



## Embracing Digital Transformation

Capability Enhancement

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## ABSTRACT

Key words: Cloud, SDDC, Agile, Transformation, Automation, Modernization, Customer experience

We are living in the period of rapid technological development, globalisation and societal changes. Regardless of what each one thinks the future may bring to us, most of us will agree that embracing digital transformation is required to face many unforeseen challenges. So, a solid understanding on Digital Transformation is required for Project Managers to manage all complex and everchanging technological projects.

Digital Transformation means disrupting the market model, accelerating growth platforms and transforming the operating model. Many organizations, especially large ones, look at Digital Transformation for new positive outcomes like optimized CapEx, lower OpEx, higher availability, better security controls and improved delivery automation.

But, only about 30% of digital transformation efforts succeed, mostly because going digital is a complex with many internal and external processes. Project Managers struggle to implement and drive the digital transformations. It requires evolution of roles, skills, processes and organizational structure. Project Managers often focused on projects vision and lose sight whether staff is properly prepared. For digital transformation strategy to work, right people, with right skills, in right place, serving right roles are essential.

## INTRODUCTION

Project services are traditionally organized as silo functional teams, lot of project-driven activities, lot of manual tasks. Hence, they often perceived as cost-centric suppliers rather than a source of innovation; On the other hand, Digital Transformation is all about agility, flexibility, rapid scaling and being more responsive to business. The organization to need to become service-driven: more efficient, fully automated, less restrictive, and with higher value on innovation - providing services at the speed of business with focus on adding business value. This white paper focuses on following recommended traits for Project Managers during this digital transformation age.

Define the Expected Benefits; Assess Operational Readiness; Determine the Degree of Change Needed; Prepare the Organization for Change; Take a Human - Centred Design approach; Cope with emerging technologies; Do not embrace digital strategy; but digitize the business strategy; Obtain full support from leadership; Make data-driven decisions; Have Agile mindset; Create digital culture; Acquire the right skills & capabilities; Manage performance; Understand the security needs of customers; Modernise existing applications & systems; Consider Connected Host for digital transformation; Build a Seamless and Predictive Customer Experience; Build a Big Data Platform to become a Data Driven Business; Applied Learning through Labs and Rapid team formation.

## DETAILS OF THE PAPER

### Define the Expected Benefits

Every company's motivations for adopting an IT operating model focused on delivering digital transformation projects are different, but whatever they are, Project Manager should clearly define, document, and communicate to all

stakeholders—along with expected results from a business perspective and a technical perspective. Some of the most common business impacts of the service-oriented model include: Higher agility and efficiency.

Cloud initiatives enable automation and orchestration of key IT services, which in turn make it possible for IT to deploy services the business needs faster, with less cost and risk. A cloud based on SDDC can also bring predictability, control, and choice to service delivery so IT can respond to the needs of business units and repatriate them “shadow IT” projects. In short, offering services in a cloud environment is the starting point for building alignment between IT and the business.

*Increased focus on higher value initiatives:* Establishing integrated IT teams organized around services, fosters focused and more operationally driven decisions about business-enabling services that drive value.

*Faster response to business needs:* The service-oriented model, with its focus on delivering services the business needs, driven by outside-in versus inside-out thinking, can help streamline everything from the service definition to the service delivery process. This directly impacts the speed with which IT can respond to changing business needs.

*Improved ability to meet service level agreements (SLAs)* With the service-oriented operating model the focus is on managing proactively, so services can be delivered reliably and predictably by resolving issues before they can impact services.

## Assess Operational Readiness

One potential pitfall in organizing for the cloud is cloud operational readiness. Many organizations discover that they lack the understanding, skills, or the best-practice guidance and training needed to move from their current organizational structure, culture, and mindset to one optimized for a service-oriented operating model. An early operational readiness assessment and a prioritized and actionable roadmap are essential to crafting a transition plan that minimizes risk and dramatically increases the chances for success.

## Determine the Degree of Change Needed

Once the operational readiness assessment is complete, Project Managers should understand the degree of change required to transform the organization to one optimally structured and skilled for a service-oriented digital model. Project Managers should undertake a skillset and career path assessment of their IT engineering and project team to determine who among the existing staff are best qualified and enthusiastic about digital transformation change.

## Prepare the Organization for Change

Organizational change can be disruptive and is often met with inertia or resistance. To help overcome this, Project Managers must not only embrace and drive the transition but socialize and evangelize it within IT and line-of-business stakeholders. Project Managers also need to consider ways to incentivize individuals to begin thinking more horizontally, both from a systems perspective and to foster greater collaboration. Modifying each individual's annual review criteria is a key technique to achieving this. In order to stay relevant in the digital age, traditional companies should disrupt their old market model.

Project Managers should not only look within their own market to recognize any potentially disruptive forces. But Forces causing disruption in one industry can also easily disrupt others. And some forces might not be disruptive for other industries but can still disrupt your own. Signals for disruption might be emerging technologies, changes in the nature of supply and demand across the value chain, or competitors that cease to exist. So, it is important for Project Managers to be aware of this and, if such forces occur, assess what benefits they could bring.

Acceleration means being able to respond quickly to changes in the market. So, how do Project Managers keep up with an ever-evolving market? By maintaining a flexible and open market model. This will also enable Project Managers to work together, maybe even with competitors. In the end, it is most important that customers are being served in the best possible way. To achieve this, Project Managers should be looking outside of their comfort zone.

The only way to achieve a flexible and open market model is to have an operating model that can support it. And to empower the operating model, Project Managers need to transform it. This is all about having the right capabilities and modernizing these capabilities for the digital era. This means a shift from focusing on business requirements to focusing more on customer journeys. From BI to proactive decision-making. From process efficiencies to Robotic Process Automation (RPA). From a risk-averse culture to a fail-fast culture, and from a rigid structure to an ecosystem of partners.

### Take a Human-Centred Design approach:

Project Managers need to see customers in the context of their daily lives. This broader, independent and unbiased point of view will help to find rich opportunities for creating customer and business value.

Human-Centred Design is a process of understanding people's needs in context of their daily lives, and then finding a solution: a product, a service, or an experience that addresses their unmet needs. Through ethnographic research, an iterative process supported by feedback loops and further research Project Managers can bring the solution to life, a Minimal Viable Product (MVP).

### Cope with Emerging technologies

To remain relevant, it's important for Project Managers to be familiar with emerging IT trends, such as cloud, robotization of processes (RPA), new development frameworks, new SDLC trends and other technological innovations. Keeping up with the latest technologies helps to better serve the customers and meets their changing needs. Here are a few tips on how to stay abreast of emerging technologies:

- Participate in technology committees
- Attend trade shows
- Make time to read/study current trends
- Try out small projects for proof-of-concept
- Keep close eye on what competitors are working towards
- Learn from 'Lateral Talent' in your organisation

### Not embracing a digital strategy, but digitizing the business strategy

Project Managers need to focus managing each legacy project differently using digital: There are three waves of digitization:

In the first wave, companies implement point solutions: a website, a mobile solution, or technology to improve a particular working process. Not integrated from a technology perspective or data perspective and working as a standalone solution.

During the second wave, companies learn that there is inefficiency between solutions. There is no data exchange and no integration at company level. So, the company recognizes a need for a more enterprise wide perspective, and a corporate approach to digital.

These first two waves apply to 'legacy companies': organizations that have developed over the past decades. They've implemented legacy systems and built business models upon functional operational efficiency and siloed responsibilities.

The third wave belongs to the digital companies. They have built their business model on technology and insights. They embrace the fast pace of innovation and can change where needed. Their culture is about finding new ways of doing business, and an Agile way of working.

Legacy companies need to change. If they don't, digital companies will bypass them, sooner or later. In order to change, legacy companies need an enterprise perspective on digital. Legacy companies have an extra burden and challenge to transform their organization to a digital enterprise. But all companies – no matter their background – need an externally oriented concept of how they will achieve their strategic objectives.

What to do with a vast number of deeply integrated, highly valuable applications that have been, and continue to be, extremely critical for the business but that may be too costly and potentially risky to rewrite. The key to digital transformation is integrating the platforms that these applications are running on with contemporary platforms so as to ensure maximum yield with application delivery

### Obtain full support from leadership

Establish a strong vision, objectives and strategic alignment; Digital needs to be fully adopted throughout the organization. Digital transformation requires full support from leadership. Project Managers should be empowered to make decisions without a cumbersome approval process and Digital initiatives should be given priority.

### Make data-driven decisions

Harness the power of data to drive the projects. Today, there is an ocean of data available. If used properly, Project Managers can adapt their digital transformation according to data generated by their customers. Data can also be used for performance measurement, analyse facts and predict better situations. The "Thick data" generated by ethnographers, anthropologists and others adapting observation of human behaviours often residing in IT functions, while ethnographers and anthropologists live in the world of social sciences. The interface between these worlds can fully harnessing the power of data to drive the projects related to machine learning.

### Have Agile mindset

Prepare to be in a state of constant change. One of the most important aspects is that digital transformation should be continuous, and development cycles are short. Short cycles enable companies to embed flexibility into the project's process.

*Think big:* Gather inputs from multiple sources, identify opportunities, synthesize and prioritize

*Start small & Learn fast:* Design and prototype, validate and iterate, define your minimum viable product

*Scale quickly:* Set up the right people, processes and technology at scale



## Create digital culture

Adopt a culture that accelerates the change. If the mindset needs change, behaviour and culture should enable this. Again, the Project Management team should be responsible for bringing this across. They need to lead by example and show the desired behaviour. A culture that enables digital transformation, or a 'digital culture', has a couple of must-have characteristics. First of all, risk-taking and an entrepreneurial spirit should be stimulated. There should be conditions in which failure is an acceptable outcome. The market is changing very rapidly and the only way in which it is possible to keep up or stay ahead is by having the ability to adapt quickly. Therefore, Project Managers should be stimulated to come with new ideas and to be empowered to make decisions on the spot.

## Acquire the right skills & capabilities

Close the skill gap and prepare the fundamentals. In the coming years, large organizations will invest millions of dollars to transform their business to digital. This requires Project Managers to understand what capabilities digital businesses need. Top engineers, designers, product owners and full stack architects can foster and accelerate the projects tremendously.

*Platforms:* Having a digital platform with integrated data and processes is enablers for successful digital transformation. The cloud is crucial to enabling the flexibility and scalability required in digital transformation. The ability to request and operate computing and storage resources enables Project Managers to incorporate the infrastructure and systems required into your software development stack.

*Solution delivery:* DevOps integration is a key component of solution delivery. 'Infrastructure as Code' is the main driver for setting up DevOps teams. With DevOps, Project Managers can now fully automate the creation of software environments, from infrastructure to application and even data. It's now possible to create a new environment in a matter of minutes –compared to the weeks or months.

*Integration of business and IT projects:* Creating trust and understanding, supported by clear governance, puts companies in a position in which business and IT projects can align their goals and programs, and innovations.

## Manage performance

Share a single vision and approach holistically. Digital transformations are taking place on a large scale, with trillion-dollar investments in cloud, IoT, and other Technologies. Business and IT Project Managers need to form a holistic approach to digital performance management, which combines a set of the right technologies, skills, capabilities, processes and KPIs to maximize return on investment.

## Understand the security needs of customers

IT Projects that deliver end-user needs by digitally transforming face a mix of challenges. Security concerns, data protection and cybersecurity are absolutely critical. Security concerns with regard to the business' core data are sky-high. New laws such as PCI DSS and GDPR have come into force to protect consumers from the potential security and data protection pitfalls that have resulted from digital transformation efforts.

## Modernise existing applications & systems.

Project Managers can apply the digital transformation process within the context of three lenses of modernization of their existing systems: application modernization, IT process modernization, and infrastructure modernization.

*Application modernization* means redesigning the broader application to take advantage of new application architectures and application new methods of access, such as web or mobile applications.

*IT process modernization* is about adopting Agile and DevOps in a systematic way, in a managed and optimized fashion.

*Infrastructure modernization* requires determining what technology platforms an application should ideally run on in terms of development, test, and production — in that order — and whether it is a large host system, a distributed environment, the cloud, or a hybrid platform. Infrastructure modernization also means establishing maximum security around the applications and data.

### **Consider Connected Host for digital transformation**

Many businesses that are involved in digital transformation run their mission-critical, transactional systems of record on large mainframe or server-based platforms, with operating environments such as z/OS or OS 2200, these platforms are capable participating in the modernization stages of digital transformation and also becoming the connected hub through which modernization leads to new opportunities for modernization

### **Build a Seamless and Predictive Customer Experience**

Realizing Digital First should be Project Managers priority. Digital first is about extending the edge across every aspect of the Project lifecycle, from problem identification, to solution implementation, and through delivery, service and support; and doing this in a way that connects customers to the company well beyond the transactional level. Now every business can be a digital business, and nearly every customer interaction has the potential to be a digital interaction with the customer in control. Tapping into this connected ecosystem opens up the opportunity to create new business designs by blurring the lines between the digital and physical worlds. The digital evolution will have as much impact on human channels as it will on online experience.

### **Build a Big Data Platform to become a Data Driven Business**

Digital Transformation is about shifting from a world of appliance-driven, hardware-coded systems and processes to a world driven by software and data. It's transformation of technology and people through three critical phases if it stays focused: Building a capability. Proving value. Scaling the benefits.

### **Applied Learning through Labs**

One key challenge for digital transformation projects is experienced staff. Project Managers should address this challenge by providing on-the-job training at Labs. Project teams should be trained based on future role and specialization needs. The Project Manager also can rethink the way employees work together and how to get work done on digital transformation.

### **Rapid team formation**

For Digital Transformation, Project Managers should establish channel to rapidly get delivery capacity from a resource pool of certified, highly skilled and experienced resources, including turnkey delivery teams, as well as skilled resources including business analysts, agile practitioners, software engineers, and technologists. Project Manager should link experts of a business segment, product line, or application with technologists to quickly form innovative and collaborative delivery teams.



## CONCLUSION

External pressures snowball at the rapid pace of technological progress and corresponding changes in customer behaviour. Internal legacy, complexity, stakeholders and the organization's cultural identity often feel like a static, solid hindrance that desperately needs to be broken down and put in motion for digital transformation.

The right skills for digital transformation are difficult to master. Project Managers must stay on top of the latest, most significant technology. Project Managers have to keep pace with customer insights and understand how and where they (could) influence and amplify each other into disruptive scenarios. Project Managers need to translate these scenarios into a vision and a business strategy that is enabled by digital. Project Managers must design an organization that is able to execute on this strategy. And, they have to find, train, and retain the required skills and competencies. The result is a complex construct of activities, structures, capabilities, skills and competencies that have to be aligned and coordinated to reach specified digital transformation objectives.

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