



DIGITAL TRANSFORMATION AT KPN: NAVIGATING ORGANIZATIONAL DISRUPTION

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VIGNETTE

a description of a firm's approach to an IT management issue, written according to a prescribed template

DIGITAL TRANSFORMATION

ORGANIZATIONAL DISRUPTION

OPERATIONAL EFFICIENCY

CUSTOMER EXPERIENCE

KPN, a leading provider of ICT services in The Netherlands, was under significant financial strain in 2013. To prevail in a highly competitive and saturated market, it needed to make two seemingly conflicting moves almost simultaneously: radically improve its operational efficiency (to reduce costs) and strengthen its customer experience. This case vignette describes how KPN transformed itself and navigated four types of organizational disruption that came with its transformation journey.

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DIGITAL TRANSFORMATION AT KPN: NAVIGATING ORGANIZATIONAL DISRUPTION

In 2018, KPN was a leading provider of ICT services in The Netherlands, serving consumer and business markets with a range of products that included mobile and broadband connectivity and cloud services. As the Dutch market leader in mobile telephony, KPN had more than 5.5 million customers and employed more than 13,000 FTE.¹

PLOTTING A COURSE TO FUTURE READY

Just five years earlier in 2013, KPN was under significant financial strain. Like many of its counterparts in Europe, the company had faced many headwinds over the previous decade: strong competition had reduced prices in saturated markets, regulations had capped termination rates and roaming fees, and over the top (OTT) companies such as WhatsApp, Skype, Spotify, and Netflix had eroded legacy revenue streams (from voice and text) while placing a heavy burden on network capacity.² To remain competitive in this environment, KPN would need to make two moves almost simultaneously: radically improve its operational efficiency (to reduce costs) and also strengthen its customer experience.

Therefore, starting in 2014, KPN began a transformation to become Future Ready—defined in MIT CISR research as an ambidextrous state in which a company is able to engage and delight customers while simultaneously reducing costs by means of readily available technologies.³ Four pathways lead to the way to Future Ready, each requiring transformation

This case study was prepared by Nick van der Meulen, Peter Weill, and Stephanie L. Woerner of the MIT Sloan Center for Information Systems Research (CISR). The case was written for the purposes of class discussion, rather than to illustrate either effective or ineffective handling of a managerial situation. The authors would like to acknowledge and thank the executives at KPN for participating in the case study.

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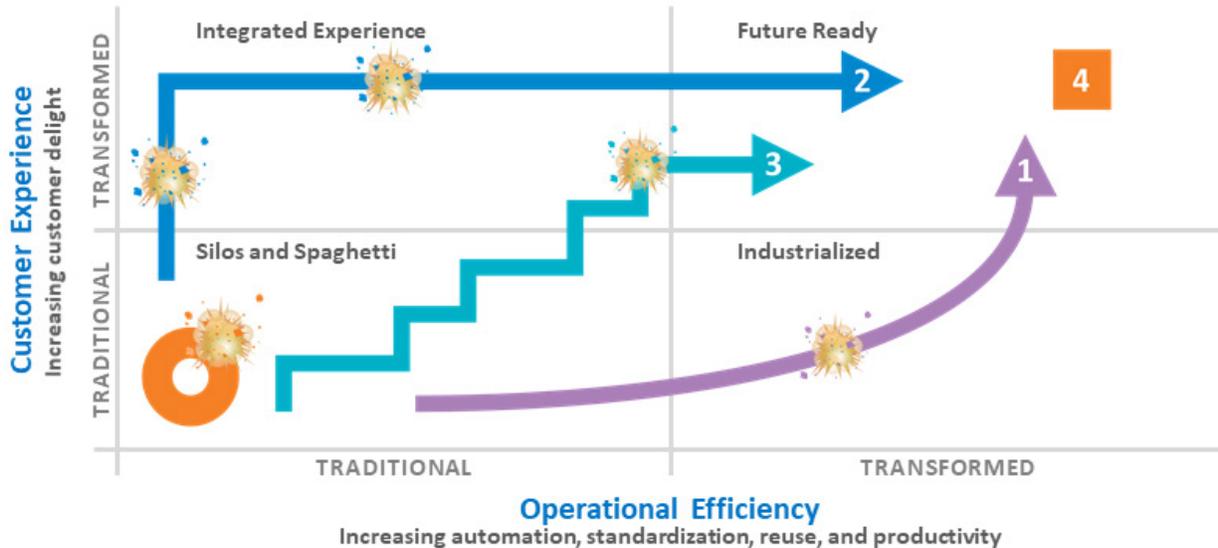
1 KPN, *Everyone Connected: KPN Integrated Annual Report 2017*, February 26, 2018, from the KPN website, p. 13, https://annualreport2017.kpn/app/uploads/KPN_IR-2017_Single_navigation.pdf.

2 On average, European telecommunications companies saw a 33% reduction in revenues between 2008 and 2017. For an overview of these developments, see GSMA, *The Mobile Economy Europe 2017*, October 17, 2017, <https://www.gsmainelligence.com/research/?file=89a59299ac2f37508b252124726a1139&download>; and GSMA, *Mobile Economy Europe 2013*, September 5, 2013, <https://www.gsmainelligence.com/research/?file=6b321d-25537f3bf708ffa34fabcbf91&download>.

3 P. Weill and S. L. Woerner, “Future Ready? Pick Your Path for Digital Business Transformation,” MIT Sloan CISR Research Briefing Vol. XVII, No. 9, September 2017.

on two dimensions—customer experience and operational efficiency—with each pathway involving some substantial organizational disruption (see figure 1 for an overview of the framework).

Figure 1: The Four Pathways to Future Ready



Source: P. Weill, N. van der Meulen, and S. L. Woerner, “Becoming Future Ready Requires Organizational Explosions,” MIT Sloan CISR Research Briefing, Vol. XVIII, No. 8, August 2018.

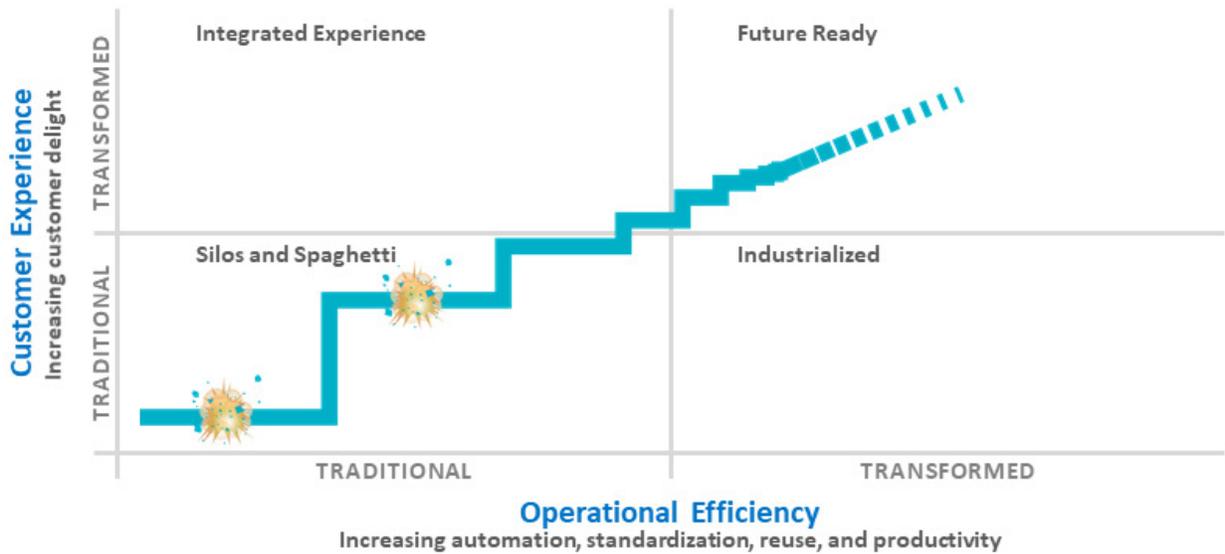
Pathway lines are based on series of informal interviews (conducted between 2015 and 2017) on digital transformation with senior executives globally; the lines were confirmed via the MIT CISR 2017 Pathways to Digital Business Transformation survey (N=413). Explosions represent significant organizational changes including changes in decision rights, new ways of working, a platform mindset, and organizational surgery.

The extent of the opportunity for KPN and the transformation required is best illustrated by the order capture process for the company’s flagship quad play⁴ product, as observed by CIO Bouke Hoving during a visit to a KPN retail store at the end of 2013. As the only Dutch provider of a quad play product at that time, it was easy to sell. Yet at the counter, KPN representatives faced silos and spaghetti: it took an average of thirty minutes to enter customer data into four separate systems, one for each service. Bouke realized that a few customer-oriented initiatives—for instance, creating a single customer identity for KPN services, and improving the order capture process on mobile devices—could have a tremendous effect on the customer experience, potentially with large returns. Unfortunately, KPN’s distributed (and mostly outsourced) IT capabilities restricted the company from immediately executing on these initiatives.

Before it could pursue a better customer experience, the company had to make several improvements to its operational foundation—to first move right on Pathway 3 before moving up (see figure 2). The following describes how KPN navigated the four types of organizational disruption that came with this journey.

4 KPN’s quad play product combined its television, broadband internet, fixed line, and mobile telephone services into a single offering.

Figure 2: Explosions Along KPN's Pathway to Future Ready



KPN's depicted pathway line and explosions are based on in-depth interviews with the CIO of KPN, as well as with the director and employees of KPN's Simplification and Innovation unit. The dotted end section represents the company's intended (ambidextrous) pathway for 2018 and beyond.

Decision Rights

Bouke Hoving obtained a mandate from CEO Eelco Blok to form a transformation unit called Simplification and Innovation (S&I). This unit centralized all business process redesign, IT architecture, and IT development capabilities, which necessitated that all commercial business unit directors give up individual change capacity. S&I then put a hold on all (mostly outsourced) back-end transformations, which freed up significant amounts of capital and helped to shift the focus towards the most promising front-end initiatives.

New Ways of Working

KPN re-insourced developers and designers to energize innovation and bring IT development closer to the business. S&I relied on specialized external recruiters to attract as applicants the very best digital talent, referred to as "magnets" for their propensity to draw other talent. To be attractive to an international candidate base, S&I relocated from KPN's headquarters in The Hague to Amsterdam, where the unit created a new and exciting digital workplace. The difference was more than physical: the new hires initiated a shift from traditional processing systems to open-source and cloud-based environments, and they also wanted to work in a more agile fashion. This new way of working—internally referred to as "Digital Craftsmanship"—enabled them to organize themselves to work collectively, experiment, and develop their craft.

Embedding these agile practices within the existing corporate governance proved challenging, however, as S&I's new way of working did not map to KPN's traditional reporting and management mechanisms. "Proxies" were therefore appointed: individuals that maintained short communication lines with the rest of the company and ensured that S&I adhered to KPN's standard reporting requirements. This eliminated unnecessary overhead for the agile teams, and also allowed them to learn (without fear of negative performance evaluations) from mistakes occurring during the agile development process.

The biggest explosion was our internal target to cancel all the steering committees, KPI spreadsheets, internal management letters, management layers, and also the corporate appraisal system—which were all big inhibitors for our staff.

BOUKE HOVING, CHIEF INFORMATION OFFICER, KPN

Platform Mindset

Over the course of its transformation, KPN decommissioned 25% of its systems while replacing every legacy platform and phasing out traditional software for open source and cloud-based environments. Early in the transformation, S&I's agile teams developed a “digital engine” that enabled API access to more than three hundred legacy services from KPN's frozen back end, allowing developers to quickly execute on customer-oriented initiatives. One of the first initiatives focused on redesigning the order capture process for mobile devices, reducing the quad play order capture time in KPN's retail stores from thirty to three minutes by the end of 2014. With initiatives such as these, S&I could show results early and often, keeping transformation momentum within the rest of the organization. Only after several important customer-oriented initiatives had been completed did S&I focus on a greenfield transformation of its back-end stack, which would allow improvement of the APIs—enabling a second wave of customer experience improvements.

Organizational Surgery

Before KPN migrated customers to its new back-end stack, S&I worked closely with the commercial consumer unit, which had relocated to Amsterdam to help rationalize KPN's product portfolio. Together, these units initiated a two-year commercial product freeze at the company, during which 80% of its product offerings were cut and processes among the remaining products were harmonized. This simplification effort helped to collapse internal silos and solidified the company's change of focus from products towards the customer.

ITERATIVE APPROACH PAID OFF

Over the course of four years, KPN had become more ambidextrous, simultaneously innovating its customer experience while reducing costs. The company had greatly improved operational efficiency, reducing downtime by 90% and achieving €570 million in savings—90% above its original target. KPN had also managed to radically improve its time to market and partnering capabilities, helping the company win a tender to partner with Tencent to rapidly develop the WeChat Go SIM product, which offered mobile coverage to Chinese tourists visiting the European Union and Australia.⁵ In 2017, KPN sold more prepaid SIM cards in the Chinese market than in its home market of The Netherlands. At the same time, the company's customer self-service app now outnumbered call center traffic by a factor of 2. But perhaps most importantly, KPN had strongly improved its customer experience—achieving an NPS improvement of 20 points. By mid-2018, KPN was very well poised to lead innovation in the 5G era under new CEO Maximo Ibarra.

⁵ Even though KPN was a Netherlands-only provider, its roaming network allowed it to compete with large global providers such as Orange, T-Mobile, and Vodafone.

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