

Shaping the future of business through Digital Transformation



This whitepaper highlights key areas of digital transformation and how to accelerate its achievement through various technologies and techniques.

By - Arun Sikri, Strategic Practice Head



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Introduction

In our fast paced, constantly evolving environment, the future of business lies in being able to engage with your customers better and provide them with great experiences each time. Therefore, it is important to track the trends that are shaping the future.

It is important to understand what encapsulates Digital Transformation and how it can be achieved through various means in an accelerated manner for existing applications and products.

As customers and users become more and more digitally enabled, capitalizing on your strategies to maximize return on investment through advancements in digital experience is the need of the hour.

It is now a well-known fact that perceptions and needs of users change more frequently than ever and those who are able to capture the trend and are agile at the level of systems of engagement, have a more satisfied customer. They are able to maintain a sustained growth in long run.

For any business, digital transformation is more of a business transformation. More often than not, people and not technology are the most important piece in digitalization of an organization.

We look at the focus areas of digital transformation and how to accelerate its achievement through various technologies and techniques. We also look at how this technology-enabled change unlocks productivity improvements and significant competitive advantage.

Focus Areas for Digital Transformation of Your Business Systems

Digital technologies have a profound impact on all areas of a business, from enhanced customer experience to productivity in operations and better peer communication within an organization. Focusing on creating customer value proposition in terms of how new services and products are being offered along with optimization of the existing services to check and improve how effectively they are being delivered is what Digital transformation may aim to achieve in most cases.

FOCUS : THE CUSTOMER VALUE PROPOSITION

1. Focus on redefining Customer Value Proposition (“What is being offered to customers”)

- Designing products and services around interactive UI, mobility and better information access.
- Augmenting Customer Experience with Digital Content and Social networking.
- Enhancing and streamlining consistent customer experience across various touch points.

FOCUS : OPTIMIZING DAY TO DAY OPERATIONS

2. Focus on Optimizing the day-to-day operations (“how it is being delivered”)

- Leverage information across channels, business partners, and supply chain.
- Integrate all elements around points of customer engagement.
- Keep customer at the center of supply chain planning and execution.

Both these aspects go hand in hand as one cannot be achieved without addressing the other. Creating customer value proposition cannot be achieved unless there is stringent input from operations on customer behavior, needs, usage patterns, and feedback. Operations will, in turn, be unable to connect well with the customers without proper digitally enabled touch points from where it collects data for analysis. Therefore, it is important to focus simultaneously on both these aspects.

Technology provides means to achieve and implement both these areas through the following:

- User Experience Transformation - Re-Design for modern user experience on web and mobile
- Cloud enablement – Augment Digital cloud platform and adopt on-cloud Development

- Analytics – Utilize analytics as a design input for transformation

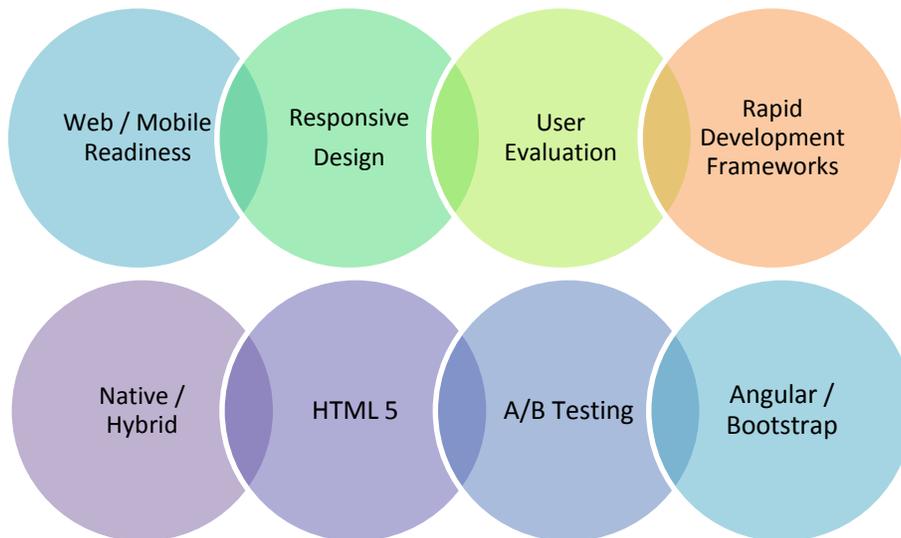
User Experience Transformation - Re-Design for modern user experience

User experience is the experience any user goes through while interacting with an application. Hence, UX design matters for any kind of software, be it a line of business enterprise application, a software product, or a website. The core of any UX design is to understand the key motivators to help in creating a meaningful and memorable experience to engage the user at every possible touchpoint.

An impactful User Experience begins with an extensive User research. Detailed interactions with the user provide deeper insights on what they expect. Studying and defining the Information Architecture of any system would be an important design activity to accomplish during a transformation exercise. Also, to be able to create an effective end product, studying the existing front end and back end and achieving a complete understanding of the system is of utmost importance.

It is also important to understand the overall ecosystem, market environment and competition while establishing UX design for your systems. This allows for design thinking to assume futuristic dimensions and include factors that would enable a business to stay ahead of competition.

Based upon business need and environment, revamping systems of engagement involve some core aspects in technological terms that enable digitization from user experience perspective:



The bottom line is to design and create new experiences and business models through new channels via online presence, increasing availability on multiple devices, enhancing sensitivity towards user behavior, and ensuring the best-of-class user experience across all interfaces.

User interface augmentation could change your business through product / service augmentation, transitioning online, reshaping organization boundaries through global decision making and enterprise integration. Therefore, it is one of the most important digitalization action in a transformation journey.

Digital Transformation typically starts from what is already available to changing it to fulfill future needs. Most organizations already have websites as their window of communication to the outside world. Very often, there is a need to make it more interactive through mobile enablement, social media integration, and analytics. This could become a key starting point for going digital. For those who have already taken this step of digital transformation, it could mean taking the next step towards providing a more interactive experience to customers, partner and employees while they do business or work within the company. Needs could vary by industry, it could mean providing an inclusive experience by integrating the physical isle with mobile in the retail world, enabling a mobile work engineer in the telecom industry, providing online boarding in airline, or digitizing home security in real estate.

Mobile will be a key enabler for transformation going forward as enterprise applications now available on web or desktops will need to be on mobile. UX for mobile is a new dimension in customer experience management and therefore, it needs to be taken up as a specialized area.

Cloud enablement – Augment Digital cloud platform and adopt on-cloud Development

Cloud could be an important game changer for Digital Transformation. It can be the single most disruptive of all new technologies. Organizations benefit through cloud not only through added capacity it offers, but also through the faster consumption of innovation in cloud services.

Cloud continues to drive disruption in businesses across the globe. It can be one of the most formidable technologies to drive transformation in ways greater than envisioned before. Rather than just driving cost efficiencies as thought earlier, organizations are now using cloud for enabling better mobile workforce, improving alignment with customer / partners, better leveraging of data for insights, developing new products and innovating among others.

Among the various key advantages that cloud provides are Rapid scalability, agility and innovation.

Cloud PaaS platforms enable scalability through elasticity on infrastructure and through the ability to augment additional resources quickly. Offerings such as AWS, Arcade, Azure, and Modulus have contributed to widespread usage of cloud as a dependable rapid development and deployment solution.

Development on Cloud based platforms offers a lot of flexibility. Platforms such as Telerik Mobile provide vast opportunities for developing device independent mobile applications without the need for on premises workspaces. Clubbed with Telerik Kendo UI, it is one of the best platforms to develop good user interfaces in quick time. Similarly, to achieve goals related to real-time scalability, the server-side JavaScript technologies like Node.JS and the NoSQL databases, such as MongoDB pick up, developers can just plug in to the Modulus cloud and start developing on the go seamlessly. Frameworks like AngularJS, ReactJS, and Bootstrap provide the required features to make the user interface fit for expected responsiveness, maintainability, and cleanliness.

Examples of aPaaS based cloud are Rollbase from Progress and Force.com from Salesforce. Both provide tremendous flexibility and agility in terms of rapid development options on cloud. One can reap the benefit of cloud based development for digital transformation as these platforms provide a host of inherent features.

Businesses need to take advantage of the opportunity to innovate, differentiate, and grow. Cloud propagates innovation by making experimentation easier and removing bottlenecks in the path to adopt technology thus accelerating the digital transformation initiatives also.

Businesses can yield significant competitive advantages through:

1. Cloud adoption
2. Enhanced agility and flexibility in implementation of innovative ideas
3. Reduced time to market

Analytics – Utilize analytics as a design input for transformation

We have long used IT to improve efficiency and productivity, optimize business operations and reach newer markets. Over the years, customer expectations have also changed. People are nowadays using social networks to interact, find jobs, find partners, socialize globally, and get new information via the Internet over multiple devices.

Businesses need to respond to this shift and take advantage of online activity to improve the way they reach out to customers, enhance their propositions and positioning and provide a world class experience. This is where analytics plays an important role. It is the feedback mechanism that allows a business to take decisions and adopt the right transformative strategy.

In order to identify new opportunities, companies need to become more data driven. For this they need tools to analyze data. Much of the data today is stored in the operational systems and a lot of companies are now starting to use the document-based databases (NoSQL) for their operational systems. One such document database is MongoDB that has gained popularity and which can be utilized for this purpose.

In addition to utilizing NoSQL databases for analytics, there has evolved a hoist of tools that enable you to perform business analytics. Whether it's the daily generated data of your systems of record, marketing applications, CRMs, ERP and Supply chain systems, or the cloud based systems, all the data can be utilized to help you predict trends, understand the customers' patterns, forecast needs related to investment in technology, operations, products etc. and thus, minimize your risk in the overall digital transformation.

Feedback from analytics systems provide a good insight on how systems of engagement can be made more personalized and targeted to empower unique customer experiences and create new business models for the organization thus enabling reshaping and redefining of customer value proposition.

Conclusion

Digital transformation is an activity that needs a wholesome approach. While organizations think of harnessing the newly trending digital technologies to grow their presence and reach they also need to simultaneously augment the delivery mechanisms and touch points to gather relevant information and feed it back to their decision making process.

In order to achieve their objectives, businesses will need to attain new set of capabilities around UX, mobile, social networking, cloud and analytics. This comes with its own set of challenges in terms of managing costs and deciding how far to go.

It is evident that those who pick up the challenge of digital transformation early will obtain its benefits and be called industry leaders as the pace of change in this area is extremely fast.

JKT can help you define the path to transformation through its Digital Services Practice. We adopt various technologies and evaluate the best suited direction for your business in pursuit of Digital Transformation. Our trained experts help in analyzing the existing market scenarios, environment and needs and establish the ideal technical path for our clients.



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