offer constant cybersecurity and IT staff training to enhance performance (Matthews, 2019). Other strategies adopted include sharing threat intelligence throughout the company to allow all individuals to take necessary measures to minimize the risk (Matthews, 2019).

2. CONCLUSION

Organizational operations are evolving as a result of digital transformation. One of the areas that are changing is cybersecurity. There are numerous cyber risks now than in the past, and cyberattacks are growing more complex. To safeguard against such attacks, a proactive, continually integrated, and automated strategy to cybersecurity is required. It also necessitates firms adjusting their strategy as the risk landscape evolves.

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