PGDM, 2021-23 (Technologies Driving Digital Business) DM / IB- 492

Trimester IV, End Term Examination: September 2022

Time Allowed: 2 Hrs Roll. No:

Max Marks: 40

SECTION - A (4 Questions * 5 marks = 20)

(CO1)5 marks

A.1.a. Draw a Manufacturing Value Chain and highlight major Digital Levers which are used in each Value Chain component.

OR

A.1.b. Draw a Retail Value Chain and highlight major Digital Levers which are used in each Value Chain component.

(CO 2) 5 marks

A.2.a. What role IOT and Block Chain play in overall path of Digitalization?

OR

A.2.b. What role Advanced Analytics and Cloud play in overall path of Digitalization?

(CO 3) 5 marks

A.3.a. What are the major Business Processes which CRM touch upon? Mention those major processes. Explain the input and output of each process with performance measures

OR

A.3.b. What are the major Business Processes which ERP touch upon? Mention those major processes. Explain the input and output of each process with performance measures

(CO 4) 5 marks

A.4.a. What are the salient features of Benefit Realization Technique? Using any one technique ascertain benefits accrued after IOT usage in any company of your choice.

OR

A.4.b. Mention major steps of Benefit Realization? Give examples of benefits realization from any industry or company of your choice .

SECTION – B (Compulsory) 20 marks

<u>Case Attached - The 4 Pillars of Successful Digital Transformations</u>

- 1. Articulate on the four pillars of digital transformation mentioned in the case. Suppose the Director of BIMTECH entrusts you to lead Digital transformation in your institute what will you do an How?
- 2. Articulate What is IT UPLIFT. Using the same approach as in the earlier problem, what IT uplift can be dine at BIMTECH?

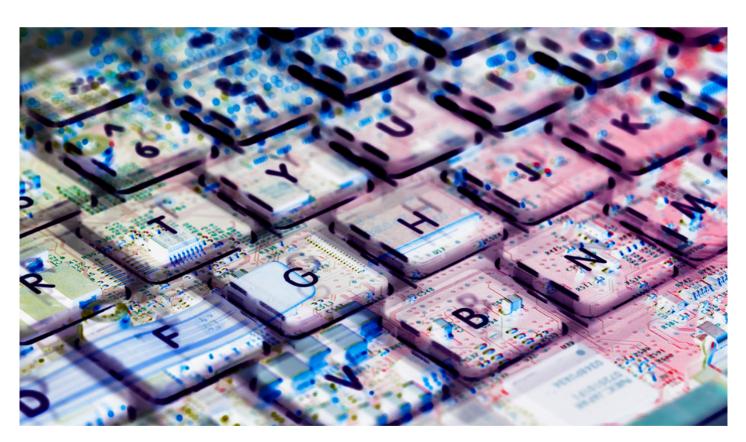
Harvard Business Review

Digital Transformation

The 4 Pillars of Successful Digital Transformations

by Nathan Furr, Andrew Shipilov, Didier Rouillard, and Antoine Hemon-Laurens

January 28, 2022



Andrew Brookes/Getty Images

Summary. Digital transformation can mean a lot of different things. For leaders, it can be hard to know where you should be focusing investment — and what kind of

digital transformation you're really after. The authors outline four pillars of digital transformation: IT uplift,... **more**

Despite years of discussion, understanding what digital transformation means for established companies remains a daunting challenge. Leaders put in charge of a digital transformation feel pulled in many different directions, with competing demands from IT, marketing, sales, and operations. Without a clear understanding, the wrong people are often put in charge, with the wrong resources, and the wrong KPIs, setting the digital transformation project up for failure.

The key to cutting through the confusion is to see that digital transformation is not a single thing, but a multi-faceted journey with differing goals depending on your industry and digital maturity. Just as we had to evolve our view of computers after their introduction — from a device performing a narrow set of tasks at the edge of the organization to one that performs many tasks, in many different ways — so it is time to evolve our view of digital transformation, from a monolithic concept to understand that digital transformation means many different things for different parts of the organization. Doing so will help you articulate what kind of digital transformation you're really talking about, and plan accordingly.

Based on our collective research on companies undergoing digital transformation, we offer a simplifying framework to cut through the confusion and conflicting demands. The framework outlines the four pillars of digital transformation we see today: IT uplift, digitizing operations, digital marketing, and digital businesses. All four are part of most companies digital transformation journey. But without understanding how they are different, it's

confusing to understand what to do next or how to invest — the resources, tools, goals, C-Suite sponsors and KPIs required for success are totally different in each case. Being clear about their differing demands can help you make smart tradeoffs and clear progress.

Below we outline the four pillars and how to invest properly to set yourself up for success. Which pillar is the right starting point for your company depends on your context, needs, but also your digital maturity. Typically, companies tackle the first pillars we describe near the start of their digital transformation journey, although as they mature they may continually upgrade to add additional pillars.

The Four Pillars

The Four Pillars of Digital Transformation

	IT uplift	Digitizing operations	Digital marketing	New ventures
What it entails	Modernizing existing IT	Optimizing existing business	Digital tools for marketing. e-commerce, customer acquisition	New business models and products
Benefits	Flexible platforms Ecosystem of tools	Cost reduction Efficiency Optimization	Upselling/ cross-selling Market/wallet share Brand value	Growth opportunities
Capabilities required	IT architects DevOps teams Change management	Business process knowledge; change management	Data analytics Digital marketing	Business creation Innovation processes Innovation leaders
C-suite sponsor	CTO/CIO	CFO/COO	СМО	CEO/CSO
KPIs	New tools, reduced costs, improved capabilities, employee satisfaction	Savings in time, people, and money; improved customer satisfaction	Return on marketing, leads, client acquisition	New products, access to markets

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IT uplift For many companies, digital transformation starts with upgrading the company's IT infrastructure as well as mobile infrastructure, data lakes, and the cloud. Essentially, this is an opportunity to use budget allocated to "digital initiatives" to modernize IT and communications platforms within your enterprise. When completed, an IT uplift provides your company

access to up-to-date tools that offer increased employee efficiency, lower IT maintenance costs and increased employee satisfaction.

Some companies are already deep into this journey, but many other companies struggle with questions about how to upgrade the digital infrastructure. Often this is the first step on the digital journey. It requires IT architects and time, but promises up-to-date platforms with more effective tools to serve customers at lower cost of maintenance. But for more mature digital companies, investment is still required to use advanced tools such as artificial intelligence.

Typically, the CIO or CTO should lead this pillar of digital transformation and the KPIs to indicate success are access to new tools, reduced maintenance costs, improved employee satisfaction, and better business performance. In support of this, recent research from IDC indicates that organizations which had begun an ERP cloud migration as part of a digital transformation initiative prior to the COVID-19 pandemic fared far better than organizations that didn't.

Digitizing operations A second critical pillar of digital transformation, often tackled earlier in the digital transformation journey, is using digital for optimizing, simplifying, and rationalizing existing processes. The goal here is to use digital tools, including more advanced technologies such as AI, 5G, and IOT, to streamline business growth.

In its most basic form, this pillar can mean swapping out analog activities with digital ones. But other times it involves rearchitecting the system to meet the needs of today customers.

For example, in the past when PayPal sent payments via email, they had significant time to ensure regulatory compliance. But to enable the instant payments demanded in today's market required rearchitecting the PayPal's organization, merging once separate divisions for payments and compliance into one entity. This is more than just swapping analog processes for digital ones; it is about rearchitecting the organization and the digital operations to serve customers better.

Digitizing operations is a fundamental pillar of digital transformation in the sense that, without it, your company will be left behind by more efficient operators. A company may begin its digital transformation journey by digitizing processes and as it matures, rearchitect processes entirely. As a company rearchitects their processes, they also start to unlock more transformational possibilities. For example, when a European retailer changed its platform to serve customers better, it discovered it could also offer other retailers' products with their improved ecommerce platform and digitized logistics, enabling the retailer to create an ecosystem of products and services from third party sellers to offer to their customers.

Because of the need to understand how the business works, digitizing operations often fares better when led by the CFO or COO. It does require time and technology but the benefits, measured by the central KPIs, are savings in time, money, and people to solve business problems and serve customers.

Digital marketing If you are looking for digital solutions to win clients, build brand awareness, profile clients or simply sell online, then you are pursuing the digital marketing pillar. This pillar is different from the others in its focus on digital tools to

interact and sell to customers. Not surprisingly, it requires different resources, such as investing in capturing clean data, digital tools including artificial intelligence to understand customers, and omnichannel presence.

Several global retailers are using digital channels, AI and predictive analytics to access prospects and customers, set up digital marketplaces, viral campaigns, and geo targeting campaigns. Likewise, companies are using artificial intelligence to identify and act on critical customer behaviors, for example, identifying customers likely to leave your service and then intervening before the do so.

Typically, the CMO leads this initiative and should focus on KPIs such as return on marketing investments, reduction customer acquisition costs, and generation of a large amount of valuable data that can be used to acquire new customers and better serve existing customers.

New ventures Finally, digital opens up many new opportunities for established companies. Seizing these opportunities, some of which may be quite disruptive, requires both developing the innovation and digital capabilities to test and pivot to new sources of growth. Digital may provide the opportunity to create new business models, new products and services, or even collaborate with a large ecosystem to create new sources of growth.

Typically the CEO, or head of sales, leads such initiatives because of the requirement for investment, agility, but most importantly a team capable of running experiments to validate the new business opportunity. The payoff is new sources of revenue, but the KPIs

are more nuanced, typically unit economic measures that you are creating solving a significant customer problem and growing profitably. Most businesses have these opportunities at hand but seizing them requires a greater digital maturity than for an IT uplift or digitizing processes.

For example, a large retail bank which we studied entered a range of different industries, such as transportation (ride sharing), content distribution (music and TV), e-health and retail marketplace just to name a few. The first deputy CEO was in charge of this transformation and be built a team that contained individuals with strong innovation capabilities, which tested and built each new business. As part of the digital function, executives were also tasked with digitizing the entire ecosystem as well as a separate department with a task to build and maintain the resulting ecosystem. To measure whether they are succeeding, the bank carefully analyzes their ability to increase customer retention in the core financial services business but more importantly, for the new businesses, measure number of daily/monthly average users, engagement, and cross-selling opportunities.

The Digital Journey

Everyone who has been part of digital transformation describes it as a journey. Digital transformation takes time, and is a series of evolutionary, and occasionally disruptive, steps. Like in any journey, you need to decide where to go first. Typically, companies begin with IT uplift and digitizing operations, followed by digital marketing and new business building. But all four pillars are important to digital transformation, so they may happen in another order. The key to success is simply getting

clarity that digital transformation is not one thing, but rather many different things. Having the right leader, resources, and measures of success for the journey towards each different pillar can contribute greatly to success.

Nathan Furr is a strategy professor at INSEAD and a coauthor of *Innovation Capital* (HBR Press, 2019), *Leading Transformation* (HBR Press, 2018), and *The Innovator's Method* (HBR Press, 2014)

Andrew Shipilov is a John H. Loudon Chaired Professor of International Management at INSEAD. He is a coauthor of *Network Advantage: How to Unlock Value From Your Alliances and Partnerships*.

DR

Didier Rouillard is the Corporate VP of Quadient, a customer experience software company operating globally.



Antoine Hemon-Laurens is Senior DigitalNOW! partner at Quadient.