

White Paper

The Four Essential Pillars of Digital Transformation

A practical blueprint for going digital

By Dr. Ian Thomas and David Rosewell



Introduction

Over the past decade a new breed of digital company has emerged, quickening the tempo of business. Digital natives such as Spotify, Airbnb and Uber have delivered more convenient, responsive and engaging experiences for customers – and often disrupted entire industry business models while doing so. As “digital natives” their intrinsic use of digital technologies such as cloud, mobile and analytics means that they continue to evolve and scale at speeds that are unthinkable for traditional organizations.

Today the potential impacts of digitization extend beyond these digital natives and are a pressing issue for businesses spanning almost every industry. As more people, systems and things become inter-connected, so the scope to create new and novel digital value chains rapidly increases. Understanding the impact of these changes and successfully evolving to avoid or exploit disruption is therefore critical to survival. But while there is a broad recognition of the dangers of inaction there is also much confusion; a recent landmark survey by Fujitsu¹ found that this lack of clarity results in two in three digital projects being considered a gamble.

C-level executives cited a number of roadblocks that were driving this feeling, such as a lack of alignment on digital priorities, difficulties integrating with existing infrastructure and processes and a perceived lack of relevant skills. Together these issues have led to a broad range of digital disconnects - fragmented user experiences, disconnected islands of process and data, a slow pace of change and a rise in silos caused by shadow IT – all of which create further turmoil and undermine the end-to-end alignment required for success.

But there is another way. In this paper we share our experiences of working with companies who are taking an outside-in approach to transformation, using customer experiences to drive alignment, integrating infrastructure and processes across the whole digital environment and transforming IT practices to accelerate change and empower everyone in the organization to make things better.

¹ “Walking the digital tightrope, a Fujitsu report”, January 2016

Our experts

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David Rosewell helps organizations achieve their business outcomes in the digital world. His extensive experience in the IT industry spans business development, consulting, and systems delivery across a variety of sectors including government, defense, utilities, retail and financial services.

The great digital gamble

It is no great insight to say that enterprises need to go digital - and recent Fujitsu research has confirmed that most organizations now have a clear understanding of the potential benefits.



Figure 1: Digital Tightrope Survey question: What do you think are the main benefits to digitalization within your organization?

But our practical experience has also shown us that there is also no easy path. Most existing businesses have been built and optimized for a pre-digital world and therefore find themselves weighed down by pre-digital technology investments, cultures and ways of working. Such organizations cannot merely flick a switch and become digital overnight - or wait years for large, costly and high risk transformation programs. They must achieve digital transformation using many quick, iterative steps – taking an evolutionary path that balances new capabilities and old.

But many enterprises take an unbalanced view of this evolution, addressing just one aspect of the necessary transformation – such as creating new user experiences or introducing new development practices. This fragmented approach results in a range of **digital disconnects**, with front-end customer experiences not connected with back-end systems, with development practices siloed between new and old systems or with business colleagues still frustrated and finding their own solutions beyond the four walls of the enterprise.

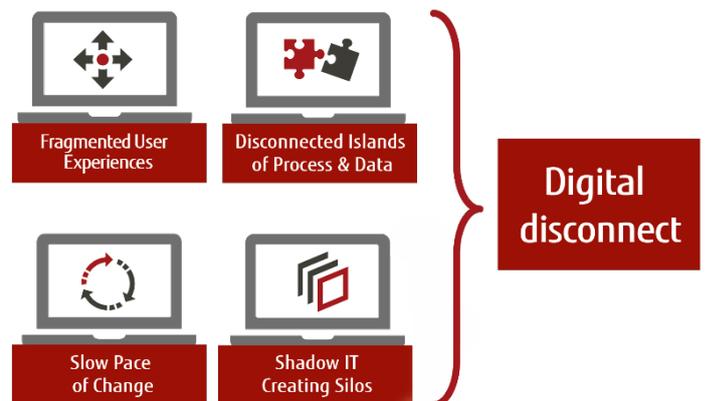


Figure 2: Potential outcomes of a disconnected approach to digitalization

The practical outcome of these problems is an inability to know whether planned initiatives will actually make things better or create unforeseen new digital disconnects – leading to an overwhelming feeling that digital projects are simply a gamble.



Figure 3: Digital Tightrope Survey question: To what extent do you agree with the following statements on your organization’s digital approach? The success of the majority of digital projects in my organization is a gamble.

Improving the odds

But not all organizations are trapped by the digital disconnect. When working with enterprises who are successfully enabling digital change we have observed a consistent set of behaviors which can be generalized to create the foundations of a repeatable, evolutionary approach. In particular these organizations take an unashamedly end-to-end approach that consists of four inter-connected pillars:

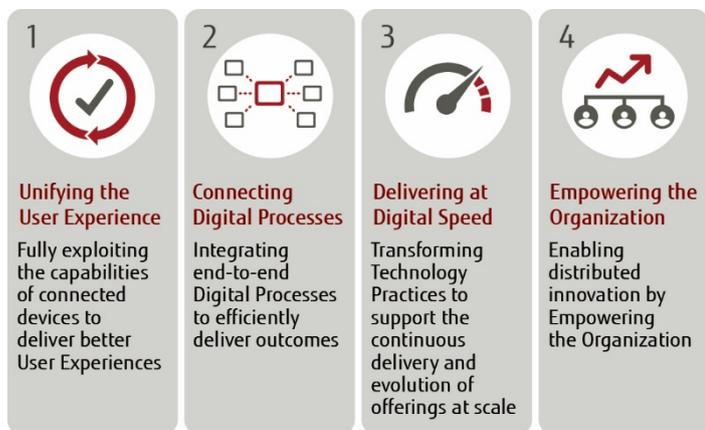
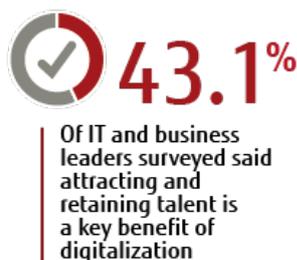


Figure 4: The four pillars of digital transformation

Together these four pillars combine to deliver a highly effective outside-in approach to digital transformation.

Unifying the user experience

To ensure a joined-up digital strategy, it’s important to start with the needs of your stakeholders and work inwards. Creating a consistent, connected experience for customers, citizens, employees and partners – one that supports people in achieving their business goals, wherever and however they happen to work – is the most important factor in satisfying peoples’ digital expectations. In particular creating experiences that help people get things done is a key weapon in attracting talent, maximizing employee productivity and retaining customers – three of the most popular aims cited by organizations in our digital research.



But the consumer-focused approach of delivering individual apps is a poor template for the demands of enterprise mobility. Delivering digital experiences for the enterprise requires us to go beyond individual apps and provide device and location-independent access to the existing process and information infrastructure of the enterprise. It is maximizing the mobility and connectedness of users that unlocks the value of digital, not the devices themselves.

True enterprise mobility therefore requires three major capabilities:

All-round mobility

- A mobile application should not be tied to a single device type and should seamlessly adapt to smartphones, tablets, wearables or desktop PCs; it is the mobility of users that delivers the full benefit of digital processes, not the devices themselves.

A common point of access

- People need a single, device independent location where they can find and access all of the digital tools they need to interact with the business; such an ‘enterprise process store’ of available applications ensures ease of access, visibility of use and consistent governance.

A 360 degree view of interactions

- As people increasingly work across multiple topics they need to gain a dynamic, ‘at a glance’ view across their ongoing tasks, replacing siloed app-centric views with one which visualizes their total backlog of work holistically across all processes and systems.

Example

At a major European public transport operator, a mobile incident reporting app allows inspectors to file complete incident reports for bus lines from their phones in less than a minute, giving the maintenance team immediate access to details and photographs of the bus repairs required.

Connecting digital processes

Digital leaders have shown time and again that web-enabled connections between people, systems and devices can transform business models and create better outcomes. But many organizations miss the central role of end-to-end connectivity in this process, instead focusing only on the digital front-end. Simply creating 'pixel thin' solutions via new apps or slicker websites, however, fails to address the underlying process and integration changes necessary to optimize digital experiences, simply layering more complexity over existing silos.



Benefit from balanced approach that effectively combined new technologies with existing solutions

Creating a truly digital business therefore requires the creation of end-to-end process flows which optimize the fulfilment of connected experiences. This requires an outside-in approach to transformation, reimagining outcomes before moving inwards connecting all of the people, software and things required to deliver the necessary value. And having the capability to constantly extend and evolve these 'digital supply chains' as customers, partners and suppliers evolve is a critical skill for the digital age.

True process change therefore requires three major capabilities:

Extending to digital

- On-premise systems still make up the critical transactional core of most enterprises and need to be quickly and easily connected to new digital processes. This requires a combination of integration connectors, API management and manual workarounds to securely and robustly connect incumbent systems to new digital flows.

Harnessing digital

- Building end-to-end digital flows requires us to 'mesh' our internal systems with people, systems and things that exist beyond the bounds of the organization. The technology infrastructure must therefore connect the whole digital landscape, making on-demand resources an integral component of end-to-end business operations.

Empowering ecosystems

- Competing in the emerging digital economy means participating in wider ecosystems with customers and partners. By using APIs to expose your unique business Intellectual Property (IP) you can bring the power of many organizations to bear on the task of realizing its full value.

Example

A major global utility has created a range of digital processes which connect their complex hybrid IT estate end-to-end. By using integration connectors to modify access rights across a range of on-premise, partner and cloud systems these processes ensure that data remains secure as employees and external contractors join, change roles or leave the company.

Delivering at digital speed

The digital world will not wait for slow, incumbent development processes, technologies and applications to deliver change – to seize market opportunities, satisfy customer demands and innovate at digital speed the enterprise has to be capable of delivering web scale IT at a fundamentally different pace. Outward-facing teams must be able to constantly build and test new ways of interacting – from experiences, offerings and channels through to entirely new business models – in order to discover and scale what works best.



Of organizations would like their digital transformation projects to move faster

Creating a truly digital business therefore begins with the use of digital platforms which support innovation at the new speed of business. By leveraging the increasing industrialization of IT we can create end-to-end modelling and deployment environments which increase speed of delivery, connect to existing legacy systems and automatically handle the deployment and scaling of systems to any size of audience:

Rapid outcomes

- By using the cloud to integrate technology we can create digital platforms for high productivity business change. Such platforms enable enterprises to rapidly model and test new processes before immediately rolling them out at scale to shorten release cycles.

Multi-speed operation

- While new digital platforms can transform delivery speed, we still need to accommodate slower, mission critical IT. Our new platforms must therefore provide the capability to decouple change cycles, quickly delivering new digital processes while maintaining connections to back-end systems until they are upgraded or replaced.

Delivering instant scale

- Development, integration and deployment is only the first step to becoming digital. Many organizations overlook the challenges and delays of scaling successful systems. Digital platforms enable organizations to avoid delays by removing the need for hardware and software procurement when there is increased demand.

Example

I HEART Studios, a rapidly expanding digital content provider based in London, developed a digital process solution to automate and manage its product photography services. In just twelve months this solution enabled the company to grow its revenue by 600 percent and absorb a ten-fold increase in staff, all without significant disruption.

Empowering the organization

Today's business talent is increasingly provided by digital natives who expect to be able to shape technology to their needs - but there is also a rapidly growing gap between a businesses' appetite for digital change and the resources available to enterprise IT. Swamped by legacy systems, siloed data and locked-down budgets CIOs are often forced to maintain the integrity of the company's traditional information systems at the expense of meeting its digital needs. This drives many business people to adopt 'shadow IT', creating huge potential security and scalability headaches.



But the increasing democratization of digital platforms provides us with an opportunity to embrace business colleagues as partners in a new and more collaborative delivery model. By empowering more people to build simple solutions for themselves we free CIOs to focus on core technology challenges and the co-opting of successful innovations.

Democratizing change

- Empowering non-technical users with simple tooling can enable greater acceleration of business improvement. People can begin to improve things outside the scope of IT, trial new ways of working without upfront cost and test new ideas before requesting further extension by IT.

Empowering cross functional collaboration

- Enabling people to co-create their own processes enables them to work together better. By breaking down old fashioned organizational or application siloes people can realign the processes they use to reflect the way in which value is actually delivered.

Shifting to a digital culture

- By keeping a watchful eye on the large scale testing and experimentation of ideas, IT can discover opportunities to industrialize successful approaches and connect them more widely to enterprise systems – driving customer-centric digital change deeply into the organization.

Example

A major French broadcaster has enabled non-technical users to build solutions for themselves, allowing simple device-independent applications to be delivered in a fraction of the time. Some of these applications have then been extended by IT teams, enriching them with further integration to deepen their impact.

Start small, learn fast and scale quickly

Taken together, the four pillars provide a structured foundation for completing an orderly, end-to-end digital transformation of the enterprise. It becomes possible to achieve large-scale change by working in small increments, rapidly delivering digital innovations as early as possible before quickly evolving them in both breadth and depth. Together the ingredients form part of a long-lasting strategy that will continue to deliver for many years to come.

In our experience the four pillars work best when organizations adopt a fast and experimental set of behaviors, leveraging the speed, cost and scale benefits of cloud to drive a transformation in delivery practices:

Achieve quick wins

- Choose early projects that rapidly deliver very specific outcomes. For example, use digital tools to transform a user experience.

Target real-world outcomes

- Empower business users to set the agenda and direct projects to solve real-world problems, with IT engaged as a change agent.

Think lean

- Do not try to make digital versions of existing applications. Instead, take on problems that have traditionally been seen as too complex, too expensive or not a priority for action.

Iterate fast

- Each project should be discrete and be able to move in relatively small, fast iterations. Be prepared to include makeshift or temporary components as needed to get by.

Build out success

- Realign resources based on successful projects and build on these projects to drive the results more deeply into the heart of the organization. Each incremental step builds out and strengthens the ongoing process of digital transformation.

While a full scale transformation will ultimately require far-reaching changes spanning issues from talent to infrastructure - and take multiple years to complete - companies adopting the kind of fast, iterative and evolutionary approach outlined in this paper can deliver end-to-end results quickly while still reshaping IT for the long term.



How can you do it? Enabling digital with Fujitsu

At Fujitsu, we support customers on their journey to digital. From increasing efficiency and profitability; through improving customer engagement and enabling new business models; we help them to realize their digital ambitions, and respond effectively to increasing demands from their business, their customers and the market.

We understand that, to be truly digital, an organization must be digitally enabled end-to-end, by building new digital front-end experiences, and seamlessly connecting these to the back-end systems and infrastructure that enable them.

Fujitsu's reputation is built upon our expertise in application modernization, process digitalization and new digital platforms. We achieve robust end-to-end digital modernization that balances the drive for innovation with the need for business continuity, building the best solutions for today, and then managing and maintaining them into the future, through transformational application managed services.

All this is underpinned with a flexible, pragmatic and evolutionary approach to digital modernization; one that supports customers throughout their digital journey – from launching or improving a single service, to delivering multiple solutions that, together, achieve enterprise-scale transformation.



Unifying the User Experience



Connecting Digital Processes



Delivering Digital at Speed



Empowering the Organization

Figure 5: Fujitsu's approach to digitalization



With the help of Fujitsu RunMyProcess, many businesses, including the case studies cited here, have been able to successfully deliver change using the four pillars outlined in this paper.

The Fujitsu RunMyProcess platform allows organizations to:

- Transform work styles and enable new mobile business models by delivering applications that seamlessly follow users across all of their devices as they go about their day – all accessible via highly customizable Enterprise Process Stores.
- Optimize business processes by connecting enterprise systems to the people, software and things that populate the digital world - thanks to sophisticated API management and a library of over 2,500 connectors spanning on-premise and cloud environments.
- Deliver and adapt their IT systems at the speed of business change, reducing time to value and supporting continuous, data-based improvement – all via the rapid creation, distribution and evolution of systems which seamlessly scale with business.
- Empower business users to deliver, test and reshape digital processes at the edge of the organization – all powered by a single governance, development and scaling framework in collaboration with IT.

To learn more please visit:

- Fujitsu Enabling Digital enabling-digital.global.fujitsu.com
- Fujitsu RunMyProcess www.runmyprocess.com
- FACE2FACEFujitsu blog blog.ts.fujitsu.com

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