



White paper for Amdocs

**On the cusp of change: customer
engagement crucial to CSP digital
transformation success**

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1. Executive summary

The Internet era has triggered a massive shift in the telecoms industry resulting in strong competition, declining voice revenues and dramatic growth of data consumption. Communications service providers (CSPs) worldwide are actively exploring ways to defend against the competitive threats of digital economy players, while capitalising on their strengths and network infrastructure to become a more integrated part of the digital economy and the associated growth opportunity.

Meanwhile the Internet era has also triggered significant change in customer behaviour and expectations. Customers have become accustomed to seamless user experience and real-time control of their services and expect nothing less from their service providers. CSPs are pressured to improve their user experience while also navigating the complexities of interlinking their legacy platforms to provide a consistent interface. Establishing an effective customer engagement model in the midst of the evolving digital economy landscape is critical for CSPs to ensure they are not bypassed in the value chain.

This thought leadership white paper focuses on the significance of exceptional customer engagement and provides a brief overview of how CSPs could innovate on customer engagement and experience.

2. Introduction

The advent of the Internet era has had a unique and profound impact on businesses worldwide. Businesses that provide online digital services, digital substitutes for traditional goods and services, or physical goods marketed and sold by digital means are compelled to participate in the digital economy or risk significant disruption.

The move to the digital economy has also had a significant impact on communications service providers (CSPs). IP-based over-the-top (OTT) service providers of all sizes – from Internet giants to small, agile start-ups – have disrupted CSPs' traditional voice and messaging revenues. CSPs have retained some inherent advantages such as existing customer relationships and network infrastructure that give them invaluable leverage to become an indispensable part of the digital economy world order. In order to do this, however, CSPs need to undergo a digital transformation and make significant changes to how they engage with their customers.

The rise of Internet giants such as Amazon and Google has caused notable changes to customer behaviour and expectations. Customers expect real-time, personalised, customisable experiences for both digital and non-digitised services. For instance, consider recent digital economy companies such as Airbnb, Instacart and Uber who have tasted huge success. Airbnb offers rooms, Instacart delivers groceries and Uber hails taxis. None of these services are digitised – what sets these companies apart is their exceptional customer engagement model. In short, by implementing a great customer interface between the services and the customer, these companies have significantly disrupted their industry.

As CSPs engage in actively defending against the competitive threats of digital economy players, they would do well to give heed to the most common disruption model: providing an exceptional customer experience that brings together disparate complex services.

3. Mapping the customer journey

The first step towards creating an exceptional customer experience is to map the customer journey. This is especially true for CSPs, who typically provide a number of services, including complex bundles. The significant rise in the number and types of available services creates both opportunities and challenges for CSPs worldwide.

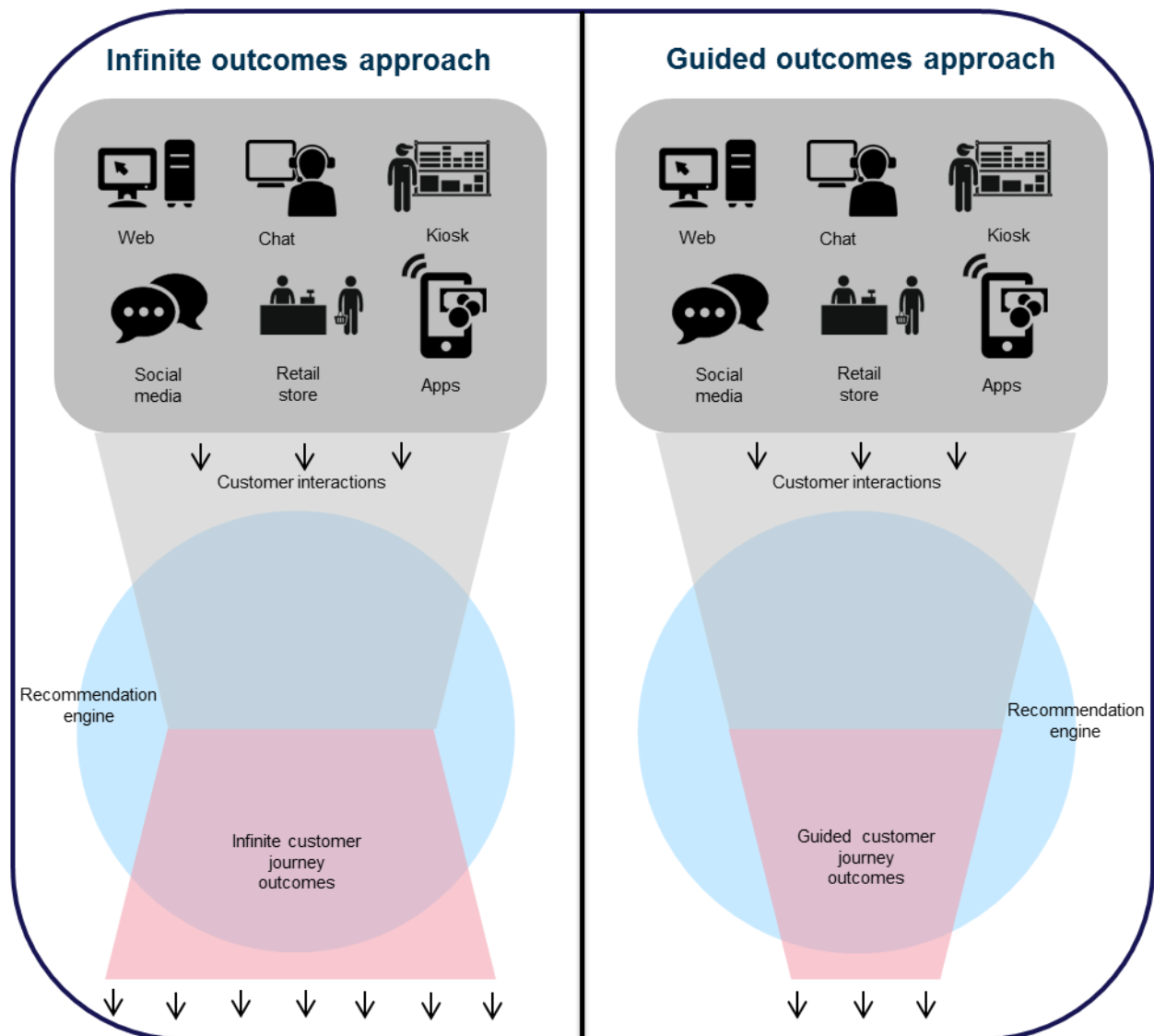
CSPs are at the threshold of offering a large variety of new digital economy services such as home networking and security, cloud-based software subscription services, machine-to-machine communications, and many more. Under these circumstances, the need to predict and be prepared for the customer interaction journey could not be more relevant.

Consumers want control over their customer journey, choosing their own paths with complete flexibility. There is a need to provide multiple journey paths that customers can take as they become aware of an offering from a CSP, research the offering, choose an offering, and (hopefully) become public advocates of the offering. Today, most CSPs' primary channels are websites and customer care agents while some also provide smartphone and tablet apps, and kiosks and retail stores. Other channels such as Facebook, Twitter and other social media tools are also becoming important.

The platforms of the future will allow customers to choose how they interact with CSPs while guiding the customer journey subtly to ensure appropriate engagement and desired outcomes for CSPs. Broadly speaking, a typical customer journey can have infinite outcomes or limited guided outcomes.

- **Infinite outcomes:** The infinite outcomes customer journey approach provides an infinitely flexible set of paths for customers to follow as they interact with the CSPs, their agents and their partners through omni-channel architecture. Designing an infinite number of potential customer journeys is complex, and effective customer engagement within this model can be time-consuming and expensive.
- **Guided outcomes:** The guided outcomes approach presents customers with a limited number of potential customer journeys, although customers still retain control over the path they want to take from the options available. Customers are guided to an ideal outcome by providing information on the offer that best suits them. This approach is designed around the paradigm of 'the greatest need to the greatest number' as opposed to the infinite outcomes approach of 'all things to all people'. Guided outcomes offer CSPs more effective control over customer engagement. By limiting the number of customer journeys, CSPs can focus on providing compelling customer experiences.

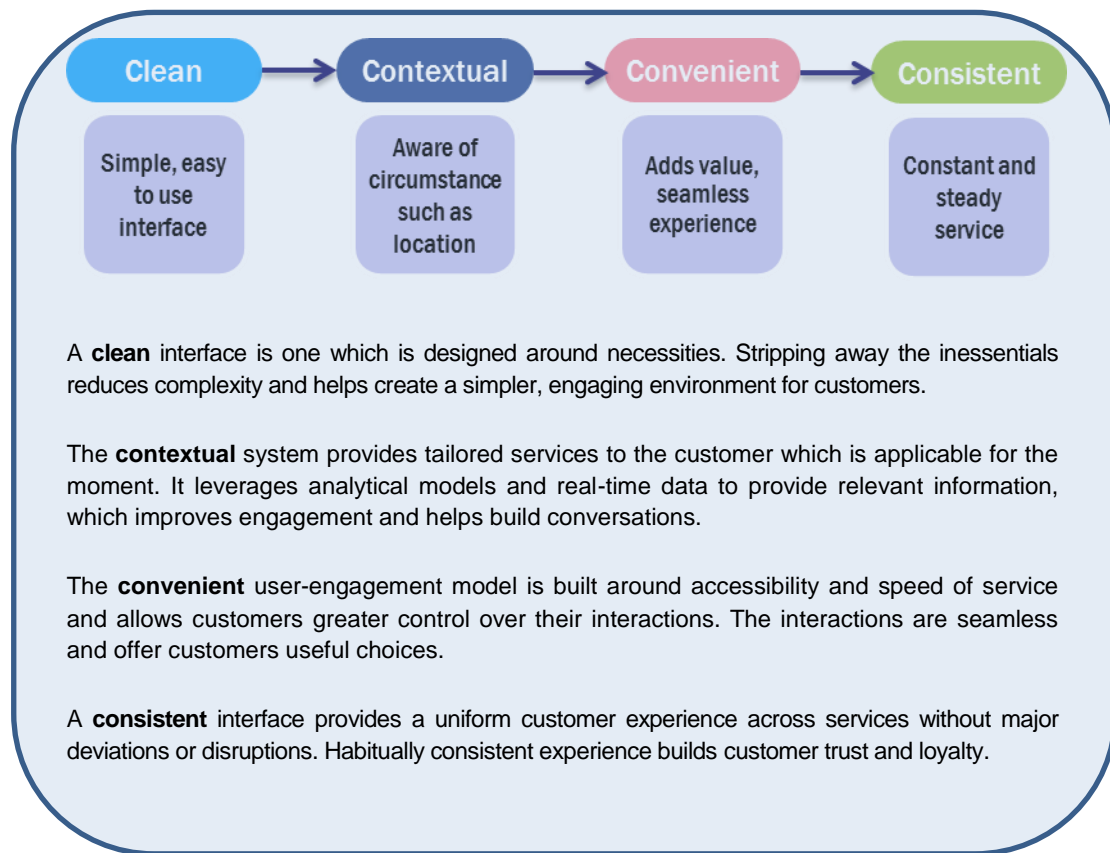
Figure 1: Comparing infinite customer outcomes and guided customer outcomes approaches [Source: Analysys Mason, 2016]



4. Crossing the chasm in customer engagement

Frictionless transactions underpin effective customer engagement, which itself requires in-depth understanding of the customer journey. For instance, consider Uber. Valued at over USD50 billion today, it is the most valuable private technology company in the world. That is staggering for a company which started operations just five years ago, in 2010. How did Uber become so successful so quickly on the back of an industry that has been around for decades? It created an exceptional customer experience by first understanding the pain points of the typical customer journey. The new thing about Uber is not the taxi ride itself, but rather the customer engagement model. Today customers can hail a taxi on their smartphones and watch the progress of the taxi on a map in real time. The billing process is seamless, and users do not have to fumble through their wallets for the right change. By innovating on customer engagement and experience, Uber has upended the taxi industry.

Figure 2: Characteristics of an ideal customer engagement model [Source: Analysys Mason, 2016]

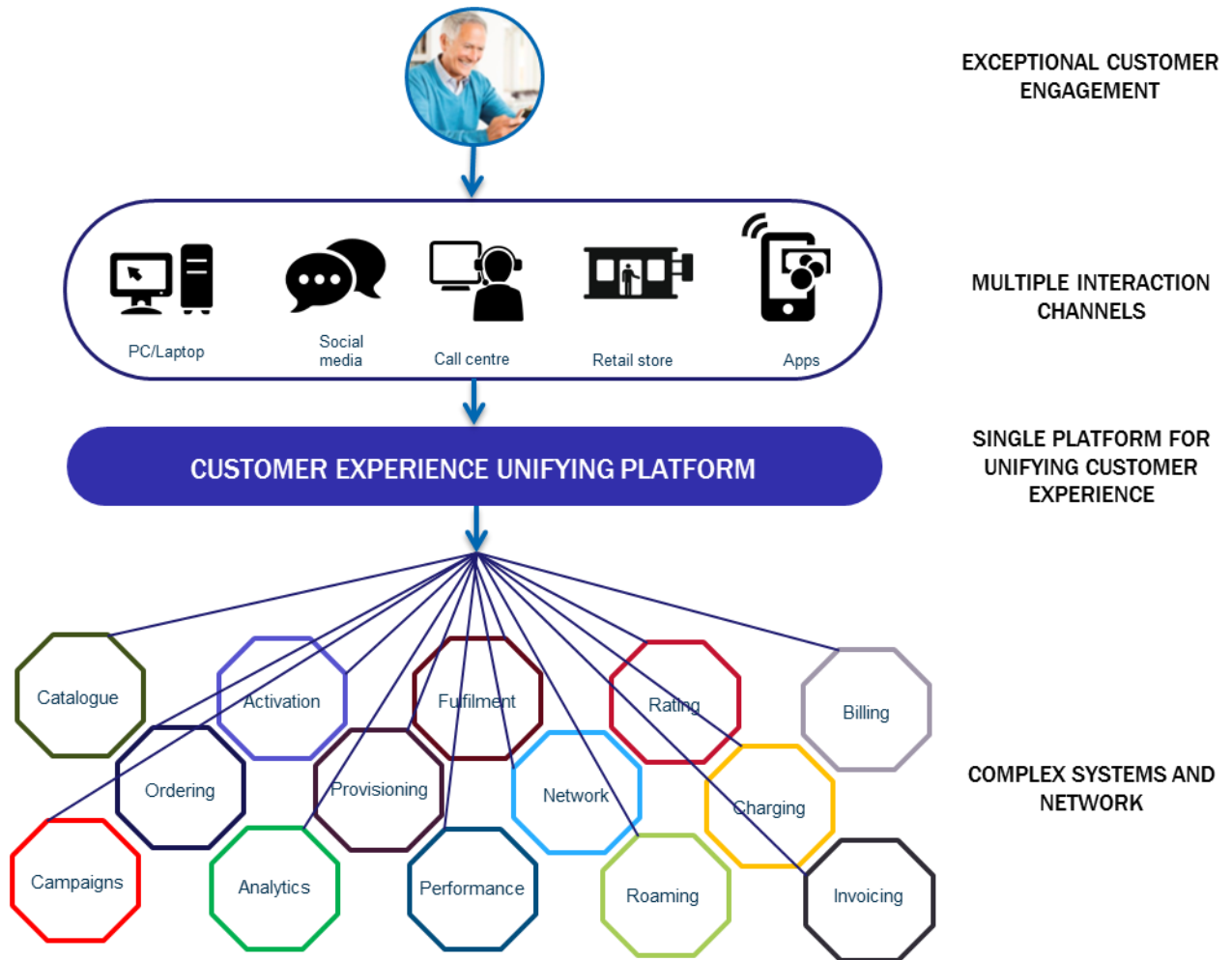


While Uber customers are treated to a seamless experience, the scene below the surface is far from simple. There are a myriad of challenges around regulation, predicting demand and managing supply, and traffic management and location tracking, among others. The end user is blissfully unaware of these underlying complexities and is presented with an interface that is clean, contextual, convenient and consistent.

This deep underlying complexity that Uber tactfully navigates is, in many ways, representative of the challenges that CSPs also encounter. The big challenge that CSPs face is to cross the chasm of experiential engagement with customers by offering an easy-to-use interface. Most large CSPs have multiple interaction channels, many of which are silos and inconsistent in their messaging. Consumers today demand consistent real-time control over their services, comparable to online services from Internet firms. Accomplishing this through a traditional transformational approach can be an expensive and risky proposition. However, CSPs focused on improving their customer engagement can deploy a customer experience unifying platform that can help provide a more engaging customer interaction experience. Figure 3 presents a snapshot of how CSPs can leverage a unifying customer experience platform to improve customer engagement.

While Figure 3 presents a simplified view of how a customer-experience-unifying platform will function, the actual design and deployment is intricate and will require deep domain expertise to overcome a myriad of system complexities. The particulars around the deployment of such platforms are beyond the scope of this white paper and CSPs are best advised to engage with vendors and experts who have deep domain knowledge across business support systems (BSS).

Figure 3: Layered view of CSP-powered exceptional customer engagement [Source: Analysys Mason, 2016]



5. Conclusion: on the cusp of change

The Internet era has triggered a massive shift in the telecoms industry with strong competition, declining voice revenues and dramatic growth of data consumption. CSPs worldwide are actively exploring ways to defend against the competitive threats of digital economy players, while capitalising on their strengths and network infrastructure to become a more integrated part of the digital economy and the associated growth opportunity.

Establishing an effective customer engagement model in the midst of the evolving digital economy landscape is critical for CSPs to ensure they are not bypassed in the value chain. While CSPs have all the ingredients to become much more than a dumb pipe in the digital economy value chain, they need to ensure customer engagement is relevant, consistent and exceeds expectations. Customer behaviour and expectations are shifting, driven by customer interactions with new-age online digital companies and CSPs would do well to invest in back-end support systems in order to provide a comparable customer experience.

6. The Amdocs Digital Experience approach

Amdocs' vision for digital telco is built around providing a complete set of capabilities for CSPs to effectively engage with customers, employees and partners across all channels and touch points. Amdocs Digital Experience extends coverage from core BSS capabilities into enabling a consistent and personalized experience across assisted and unassisted channels. It is comprised of solutions which deliver a comprehensive omni-channel engagement that supports consistent data, channel hopping and process continuity. The six key building blocks of the Amdocs Digital Experience are:

Figure 4: Key considerations for delivering a digital experience [Source: Amdocs, 2016]



- **Omni-channel:** Amdocs omni-channel strategy is built around ensuring the same information is available on both assisted and unassisted channels through the use of widgets so that CSPs can build once and deploy across multiple channels.
- **Personalization:** Amdocs Digital Experience uses insights based on the customer profile and online behaviour and navigation, utilizing data such as eligibility, compatibility and service usage patterns to enable contextual promotions. It also delivers dynamic pricing for products and services during configuration, and is integrated to Amdocs Big Data analytics for targeting and micro segmentation.
- **Commerce:** Amdocs Commerce solution delivers a single catalogue driven shopping experience for all business services from traditional services to multi-play, entertainment and digital content. The capabilities range from supporting end-to-end purchase journeys for new customers to assisting existing customers while they explore new plans or upgrades, personalized pricing, comparison of items, order tracking and search engine optimization. These flows are supported and integrated across digital interfaces, contact centres and retail channels.
- **Self-service:** Amdocs Digital Care solution powers both assisted and unassisted channels with a specific focus on self-service capabilities that enable customers to manage and track their account effectively. It also enables CSPs to cross-sell and up-sell services by providing end-to-end visibility and insight into the customer journey across various touchpoints.
- **Business agility:** Amdocs Digital Experience is built on a single master enterprise catalogue which integrates across all channels allowing for faster time to market for new products and services. Business users are also empowered to create their own experience with an abstraction of widgets into the web content management platform.
- **Innovation:** Amdocs assists CSPs to improve customer engagement and experience by connecting to an ever-growing partner ecosystem tailored to provide channel specific solutions.

The Amdocs Digital Experience combined with a complete set of products and services from strategy and design to implementation and managed services supports CSPs in their transition to a digitally enabled service provider. Amdocs leverages its deep understanding of intricate CSP environments by removing complexity in order to enable a superior digital customer experience.

About the authors



John Abraham (Senior Analyst) is part of the BSS practice in Analysys Mason's Telecoms Software Research team. He leads our Revenue Management programme and contributes to mobile money research for the Digital Economy Software Strategies programme. John has been part of the telecoms industry since 2006, and joined Analysys Mason in early 2012. He has worked on a range of telecoms operator projects in Africa, Europe, India and the Middle East. Before joining Analysys Mason, he worked for Subex, a provider of BSS offerings. John holds a bachelor's degree in computer science from Anna University (India) and an MBA from Bradford University School of Management (UK).



Dr Mark H. Mortensen (Practice Head) leads the BSS practice and is personally the lead analyst for Analysys Mason's Customer Care, Service Fulfilment and Digital Economy Software Strategies research programmes, which are part of the Telecoms Software research stream. His interest areas include customer self-service, new telecoms businesses entering the digital economy value chain, and network planning and optimisation. The first 20 years of Mark's career were at Bell Laboratories, where he distinguished himself by starting software products for new markets and network technologies and designing the interaction of BSSs/OSSs with the underlying network hardware. Mark was Chief Scientist of Management Systems at Bell Labs, and has also been president of his own OSS strategy consulting company, CMO, at the inventory specialist Granite Systems, VP of Product Strategy at Telcordia Technologies, and SVP of Marketing at a network-planning software vendor. Mark holds an M.Phil. and a Ph.D. in physics from Yale University and has received two AT&T Architecture awards for innovative software solutions. He is also an adjunct professor at UMass Lowell in the Manning School of Management, specialising in business strategy. Mark has also participated on the GSMA Global Mobile Awards judging panel.

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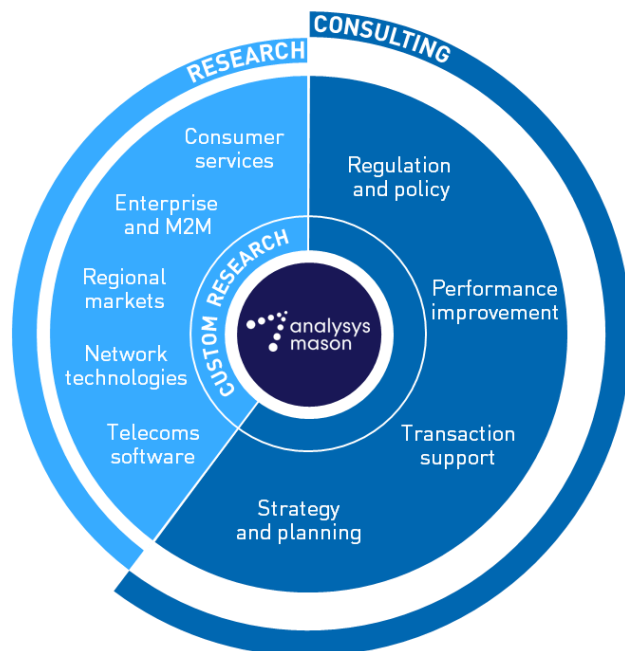
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