

Digital transformation and Entrepreneurship

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ABSTRACT

Over the last two decades, the phenomenon of technology entrepreneurship has attracted the interest of policymakers and researchers due to its significant impact on the economic progress of the country. Several authors define technology entrepreneurship as the interface of entrepreneurship and technological innovation. In this stratum, technological opportunities can be recognized and exploited by entrepreneurs through new venture creation. The paper presents opportunities related to digital transformation for entrepreneurship, a change that is associated with the application of digital technology in all aspects of entrepreneurship. This paper presents a structured framework with digital transformation stages, activities, and results. This research contains a literature review that fundamentally comprehends the digital transformation of entrepreneurship. The research clearly expressed the meaning of the digital transformation of entrepreneurship phases for the digital transformation. yet this special section provides a more fine-grained understanding of technology entrepreneurship. This paper presents new insights into the determinants of technology entrepreneurship and what are the consequences of technology on producers, consumers, and policymakers.

Keywords: Digital Transformation, Entrepreneurship

Introduction

Digital transformation is a change of digital technology into areas of business, changing how to operate and deliver value to customers. It is vital for all businesses from small to giant. It is

the process of using technologies to create new businesses or modify existing business processes, customer experiences, and culture to meet changing business and market requirements. Digital transformation is using digital data to simplify the work done and also adds value to every customer interaction both online and in person. It transforms traditional roles into a digital ones. It begins and ends with how consumers think and how to engage them digitally. Digital transformation affects every sector of society. Now, companies have an opportunity to radically change their business models by incorporating new digital technologies like the Internet of things, social networks, mobile, and other innovations. Digital Transformation is disrupting every aspect of business, by breaking down barriers between people, things, and businesses. Businesses can create new products and services and find more efficient ways of doing business by breaking these barriers. Digital transformation is taking place across organizations of all types and in every industry. But all the organizations and industries share a common theme: The ability to transform processes & business models, Personalize customer/ citizen experiences, and Empower workforce efficiency and innovation. For this, companies need a Digital Business Platform which is enabled by technology. Digital Business Transformation is the application of technology to build new processes, new business models, and software systems that result in more profitability, higher efficiency, and greater competitive advantage.

Literature review

Besson & Rowe (2012)¹ acknowledge inconsistencies in the digital transformation literature and further argue for its reconciliation and expansion.

Fitzgerald, M. (2013)² studied about MIT Sloan Management Review Research Report (2013) and revealed that 78% of executives and managers across various industries, believed achieving digital transformation would be critical to their organizations.

Bharadwaj (2013)³ reflects on the digital transformation era as a time for organizations to rethink the role of IT strategy from that of a functional level strategy to one that integrates IT strategy and business strategy. All these indicate how organizations are increasingly being involved in digital transformation. In fact, in today's digital era, digital transformation has become an everyday agenda item in business boardrooms.

Manyika (2013)⁴ examined that digital technologies should be observed both in terms of capacity to disrupt and potential economic impact because these effects go hand-in-hand and both are of critical importance to leaders.

Downes and Nunes (2013)⁵ studied that recent advances such as big data, artificial intelligence (AI), and digital transformation indicate the advent of a new era in Information Technology.

Harvard Business Review Analytics Services (2014)⁶ revealed that 50% of business and technology leaders said their organizations were already missing out on new technology-enabled business opportunities.

Westerman G. (2014)⁷ studied whether digital transformation is the solution to emerging business challenges in the digital era or is another marketing buzzword. A huge challenge remains in the lack of a reconciled definition and fundamental elements of the literature.

Wang, Janowski, Loebbeck & Picot (2015)⁸, digital transformation is a technology-enabled change such as implementing a new ERP System and is a more radical and evolutionary process that takes place over time.

Aral, Oestreicher-Singer & Zalmanson, and Hanna (2016)⁹ analyzed that these technologies transform the way business entities operate, creating value and bringing different experiences to various stakeholders involved.

Hess (2016)¹⁰ analyzed that digital transformation is everywhere. No organization or business industry is resistant to its effects. Information, knowledge, and processing capacity are now permanent and ubiquitous, and the growing connections between people, objects, devices, and systems are modifying the conditions under which individuals, businesses, and societies live and operate

OVERVIEW OF THE DIGITAL TRANSFORMATION

Digital technologies Nowadays- mobile, and cloud - have a great impact on organizations and human activities. Organizations entail consolidating these digital technologies to transform processes, enhance their capabilities engage talent to strive in the digital world. When a company makes a transition from its current state to desired future state organizational change occurs. To manage these organizational changes proper planning and

implementation are a must within the organizations to minimize cost and employee resistance to the organization, simultaneously maximizing the effectiveness of these change efforts. Digital transformation in entrepreneurship is the implementation of new digital technologies into all business areas, which leads to a significant change in the way the organization works. The strategy of digital transformation must have a clear vision for the company's growth & development and, be supported by these technologies. Successful digital transformation goes with the optimization of entrepreneurship processes in the most appropriate way and reengineering. The digital transformation of entrepreneurship seems different for different organizations. The goal of digital transformation should be an immaculate interaction with the customers. Many companies are focusing on technology rather than on the customer. It is necessary for the organization to change, technology and data integration which is important equally to achieve successful digital transformation of business and for the consumers too. A successful organization supports culture, strategy, and leadership to utilize the potential of digital transformation of an entrepreneur. An organization's digital strategy goals include: increasing employee efficiency, improving customer experience, encouraging innovation, improving decision-making, and transforming the business. The organization that promotes innovation is innovative compared to competitors. Leadership requires sufficient skills, and experience to accompany digital strategy. Digital transformation can only be successful if there is strong leadership and a well-founded strategy. Digital transformation leads to organizational changes which are related to sound leadership, well-defined strategy, and organizational culture.

Among companies where big data, cloud, mobile, and social technologies are critical parts of the infrastructure, these technologies are, or will soon be profitable on average, had higher revenues, and achieved a bigger market valuation than competitors without a strong vision. As with any emerging technology, however, there are significant challenges associated with cloud, mobile, social, and big data initiatives. The survey suggests that the primary risks preventing their wider adoption are data security issues, lack of interoperability with existing IT systems, and lack of control. The paper research an organization's level of digital maturity and readiness for digital business transformation. Digital business transformation is a new phenomenon, and no organization can be considered yet to have achieved the end state of maturity.

IMPACT OF DIGITAL TRANSFORMATION ON CUSTOMERS

In the past few years, people have realized that they can get done much from their laptops and smartphone. As such, customers are more demanding and selective than ever before. Now, resources like touchless checkout options are increasingly becoming expectations. It is now recommended to perform market research from time to time to provide technologies that customers wanted to provide. This way, an entrepreneur can see what the customer wants, as well as what the competition is going on to win the business.

Companies have started to take advantage of investment to gain an in-depth understanding of specific market segments and geographies. Firms, nowadays, are exploring social media to understand customers' behavior, their satisfiers, and dis-satisfiers. Also, companies are learning to promote their products and services more effectively through digital media. Companies are now trying to build relationships with customers using digital technologies, and are offering products that improve branding in lifestyle communities.

For example, some insurance firms, are improving their cost structures and portfolios through analytics-based pricing and underwriting. Other companies are also conducting analytics-based experiments for customer satisfaction. Nowadays companies are using technology to strengthen in-person sales conversations. Financial services firms are using digital-based presentations instead of paper-based ones to make sales pitches. Insurance firms have introduced mobile tools to help salespersons and customers engagement in analytics-based planning. A medical sales force is replacing in-person interactions with digital interactions. A salesperson carries an iPad with video and other information about new products.

A better understanding of digital technology helps firms to transform the sales experience. Companies are consolidating customer purchasing data to provide more personalized products and customer service. A hospitality firm that engages in location-based marketing uses digital media to send personalized mobile coupons to its customers. A bank is creating a concept store to build strong customer relationships and to make the life of the customer easier, by simplifying their processes through a digital application. An e-commerce company automatically loads a customer's last online shopping list into its site. This rationalized the shopping process, allowing customers to look at other products. Customers can then decide whether to pay now option or pay at the time of delivery. Customers can also decide to use home delivery with a specific pick-up time.

Customer service can be intensified significantly by digital initiatives. Transparent and speedy problem resolution builds trust in customers. Many companies establish Twitter accounts to resolve client complaints quickly. Many firms, especially financial services, and retail are making strong intrusions into integrated multichannel activity.

IMPACT OF DIGITAL TRANSFORMATION ON PRODUCERS

Digital marketing Globalization and increased use of digital technology are important aspects of traditional sales and marketing to digital ones. Digital transformation is changing the way consumers live and how entrepreneurs do their business digitally. Internet access has created more opportunities for digital marketing. Nowadays a large number of the population are using mobile and the internet, which promoted companies for digital marketing of their products and services at a lower cost.

Operational Process An operations process is defined as the organizational method for getting a task done. It consists of four primary activities, they are planning, preparing, executing, and assessing. The most exciting transformation in customer experiences are the most visible aspects of transformation, firms are also benefitting from transforming.

Companies earlier used automation to make processes more efficient. Enterprise Resource Planning (ERP) has enabled significant efficiency in financial, and supply chain processes. An insurance firm has created a digital platform for claim processes. Employee self-service systems, for example, in areas like HR, are also becoming extensive. Some manufacturer has begun to centralize the HR function, allowing economies of scale through self-service. Various companies have automated many R&D processes. Research and development allow researchers to focus on innovation and creativity. It also creates a rivulet of data that can be useful in data mining efforts later. New technologies are extending this trend of gaining benefits beyond efficiency. A manufacturer created fully automated plants that significantly reduce requirements of labor, improve the quality of the product and enhance safety, health, and environmental performance. A garment manufacturing company has moved to digital design processes. Going digital eliminates physical prototypes,

and reduces the product development lifecycle, which allows the firm to be much more graceful, changing designs quickly in response to changing market demand.

Technologies such as mobile, e-mail, and video conferencing have become the norm nowadays in many companies. Employees routinely interact with people whom they have never met or visited. Mobile devices allow employees to stay connected with the office and to work from home. Individual-level work has been virtualized – distinguishing the work process from the location of the work. Employees now work from home and can communicate with the people with whom they are temporarily meeting. The firm's networking tools allow employees to talk with anyone in the company from anywhere. Digital transformation replaces limited one-way vertical communication with broad communication channels which are both vertical and horizontal. Employees can engage in two-way communication quickly. Employees can have two-way communication that was previously not possible. Salespeople and front-line employees are benefitting from the digital collaborating tools in which they can identify experts and get questions answered in real-time. They are also gaining access to have interactions with a customer digitally.

Digitally-modified businesses A digitally modified business adopts technologies or innovations that modify its current product or service to meet changing business and market requirements. It's about changing the way of doing business. It is finding ways to elevate physical with digital offerings. It cut across traditional roles like marketing, sales, and customer service. Digital transformation begins and ends with how a business engaged with its customers. A grocery firm is staying tuned to its traditional business, but using digital methods to transform business growth. Our e-commerce platform is bringing new clients by promoting their products digitally. Making call centers run more efficiently with digital technology. A business credit firm is developing a digital business for some credit products that require less involvement than their traditional high-touch offerings.

New digital businesses Digital business focuses on how technology empowers companies to create new values and experiences that distinguish them and give them a competitive advantage over their competitors. Companies are introducing digital products that supplement traditional products. A sports costume manufacturer started selling GPS and other digital devices that can track customers' workouts.

Digital globalization Firms are increasingly transforming from national to global operations. An increase in digital connectivity between two countries leads to increased export of goods and services. Digital technology with consolidated information allows firms to gain global symbiosis while remaining locally responsive. They are becoming more centralized and decentralized at the same time. These companies benefit from global shared services for HR, finance, and even core capabilities like Design and manufacturing. Global shared products and services promote efficiency and reduce risk. They promote global flexibility. Local managers are empowered to make decisions independently and gain a broader view of the business through centralized data. They have the freedom to adapt the business to their local needs with the responsibility to function in the interests of the enterprise. Globalization also requires a different approach to policy: “fewer commands from headquarters, but more guidelines.”

IMPACT OF DIGITAL TRANSFORMATION ON POLICYMAKERS

It is very challenging to design and implement well-suited policies for the digital age. The COVID-19 crisis reinforces the need for a digital transformation. Because of the change in the economy due to COVID-19, the health and economic crisis has emerged. This endemic booted digital transformation across the world, which has an impact on policymakers. Policymakers started promoting investment in communications infrastructures.

As compared to the public sector the private sector invests the highest share in communications infrastructures. However, governments also support such investments when it is not economically feasible for the private sector. To stimulate investment in communication infrastructure, policymakers must address barriers to investment and improve competitive dynamics.

Communications infrastructures and services policies are critical to stimulating high-speed infrastructure deployments like simplifying license procedures, facilitating efficient access, removing regulatory uncertainty to stimulate investment, and also boost competition in communications infrastructures and services markets.

Regional development policies are also important to address differences in access to digital infrastructure in urban, semi-urban, rural, and remote areas. Governments may encourage private investment to solve digital infrastructure problems in rural areas.

Effective use of digital infrastructure and services enables individuals to be participative in society, firms to boost their productivity, and governments to adopt a user-driven approach. and effective use of digital technologies requires awareness, investment in information and communication technologies (ICTs), business dynamism, and skills. Policies need to reinforce trust in digital environments.

Modifications are needed to revamp institutions and policies with the digital economy. Areas for attention include regulatory authority and competition policy, digital infrastructure, workforce development, tax policies, and social protection frameworks. Competition policy should be overhauled for the digital age. Prosecution of Antitrust laws must be strengthened. Policymakers need to clinch that financial markets remain competitive and able to meet the bureaucratic challenges of digital Platforms, financial products, and innovation. Also, frameworks are entailed for international alliances in areas like taxation of cross-border digital business and regulation of cross-border data flows.

The ecosystem should be innovated and improved. Patent systems should be updated to the changed dynamics of the digital economy. Research and development programs should be strengthened to stimulate technological progress to serve broader economic and social goals. Policymakers must update tax systems.

The digital infrastructure must be developed and strengthened to expand access to new opportunities, that need increased public investment. Strong digital infrastructure and digital literacy will be pivotal for any economy nowadays as technological change has shifted any economy from low-skill, low-wage manufacturing to highly skilled and automated manufacturing.

Investment in training and education should be promoted and emphasis should be given to the education that complements the new technologies which require a transformation in the content, and financing of these programs. This requires public-private partnerships. To meet the changing demand for skilled manpower the availability and quality of education should

be scaled up and online learning tools must be employed. Inequalities in accessing training and education must be addressed.

Labor market policies should be revamped with the changing economy. Policies need to be forward-looking focusing on improving workers' abilities. Unemployment schemes should be supporting workers in adjusting to change, and transitioning to new jobs. Worker benefits systems, which include pensions and health care, need to adjust to a market with frequent job transitions and more diverse including a gig economy.

Conclusion

Nowadays digital transformation has attained a gigantic interest from entrepreneurs because of its pioneering impact on providing unexpected association with customers. With the emergence of digital technologies, dynamic markets, and clients, entrepreneurs are taking advantage to obtain more technical benefits through innovation in business models, product restructuring, organizational structures, and procedures. Digital transformation slowly brings different stages of technological innovations in the organization and enables them to become efficient and aggressive in the present market. Digital transformation is comprehensive and consolidated confined to many procedures, changes in technology, interactions, and external as well as internal influences. This ongoing journey needs to be supported by the right leadership and the right technology.

Networks, Clients, Associates, Workforce, Procedures, IT Expertise, Structure, Motivation, and Culture. Digital transformation is a dynamic aspect that every business requires to focus on in their policy design process. Digital transformation is about people, value, and the ability to quickly adjust through the smart use of technologies as well as information.

References

1. Besson, P. & Rowe, F., (2012); Strategizing Information Systems-Enabled Organizational Transformation: A Transdisciplinary Review and New Directions; Journal of Strategic Information Systems, Vol 21, Pp 103-124
2. Fitzgerald, M. (2013); How Starbucks Has Gone Digital; MIT Sloan Management Review
3. Bharadwaj, A. et.al., (2013); Digital Business Strategy: Toward A Next Generation Of Insights; MIS Quarterly, Vol 37 No. 2, Pp. 471-482
4. Manyika, J., Chui, M., Bughin, J., Dobbs, R., Bisson, P., & Marrs, A. (2013). Disruptive technologies: Advances that will transform life, business, and the global economy: McKinsey Global Institute
5. Downes, L. and Nunes, P.F. (2013), "Big bang disruption", Harvard Business Review, Vol. 91 No. 3, pp. 44-56.
6. HBR Analytics Services, (2014); The Leadership Edge in Digital Transformation; Harvard Business Review
7. Westerman, G. et.al. (2014); The Nine Elements Of Digital Transformation; MIT Sloan Management Review
8. Wang, Y. et.al. (2016); Big Data Analytics: Understanding its Capabilities and Potential Benefits to Healthcare Organizations; Technology Forecasting & Social Change;
9. Aral, S. et.al. (2013); Social Media and Business Transformation: A Framework for Research; Information Systems Research, Vol 24 No. 1, Pp. 3-13
10. Hess, T., Matt, C., Benlian, A. and Wiesböck, F. (2016), "Options for formulating a digital transformation strategy", MIS Quarterly Executive, Vol. 15 No. 2, pp. 123-139.