

## **Considerations initiating digital transformation, digital promptness of organizations and acceptance of digital initiatives– excursion of digital transformation in organizations**

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### **ABSTRACT**

Digital disruption has changed the mentality from “survive and thrive” to “evolve or die”. This evolution is industry agnostic – retail, manufacturing, pharmaceutical, telecom and also country agnostic. What firms need to ensure is how to grow with this disruption and improve their maturity levels along the way. To do this lot of organizations adopt digital transformation. Essentially, digital transformation is the process which many organizations adopt to reach on the other end of maturity curve or a digital maturity curve. In this paper, author studies the journey organizations take to reach the other end of this digital maturity curve - in this paper, author defines the three phased approach to digital transformation journey of organizations which are 1) drivers of digital transformation in organizations 2) digital readiness of organizations to embark on this journey and 3) adoption of digital transformation initiatives in the organization.

The authors conducted in-depth interviews of twenty-six executives of large business organizations in india. These experts in recent times had led the digital transformation journey in their organizations based upon artificial intelligence tools. Asemi structured open-ended interview questionnaire was used to conduct the interviews with the experts. The data was content analyzed for themes.

Authors identified5 themes post interviewing the experts across different organizations. These themes talk about the impact of pandemic and support from leadership on the initiation of digital transformation in the firm. Findings also cover the effect of training and incentives on adoption of digital initiatives.the findings from the study would aidexecutives leading digital initiatives in their organizations. The study findings can act as a guiding principle workbook for organizations that are planning to embark on the journey of launching transformation in their organizations by focusing on internal and external factors. The study also sheds light on how organizations are driven by external catastrophic events like covid-19 pandemic. The study findings will also be relevant for the change leaders of organizations to understand how to be the chief narrator of digital transformation.

**Keywords:** digital transformation driver, digital readiness, technological initiatives, adoption tracking, digital transformation adoption

Introduction

With the kind of rapid advancements in technology and transformation in today’s world as discussed above, digital transformation has begun to have a supreme impact on businesses, and organizations have started to leverage digital transformation for redesigning business processes, altering organizational structures and boundaries, and redefining industry structure and competition in addition to meeting customer needs (teo, tan, & wei, 1997). Digital transformation is not just disrupting traditional businesses, but it also enhances the existing value propositions through improved connectivity and recombination along with using digital initiatives (iansiti & lakhani, 2014). Various elements of traditional business operations and models get replaced with digital technologies and initiatives to formulate a digital business model for an organization. A digital business model essentially renovates traditional value propositions and processes by defining, building, and delivering superior value propositions using digital means (blaschke, cigaina, riss, & shoshan, 2017).

Theoretical perspective of the study

Different studies view digital transformation differently. For some, any information technology-enabled change, such as implementing a new crm or an erp system, is considered a digital transformation. In contrast, others believe that digital transformation is a more radical process that takes place over time (janowski, 2015; loebbeck & picot, 2015).

The authors leveraged the flow model of digital transformation (cf. Parker et al., 2016, shah et al., 2006, van doorn et al., 2010)as a basis of the research. The model explains the factors, phases or levels, and strategic requirements of digital transformation (cf. Parker et al., 2016, shah et al., 2006, van doorn et al., 2010). The model includes the external drivers of digital transformation, followed by the sources from multiple disciplines to discuss the stages of digital transformation journey. Based on an understanding of these phases, the strategic imperatives were discussed that result from digital transformation and the adoption of the initiatives in the organization.

Transformation

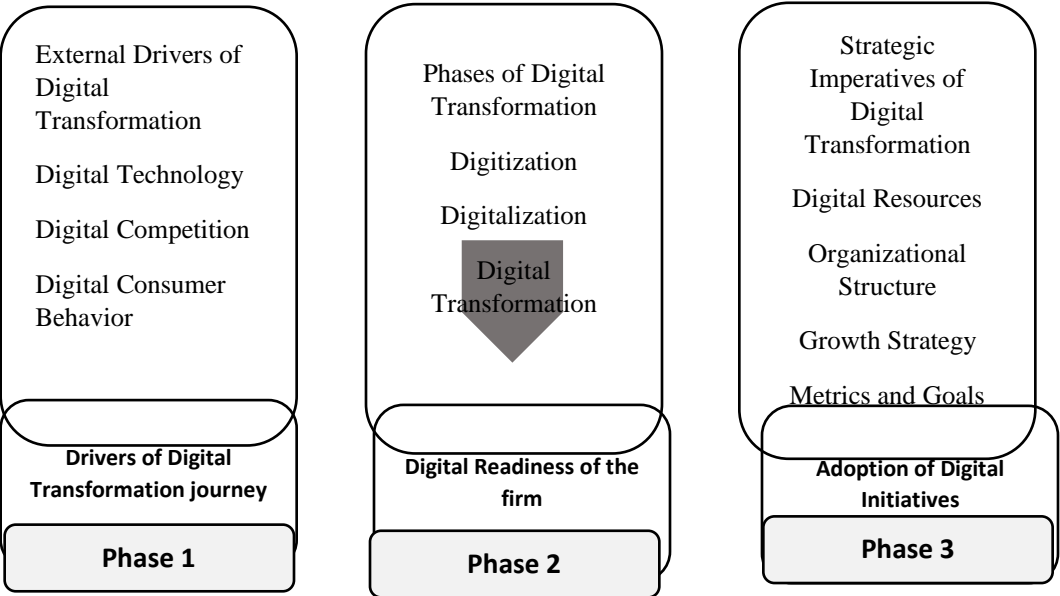


Figure 1: deriving the phases from the flow model of digital transformation

While some researchers associate digital transformation with business models and strategy, others view digital transformation as a process (berman, 2012; berman & marshall, 2014). Digital transformation is not only the mere digitalization of products and services; it is more about redefining an organization's value proposition (porter & heppelmann, 2014).

### Drivers of digital transformation

Embarking on the journey is only one part of an organization's digital transformation. Although literature recognizes the role of culture in facilitating digital transformation (pillay et al., 2012) and early academic contributions on it-enabled business transformation already pointed out the requirement of cultural modifications (venkatraman, 1994), culture has not played a very significant role in the research for digital transformation. a clear digital strategy and leadership poised to drive the transformation separates digital leaders from the rest. Technological transformation in business has stories of companies focusing on technologies without putting money into organizational capabilities that ensure return on investment.

below drivers have been summarized supported by the literature

<b>Drivers of digital transformation</b>	Literature review
<b>Digital technologies</b>	Agarwal, et.al. (2010); berman (2012); bharadwaj, et.al. (2013); bharosa, et.al. (2013); janowski (2015); kreutzer (2014); luna-reyes & gil-garcia (2014); mithas, et.al. (2013); lucas, et.al. (2013); stieglitz & brockmann (2012); setia, et.al. (2013); wang, et.al. (2016); berman & marshall (2014); loebbecke & picot (2015); westerman et.al. (2011)
<b>Digital capabilities</b>	Berman & marshall (2014); loebbecke & picot (2015); matt, et.al. (2015); schuchmann & seufert (2015); tamm, et.al. (2015); wang, et.al. (2016); westerman et.al. (2011);
<b>Strategies</b>	Berman & marshall (2014); bharadwaj, et.al. (2013); matt, et.al. (2015); stieglitz & brockmann (2012); tamm, et.al. (2015); mithas, et.al. (2013);
<b>Business models</b>	Agarwal, et.al. (2010); berman & marshall (2014); bharadwaj, et.al. (2013); janowski (2015); loebbecke & picot (2015); luna-reyes & gil-garcia (2014); matt, et.al. (2015); mithas, et.al. (2013); schuchmann & seufert (2015); tamm, et.al. (2015); stieglitz & brockmann (2012);
<b>Value chain</b>	Agarwal, et.al. (2010); berman & marshall (2014); bharosa, et.al. (2013); janowski (2015); stieglitz & brockmann (2012); tamm, et.al. (2015); wang, et.al. (2016);

**Table 1: drivers of digital transformation from literature**

Source : author's own interpretation

### Digital readiness of the firm

Organizations must use their strategy and way of working to import the potential of digital transformation of business (k. Schwertner, 2017). Generalized cultural attributes were proposed to nurture digital transformation success. These were innovativeness (e.g., fichman et al. 2014), risk-taking ability (e.g., fitzgerald et al. 2014), collaborative way of working (e.g., westerman et al. 2011), trial mentality (e.g., kane et al. 2016; piccinini et al., 2015), or agility (e.g., kane et al. 2016).digital transformation, apart from integrating digital technology with the business, also involves a readiness change in an organization, which challenges the status quo and experiments and gets comfortable with failure. Leaders need to create a change in the organization where continual improvements are enforced, and the key stakeholders and employees are open to the transformations happening in the organization.

### Adoption of digital initiatives

Digitization of society started in the 20th century and accelerated in the 21st century. This encouraged the adoption of digital transformation by many organizations across the globe. Organizational readiness has proved in numerous empirical studies to be the most influential predictor of e-business adoption; it is the essential prerequisite of the decision to try to harvest the benefits of e-business (grandon & pearson, 2004; molla & licker, 2005; riemenschneider & mckinney, 2002). Specific e-business activities depend on specific industry characteristics; large corporations are likelier to adopt e-business than smes (fomin et al., 2005). Adoption is significantly more influenced by organizational e-readiness than by environmental readiness. Below table defines the sources of literature which talk about **adoption of digital transformation in organization basis the digital readiness and the drivers of transformation.**

Source	Digital readiness and adoption of business initiatives
(rogers, 2003)	“adoption takes place when decision makers perceive a relative advantage over alternative technologies or business processes”
Grandon and pearson, 2004; molla and licker, 2005; riemenschneider and mckinney, 2002)	“organizational readiness has proved in numerous empirical studies to be the most influential predictor of e-business adoption; it is the most basic prerequisite of the decision to try to harvest the benefits of e-business”
Looi, 2005	“competitive pressure to adopt e-business is the most important motivation”
Fomin et al., 2005	“specific e-business activities depend on specific industry characteristics; large corporations are more likely to adopt e-business than smes”

Molla and licker, 2005	“adoption is significantly more influenced by organizational e-readiness than by environmental readiness”
Peter c. Verhoefa,* , thijs broekhuizena , yakov bartb , abhi bhattacharyaa , john qi donga , nicolai fabiana , michael haenleinc	“metric to measure the failure of digital transformation journey - while certain adjustments and updates of metrics usually happen when a firm goes through digitization and digitalization phases (e.g., measuring website clicks, video views and mobile downloads, after the introduction of online and mobile channels), overall outcome-related metrics like roi, profitability and revenue growth, typically remain relevant for firms that engage in digitization and digitalization”

**Table 2**digital readiness and adoption of business initiatives

source: kollmann, tobias & kuckertz, andreas & breugst, nicola. (2009). **Organizational readiness and the adoption of electronic business – the moderating role of nation-al culture in 29 european countries**

### Research methodology

The authors have used qualitative research methodology (silverman, 2001). According to burns and grove, (2009), qualitative research was an approach that was systematic and subjective to highlight and explain experiences. Authors had explored various qualitative methodologies - phenomenological, ethnographic, grounded theory, historical, case study and content analysis (silverman, 2001). Post studying the various models, authors have chosen content analysis as a preferred way of research methodology (patton, 2002). This was because the idea of the researchers was to “stay true” to the text and to achieve trustworthiness from the interactions with respondents (downe-wambolt, 1992, morse and richards, 2002)

The research allowed to understand how different companies underwent their journey and also helped study their responses in the same industry. The study also helped analyze the similarities and differences between companies in the same industry. The study used data from interviews, events, and case studies published online. The studies in scope also used stories with a longitudinal time frame expanding over the entire course of study for some organizations and pre- and post-covid time for a few others. Hence, for this research, the main idea was to study the digital transformation journey of organizations based in india who have been through the journey and are from a traditional/ new age industry. Stories were selected considering the initiatives were big enough for the organization to create a strong impact. The organizations were chosen from different sectors. The companies chosen were relevant in the market. The organization's service/product offerings were spread across different areas, such as retail, finance, and telecom. The organizations started their journeys only in the last ten years, with the total journey duration varying from organization to organization.

**Experience view:** 50% of the experts have experience between 14 – 18 years. Everyone interviewed had experience of more than 10 years. 4 experts had experience of more than 20 years. Most of the experts in this experience range were the decision makers of the transformation journey and would have a key role to play in the journey for organizations. For few experts the total experience is more than the age of the organizations itself. Total cumulative experience of the

experts interviewed is 396 years, which maximum cumulative experience from strategy department.

#### Profiles of experts interviewed (experience view)

Experience of the experts	It/digital	Strategy	Marketing	Cxo	Others	Total	Average cumulative experience
8 - 10 years						0	0
10-14 yrs	3	2	1		3	9	108
14-18 yrs	3	5	2	1	2	13	208
>= 20 yrs			2	2		4	80
Total	6	7	5	3	5	26	
Average cumulative experience	$3 \times 12 + 3 \times 16 = 84$	$2 \times 12 + 5 \times 16 = 104$	$12 + 32 + 40 = 84$	$16 + 40 = 56$	$3 \times 12 + 2 \times 16 = 68$		396

**Table 3 – profile of experts interviewed (organization function and experience) source - authors 'own conceptualization**

**Industry view:** retail, media, fmcg, telecom, food, energy, and finance are the industries experts belonged to. The organizations were a mix of digitally born or aiming to transform digitally. Most of the firms belonged to retail sector. The second most covered sector is fmcg. This could be as a result of 1) higher number of digital transformation initiatives are launched in the consumer facing industries (retail and fmcg) 2) the sampling was done using snowball which resulted in experts belonging to same network. The least number of experts belonged to energy and telecom sectors. Interestingly, as per the experts, these 2 sectors have a high dependency on government and external bodies for regulation.

#### Profiles of experts interviewed (industry view)

Experience of the experts	It/digital	Strategy	Marketing	Cxo	Others	Total

<b>Retail</b>	3	3	2		1	9
<b>Fmcg</b>	1		1		2	4
<b>Telecom</b>	1	1		1		3
<b>Food</b>		2	1	1	1	5
<b>Energy</b>				1	1	2

**Table 4 – profile of experts interviewed (organization function and industry) source - authors ‘own conceptualization**

### **Thematic saturation in expert interviews**

The number of interviews required to identify the significant themes and patterns for the study is critical for ensuring that all likely possibilities have been explored. The minimum number of interviews required to achieve this objective has been suggested to be as low as ten (glaser & strauss, 1967) to as high as 20-30 (saldana, 2015). Achieving thematic saturation is essential in the expert interview technique (guest, bunce, and johnson, 2006; hennink, kaiser, marconi, 2017).

Thematic saturation was achieved after 22 interviews as no novel insights were discovered, and the process was closed after conducting 26 interviews (guest, bunce, and johnson, 2006). Respecting the ethical aspects of the research process, the participants were assured that all responses would be kept confidential and used only for the specific purpose of the study (lancaster, 2017; richardson & godfrey, 2003).

### **Data analysis**

Using the content analysis method as rationalized in the previous chapter, selected employees of the chosen organization were invited to discuss the digital transformation journey undertaken by the organization. The questions as part of the interview were meant to be simple and direct, with the main focus being understanding employees' perspectives on the organization's journey. The questions used for the interview have been defined in the previous chapter. The interview process is defined below.

In-depth interviews were conducted with twenty-six executives of large business organizations in india. These experts had recently managed the digital transformation journey in their organizations and belonged to different sectors and varied business functions. The experts were either part of the decision making process in the firm or were the actual users of the digital initiatives launched as



part of transformation. Total cumulative experience of the experts interviewed is 396 years, which maximum cumulative experience from strategy department. 50% of the experts have experience between 14 – 18 years. Everyone interviewed had experience of more than 10 years. 4 experts had experience of more than 20 years. Most of the firms belonged to retail sector. The second most covered sector is fmCG. This could be as a result of 1) higher number of digital transformation initiatives are launched in the consumer facing industries (retail and fmCG) 2) the sampling was done using snowball which resulted in experts belonging to same network.

A semi-structured open-ended interview questionnaire was used to do an in-depth personal interviews with the experts. Pattern recognition was done that involved identifying core themes via the careful reading, and rereading, of the interview narratives. A three-cycle coding process was followed to develop common trends (themes) from the interview transcripts. Post the interview, the narrative was coded using Delve tool. Initial concepts in the data were analyzed and these were grouped into provisional categories and first order concepts (open coding) – level 1 coding. Total 11 codes identified were 1200. In the next step, codes were narrowed down using the focus to a relatively few level 2 codes. Level 2 codes were 152. Level 3 coding involved a very fine focus using the gradual and progressive convergence of ideas from level 2 as the basis of inquiry. 23 high level concepts emerged from 12 codes. Themes were refined during level 3 coding or thematic coding as ideas approached a critical density. Once thematic coding was done, common patterns between and among these provisional categories were identified, which generated the 7 highly refined themes detailed below.

## **Research findings**

Post data analysis, themes were derived for each phase of the digital transformation journey

### **Phase 1 – drivers of digital transformation journey**

#### **Theme 1 –directive from leadership leading to increase in sales is the key driver to launch digital transformation journey**

Quote from experts–

“trigger for the organization was the directive from the group or global team who had already launched similar initiatives in other markets”

“trigger was driving sales efficiencies”

“trigger was to increase overall revenue and expand outlets”

Push to initiate the digital transformation journey is internal and is often triggered from leadership or a new entrant to the team (either in leadership or a new team formation). Large, more established companies have an innovation cell launched, which does holistic research on the latest digital trends in the market and how the competition or ancillary companies are leveraging from these initiatives. For a key media player, initiating digital transformation was activated internally when the objective from the initiative is to increase top line or revenue or reduce costs. It was driven by internal leadership when a key leadership member joined the organization from an external organization and changed the legacy.



**Theme 2 – pandemic had a positive impact for the organizations undergoing digital transformation journey**

Quote from experts –

“for retail specific organizations, covid 19 gave way to many digital transformation initiatives”

“the project was launched pre covid, but during pandemic we realized that digital and contactless payments gathered a lot of momentum because of the way the consumer behavior was changing”

Plan was to consolidate to one chat / voice / data sharing platform immediately took the priority and had to be delivered in less than a month

Covid-19 had a massive role to play in organizations across the globe. Although the pandemic has hurt many businesses, it has also uncovered new opportunities for entrepreneurship. It has boosted digital entrepreneurship, for instance, reflecting changing consumer behavior during and in the aftermath of the pandemic. Employee experience with digital workplace transformation and remote access—with its assets supply chain issues and hiring still at the usual pace, the dependency on remote applications like citrix / vdi increased. This helped define standards and transform to a more mature next-generation technology, which is also a preference from a cyber perspective.

**Phase 2 – digital readiness of the firm**

**Theme 3 – continuous support and communication from leadership with an expectation in working culture is essential to be digitally ready**

Quote from experts –

“it is highly important to ensure the entire team is on board with the project. Constant support from all the relevant parties is of key importance”

“aligning on the priorities and getting the buy-in from the board are the potential roadblocks”

“not all talent resides in house, right talent onboard is important. New partners were explored. Organization structure was also redesigned”

Digital readiness is a combination of digital skills and trust. Digital skills are the degree to which employees use digital tools and mean to carry out the various operations in an organization. Trust, on the other hand, is employees' belief about their ability to determine the trustworthiness of using these digital means for carrying out the operations in the organization. Digital readiness ensures employees are ready and comfortable to use digital means, i.e., employees can navigate through the digital world of work and perform. An organization must possess specific abilities to be digitally ready in today's world: be disruption ready, provide seamless information flow, take ownership, have a positive outlook towards change, and have the ability to change organization structure when needed.

**Phase 3 – adoption of digital initiative in an organization**

**Theme 4 – aid to training and motivation are needed to enable adoption of digital initiatives in an organization**

Quote from experts –

“internally, as part of the process, lot of buy in required from people. Lot of training is also involved. Training for the change, for a particular software”

“training is highly important for any project. Even after all this, it is important to make ppl adopt. Including training material, workshops, handholding. Initial handholding is highly important”

“mandate backfires in our organization. Creating incremental buy in is important”

Digital transformation involves using digital technologies to improve a process to make it more effective or efficient, thereby improving one or more of the business objectives. The idea is not to use digital-only to replicate an existing service in its digital form but rather to use digital or a technology initiative to transform a process that is essentially more helpful and significantly improves efficiency. Usefulness and ease of use (eou) are considered essential elements in the acceptance and use of technology. One depicts how important an initiative is, and the other depicts how easy it is to use that initiative. Nevertheless, there is still confusion about these two constructs, their interdependency, and the importance of one over the other. Usefulness is seen as a function of the action, while ease of usefulness is viewed as a construct independent of the task reflecting essential properties of the user interface. It is also suggested that perceived eou may be a function of task/tool fit.

Overall, both these factors are extremely important for the adoption of any initiative in our organization. The usefulness and ease of use are both important and should be evaluated before the initiation of the project.

### **Theme 5 – tracking adoption is essential to measure the success of digital initiatives in organizations**

Quote from experts –

“different groups were created – 1) aware managers 2) happy basics 3. Experience seekers (most noisy people)”

“transparency and tracking will be captured, creating pulls and pushes from leadership”

“start with a few employees. Pilot is the new way of going big”

Digital transformation success depends on the adoption of digital in the people and processes of the organization as a whole and not specific to any department (dremel, c., wulf, j., herterich, m., waizmann, j., brenner, 2017). Successful organizations must leverage strategy, culture, and leadership to harness the potential of digital transformation in business.( k. Schwertner, 2017). What separates digital leaders is a clear digital strategy combined with a culture and leadership poised to drive the transformation. The history of technological advances in business is littered with examples of companies focusing on technologies without investing in organizational capabilities that ensure their impact. Digital transformation can result in the emergence of new jobs: “new professions have emerged as the cloud broker whose role is to aggregate all internal and external cloud services through a single portal” (i.1) or “the chief digital officer, who has a facilitating role in the adoption of digital technologies for business but he can also be responsible for a complete project of the digital transition.”

### **Conclusion**

Digital transformation is not only about tech; it is more about people. It is essential to use this to drive many efficiencies, but organizations must be cautious of the consequences it may bring. Organization restructuring also happens often, and people may also lose jobs. Many organizations globally are embracing digital transformation to stay relevant and competitive. Embracing digital technology or embarking on a digital transformation journey means integrating digital technology into various organization operations and ranging from customer interaction to internal processes. However, not all digital transformation stories are successful for an organization. Few organizations do not see the light of the success of digital transformation and have to face challenges as they embark on this journey. Digital transformation success depends on digital readiness and adoption of digital technology in the people and processes of the organization as a whole, and it is not specific to any department.

### **Theoretical contribution**

This qualitative research is a highly contextual study keeping in scope the Indian companies which have undergone the journey of digital transformation. The companies have either completed the journey or were still in the journey to completion. New theoretical contributions have been identified to the existing knowledge of digital transformation in organizations. Organizations adapt or transform when they are faced with external opportunities and threats. In the existing management literature, very few studies deal with digital transformation because of the various internal and external opportunities available to a firm. This research also talks about the readiness of organizations when they face these drivers and the adoption of these initiatives in organizations. The study covers all the phases of the digital transformation journey.

### **Managerial contribution**

This research study's findings would help managers leading digital transformation initiatives in their firms. The findings would help the managers understand what went right and what could potentially go wrong while implementing these organizational initiatives. The study findings can act as a guiding principle workbook for organizations planning to embark on the digital transformation journey by focusing on internal (technology and organization) and external (environment) factors. The study also shows how organizations are driven by external catastrophic events like the COVID-19 pandemic. The study findings will also be relevant for the change leaders of organizations to understand how to be the chief narrator of digital transformation. Furthermore, it would also help executives regarding how to track adoption to measure the success of digital initiatives in organizations.

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