DIGITAL THINKING: GETTING READY FOR A DISRUPTIVE WORLD

Amit Kundaliya
Associate Director- Digital, Nagarro
Vikas Awasthi
Sr. Project Manager, Denave Pvt. Ltd.

Abstract:

Industry 4.0 is all about driving digital technologies to the core of traditional manufacturing and industrial practices/ processes. For manufacturers to be able to remain competitive, they must embrace the digital transformation and everything it has to offer. There is an inherent need to pay attention to the digital transformation trends which are and will be driving industry 4.0.

The industry is getting disrupted by technologies like advanced data analytics, artificial intelligence machine learning, IoT and others taking a center stage.

In this paper we will be discussing about a digital ecosystem and its constituent elements, we will also focus on the industry trends and the value at stake across few industry verticals like: Consumer centricity, Connected digital enterprise and Change ready mindset.

Consumer journeys and experiences will be driving future business strategies, culture & operating models of all the industry sectors and manufacturing is not untouched. For an enterprise to be transformed, digital must shift to the core of the business, with digital platforms, processes and data fully connected from CMO, CIO to COO. Perhaps the most challenging part of a transformation journey is around the mindset. We will be diving deeper into each of the above aspects and discuss how organizations may make use of digital technologies (Artificial Intelligence, Machine Learning to name few), focus on consumer experience and adopt an agile mindset to have a successful digital journey.

Keywords: Transformation, Agility, Connected Experiences, Artificial Intelligence, Machine Learning, etc.

Introduction

Industry 4.0, commonly known as the fourth industrial revolution (4IR), is the technology-based transformation where many physical and digital technologies are combining through data analytics, artificial intelligence, and the Internet of Things (IoT) to create true digital enterprises. Leaders across the enterprises are fast realizing that digital is not only about technology, it is also about ideating and creating new experiences and service models.

A challenge that many organizations face is around the definition of digital for them. A technology solution addressing a certain business problem or solely a technology-based approach is not digital, it rather restricts digital to a small part of the organization, and instead, companies must bring digital into every aspect of the business, creating a digital ecosystem that includes people, processes and technologies. Let's take a look on a few very important aspects which are essential for any enterprise for a successful transformation journey.

Change Ready mindset

As digital continues to disrupt most business operations, traditional organizations struggle to cope with the pace of change. Organizations must focus on speed, emerging technologies, and data but the agility needed for the same is somehow missing in a traditional outfit. We will discuss how organizations can keep their workforce relevant via re-skilling them.

Digital transformation – although talks about driving digital technology to core still demands leadership and individuals driving the company's change. The huge task of transitioning a business from traditional one to become a technology-driven entity demands initiative, direction and continuous movement.

A transformation journey must start from the top of the organization, for any enterprise successfully transform itself it is very essential to have the C layer and other top executives share the same vision about digital and are aligned on what their digital roadmap will look like. CEO-leadership of transformation perhaps could be considered the most essential part of a successful digital business transformation. The emergence of new C level roles like Chief Digital Officer, Chief Experience Offices, and Chief Data Officer etc. augmenting the traditional CIO / CTO roles is a clear indication on how serious the enterprises are about a digital mindset.

While digital clearly provokes change, there is no need to make a big bang rollout, it's always about starting small, rapidly realizing the value and then gradually building it up. The fundamental elements of an effective operating model remain as important as ever.

Adopting a test & learn based approach and being change ready are the traits which an organization needs to build across. The consumers' preferences are changing at an exponential speed and the technological landscape is changing even faster. Employees need to be ready and empowered to move at this pace. Agility is the key for any transformation journey. Re-skilling the workforce and building a culture of continuous learning is what is going to be a key differentiator between success & failure.

Here are some key principles which are very important for a change ready organization:
- Agility - the ability, foresight and willingness to quickly adapt to changing circumstances was essential.
- Anticipation - reflecting on a technology-driven future that could look substantially different.
- Diversity - workforce diversity and inclusiveness increased the prospect that the company would be open to new ideas.

Consumer Centricity
Today's consumers are the new market-makers, with an exponential rate of changing consumer expectations they are reshaping industries and changing how businesses operate, compete & win. Success depends on how well the business operates at the speed of consumer. Consumer centricity focuses on a shift from being product/services led to being consumer led. Having an outward-in view of the business is the new thinking. The consumer experiences & journeys drive future

business & operating models. The Consumer is in charge!

Customer experience leaders know that digital is not only about being technology-focused. Rather, it is about imagining and re-imagining about how to be relevant to current and future customers—from creating new experiences and models to transforming the business.

Let's take banking industry as an example, according to Capgemini world retail banking report 2018, 70% of the bank executives believe that consumer expectation is the biggest factor which is causing disruption in the banking industry. About 95% of the executives believed that offering consumers a better experience is the most important aspect. Banks are now realizing that their traditional ways of working are constantly getting challenged. The customers are looking at alternate ways of banking and the demand for digital channels has been on the rise. Traditional banks which earlier operated in a closed mode are opening up and partnering with fintech firms to extend their banking capabilities and improve operational efficiencies. Banks are finally opening to social media as a viable customer experiences tool, and a fundamental content marketing tool.

The fact is what has been working in the past for businesses yesterday is not going to work tomorrow or might already be not working today. Attracting new customers and retaining existing ones needs a customer-focused digital transformation. It starts with reimagining the customer experience and making sure that the right processes and technology are placed to make it a

success.

Does it mean that we define the same journey for each and every consumer? The answer is NO. Leading companies are already re-imagining customer experiences with a strong focus on digital. By giving customers rich experiences in their own languages, Marriott is reaching $7 billion in annual sales online.

A customer-relevant & digitally powered business is no longer good to have, but is fast becoming the only means to stay competitive and survive.

Forrester research shows a correlation between customer experience excellence and revenue gains tied to customer loyalty- be it through repeat purchases, lower switching rates or increased word of mouth. The research revealed potential loyalty-related revenue boosts of $3 billion for wireless service providers, $2 billion for airlines and $1 billion for hotels as stand-outs among the industries analyzed.

Connected Digital Enterprise
Digital business transformation is nothing more than a business transformation but using digital technologies or transformation in a digital age for digital people. The rate of change in technology is causing disruptions in the business models but at the same time, it is creating a lot of opportunities.

Businesses need to understand this and get ready with a connected ecosystem with technology at the core. Placing digital at the core means connecting digital platforms and data, end-to-end across the business.
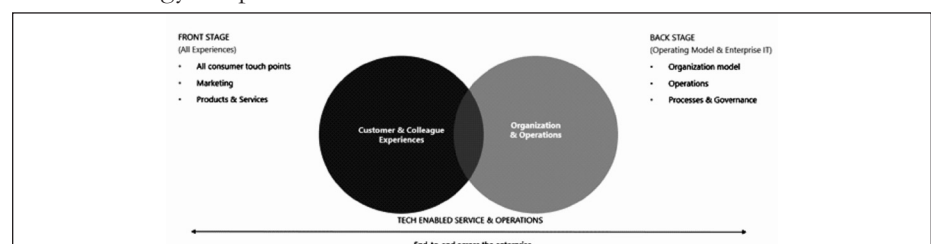

Figure 1: A High-Level View of Connected Enterprise

A successful Transformation relies on creating a connected digital enterprise (connecting employees, customers, partners, technology, data and more). In other words – digital should run across the front stage part (customer facing applications, products & services, etc.) to the backstage (enterprise IT, employee portals, etc.) connecting the business functions and creating value across the horizontal.

Role of Technology

The rate of technology-based innovation is already exponential - let alone what tomorrow will bring. Most companies are struggling to keep pace with the newer technology trends. Technology is no more an enabler to the business – it itself is one of the key business areas and has the power to alter human experiences and consumer journeys.

Netflix is a perfect example of an overall business model transformation riding on technology innovations. Somewhere In 2004, Netflix started a digital journey to move away from its very successful DVD-by-Mail business mode to a Video streaming-based model. It is one of the rarest cases where an organization abandoned its traditional model to embrace a future technology-based model. Another success story is Amazon. Initially an online bookseller, it started focusing on alternate business models riding on technology and created multiple tech-based business platforms. The below diagram shows the latest technology trends which are causing digital disruptions. Let's briefly discuss a few of them.

moved to banking and other financial sectors. The insurance and healthcare industries are exploring the distributed ledger setup to make innovative use of the same.

Reality

Three flavours of 'reality' are finding great use in modern digital businesses. Assisted, Mixed and Virtual reality are being used in a wide variety of business solutions. For example, Virtual reality is being used in the Gaming and casino industry. Augmented and assisted reality is finding its place in the manufacturing and automotive sectors for workforce training and productivity improvements.

References

- https://www.gartner.com/smarterwithgartner
- Capgemini World Retail Banking Report, 2018.
- https://www.nagarro.com/en/blog/post/71/assisted-augmented-and-virtual-reality-our-industry-4-0-initiative

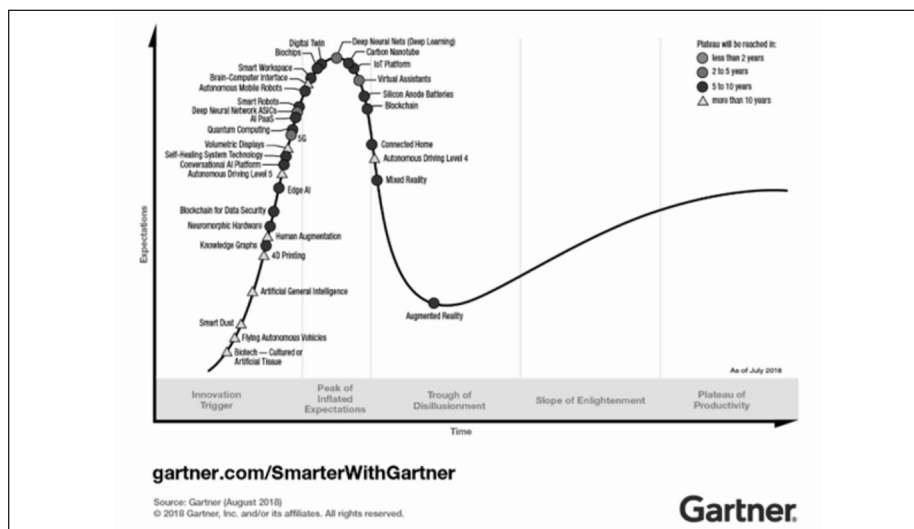**Figure 2: Hype Cycle for Emerging Technologies, 2018**

Machine Learning & Artificial Intelligence

The industry is fast becoming data centric. Making sure that the customer data is being captured at every possible avenue, connecting the data and deriving actionable insights with an overall view of the customer is MUST for the industry. The game is fast moving towards being "personalized & selective" according to the customer preference. Data provides the ability to address customer's evolving expectations. Any industry with very large amounts of data — so much that humans can't possibly analyze or understand it on their own — can utilize AI& ML.

Potential of Blockchain

Blockchain (distributed ledger) technology is viewed by many pundits as enabling the next big wave of technology-driven business transformation on a global scale. It all started with crypto currency and slowly