

Analysis of Digital Transformation in Banking: The Hungarian Case

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Abstract : The process of digital transformation has a profound influence on all sectors of the worldwide economy and the business environment. The influence of blockchain technology can be observed in the digital economy and e-government, rendering it an essential element of a nation's growth strategy. The banking industry is experiencing significant expansion and development of financial technology firms. Utilizing developing technologies such as artificial intelligence (AI), machine learning (ML), and big data (BD), these entrants are offering more streamlined financial solutions, promptly addressing client demands, and presenting a challenge to incumbent institutions. The advantages of digital transformation are evident in the corporate realm, and firms that resist its adoption put their survival at risk. The advent of digital technologies has revolutionized the business environment, streamlining processes and creating opportunities for enhanced communication and collaboration. Thanks to the aid of digital technologies, businesses can now swiftly and effortlessly retrieve vast quantities of information, all the while accelerating the process of creating new and improved products and services. Big data analytics is generally recognized as a transformative force in business, considered the fourth paradigm of science, and seen as the next frontier for innovation, competition, and productivity. Big data, an emerging technology that is shaping the future of the banking sector, offers numerous advantages to banks. It enables them to effectively track consumer behavior and make informed decisions, thereby enhancing their operational efficiency. Banks may embrace big data technologies to promptly and efficiently identify fraud, as well as gain insights into client preferences, which can then be leveraged to create better-tailored products and services. Moreover, the utilization of big data technology empowers banks to develop more intelligent and streamlined models for accurately recognizing and focusing on the suitable clientele with pertinent offers. There is a scarcity of research on big data analytics in the banking industry, with the majority of existing studies only examining the advantages and prospects associated with big data. Although big data technologies are crucial, there is a dearth of empirical evidence about the role of big data analytics (BDA) capabilities in bank performance. This research addresses a gap in the existing literature by introducing a model that combines the resource-based view (RBV), the technical organization environment framework (TOE), and dynamic capability theory (DC). This study investigates the influence of Big Data Analytics (BDA) utilization on the performance of market and risk management. This is supported by a comparative examination of Hungarian mobile banking services.

Keywords : big data, digital transformation, dynamic capabilities, mobile banking

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