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***Becoming a  
digital telecom***

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**Be bold, move fast**



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# Executive summary



**The telecommunications industry has been critical** to the process of digitization across a range of other sectors. From retailers to financial services, firms depend on telecom networks to provide customers with compelling online and mobile experiences designed to capture their interest and keep them coming back. Yet the industry's own efforts to transform the way it interacts with consumers to market, sell, and support its products and services, have lagged. It's time for that to change. Consumers are rapidly learning the value of digital through their experiences in other, more advanced industries, and they are coming to expect the same from their telecom operators.

To meet this objective, operators must offer an integrated, omnichannel user experience: on the desktop, on mobile devices, on the phone, and in stores. That, in turn, will enable them to build a portfolio of new products and services designed to match the requirements of each customer. Together, these two elements — an omnichannel experience and better products and services — will allow operators to boost value.

If operators are to make the digital transition, however, they must first define just how ambitious they want to be in taking advantage of digitization, creating a truly omnichannel experience, and developing the digital products and services that customers want, and then build the operating model and information technology needed to support these ambitions. Success will require designing a strategy for creating the digital experiences that customers will expect three years from now, not today. It will also entail working closely with customers and collaborating across business unit and functional boundaries in creating digital experiences, constant experimentation, and a willingness to learn from mistakes — all with an eye on the ultimate goal of creating value.

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# *A missed opportunity in digital*

The race to put new digital technologies at the service of customers has already transformed many industries, including media and entertainment, financial services, retail, healthcare, and utilities. Companies are learning that digitization is no longer just a way to lower costs and boost productivity, but a means to offer delightful, compelling, digital experiences across all channels, leading to real top-line growth. Boldness is the order of the day — companies have come to understand that simply incorporating a few digital elements here and there into their dealings with customers isn't enough. They must completely reimagine and reinvent how their businesses should operate to connect fully with customers, in every channel — in stores, online, and increasingly through mobile devices.

Given this pressing need, it is especially ironic that the industry that provides the backbone to digitization — telecommunications — has been slow to digitize its internal operations or to benefit from this evolution. After all, telecom operators built and continue to own much of the network infrastructure for both the fixed and mobile Internet, and they continue to invest billions to keep up with the exploding demand for data services on those networks. But instead of sitting at the heart of the transformation, they've remained largely on the outside looking in, as other industries reap the benefits.

That reflects a missed opportunity. Customers in every industry are rapidly growing accustomed to how digitization is transforming the shopping and support experience, and are coming to expect the same level of convenience in dealing with their telecom service providers. Operators that can't provide the benefits of digital risk losing out on this critical opportunity entirely, and being reduced to competing with one another on price alone — a source of considerable danger for operators.

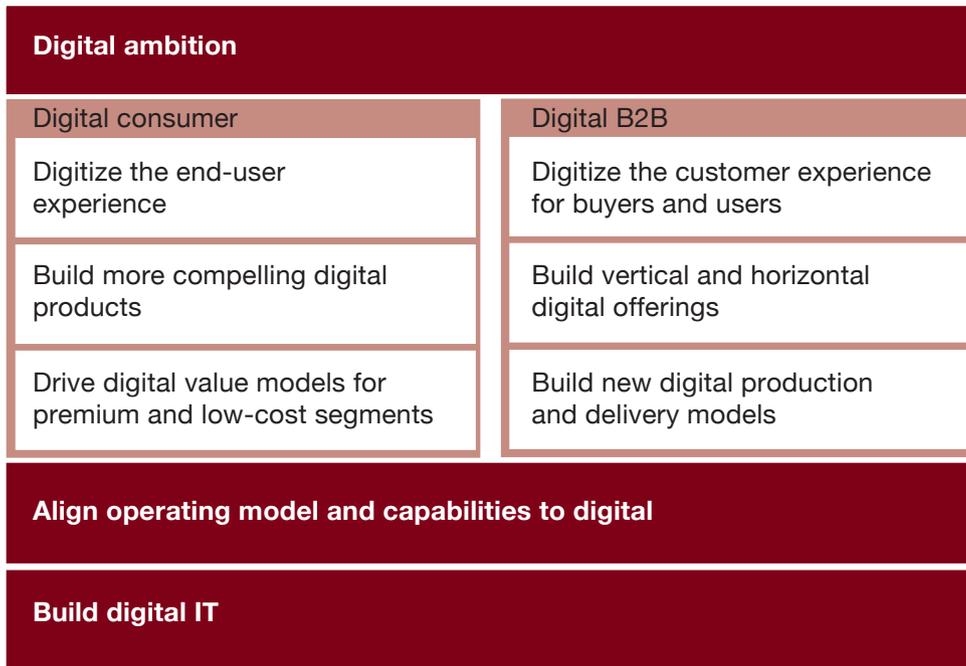
So it is incumbent on all operators — no matter their size, their market, or their current level of digitization — to rethink their roles in the new age of information, and to reset the strategies needed to capitalize on this opportunity. That will require that they play to their considerable

*Telecom has been slow to digitize internal operations.*

strengths as they develop new digital products, services, experiences, and enabling technologies for all their customer segments — while continuing to devise ways to enable companies in other industries to pursue their own digitization efforts.

If telecom operators are to succeed in capturing their fair share of the value to be found through digitization, they must proceed quickly, yet systematically. To that end, *Exhibit 1* offers a framework for how operators can use digital technology to transform not only the way they interact with their consumers (the focus of this report) but also the products and services they can offer to enable the digital transformation of their business customers — as well as how operators can execute the transformation.

*Exhibit 1*  
**The digital telecom transformation framework**



Source: Strategy& analysis

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# *The digital consumer*

Consumers are at the heart of the digital transformation, in virtually every industry. They are driving the demand for more powerful devices, ubiquitous connectivity, more and better information and entertainment, and closer interactions with friends and companies alike, at work, at home, and on the go. If telecom operators are to address these needs and expectations, they must rethink their marketing mix by reimagining the entire customer experience, including communications, marketing, sales, and service. And they must provide the most attractive portfolio of new digital products and services while redefining the value models enabled by digitization.

***Digitize the end-user experience.*** Many operators have already made efforts to digitize their relations with customers, developing Internet-based sales channels, offering online customer care, and boosting their social media presence. With some exceptions, however, these efforts have not been truly integrated, and as a result, they have yet to produce real top- or bottom-line gains. Indeed, for many operators, online sales still represent less than 20 percent of total sales. However, the effects of digitization on telecom markets are real, as the rapid increase in online sales of mobile offerings in France over the past two years clearly demonstrates (*see “The Digital Consumer,” next page*).

If operators in other markets are to benefit from the same effect, they need to understand what motivates consumers now and determine how best to draw them in. To that end, operators must first present a truly omnichannel experience that coherently ties together all the possible points of contact with customers — on mobile devices, online at home and work, and in stores.

- ***Mobile first.*** The mobile experience must be at the heart of the reimagined omnichannel strategy, given how quickly smartphones and tablets have transformed how people interact with friends, retailers, and the media. But designing the customer interface for mobile should not be a simple translation of an operator’s Web interface. The customer journey needs to be reimagined, beginning with mobile. On smartphones, consumers use apps and browsers in different contexts, yet the main interface for operators should be through an app —

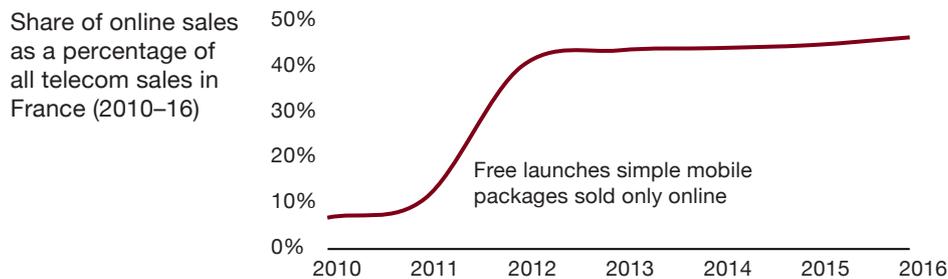
## The digital consumer

In virtually every industry that caters to consumers, online sales are rapidly gaining a larger share of total sales. Customers are quickly growing accustomed to the ease and speed of online channels, especially in industries at the leading edge of creating great customer experiences — notably retail, media and entertainment, and financial services. Sales of smartphones and tablets by non-telecom players are rising quickly in many markets, and there is no reason that operators can't generate similar numbers.

In France, for instance, digital sales of mobile subscriptions made up roughly 10 percent of the total prior to 2011. In early 2012, Free, a player in the fixed-broadband market that received a mobile license in 2010, launched its first ultra-simple, fully online mobile offers at half the standard market rates. That forced other market players to follow suit, offering their own purely online mobile services at lower prices. Within two years, close to half of mobile subscription sales in France had moved online (see *Exhibit A*).

### Exhibit A

#### The entry of Free, a simple, online-only mobile telecom service in France, forced competitors to follow suit, driving online sales of mobile plans



Source: Strategy& analysis and estimate

preferably a single app instead of a multitude that serve different purposes and only confuse customers. This app should allow for a seamless customer journey from the Web to the shop, whenever and wherever the customer wants to interact with the operator — a truly omnichannel experience.

- *Online.* Every operator has a website, but so far that hasn't been enough. The online channel must become a more important component of how telecom operators connect with customers, offering a truly compelling online experience that's fully integrated with every other channel. To achieve this, operators must take a page from retailers like Amazon and make the online shopping experience easier and far more personalized, offering a richer experience and a wider range of relevant options for

interactivity, while improving opportunities for self-service and other forms of customer care. Implemented correctly, online sales — together with sales on mobile channels — should make up more than half of operators' total sales.

- *Digital stores and omnichannel.* Consumers, even highly digital ones, still value access to stores. These can provide a physical incarnation of many of the digital products and services they crave, offering expert advice and service regarding their digital needs. But unlike the stores that most operators provide today, they need to be digitally enhanced, with features like check-in via mobile devices, personalized content on interactive screens, and mobile point-of-sale capabilities that provide a richer and more personalized experience. Ultimately, the customer should walk into the store and feel as if it were designed expressly for him or her. The real value of digital comes when operators can create a full “omnichannel” customer experience that includes physical stores, cutting across all channels and providing a seamless customer journey.

A common thread through all these channels is the ability to personalize the consumer experience, ensuring that customers are instantly recognized as they enter each channel, with their histories known, and sales and service offerings customized accordingly. It isn't enough to segment customers broadly using traditional approaches. A successful marketing strategy will need to make use of “big data” and powerful analytics engines to develop individual insights about each customer, and then use that information to create targeted advertising campaigns and recommendations, personalized products and services, and cross- and upselling opportunities. For example, leveraging big-data techniques can allow operators to understand at a very granular level the quality and coverage issues of their customers and to provide them with custom messages adjusted to their value to the operator and for specific situations. Operators could even use this information to make targeted infrastructure investments designed to improve the digital experience and service of their best customers.

**Build more compelling digital products.** Personalization will allow operators to make truly targeted personalized offers, tailoring the features of phones, smartphones, and tablets to the needs of the customer, and matching the devices to a wider, more flexible choice of voice and data plans, dependent largely on how much the customer is willing to spend.

The real opportunity, however, lies in the many new services the fully digitized operator will be able to offer. Data services will dominate: Plans might include premium features such as guaranteed quality of service and added bandwidth. Operators should also consider making available additional services such as e-commerce, cloud storage, video, music, and games, and working with partners to establish cross-vertical offerings in areas such as e-payments, as well as e-health and e-wellness through the

*A common thread through all these channels is the ability to personalize the consumer experience.*

use of connected wearable devices. And, given growing concerns about privacy and security, innovative operators could develop guaranteed data privacy and security services for premium customers, distinguishing themselves from the large Internet players by becoming “trusted providers.”

**Drive digital value models.** As operators more fully digitize and take advantage of new technologies and capabilities, generating added value in the consumer space will remain a challenge. *Exhibit 2* offers a breakdown of the interest that different customer segments might have in digital products and services, and their consequent value to operators. Operators must learn to distinguish very carefully between customer needs and their value to the operator, and to price services accordingly. This is especially true given that over time, the number of digital customers will increase, and there is a risk they could migrate to lower-cost offers.

To counter this trend, operators must develop new digital experiences and a wide range of appealing new services to attract these customers and generate more value. Premium and add-on services will, of course, command higher prices and produce higher margins, while lower-end services can be delivered at substantially less cost, and operators must make absolutely clear to customers the differences between their offerings — and the virtues of the premium ones. Operators must also learn to manage their networks to offer customers differing levels of network speed, quality, and reliability, at different price points.

*Exhibit 2*

**As customers migrate to digital at different speeds, their value to operators will change**

		<b>Digital attitude</b>		
		Reluctant	Digital shopping and service	Fully digital lifestyle
<b>Pricing attitude</b>	Premium	<b>Premium non-digital</b> Need to be guided to adopt digital over time	<b>Premium digital experience</b> Provide an enhanced premium digital experience	<b>Premium digital lifestyle</b> Provide new premium digital services and channels to enable the digital lifestyle
	Low-cost	<b>Low-cost non-digital</b> To be addressed by low-cost, non-digital, indirect channels	<b>Low-cost digital experience</b> Leverage digital channels to reduce cost-to-serve	<b>Low-cost digital lifestyle</b> Provide simple yet advanced digital services and leverage digital channels to reduce cost-to-serve

Source: Strategy& analysis

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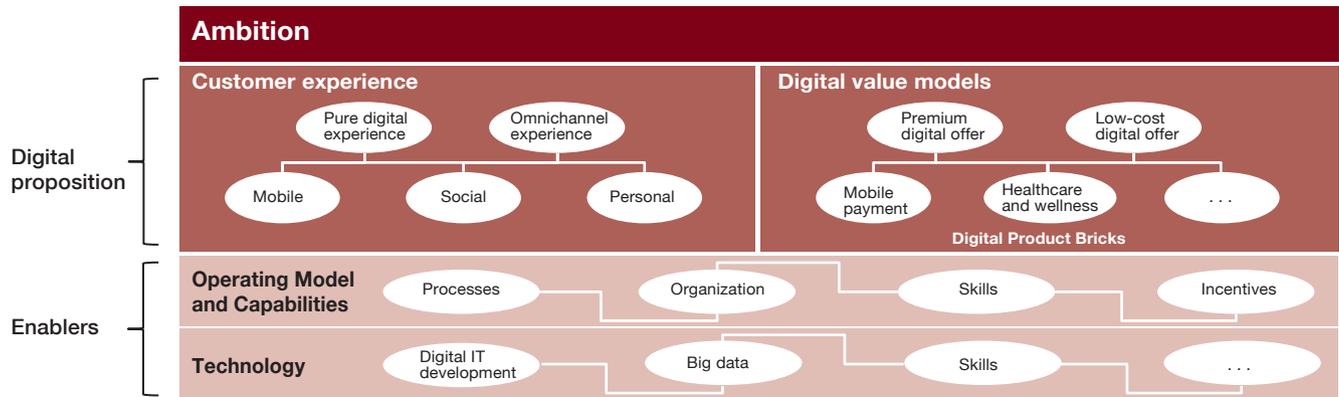
# *Becoming digital*

If telecom operators are to successfully make the transformation to a fully digital way of doing business, they must first understand that it isn't just about adding a website or a Facebook page. Instead, the shift will affect every aspect of their operations, from the digital proposition that will define all interactions with customers to the business and IT processes that will enable the new model. *Exhibit 3 (next page)* shows the specific areas and workflows that will need to be reimaged and suggests a process to be followed.

1. *Determine your digital ambition.* Telecom operators must decide just how ambitious their goals are. What do they plan to focus on when rethinking the customer experience? Are they ready to disrupt their entire business model, perhaps expanding into unknown territory? Whatever the case, the key is determining how they can differentiate the company through digitization, whether in customer experience, with digital products and services, by becoming a trusted digital partner, or something entirely different.
2. *Deliver a truly omnichannel experience.* Operators must also understand that the digital experience must be the foundation of how they connect with customers. This entails shifting their orientation away from individual channels and transforming their operating model to give customers a compelling, integrated experience across every channel, centered on mobility. Consistency across all channels is key, as is measuring how successfully they can capture customer interest.
3. *Define coherent customer propositions.* Next, operators should begin to design a compelling customer experience across all channels, focusing on the mobile experience and social media. They must develop specific product and service offerings priced to capture real value across each customer segment and tailored to the segment's appetite for digital, its willingness to pay, and the speed at which it's willing to migrate.
4. *Redesign the operating model and build capabilities.* This includes the processes, organizational structure, skills, and incentives that will determine how the digital proposition is carried out. Here, the key is to

Exhibit 3

Structuring a consumer-oriented digital transformation program



Source: Strategy& analysis

break down the silos that have resulted in a channel-specific approach to customers. Instead, operators should develop a much flatter, faster, more collaborative, and data-driven organizational model, along with a channel management approach that can resolve conflicts and redistribute resources among the various channels. Frontline sales and customer care staff must have the skills needed to meet the needs of digital-savvy customers; similarly, data analysts will need to be able to work with the wealth of new data captured through digitization.

5. *Rethink information technology.* IT in the digital age can no longer take a backseat to more customer-facing activities. Instead, it must be much more tightly integrated with the new technologies, like social media and big data, that are driving the shift to digital. IT, too, must put the customer first. This shift cannot turn into a three-year development project; rather, operators must transform as much of their customer-facing technology as they can, as quickly as possible, and then turn their attention to the back end on which it runs.

A key element of this transformation process involves completely replacing legacy IT systems with new, lighter, more agile platforms that can support simplified, fully online offers. Operators should implement a more agile approach to the development of new technologies to match their continuously evolving business requirements. A more open architecture will allow them to quickly incorporate ongoing innovations from outside the company. And they must boost their ability to gather and exploit the increasing wealth of available data to allocate resources more effectively and target marketing activities more precisely, a capability that is fast becoming a key competitive advantage.

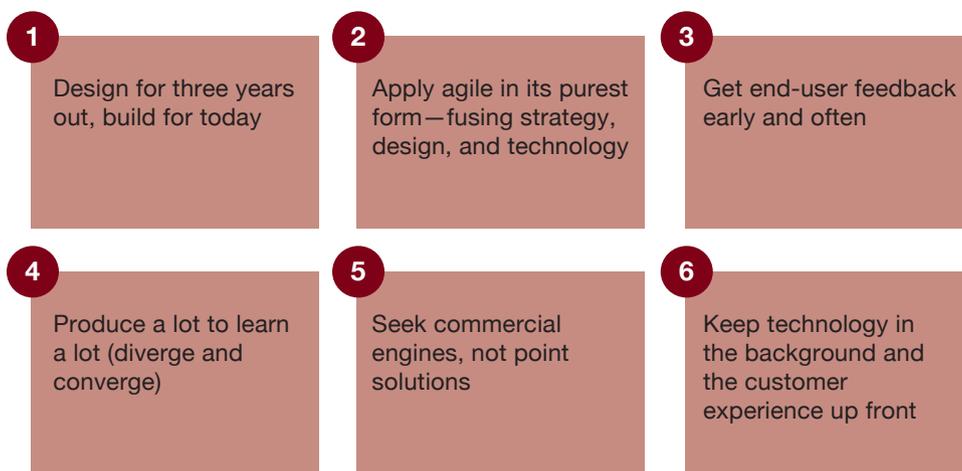
# Making it happen

Becoming fully digital, however, will not be a linear process — simply following a series of steps won't be adequate to the task of reimagining a company's entire way of doing business. Instead, operators need to think simultaneously about their digital strategy; the design of their customer experiences, products and services, and business and operating models; and the technology needed to carry out the strategy and design. Each of these three elements will dramatically impact the others as companies digitize.

We believe six guiding principles are crucial in designing and executing digital strategies (see *Exhibit 4*).

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## *Exhibit 4* Six guiding principles for designing digital strategies



Source: Strategy& analysis

1. *Design for three years out, build for today.* Technology road maps are well understood three years out. Increases in chipset processing power, memory costs, device energy consumption, and battery power enhancement can be predicted accurately, as can be the emerging trends that will affect the telecom industry. The designs being built today need to take all these into account. Yet going beyond three years is significantly more risky, as the potential for major unpredictable disruptions increases dramatically beyond that horizon.
2. *Apply agile product development in its purest form, by fusing strategy, design, and technology.* Combining these capabilities — simultaneously, not sequentially — will provide a huge boost not just in the speed of deployment of new digital solutions, but also in their quality and impact.
3. *Get end-user feedback early and often.* We believe that much market research is a waste of time, especially as it relates to designing new digital products and services. If you want to understand how a lion behaves, you don't go to the zoo — you go into the wild. Accordingly, operators should develop solutions based on live observations and interactions with customers as they are designing them, and constantly adjust their approach based on feedback.
4. *Produce a lot to learn a lot (diverge and converge).* Rather than limiting themselves at the outset, operators should promote the free flow and expression of many divergent concepts early on, learn from these divergent approaches, and then quickly converge on the best solution.
5. *Seek commercial engines, not point solutions.* The digital realm is a place of many fads. Many companies and executives who lack the time and patience to understand the real underlying potential offered by digital take the easy way: simply replicating and implementing the latest “great idea.” Instead, digital solutions need to bring demonstrated value to the business. If they don't, then they should not be implemented.
6. *Keep technology in the background and the customer experience up front.* Rather than creating technology for technology's sake, operators should use it as a means — a tool for providing the best experience for the people who will be using it.

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# Conclusion

It is now absolutely critical for all telecom operators to become digital: to put customers and the digital experiences, products, and services they demand at the center of the operator's strategic thinking, business design, and operating model. The risk of not doing so — starting today — is simply too great. The industry is beset with saturated markets, stagnant growth, and highly competitive interlopers looking to carve out large slices of operators' traditional businesses.

In this environment, operators must find their own new paths to increased growth and profitability, and the only answer lies in digitization. The transformation won't be easy for many operators, which are huge organizations that have traditionally moved very slowly. That has to change quickly if they are to assert their rightful place in the coming digital telecom ecosystem.

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