A Review Paper on Era of Digital

Tejinder Singh¹, Harmanjeet Singh², Er. C.K. Raina³

¹CSE Department, Adesh Institute of Technology, Gharuan, Punjab, India
²¹HOD, CSE Department, Adesh Institute of Technology, Gharuan, Punjab, India

Abstract: As many organizations process strategies and transformation programmers to exploit “digital”, here is one prospective on simplifying this multifaceted agenda. We suggest six domains of digital that strategy should cover, and five features of successful digital transformations.

Today most organizations have “all things digital” front of mind—both at board level and in their planning and operational teams. Whilst the benefits might not always be quantifiable, most executives are relying on their intuition to make investments to respond to this mega-trend. We think they are right to do so.

Six domains of digital you need to address.

1) Customer experience & digital marketing
2) Digital business models
3) Digital organization
4) Analytics
5) Digital technology strategy
6) Governance, risk & compliance

The objective of digital transformation span a wide spectrum, including increased revenue, lost reduction, improved customer satisfaction, enhanced differentiation, and ultimately, mitigation of the risk of digital disruption. Firms are investing heavily in customer experience as a part of their digital transformation strategies.

Keywords: Adaptability, digital payment, user experience.

I. INTRODUCTION OF DIGITAL TRANSFORMATION

Digital transformation is the process of shifting from traditional approaches to new ways of working and thinking using digital, social, mobile, and merging technologies.

Digital transformation may be thought of as the third stage of embracing digital technology: digital competence, digital usage of digital transformation, with usage and transformative ability informing digital literacy. The transformation stage means that digital usage inherently enable new type of innovation and creativity in a particular domain, rather than simply enhance and support the traditional method. In a narrower sense, “digital transformation” may refer to the concept of “going paperless” and effect both individual business and whole segment of the society such as government, mass communication, art, medicine, and science.

Digital transformation in enterprises is primarily about engaging with consumer using powerful digital services. This is now a consumer game where agility, ease of use, simplicity and the key element of design thinking critical success factors. Digital transformations cut across customer experience, operation efficiency and the business model itself.

A. What is Digital Transformation

The term is very definitely being hyped by some, and is danger of becoming as diluted in meaning as the “cloud” term as it becomes a catch all for almost anything associated with our new connected, social media oriented world using emergent technology.

2017: strategy, returns on investment and challenges.

Digital intelligence briefing: 2017 digital trends originally published: feb2017

It is the latest technology in computer science engineering. The 2017 digital trends report, based on the seventh annual trends survey conducted by Adobe, highlights the digital trends.

Expert Christopher ward has done the research will help you convince the boss. Report Author Mary Shackled points out that what is fact has been happening in digital transformation initiatives.

With this technology, inserted at points with in the business where there are immediate needs for it. During 2017, covering topics ranging from customer experience and mobiles of data driven marketing and personalization.
The report is based on a global survey of more than 14,000 marketers and ecommerce professionals carried out at the end of 2016. A few months ago, tech pro research surveyed IT leaders about digital transformation in their organizations, only 20% said they had a comprehensive digital transformation strategy in place, but this does not mean digital transformation has not been happening.

B. Digital Transformation Of Industries
The digital transformation of industries project, launched by the World Economic Forum in 2015 is a multiyear engagement with the aim to adjust the impact of digital technologies on business and society to better understand digital transformation opportunities and risks in industries and their related sectors and provide insights and required for business model changes. In 2016-17 the project will focus on 8 further industries: chemicals, mining and metals, gas, insurance, hospitality, professional services, telecoms and retail.

Object
The goal of the project to generate insights into how digital technologies are changing individual industries how they lines between industries and the impact of these transformation on the wider society.

C. Object
The goal of the project is to generate insights into how digital technologies are changing individual industries. How they blur the lines between industries, and the impact of these transformation on the wider society. it will be incumbents in successfully transitioning from analogue to digital, and entrants in identifying new market opportunities and competitive advantage enabled by digital.

The project has the following deliverables:
Industry deep dives documenting digital transformation in specific industries, case studies on how individual companies are successfully transitioning to digital workshops around the world to engage partners, sensitive to our finding, gather their insights on their most pressing concerns and porosities.
Session at forum event
A mini-site – digital we forum, out- that hosts our finding in a multimedia format.

II. THE PROJECT HAS THE FOLLOWING DELIVERABLES
Industry dives documenting digital transformation in specific industries. Case studies on how individual companies are successfully transitioning to digital workshops around the world to engage partners to our findings and priorities.

A. Opportunities
Today, digitally transformed organization are 26% more profitable than other competitor industries. All it organization now realize how transformative digital transformation as well. Global spending on digital transformation technologies is expected to cross $2.1 billion by 2019**. Thus, Indian & global it companies are investing heavily in building digital transformation skill to enable their client transform digitally. However, 77% of companies considered lack of digital skills as the key hurdle to their digital transformation.

Demand
1) Efficiency
2) Quality
3) Reliability
4) Security
5) Time

B. Digital Transformation Of Industries
The digital transformation of industries project, launched by the World Economic Forum in 2015 is a multiyear engagement with the aim to adjust the impact of digital technologies on business and society to better understand digital transformation opportunities and risks in industries and their related sectors and provide insights and required for business model changes. In 2016-17 the project will focus on 8 further industries: chemicals, mining and metals, gas, insurance, hospitality, professional services, telecoms and retail. The cross industry topic are: platform governance, impact of policy regulation, social implication and impact of emerging technologies.
C. Digital Transformation

Digital transformation is the change associated with the application of digital technology in all aspects of human society. The transformation stage means that digital usage inherently enables new types of innovation and creativity in a particular domain, rather than simply enhance and support the traditional methods.

D. DevOps

DevOps (A clipped compound of “Software Developments” and “Information Technology Operations”) is a term used to refer to a set of practices that emphasize the collaboration and communication of both software developers and information technology (IT) professionals while automating the process of software delivery and infrastructure changes. It aims at establishing a culture and environment where building and releasing software can happen rapidly, frequently, and more reliably.

E. Overview

In traditional, functionality separated organizations, there is really a cross-departmental integration of these functions with it operation. But devops promotes a set of process and method. For thinking about communication and collaboration – between departments of development, QA (Quality Assurance) and IT operations. In some organizations, this collaboration involves embedding IT operations specialists within software development teams. Thus forming a cross-functional team – this may be combined with matrix management.

F. Goal

The specific goals of DevOps span the entire delivery pipeline. They include improved deployment frequency which can lead to:

1) Faster time to market;
2) Lower failure rate of new releases;
3) Shortened lead time between fixes;
4) Faster mean time to recovery (in the event of a new release crashing or otherwise disabling the correct system).

Simple processes become increasingly programmable and dynamic, using a DevOps approach. DevOps aim to maximize the predictability, efficiency, security, and maintainability of operational processes. Often, automation supports their objective. DevOps integration targets product delivery, continuous testing, quality testing, feature development, and maintenance releases in order to improve reliability and security and provide faster development and deployment cycles. Many of the ideas (and people) involved in DevOps come from the enterprise system management and agile software development movements.

III. DEVOPS STRATEGY TO ENSURE SUCCESS IN THE CLOUD

DevOps and cloud computing are linked. This fact is well understood by organizations that use cloud services or build applications in the cloud.

The core component of this relationship is value through agility. DevOps provides the automation behind agile methods. Traditional target platforms require weeks or months of planning for the hardware and software required. Even with virtualization, the automated provisioning of those resources can’t typically be done on demand.

When it comes to implementing DevOps in concert with the cloud, there are a few core principles to understand and incorporate.

A. There should be a continuous process that includes all aspects of development, testing, staging, deployment, and operations. There should be no time where parts of the process can’t be fully automated. This includes self or auto-provisioning target platform resources.

B. Major and minor changes to applications from development to operations, should typically occur in less than one day. Moreover, the deployment platform should support almost unlimited provisioning of almost unlimited provisioning of resources.

C. The enterprises can exist on premises in the cloud, or in hybrid configuration. Moreover, the use of multiple Cloud brands, such as AWS, Google, and Microsoft, should be supported as well as public and private cloud models
Devops and cloud become the pged.

<table>
<thead>
<tr>
<th>The Old Way</th>
<th>The New Way</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)Software is build and shipped.</td>
<td>(1) Services are even and managed.</td>
</tr>
<tr>
<td>(2) Development</td>
<td>(2) Services are never done until turned off.</td>
</tr>
<tr>
<td>Of feature is done.</td>
<td></td>
</tr>
<tr>
<td>(3) Product owner focus only on features.</td>
<td>(3) Product owners own operational results along with the product feature set.</td>
</tr>
<tr>
<td>(4) Each silo owns its own area.</td>
<td>(4) All user focus on end user satisfaction.</td>
</tr>
<tr>
<td>(5) Devs must go through ops to get work done.</td>
<td>(5) Ops enables dev to get work done.</td>
</tr>
<tr>
<td>(6) Ops monitor apps.</td>
<td>(6) Ops provides dev with tools to operate apps.</td>
</tr>
<tr>
<td>(7) Reactive monitoring / ops.</td>
<td>(7) Proactive monitoring / Dev.</td>
</tr>
<tr>
<td>(8) Customer are isolated from each other.</td>
<td>(8) Multi-tenancy and shared resources.</td>
</tr>
<tr>
<td>(9) Application services share common platform and infrastructure.</td>
<td>(9) Distributed services on isolated instances, hardware independence.</td>
</tr>
</tbody>
</table>

IV. BENEFITS OF DIGITAL TRANSFORMATION

The financial services industry, like many other, is experiencing rapid change particularly in the area of digital marketers are forging a path original and innovative ideas. As such, businesses are starting to see the potential of digital for engaging customer externally, but also for streamlining internal processes.

This seismic digital transformation has the potential to integrate and streamline entire business processes in order to increase business performance.

A better customer experience

1) A positive customer experience starts with every internal team with in your business understanding their role in redelivering that experience. Put in place processes and tools to educate staff about your organizations most valuable marketing asset - your unique brand experience through your entries customer journey.

2) An enhance brand reputation

   Today, 81% of executing are placing the highest priority in actively managing their banks brand or reputation compared with 68% in 201.

3) Stream operation;

   58% of organizations have failed to adapt their internal process for digital. Streaming operations saves time money and allow to be more efficient with their time PA consulting, digital barometer.

4) Increase in sales.
Companies that have embraced digital transformation are 26% more profitable than average industry competitors and enjoy a 12% higher market valuation/MIT center of digital business.

**Overview**

![Venn diagram showing DevOps as the intersection of development (software engineering), operations and quality assurance (QA)](image)

**A. (O) 5Tech Trends That Will Change The World In 2017**

1) Internet of things (and the death of the hub).
2) The best alv products.
3) The best smart home products.
4) Food industry expert predict a wild future for food.
5) 3d printing for all.

**B. How can you make or digital journey successful:**

Successful digital transformation in our study used a common set of elements each is a lever executives can use to initial and device digital transformation in their organization. Leaders diagnose the potential value of existing corporate assets and build a transformative vision for the future. Then they invest in skills and initiatives to make the vision a reality. Fundamental to the transformation is effective communication and governance to ensure that the firm is manning in the right direction. The elements work together in an iterative approach constantly communicating and writing to re envision and further implement new types of digital transformation. Senior executives drive digital transformation through on iterative three step process.

1) Envision the digital future for your firm.
2) Invest in digital initiatives and skills.
3) Lead the change from the top.

**V. CONCLUSIONS**

We are in an era of digital disruption. Agile digital transformation is a way to bridge the gap globalization is commanding efficient integration of businesses which can only be achieved through digital processes and collaborative platforms. Customers are demanding new ways of engaging. As competitors and new players make digitally enabled practices a reality, businesses must harness the power of transformation to remain relevant and competitive.

What benefits should a company expect to see from its transformations. The answer: increased revenue resulting from superior customer experiences, improved long. Term enterprise value through enhanced process agility, continuous innovation, and improved return on IT investments through best of breed platforms that reduce an organizations technology debt.
REFERENCE


