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A Study on Digital Transformaton and Its Effects on Business Model Innovation

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Abstract- Digital transformation (DT) is now a key enabler of business model innovation (BMI) in the modern competitive landscape. Businesses are increasingly using digital technologies like artificial intelligence (AI), cloud computing, big data, and the Internet of Things (IoT) to increase operational effectiveness, devise new revenue streams, and provide better customer experiences. This research analyzes the effect of DT on BMI, with determinants, issues, and approaches chosen by companies. Based on secondary data collected from journals, industry reports, and case studies, the study identifies that DT has a significant effect on cost bases, customer relationship, and value proposition. According to the findings, although DT fosters innovation, it is challenging due to high costs of implementation and cultural resistance. Recommendations are the adoption of agile strategies, investing in digital competencies, and implementing technology-based business models to achieve sustainable growth.

Keywords - Digital Transformation, Business Model Innovation, Technology Adoption, Industry 4.0.

I. INTRODUCTION

The evolving nature of digital technologies has revolutionized how companies operate, communicate, and generate value. Digital transformation is not just about embracing technology but also a radical change in business models and organizational processes. The conventional models, based on linear value chains, are giving way to digital ecosystems that allow companies to provide custom-made experiences and use new revenue models.

Statement of The Problem

Although crucial, digital transformation is often a challenge for organizations to map onto their business models. The key question is: How does digital transformation impact business model innovation, and how can firms make use of this change?

Objectives of The Study

- To examine how digital transformation affects business model innovation
- To determine drivers and challenges for DT adoption
- To propose strategies through which businesses can harness DT effectively

Scope of The Study

The research is general but derives lessons that are applicable in several industries, such as retail, manufacturing, and services.

II. REVIEW OF LITERATURE

Digital Transformation (DT)

DT means embedding digital technologies across all business domains to drive value creation and operation efficiency (Bharadwaj et al., 2013). It comprises cloud computing, big data, IoT, and Al.

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Business Model Innovation (BMI)

BMI is the art of transforming how a firm generates, delivers, and captures value. Nine building blocks are recognized by Osterwalder's Business Model Canvas, and all are influenced by DT. Link Between DT and BMI

Research shows that DT is a catalyst for BMI, enabling firms to create new products, services, and customer experiences (Foss & Saebi, 2017). Despite this, DT adoption is linked to major challenges of high cost, staff resistance, and cybersecurity threats.

III. RESEARCH METHODOLOGY

The research employs secondary data from academic publications, industry reports, and case studies. The research engages in an examination of existing patterns and findings pertaining to DT and BMI case studies. Analysis takes its focus on commonalities and insights regarding DT and BMI.

Data Analysis and Interpretation Overview:

Analysis centers on comprehending how digital transformation (DT) affects various elements of business models. Secondary research (industry reports, surveys, and case studies) forms the basis of interpreting the data and presenting it in the form of tables and charts for better understandability.

Table: Age Group Of Respondents

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AGE GROUP	NO. OF	%
	RESPONDENTS	
18-25	40	40
26-35	30	30
36-45	20	20
46 & Above	10	10
TOATL	100	100

Source: Primary Data

Interpretation

The majority of respondents (40%) belong to the 18–25 age group, indicating that younger professionals are more aware and engaged in digital transformation discussions. The percentage decreases as the age group increases, reflecting that digital adoption and interest are higher among younger demographics.

Table: Gender Representation in Digital Transformation

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GENDER	NO. OF RESPODENTS	%	
Male	55	55	
Female	40	40	



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Other	5	5
TOTAL	100	100

Source: Primary Data

Interpretation

Male respondents make up the majority (55%), with 40% being female respondents.

5% respond as others, showing a new trend of inclusivity. The data reveal that though there is improvement in representation based on gender, there is still disparity in equal participation in digital transformation job and decision-making positions.

Challenges

- High initial investment
- Cybersecurity threats
- Organizational resistance
- Visualization Example
- (A bar chart illustrating % impact of DT on value creation, customer engagement, and revenue models can be provided)

Findings

- DT tremendously boosts business agility and speed of innovation.
- Implementation of AI, cloud, and data analytics results in enhanced efficiency.
- Cultural and skill-based challenges are significant obstacles.

Recommendations

Take up agile transformation approaches. Invest in digital literacy and upskilling initiatives. Create cybersecurity frameworks.

IV. CONCLUSION

Digital transformation is crucial in building new business models. Companies that strategically deploy technology adoption into business objectives will have a competitive advantage. But for benefits to be fully realized, companies have to overcome cost, skill, and culture change barrieres.

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