



Fast Tracking Telcos to Digital Transformation

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About this paper

A Pathfinder paper navigates decision-makers through the issues surrounding a specific technology or business case, explores the business value of adoption, and recommends the range of considerations and concrete next steps in the decision-making process.

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EXECUTIVE SUMMARY

The customer environment has shifted so rapidly to digital engagement – across the world and across industries – that many businesses that are dependent on legacy processes have been caught short. They face the question of how to quickly and efficiently transform themselves from slower, more cumbersome organizations into more responsive and dynamic ones.

Telcos in particular, because they have often been seen as laggards in adopting advanced customer experience technologies, have a steep uphill climb. There is an inherent tension between the desire to deliver high-quality digital customer experiences (along with digitally consumed products) and the complex integration of back-office systems and processes telcos rely on.

Although telcos have made billion-dollar investments in infrastructure, the customer support experience tends to be fragmented and decidedly not modern. The IT around the customer experience tends to be made up of legacy hardware and software. The development cycle is a traditional, yearly cycle, even as other industries move toward the more frequent – often multi-week sprints – release cadence of agile development. Telcos, with support from their vendor partners, need to find a way to deliver a more streamlined experience for customer management and retention.

KEY FINDINGS

- Customers want instantaneous help through social media, chat and mobile apps.
- The IT landscape among telcos is made up of more legacy technology than in other industries. Larger telcos are generally slower to deploy new tools in updated IT stacks, and yet are typically high spenders on those tools because of high customer care volume.
- There are viable new approaches in the marketplace that can enable more rapid and customer-friendly processes.
- One agile methodology for coping with digital transformation – minimal viable product (MVP) – is especially relevant to telcos. MVP encourages quick deployment and feedback cycles to guide continuous improvement. Telcos can use it to create lean architectures that minimize the number of new systems introduced, along with the number of integrations needed.

The Transformation to a Digital Telco

At the heart of digital transformation is the customer experience: Businesses today can interact more directly with customers through many channels – various applications, Facebook, Twitter and other social media sites. Telcos are ripe for disruption when it comes to customer experience. Although the mobile phones nearly everyone uses are constantly iterated with upgrades, there has been minimal progress in the way subscribers make payments and change services. In many cases, customers still have to call customer service to make changes to their service plans.

Communication service providers (CSPs), in both mature and emerging markets, face competition from aggressive entrants. They must also deal with new kinds of customers, as well as find new methods for monetizing those customers. The foundations of the CSP industry have been rocked by more choices for subscribers, a low barrier to switching providers and rapidly declining differentiation between competitors.

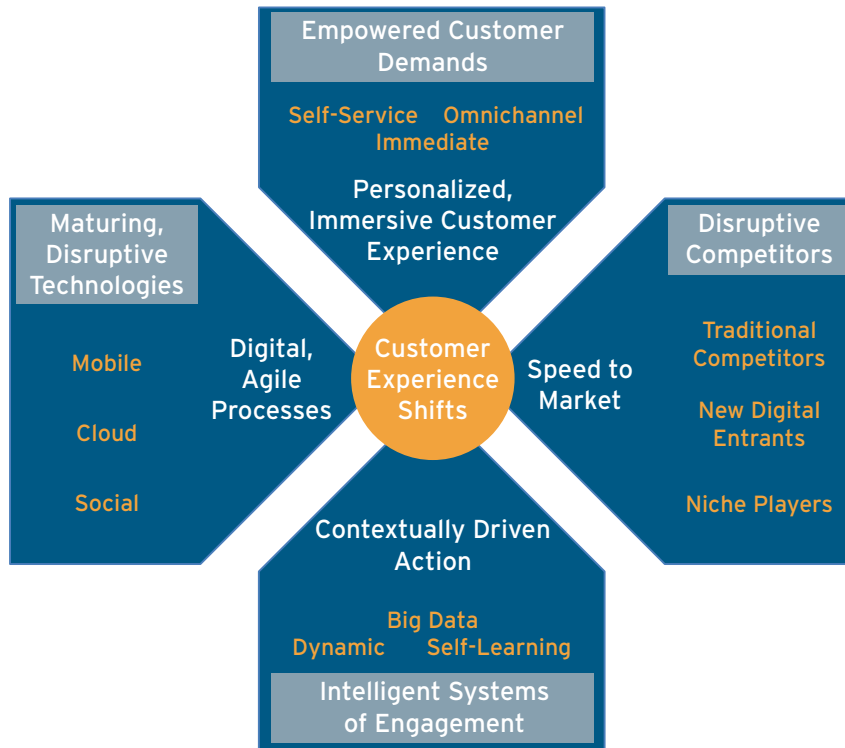
As empowered customers turn to digital contact channels, those in the telecommunications industry must reimagine their business and operating models to address the increased expectations of customers who desire more control, convenience and context. Customers value experiences and, in turn, often feel compelled to share their personal encounters. Experience, not products, will be the competitive battleground of the future.

Yesterday's world was about one-way customer interactions; today's is about self-directed, on-demand two-way engagement anywhere, on any device, to ensure a positive experience. Customers want to communicate on their terms using their preferred channels. Depending on the urgency, nature and overall context of the situation, customers are choosing self-service more often to engage with telcos. As Figure 1 shows, customers want personalized, self-directed, instantaneous support. Incumbents that do not adjust to this new landscape will find themselves facing disruptive competition from new and traditional players.

Users increasingly prefer to use their cellphones to facilitate interactions with telcos. They use mobile apps to make payments and use asynchronous customer service chat so that they spend less time waiting and can go about their day. Telcos can respond by offering mobile apps that provide customer support, and by offering flexible ways to pay bills and change data plans.

Telcos trying to focus on customer retention while winning new business need to streamline their systems of engagement and provide accurate information to their customers. For telcos, a customer-centric methodology means that access to billing, sales and other systems should be instantaneous and updated in real time.

Figure 1: The customer experience is shifting



Source: 451 Research

CSPs have primarily invested in legacy systems of record such as billing, CRM and ERP platforms. These systems are critical for managing internal operational processes, but they are typically monolithic, expensive and time-consuming to modify. They are typically siloed, which degrades the overall customer experience. The legacy IT stacks found in many telcos are, unfortunately, not ready for digital experiences. These systems were designed for a non-interactive world built around complex CRM and voice-based call centers.

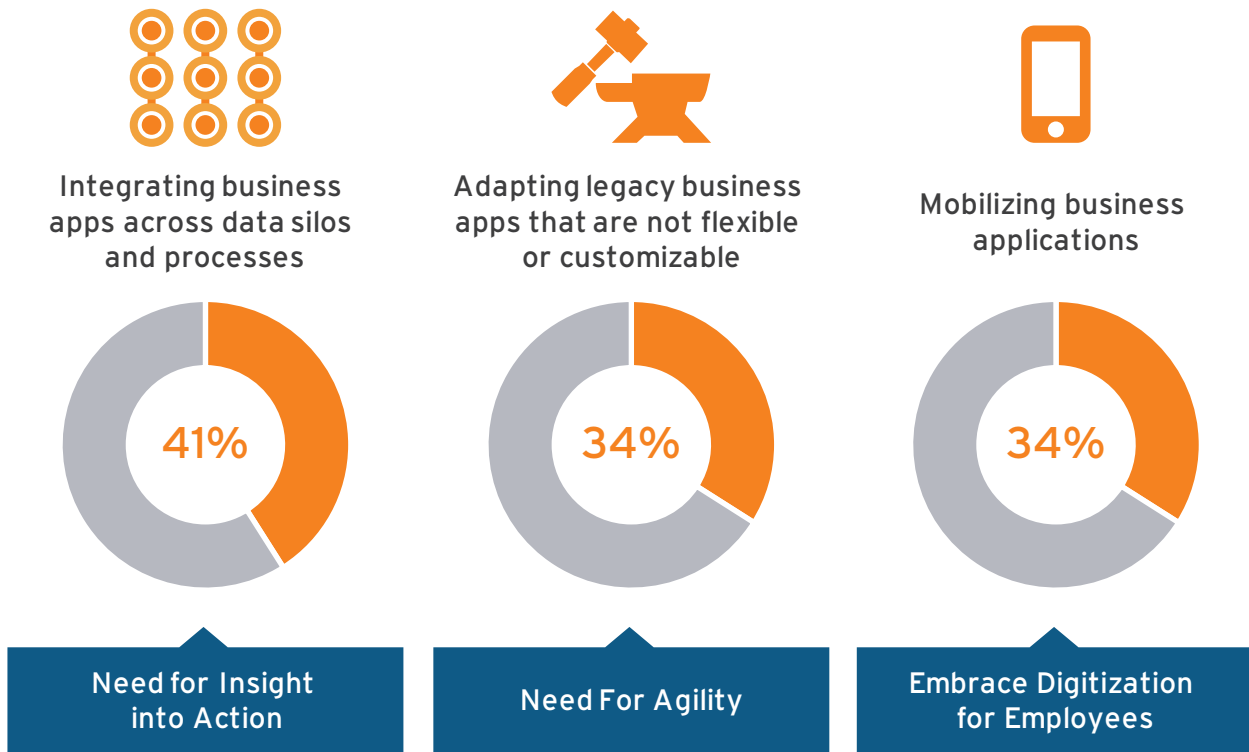
These traditional IT approaches represent major challenges when it comes to replacing or refreshing the components of the IT stack. In the context of telco deployments, digital transformation projects are too slow: timelines for projects often take 18-60 months to get from idea to reality. They are too expensive; integration and migration costs can run into the millions of dollars. And they are risky; many fail to deliver on key performance indicators or have murky ROI. There is also an inherent risk that replacing the IT platform might just continue or freeze in place the legacy processes.

451 Research believes that the best way to address this issue is to create a digital stack with new systems of record and engagement to make meaningful improvements to the experience, and to achieve IT transformation. If they don't address some of the underlying pain points, these investments will do little more than plaster over the cracks.

Siloed Data is Among the Key Challenges for Telcos

Although the industry is evolving at breakneck speed, and customer demands are changing even faster, the CSP IT departments have remained in the dark ages with highly complex, rigid structures that leave little room for agility. According to 451 Research's Voice of the Connected User Landscape, 41% of CSPs say that integrating business applications across data silos and processes is their top pain point. Additionally, adapting legacy applications and creating mobile applications for customers both represent significant challenges for the road ahead.

Figure 2: Business pain points and investments



Source: 451 Research's Voice of the Connected User Landscape: 1H 2017 Corporate Mobility and Digital Transformation

The traditional model for refreshing the IT stack tends to be a slow approach that focuses on incremental changes to deployed applications. Telcos employing this model tend to run into high costs and fall back on old processes. They are also working with large vendors and have to contend with heavy systems integration across siloed components – such as CRM, billing and charging – that need to be glued together with intermediary software.

Newer approaches to digital transformation attempt to address these issues by enabling startups and agile corporations to build up new systems and launch new products quickly and iterate the services later. This approach tends to work well for companies that are trying to address specific segments, such as mobile-first millennials.

Digital transformation for telcos should result in a new way of running the business that combines operations and technology to simplify IT architectures. It should mean a new commercial model by shifting customer care to modern mobile apps. Digital transformation can also help streamline business processes through greater implementation of automation.

The Paths to Digital Transformation

Vendors offer telcos multi-faceted approaches with different scopes to address the conundrum of customer experience. There is no one-size-fits-all method for telco transformation because each telco faces its own market conditions and customer expectations.

Due to their complex application and network stacks, some telcos are ripe candidates for a 'bimodal' or two-speed approach to digital transformation. This approach allows a company with significant legacy infrastructure to keep much of what exists, and augment it along a parallel track with newer digital capabilities that are managed separately. In effect, what happens is that large, slower-moving companies such as telcos can choose the best execution model for particular applications and processes (for example, cloud or on-premises) based on their own calculations about whether a legacy or new system is the appropriate environment to handle it. Newer organizations that were 'born in the cloud' have a different set of variables to contend with than older businesses that are tied to legacy on-premises equipment.

The two-speed method has two separate modes: one maintaining legacy infrastructure, the other on modern software and more agile methods. CSPs can be particularly suited to this model because they already rely on legacy systems and processes that are crucial to keep the network up and running. Operating another part of the business at a faster speed, with modern systems, enables these companies to respond to growing threats from competitors and transition to a more dynamic culture. The two-speed method can also reduce risk for the business and allow for innovation since legacy operating models have more constraints than newer digital operating models.

Figure 3: Key business impacts

Business Issue	Legacy Operating Model	Digital Operating Model
Business agility	Low	High
IT complexity	High cost, slow	DevOps, agile
Personalization	Static, segment of many	Dynamic, segment of one
Customer engagement	Limited	Active
Monetization	Missed	Timely
Digital channels	Low < 80% call center and retail	High > 80% mobile-first
Cost to serve	Dollars/interaction	Cents/interaction

Source: 451 Research

Similarly, the MVP methodology can be used to launch a digital transformation effort that gets solutions in place in as little as six months. Thanks to the continuous iteration cycles of its agile-like process, a business can repeatedly add enhancements and new services to its digital platform while moving legacy systems into retirement. The MVP approach creates innovative thinking and disruptive capabilities, which are needed in telco transitions.

Another approach is for a mature brand to create a new digital business, starting with a whole new parallel set of people, processes and technology, known as a 'flanker brand.' Flanker brands are typically created to help a company capture more market share with a differentiated operating model. These offshoots are leaner – with smaller employee counts – and focus on different skill sets than a traditional telco.

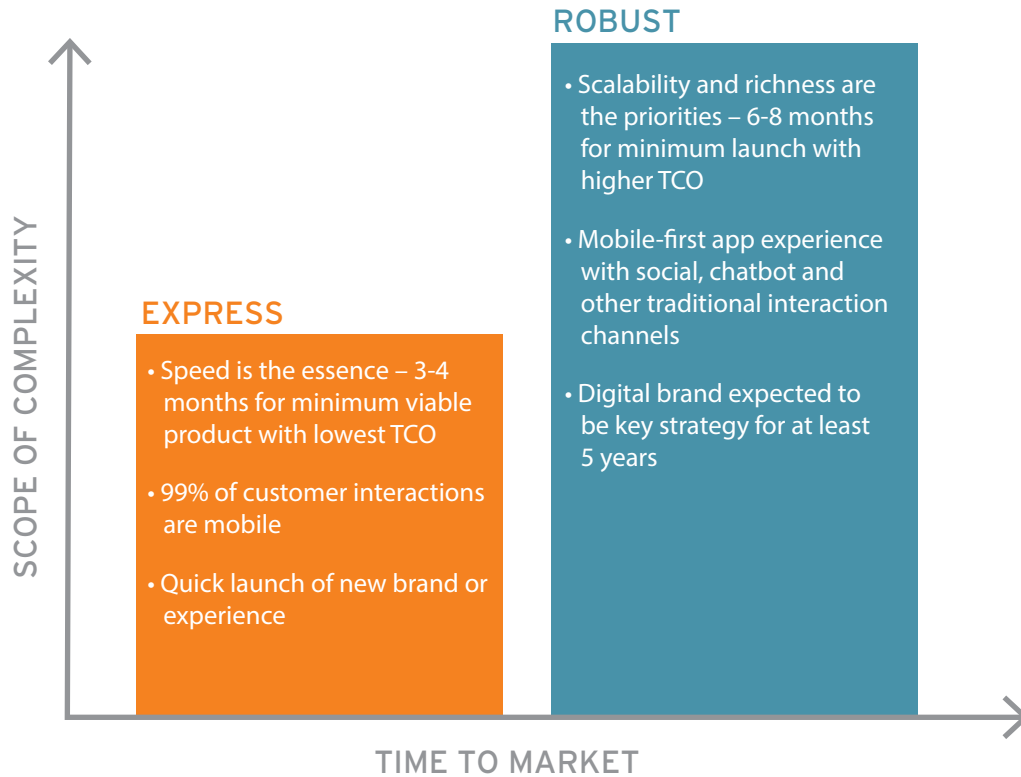
Flanker brands can be aimed at market segments that are receptive to natively digital offerings (for example, millennials). They can be run by an executive with a clear objective to transform the business, and staffed by 'change agents.' Flanker brands would run with agile development and work with disruptive technology vendors, their operations siloed away from the main brand.

Flanker brands can achieve success for a number of reasons. They have very little legacy integration; they can represent a separate brand alongside the main offerings; and they can be launched quickly. In contrast with the legacy model, which is retail led, the 'flanker brand' can be mobile-first in a majority of scenarios.

Understanding Different Digital Execution Models

One vendor in the market offers two distinct MVP approaches (express and robust) for transforming IT stacks. Express prioritizes faster time to market and a self-service, mobile application engagement model. The robust model extends the implementation time and expands the customer journey engagement model.

Figure 4: Which is the best MVP model?



Source: 451 Research

EXPRESS

The express model of deployment is best for telcos that value speed of deployment above other considerations. In this model, systems are built quickly and are ready for launch within six months. By their nature, these systems are not as fully featured as their counterparts. Telcos using this model are typically startups or flanker brands that will scale to match customer demand.

Express systems are built with the expectation that the vast majority of sales will happen in the digital channel. Beyond that, the systems rely on self-care models, where customer interactions with the brand happen almost exclusively via the carrier’s mobile app. In cases where a customer issue arises that cannot be addressed via the app, a call center is used as a fallback.

Typically, the initial use cases include user registration, pay-now credit/debit card payments, customizable plans and a marketplace or online store. For example, express model applications enable greater user control, with notifications and instant plan changes to help them avoid overage charges.

CASE STUDY - OOREDOO (OMAN)

Ooredoo Oman wanted to evolve a brand into a digital service provider. Its target market, the youth segment, has a high number of smartphone users. Its goal was to develop a new digital experience, operating separately from the existing organization. The company previously had IT transformation projects that yielded disappointing results, so it wanted meaningful and measurable progress. The rollout of this new digital proposition was conceived as a group-wide pilot, with plans to launch in one market. Upon a successful deployment, Ooredoo plans to extend this approach to other companies within the group.

ROBUST

Companies that follow a robust model are looking to deploy a full-featured platform. Time to launch is slower than the express model, often taking about eight to nine months. After launch, the product is expected to be the main business vehicle in two to five years.

Robust platforms are built to scale to millions, if not tens of millions, of customers from the outset. As with the express model, agility is employed, but to a lesser degree. Even though it is slower to market than the express model, it can still be updated quickly. Beyond the initial rollout, there are opportunities to iterate with multiple additions of functionality.

CASE STUDY - NORTH AMERICAN CARRIER

A tier one North American carrier wanted to launch a new digital brand with its own identity. The new brand will target budget-conscious consumers who do not want to pay the cost of unlimited data plans while being heavy users of data themselves. Its deployment model was via 100% public cloud, and it wanted a low-touch, low-cost operating model.

Acquisition, customer engagement and customer care were meant to be done entirely through online channels. The goal was to move beyond the established way of thinking because it wanted a first-mover advantage over its rivals. The carrier's new flanker brand involved an off-campus project team with a blend of digital, IT and telco resources.

Takeaways

Telcos often take a passive approach to dealing with customer support because they see customer service as a cost center that soaks up resources. However, customers don't just interact with companies – they go on a complex journey that requires up-to-date information resources and interaction channels. These are often at odds with legacy infrastructures and processes.

Vendors are trying to deliver telcos a more streamlined experience for customer management and retention. The MVP approach allows telcos to present a new IT stack that is geared to the customer experience, based on different deployment methods. Those companies that want to succeed in a digital-first world should embrace new technologies that better position them within the changing market.

One place to start the transformation is with an overhaul of the customer experience. As noted, companies are experimenting with digital transformation by creating mobile-first and digital-first flanker brands. These brands can act as startups that target the millennial customer segment by offering services and support where millennials need them.

Companies choosing between these two MVP models should make note of these considerations:

- **Express models offer quick-to-market flexibility, reduced risk and room for expansion in the future.** However, they are narrow in scope and address a market that is well suited to mobile-only care. Plus, it will take time to iterate on subsequent deployments.
- **Robust approaches give the customer a complete subscriber experience and have the scale.** However, telcos face a longer deployment timeline that will get easier to add to over time.

In the final analysis, telcos should be aware that they have several options for overhauling their IT platforms and bringing to the forefront more modern and flexible customer experience initiatives. Digital transformation is difficult and complex, but by approaching such a project with a partner schooled in offering flexible deployment models, even large telcos can step into the digital future with confidence and minimal risk of technology disruption.