

Patterns of Digitization

Bibliographic data

The completed research paper was written by Paul Mugge, Haroon Abbu, Timothy L. Michaelis, Alexander Kwiatkowski, and Gerhard Gudergan, entitled: "Patterns of Digitization A Practical Guide to Digital Transformation". It was published in 2020 at Research-Technology Management.

Theme of the paper

This paper moves toward providing a practical framework for organizations seeking to navigate the digital transformation process. The authors identify six patterns of digitization and provide guidance on choosing the pattern that aligns with an organization's strategic goals and business model, it offers practical advice to help organizations assess their digital capabilities and develop a roadmap for digital transformation.

Synthesis of the paper

The article "Patterns of Digitization: A Practical Guide to Digital Transformation" acknowledges the growing interest in digital transformation as an economic need and a means to create new and profitable business designs. Despite this interest, many organizations exhibit a hesitant attitude toward digital transformation and lack the knowledge, tools, or will to undergo such a significant change, while some companies have successfully implemented digital transformation, most lag behind and can only be labeled as conducting experiments or proof of concepts.

The study made by the authors aims to assist organizations that are currently implementing digital transformation by sharing information on how other companies are approaching the task, it employs a survey instrument called Patterns of Digitization, which assesses how companies are implementing digital transformation, including the various strategies they employ, the investments they make, and the actions they take to achieve large-scale (institutionalized) digital transformations. The study is based on the Business Transformation Framework, which breaks down the process of business transformation into four main areas to manage: transformation strategy, transformation design, transformation delivery, and governance and leadership. Addressing each component of the framework provides the scaffolding necessary to sustain new business transformation initiatives like digital transformation. The research distinguishes between "digitally mature" and "digitally developing" organizations, using the Carnegie Maturity Model Integration (CMMI) process as a basis for defining digital maturity breaking organizational maturity into five levels, with levels 4 and 5 considered high maturity or digitally mature organizations, and levels 1, 2, and 3 considered less mature or digitally developing organizations.

The results identified 18 differences in practice attributes that may distinguish the practice of digitally mature organizations from those of digitally developing organizations, these differences were synthesized as six key themes that can provide a practical guide for organizations engaged in digital transformation.

The first key theme is to align resources, both financial and human, with the organization's strategy, digitally mature organizations invest in new technologies, new businesses, and staff such as data scientists, and they move their products and services to the cloud. The second key theme is to engage key partners and develop externally focused business plans, digitally mature

organizations succeed with externally oriented strategies, and they integrate competencies from outside the organization. The third key theme is to demand collaboration and a nimble development environment, digitally mature organizations must support a nimble and collaborative development approach if they are to be seen as innovative and responsive to accelerating changes. The fourth key theme identified in the study is to foster a data-driven culture, digitally mature organizations have a strong data-driven culture that permeates throughout the organization they use data to make decisions and develop new products and services. The fifth key theme is to prioritize customer-centricity, digitally mature organizations prioritize the customer experience and use customer insights to develop new products and services. The sixth and final key theme is to have a strong leadership team that supports digital transformation, digitally mature organizations have a strong leadership team that supports digital transformation and understands the importance of investing in new technologies and developing new competencies.

Questions and reflection

Q1: As the authors can generalize the research, won't some limitations affect the results?

In my opinion, the research article on the differences in practice attributes between digitally developing and digitally mature organizations provides valuable insights for organizations engaged in digital transformation. The study's findings and key themes can serve as a practical guide for organizations seeking to improve their digital maturity and competitiveness. However, it is important to note the limitations of the study, such as its focus on a specific set of practice attributes related to digital transformation, and there may be other practice attributes that are relevant to digital transformation that were not included in the analysis, another potential limitation is that the study used self-reported data from participants, which could lead to response bias.

Going forward, I will be more mindful of the importance of digital transformation and its impact on organizational performance. As technology continues to evolve, companies need to adapt to these changes to remain competitive and relevant in the market. As someone who studies to work in the technology industry, I see the importance of staying up-to-date with the latest trends and developments.