

DigitalONE

Simplifying the Customer and CSP Experience

Introduction

This paper outlines Amdocs' DigitalONE solution for Communications Service Providers (CSPs). It is intended to give an overview of the different elements that form DigitalONE and the approach to solving the key problems that CSPs face in today's and tomorrow's markets from more of a business approach rather than the underlying technical detail.

The telecoms industry is no longer in control of an end-to-end closed environment. It needs to embrace new automated ways of working, a more flexible approach and hence needs to shift the emphasis of its service creation, delivery and customer experience to reflect the reality of the digital age. This represents a major opportunity to build a flexible platform upon which a new array of services can be created, delivered and consumed by individuals, businesses or whatever partners may be involved in a B2B2X model. The time from a business planning decision to change a service, introduce a new service or modify a package has got to be brought down to a matter of days if not hours. And, it is the business logic driving these changes not the underlying technology.

The digital ecosystem as a whole is there to be exploited by the operators to bring richer and more lucrative services and experiences to its customers. 5G brings some potentially major changes to the role of the CSP. What we do know is that it will come with greater volume, variety and velocity. The formerly isolated connectivity will become increasingly linked to the business outcomes of business customers and to the experience of the ultimate customers in the ecosystem.

The typical pain points for today's CSPs relate to long time-to-market (TTM) and lack of business agility due to cumbersome internal processes, inflexible systems, lack of consistency across channels and a siloed mentality between different Line of Business (LOBs) and the IT and networking organisations. This has of course been exacerbated under the market conditions and new challenges presented by the Covid19 pandemic. What is needed under the digitisation process is to hide complexity and allow the businesspeople to access the appropriate pieces of technology to build forward-looking services and experiences in a dynamic and simple manner.

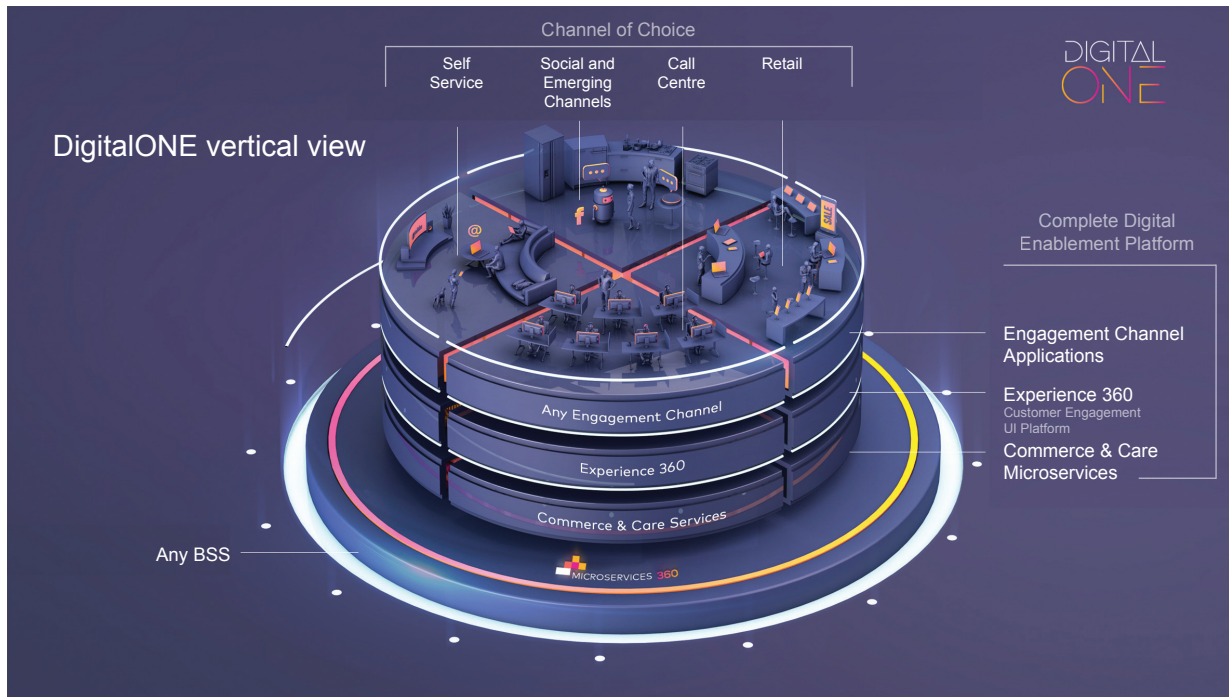
With the range of options open to them, CSPs want to deliver a consistent, data-driven and personalised customer experience across channels but also link them to maintain the dialogue and follow the transaction from first to last. In short, for current and any additional future channels, they want the solution to deliver the transaction, make sure all elements are completed and activate the service for the customer.

From a technology perspective, this builds on a more open architecture built on cloud and Low-Code principles. Key information is passed readily through standardised open Application Programming Interfaces (APIs) in line with the TM Forum's Open Data Architecture (ODA) framework. In this way information formerly held in isolation in different parts of the organisation can be integrated to underpin the quality of service and experience. It's not all about doing things faster. It's about doing it right for the customer with no shocks and just clean high-quality service.

“ In a nutshell: How do we automate the whole process from capturing the customer information through to full-service execution? ”

Addressing the business challenges of today's CSPs

The DigitalONE vision is to provide a flexible and dynamic end-to-end business logic driven solution to CSPs, allowing a combination of top-down and bottom-up considerations built on an open approach.



↑ The DigitalONE modular cloud-native suite gives all CSP stakeholders the power to deliver the best personalised experience to every customer with its configuration tooling for business users - Experience360. This is built on Amdocs' ever-expanding vault of microservices and configured via MS360.

Using the Experience360 platform, it provides the business logic for customer profiling, channel applications, customer journey configuration and all care and commerce needs: shopping cart, ordering, care/case management, interaction management and billing care. All this can be pre-integrated with CatalogONE drawing on MS360 microservices. Since it is fully cloud-native, DigitalONE can be deployed on any public cloud, on premise or a hybrid solution.

DigitalONE simplifies the journeys of individual customers along with those of the CSPs.

- For the first time it is possible to align the journey from enquiring about a service, setting the purchase in motion with the front and back office systems of the CSP to bring the service into existence and bill.
- DigitalONE allows CSPs to serve all customers (consumers and business, existing and new), all channels (assisted and unassisted, current and future), all LOBs and partners.
- No longer does a product or service feature need to be sent away to the IT department, but it is defined by business language and brought into existence through layers of abstraction away from the core code and transcends former silos and departments as common building blocks.

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“ It’s not just about telecoms. It’s embedding telecoms and its connectivity into other industries, business processes and underpinning the whole digital economy. ”

- The language used to describe the journeys is one of business and not of technology. Hiding the complexity of what the technology actually does and exposing the benefits to the customer as well as to the different stakeholders inside the CSP is a major turnaround for the industry

In short, DigitalONE implements an ever increasingly complex intelligent set of services in a way that is understandable by all parties inside the CSP, all potential partners and channels, as well as the end customer.

Meeting customers experience expectations

From the end user perspective, this approach removes the painful issues of different channels and lack of consistency and enables the seamless 1-click personalised digital experience we have come to expect in the digital world.

- Swapping from an online chat to an in-store discussion of a proposition becomes seamless.
- Returning to a possible purchase picks up where the previous interaction left off.
- First time resolution of problems, awareness of suitable offers and upgrades all fit smoothly into the new structure.
- Customers are increasingly comfortable with their digital engagement as DigitalONE allows the blending of all digital channels (and human ones where required).
- AI-driven personalised contextual experiences ensure customers are getting exactly what they need or are looking for.
- Most importantly, the 'journeys' that DigitalONE has identified will help keep both the CSP and the customer themselves up to date with all searches, customer interaction and hence underpin a better customer experience.

“ An opportunity to tidy up the IT shop and align business and technology.”

A business-driven solution

DigitalONE empowers all parties to contribute to the success of a business. The ability to draw upon the underlying complex technology by using simplified configuration tools and applying business logic is a fundamental shift in the ways of doing business inside the CSP. This is the goal of Experience360.

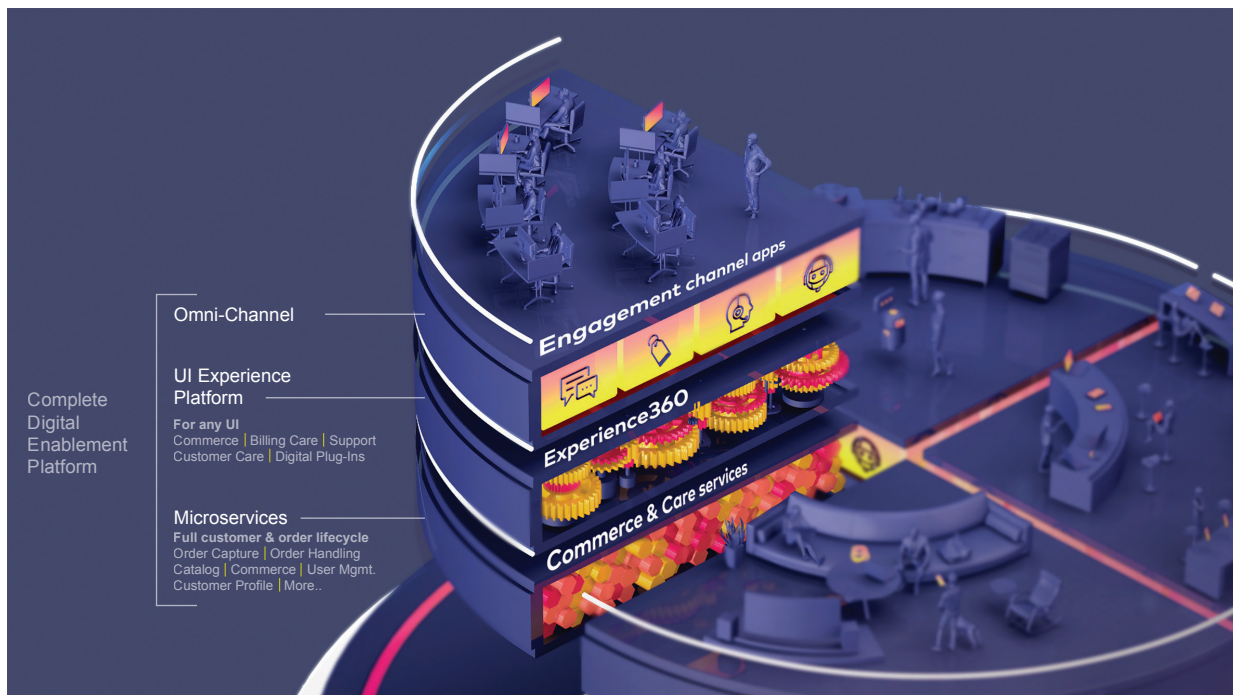
- IT is no longer an isolated function within the organisation but becomes a tool embedded into every part of all daily activities within all LOBS.
- Rather than thinking about the constraints of underlying technology, planners and product management can identify the needs from the customer side and configure the technology accordingly.
- Barriers to trying new services and bundles are removed, resulting in a more entrepreneurial spirit inside the CSP.

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- TTM is accelerated, as is the introduction of new products and experiences.
- Ultimately, DigitalONE brings the power of configuration to the CSPs business leaders.

Holistic approach with modular flexibility

DigitalONE has been built with modularity in mind from the start enabling a gradual approach to digital transformation. Bringing these modules together for business logic reasons shifts the emphasis away from how things work and puts it clearly on how the business processes and customer experience should flow. For example, a slice can be taken through the different layers of the DigitalONE offering to deliver a shopping cart or identity management. However, the CSP may want to retain control over the User Interface (UI), and the DigitalONE solution can deliver the appropriate information up into the UI through the APIs. Alternatively, the full suite of DigitalONE can be implemented providing an end-to-end automated and integrated engagement-to-bill flow.



↑ The modular approach allows a CSP to take a custom slice through the offering to provide a customer specific solution which can be integrated with any existing or new billing platform.

Time to market for the CSP is always front and centre for business leaders.

- The old approach of processes and systems for each individual service makes way for a common Low-Code based platform upon which all services can be built and delivered.
- DigitalONE removes the technology barriers and hence the frustrations of Product Managers and Business Analysts.
- Microservices provide the agility to introduce new features and services rapidly

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- Ongoing stability is also ensured where individual Microservices can be modified without affecting the rest of the service.
- Over a thousand journeys for customers have been already identified based on industry best practice. This intelligent knowledge base will expand as implementations grow and new journeys are defined.

Once business managers have an idea, the microservices, commerce engine, care engine and order management are aligned, either through a specifically designed UI or through the Amdocs UI. Consistency and reliability of the offer are vital but time to market adds an edge for the commercial side. And, of course, the more products are developed in this way, the more common elements are reused and leveraged for the organisation.

From the CSP perspective, DigitalONE also improves efficiency by allowing multiple brands, omni-channel and multi-play offerings to sit on common building blocks. All too often under previous regimes, each brand and even services within each brand, would have their own shopping cart, order management, customer delivery and fulfilment systems. Working with the Commerce and Care engines, CatalogONE can also be introduced building on a central catalogue. Putting this at the centre of a unified approach allows brands to build their specific offerings off a common platform hence reducing TTM, potential errors and streamlining resources.

In addition, this cultural shift for the CSPs brings everyone into the fold when it comes to 'owning the customer experience'. No longer is finger pointing accepted. The flow of processes from back to front office and across all channels and LOBs exposes everyone at every stage to how their part of the business impacts the customer. On the surface this is a very different world to employees, but it is actually very empowering when understanding how everything works.

All of the above is built on the benefits of flexibility, scale and speed of execution provided by cloud and a more software centric CSP. In addition, leveraging analytics across all areas accumulates knowledge and feeds back to provide intelligent, personalised and contextualised experiences as well as enhancing the boardroom view to track and optimize overall performance.

“A consistent experience across channels. This is not a technology play, it is a whole cultural and DNA shift for the world's telcos.”

Conclusions

DigitalONE represents a major shift in Amdocs' approach to building the journey for both the CSPs and the end customer.

- It is built to accommodate the new permutations of business models. The traditional B2C model is now joined by both B2B and, perhaps more importantly, B2B2X.
- Business planners get the freedom to develop services based on their experience of working with customers.
- It defines all journeys in business terms and not technical ones.
- Assisted and unassisted channels have all of the information at their disposal to support the customer journey.
- Given the variety of circumstances unique to each organisation, CSPs can leverage the modular parts of the DigitalONE solution, build a slice through the different layers and even bring integration partners into the mix as appropriate.
- Leveraging underlying common resources, it also opens up internal innovation as all stakeholders get visibility of how the CSP works and how their roles fit into supporting customers.
- The technologists see how their efforts drive revenue for the CSP.
- The number of systems being deployed in the CSP is simplified: No longer is it essential to build separate stacks for each LOB or even services within LOBs

All of this is supported by increased intelligence and use of analytics leading to the promise of Artificial Intelligence.

For the future, 5G and extended fibre coverage opens up a lot of possibilities. The CSPs need to have the agility in place for their services to adapt to every market scenario. Connectivity may become increasingly invisible to the consumer of digital services but the way it adapts to supporting these new models is critical in keeping the digital economy working smoothly.

Internal and external consistency of service across all channels and products combined with accelerated speed to market is key to the CSP's success enabling their expansion into the digital economy. Hiding the complex technology and exposing the flexibility of services in the future will allow the world's CSPs to cement their position in the digital ecosystem. And, for many, building on this platform they will both develop their own value-added services as well as bring those of others into the fold. This change from a technology-centric view to a customer and business focused view will guarantee the longevity of the CSPs and their role supporting the digital economy.

DigitalONE represents an opportunity for the leaders of the world's CSPs to get the best out of the human and IT resources at their disposal. It is a change in culture as well as shift in technological approach, but it will allow the CSPs to align themselves to future business activities of all players in the digital ecosystem on their terms. It is not an IT or technology project; it is a business project.