

towards automation:

# improving the **B2B**

customer  
experience

Author: Ed Finegold, Contributing Analyst  
Editor: Anne Morris, Contributing Editor  
ISBN: 978-1-955998-37-6

Sponsored by:



# contents

- 03** setting the scene
- 04** chapter 1: service providers pursue B2B growth
- 09** chapter 2: B2B automation priorities
- 11** chapter 3: fundamental B2B CX principles
- 13** chapter 4: service providers automate for B2B
- 15** chapter 5: key steps to success
- 17** additional feature: overcoming barriers to delivering a digital-first B2B customer experience
- 23** meet the Research & Media team

# setting the scene

Communications service providers (CSPs) and their peers in the cloud and ICT spaces are gearing up for a showdown in business-to-business (B2B) markets. The appeal of capturing the greatest portion of a rapidly growing enterprise technology pie cannot be resisted. For many CSPs, it is the central pillar on which their future growth strategy is built. The stakes are high and customer experience (CX) will be the difference maker. But CX for business customers poses a far more complex challenge than it does in consumer markets.

Based on a TM Forum survey of more than 200 individuals employed in relevant roles by service providers worldwide, an overwhelming majority (83%) agree that IT and network automation, in conjunction with mastery of enterprise-wide data and real-time intelligence, will be the lynchpin for their B2B market growth ambitions. (A subset of the data for this e-book was used in this earlier [TM Forum report](#)).

The question is no longer whether many CSPs will move aggressively to automate; rather, more relevant challenges facing CSPs today include how best to automate and where to start.

Read this e-book to understand:

- Which enterprise verticals service providers are targeting to grow their B2B businesses
- Which business models service providers favor in B2B markets
- How service providers are prioritizing operations automation to meet B2B CX goals
- What fundamental characteristics a modern B2B CX should include
- How service providers are using TM Forum resources like the Open Digital Architecture (ODA) to design their next-generation CX and automation architectures.

**The question is no longer whether many CSPs will move aggressively to automate; rather, more relevant challenges facing CSPs today include how best to automate and where to start**

## service providers pursue B2B growth

**The collective desire of communications and cloud service providers to grow revenue in enterprise vertical markets is clear. According to our survey, two-thirds (67%) of communications and cloud service providers already offer industry-specific solutions in at least one enterprise vertical. In fact, 62% are engaged in two or more industries, though only 21% of service providers are currently engaged in three or more. One of the big questions for CSPs as they search for new revenue is how to extend the reach of their offerings into a greater number of industries.**

The 200 individuals surveyed by TM Forum at network operators and service providers in six global regions were asked about their organizations' forward-looking priorities in business-to-business and public sector markets relating to:

- Business models
- Vertical industries
- Partner ecosystems
- Customer experiences
- New revenue opportunities
- Network and IT automation.

In each of these areas, service providers report specific activities aimed at improving the value propositions, experiences, depth of offerings and automation levels they can deliver to large business customers.

**One of the big questions for CSPs as they search for new revenue is how to extend the reach of their offerings into a greater number of industries**

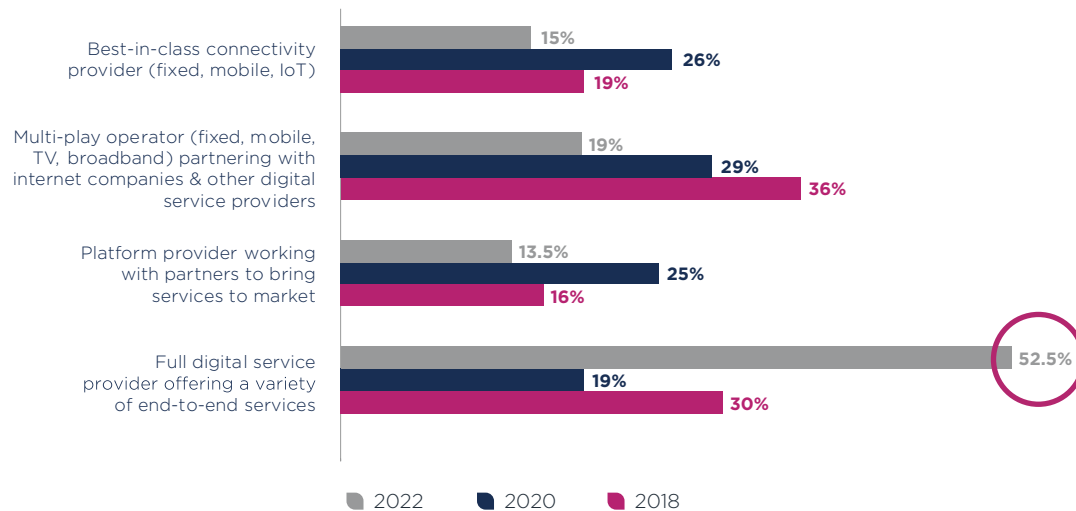
## business models

Our data for this e-book shows that service providers' value propositions have shifted toward a focus on end-to-end service offerings. In fact, 65% of service providers consider an end-to-end services model to be their best path to revenue growth.

TM Forum's latest Digital Transformation Tracker 6 (DTT6) report also shows CSPs' aspirations towards providing end-to-end services (see chart below). DTT6 data shows that 52.5% of CSPs prefer an end-to-end digital service provider model, compared to just 19% in 2020. Some 26% of operators preferred a best-in-class connectivity model in 2020, but only 15% do today. And just 13.5% now favor a platform model, compared to 25% in 2020.

These data points suggest many CSPs now have a primary focus on end-to-end services that bring multiple service components together, including network connectivity.

### what CSPs believe they should aspire to become



TM Forum, 2022

Many CSPs now have a primary focus on end-to-end services that bring multiple service components together

## vertical industries

Of the 65% of service providers that say they favor an end-to-end services model, nearly half (46%) already offer vertical-specific solutions in media & entertainment, exceeding the survey group average of 27% (see chart right top). In addition, 43% of service providers who favor an end-to-end service model offer vertical-specific solutions in healthcare and 42% in financial services. Again this exceeds the group average (31% and 26% respectively). This trend continues across all verticals, demonstrating that when service providers emphasize vertical-specific offerings, they tend to prefer an end-to-end services approach.

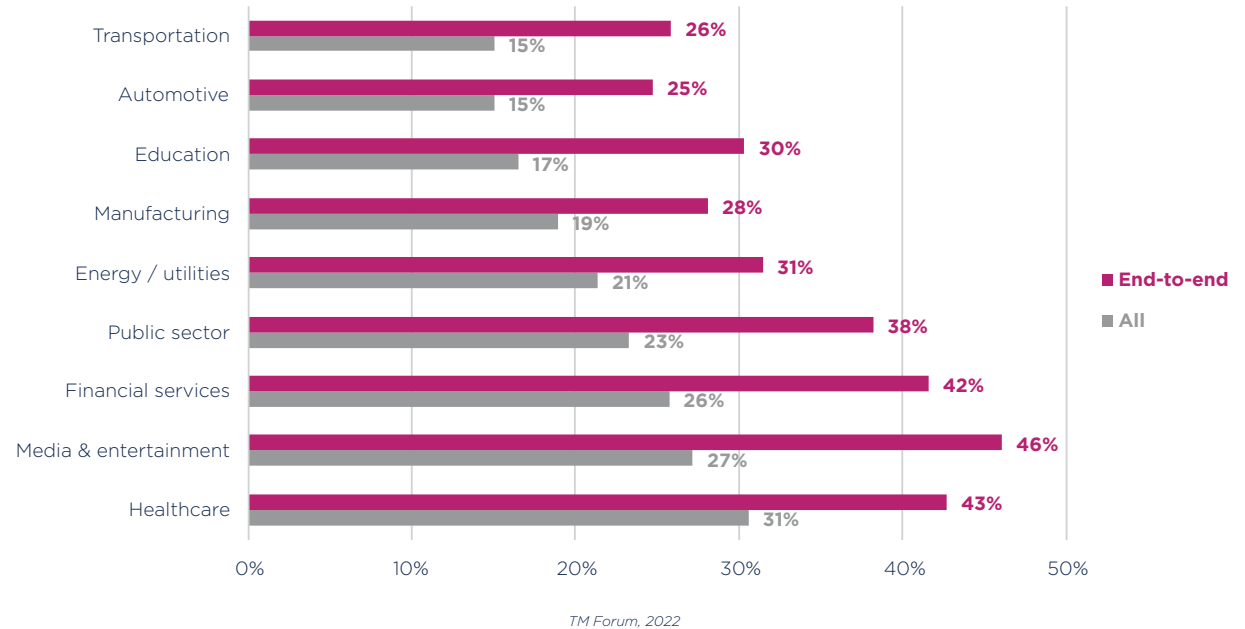
Many CSPs envision working increasingly with partners to create end-to-end solution offerings. For this reason, 57% of service providers say improving their partner and ecosystem management capabilities is critical. Among the 83% of service providers that deem network and IT automation crucial to their futures, nearly two-thirds (63%) consider improving their ecosystem and partner management capabilities to be urgent for generating new revenues.

Most of those service providers also place a high importance on other CX-related improvements (see chart right bottom).

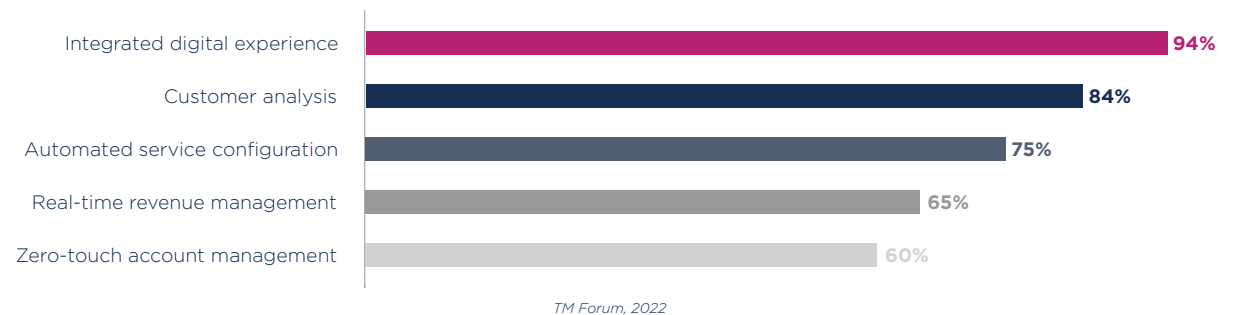
Each of these capabilities can play a crucial role in delivering a sophisticated customer experience to B2B ecosystem stakeholders that is strong on automation, observability and real-time action, but

which also shields users from the immense process complexity in the background – something that many CSPs have often struggled to do, especially in more complicated partner and B2B channels.

### % of CSPs with offerings specific to vertical industry



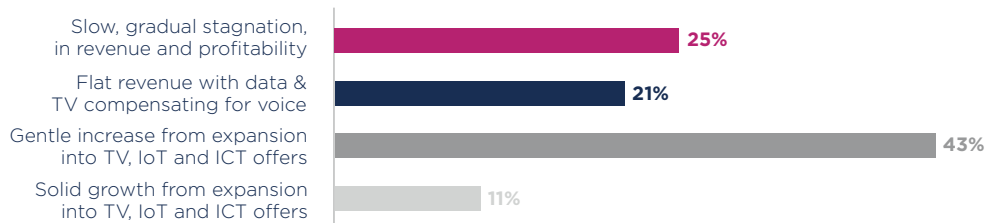
### operations priorities for CSPs focused on ecosystems



## new revenue opportunities

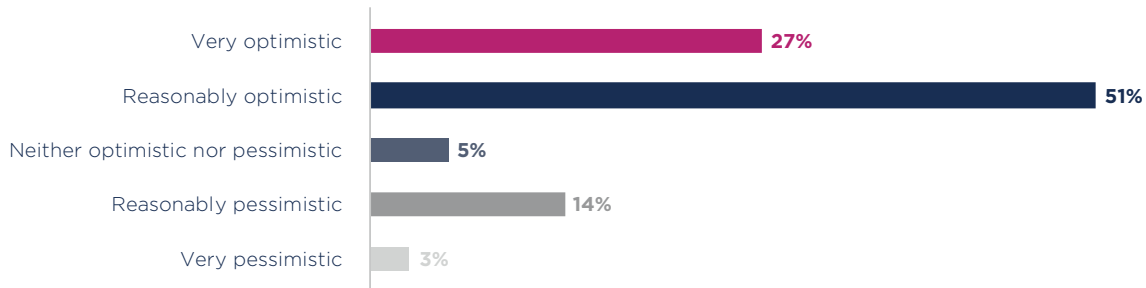
According to our DTT6 report, 54% of CSPs expect modest to solid revenue growth from TV, Internet of Things (IoT) and ICT services; the other 46% see flat revenues or a gradual decline. Yet, 78% of CSPs are reasonably or very optimistic about their businesses in the next two to five years, while only 17% are pessimistic (see charts).

### CSP outlook on near-future revenue



TM Forum, 2022 (Source: DTT6)

### CSPs' optimism about their businesses (2-5 years)



TM Forum, 2022 (Source: DTT6)

One potential reason for this dissonance is that although a significant minority of CSPs may question the future of their traditional business, the broad majority are confident they can transform in fundamental ways, such as through enterprise-wide automation.

Indeed, to take on growing complexity, there is a near industry-wide effort to implement automation at multiple levels of the network and IT stacks, including everything from basic IT operations, data centers and cloud access, to CSP networks and operations. More than 80% of service providers say IT and network automation are fundamentally important to their ability to deliver more value, new value propositions and enhanced experiences to business customers (see chart below).

The next section focuses on which aspects of network and operations automation service providers are prioritizing and how that automation needs to support customer expectations for personalized and real-time experiences and controls.

### how important is network and IT automation to improving CX and generating new revenue?



TM Forum, 2022

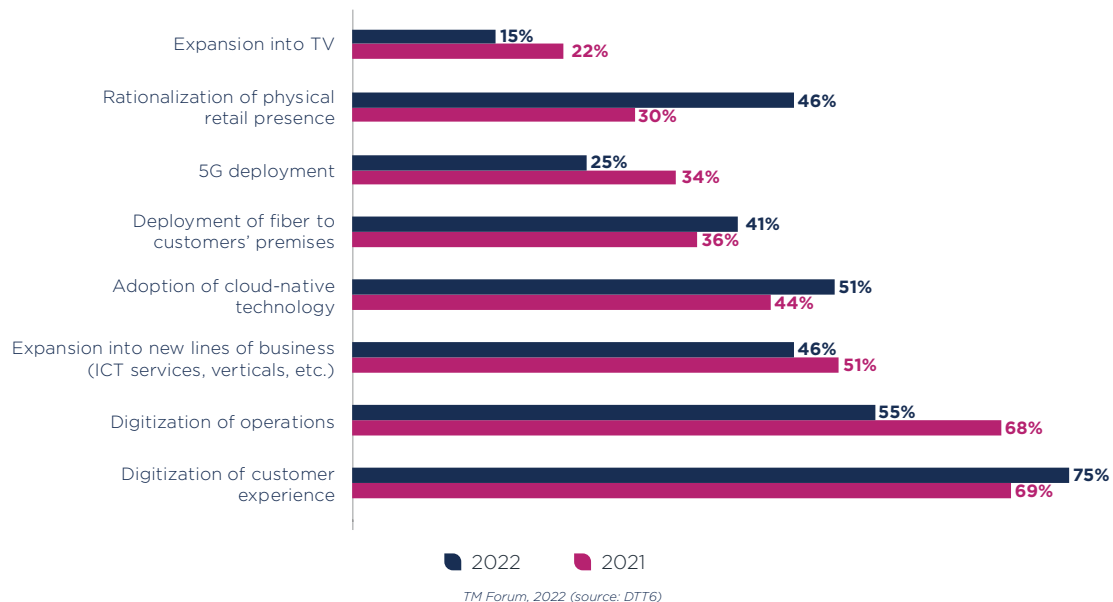


# B2B automation priorities

**The Covid-19 pandemic's impact on service providers' business and automation priorities cannot be understated. DTT6 shows that 75% of service providers have made CX digitalization a higher priority as a result (see chart below). This exceeds priorities such as cloud-native technology adoption (51%); fiber deployment to customer premises (41%); and 5G deployment (25%). Most telling is that between 2021 and 2022 service providers started prioritizing CX digitalization over operations digitalization, though both remain important.**

In fact, the 83% of operators which say network and IT automation is fundamentally important to their ability to generate and grow revenue in the future share a variety of related CX automation priorities detailed on the next page.

## CSPs' higher priorities because of Covid-19



For example, when a service provider says network and IT automation are fundamentally important:

- Integrating digital experiences is 4x more likely to be an **urgent** priority
- Automating service configuration is 4x more likely to be an **urgent** priority
- Delivering zero-touch account management is 3.5x more likely to be an **urgent** priority
- And end-to-end services are 3.5x more likely to be considered a **significant** revenue opportunity.

Though these types of automation initiatives may aim to fulfil specific aspects of an overall execution plan, none is isolated in the context of a complete customer experience, particularly for an end-to-end solution or set of services. For example, automated service configuration is part of zero-touch account management, which in turn is part of an integrated digital experience that could support a variety of end-to-end services.

Contrast these priorities with the minority (12%) of CSPs which said that network and IT automation are important but believe they can generate new revenue without significant automation advances. For these service providers:

- Improving ecosystem and partner management is 10x more likely **not urgent**
- Integrated digital experience is 4.5x more likely **not urgent**
- Zero-touch account management is 3.9x more likely important but **not urgent**.

And yet while their operations automation priorities may differ, 67% of this group still considers an integrated digital experience for B2B customers an urgent priority, while 77% say improving their application of customer analytics to B2B customer experiences is urgent too.

**Although automation initiatives may aim to fulfil specific aspects of an overall execution plan, none is isolated in the context of a complete customer experience**

# fundamental B2B CX principles

**One important goal for automation, particularly regarding CX, is to shield the user from the complexity of systems and processes. A simple example is an automated text notification that a software-defined wide area network (SD-WAN) service has or has not been provisioned, with follow-up links or instructions if it has not. Compare that experience with the more typical flood of alarms, emails, texts and calls with support agents who may lack visibility into the entire process. The former represents customers' current expectations, while the latter reflects many customers' past experiences.**

In the B2B domain, enabling automated CX is far more complex than in B2C environments. Still, a few fundamental principles for a digitalized CX apply.



## Roles & controls personalization

In a B2B setting, personalization revolves around a user's role and the functions, controls and data access entitlements appropriate to that role. Governing controls repeatably makes it easier to manage access risks while protecting users from error or accidental exposure to sensitive information. Any user might prefer to configure a custom dashboard, change views of metrics and messages, and configure email or text alerts for specific events, just as with some consumer banking and mobility apps.



## Support personalization

The leap from consumer to enterprise support is massive because of the increase in product breadth and sophistication, which makes personalized support even more relevant. As enterprises become more dependent on third-party networks and technologies to hit performance and production KPIs, they need support reps to understand who they are communicating with; what that person's responsibilities are; which events may be impacting their area of responsibility; and which resolutions are available to remedy the situation. Ideally, this becomes an autonomous, self-healing process where impacted parties are notified only if performance or SLA compliance is impacted.



### Visibility and observability

Knowing when things will happen, with the option to follow progress on a map or flow chart, is the hallmark of a digital experience. For the enterprise, there will be an assumption that visibility and observability are part of any process that impacts their business or is bound by a timing commitment. This can include live network and service views; views of ordering and provisioning processes and sub-processes; and a variety of performance metrics, ideally configurable to the customer's requirement.



### Automation

It is uncommon for more than 80% of service providers to agree on anything, but our data shows they do agree that automation is necessary for their ability to grow revenues and add greater value for customers. For CX, there are two paths to consider. One is the process automation path, which brings operations processes closer to closed-loop and zero-touch and can power instantaneous service experiences for customers. The other automation path relates to informed actions taken based on inputs or events. For example, a decisioning engine would check an address for 5G coverage as well as a risk score prior to making a home internet offer in real time at a specific price.



### Data mastery

The thinking around enterprise data has changed quickly. Concepts like data lake, data fabric and data cloud are kicked around, but amount to the same thing – large organizations want every group to be able to utilize any data in the organization to drive sales, marketing, cost, performance and customer experience improvements. For B2B CX, this translates into a need both to share crucial customer and behavior data with the enterprise, but also to leverage data from around the enterprise to make CX more aware of what's impacting a customer and more able to address it in less time.

In the next section, we look at examples of how CSPs are using automation, analytics and TM Forum principles, guidebooks and specifications to transform the experiences, features and controls they present to business customers.

## service providers automate for B2B

**There are some clear examples of CSPs that have established C-level initiatives to improve their levels of automation, command of enterprise-wide data and customer experience sophistication. Here are two examples of TM Forum member companies which undertook strategic initiatives to advance their use of enterprise-wide data, automation and analytics and as a result made substantial CX and business gains.**

The logo for STC, consisting of the lowercase letters 'stc' in a bold, purple, sans-serif font.

In 2019 [STC launched](#) a major digital CX transformation program, called Corporate Customer Experience Management (CCEX), to create a foundation for its digital CX transformation. CCEX is overseen by the CEO's office and establishes a unified approach to CX measurement across the STC Group, with an aim to create and continuously improve a 360-view of STC customers. STC Group used a combination of TM Forum resources including the [TM Forum Business Process Framework](#), [Information Framework](#), [Open APIs](#) and best practice toolkits to define and execute its CCEX vision.

When the Covid-19 pandemic struck, STC's ability to adapt to new customer needs and behaviors was tested. Shops closed, forcing sales, support and payment channels to adapt. Business users began working from home, blurring the lines between business and consumer CX. And the path forward remained uncertain.

But STC expanded the number of things customers could do via digital channels, including new service sales, upgrades, add-ons, customer support and trouble ticket resolution. It rolled out new digital offers, like extra data for consumers and employer discounts on their fixed or mobile broadband services. And the operator used CX insights from its CCEX platform to improve its Jawwy TV application, resulting in subscriber additions.

As a result, STC Group has seen substantially greater use of digital channels by customers and double-digit improvements in average revenue per user (10.6%), net promoter score (15 points), and brand value (14%).



Jio Platforms created a new IoT platform with the goal of creating a network-wide ecosystem which could accelerate its ability to adopt IoT devices onto its network; bring new services and partnerships to market faster; improve operational efficiency, security and customer trust; and increase revenues.

Jio Platforms utilized TM Forum's Open Digital Architecture (ODA), which provides a blueprint for modular, cloud-based, open digital platforms that can be orchestrated using AI. In this case, the ODA reference architecture helps facilitate collaboration among enterprises and IoT device makers to roll out B2B2X and B2C business and operational models rapidly, even with multiple partners involved.

The IoT platform and ecosystem are supported by Jio's ATOM platform. ATOM gives users an environment for running large batch jobs, viewing device states in real time, analyzing events, and it implementing machine learning algorithms for predictive anomaly detection. It also provides access to a large data lake which IoT platform users can leverage in scenarios such as engineering and conformance testing for new IoT solutions and use cases.

This IoT platform provides an example of how CSPs can use automation and analytics not only to improve their own customer-facing operations and CX, but also to provision enabling platforms that can allow partners to create businesses, experiences and self-configured offerings on an operator's network.

In short, Jio Platforms provides a case example for why more than 80% of service providers in our research say automation is critical to new revenue growth. And it is an example of why 63% of service providers prioritizing automation also consider improving ecosystem management to be urgent.

# key steps to success

**Although the task of bringing digital experience basics to complex B2B products, processes and even ecosystems seems daunting, there are resources service providers can leverage, as well as perspectives to be gleaned, from how service providers worldwide are investing in operations automation now.**

Here are five tips to make enterprise-wide automation and data sharing happen in support of delivering a world-class B2B customer experience.



## **Don't underestimate the complexity**

Use resources like TM Forum's [Open Digital Architecture \(ODA\)](#), [Open APIs](#), [CurateFx](#), and [Business Process Framework \(eTOM\)](#) to overcome the complexity curve. These resources provide everything from guidebooks and blueprints to code that service providers are using today to automate operations, build new ecosystems and open new B2B markets.



## **Think holistically**

There is a reason why more than 60% of service providers are pursuing automation across integrated digital experiences, customer analytics, automated service configuration, real-time revenue management and zero-touch account management at once: they are all part of the digital customer experience continuum. Automation is not about integrating linear processes. Rather, it should be considered holistically, enterprise-wide, and as an inherent aspect of IT and network operations going forward, not as an add-on.



### **Start with low hanging fruit**

The sheer number of potential automation and data analytics use cases a service provider can benefit from is overwhelming. Start by automating resolutions to common problems and by incrementally adding digital experience characteristics to portals and apps. These may include self-serve quoting and ordering; simple status readouts for process visibility; and configurable notifications for key events, like activations or faults.



### **Stay adaptable**

Of the service providers we surveyed, 65% prefer an end-to-end service model while 38% prefer a platform approach. But this can change fast. Another reason to approach automation from a platform perspective is to evolve, change and adapt with the market. A linear or piecemeal approach will prove too brittle and may result in solutions built for markets that no longer exist or didn't materialize.



### **Master the data**

The importance of a service provider capturing, mastering, analyzing and sharing its enterprise-wide data to drive data-driven decisioning in all areas of the business, and particularly in customer journeys and experiences, cannot be overstated. Businesses that have done so are already reaping rewards in financial performance and market share growth. It is crucial to implement the tools and infrastructure to make data an available resource and part of the culture of how decisions are informed, made and executed across the business.



## overcoming barriers to delivering a digital-first B2B customer experience

While CSPs compete to develop richer and more innovative product portfolios, they also encounter barriers that prevent them from delivering high-quality customer experiences.

Disconnected systems and data silos elevate the risk of errors during the sales process, resulting in poor delivery.

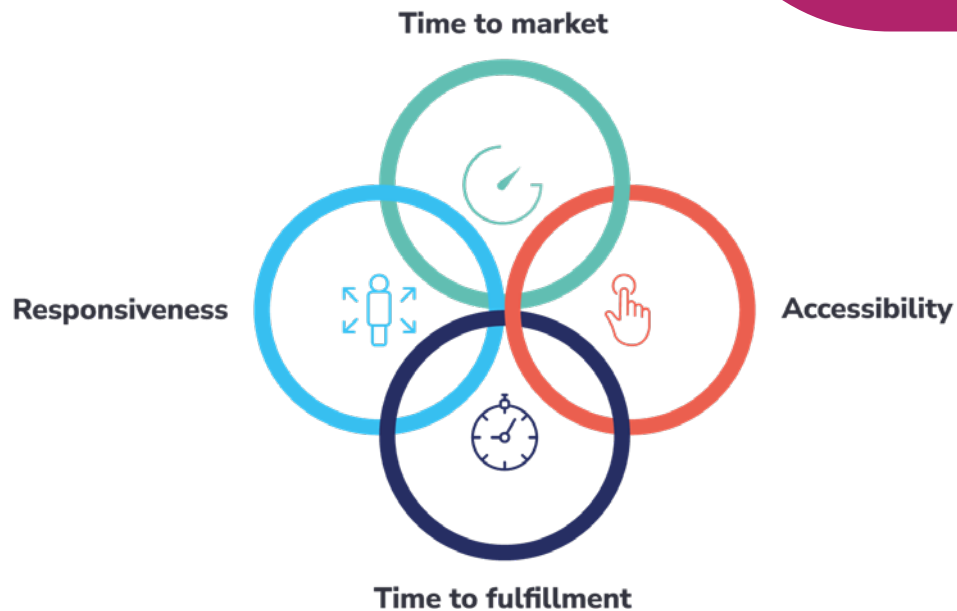
Lack of automation and over-reliance on manual processes produces inefficiencies throughout the solution-to-cash process.

Outdated sales and order fulfillment journeys fail to meet the digital-first expectations of enterprise B2B customers.

Enterprise B2B customers expect seamless omnichannel self-service as standard, are intolerant of inflexible subscriptions, and want to make changes to them whenever their business requires additional resources, with real-time notifications of order status.

CSPs need a unified platform that connects the end-to-end solution-to-fulfillment process to break free of these systems barriers, and create a smoother customer journey through the entire buying cycle.

CloudSense™



# responsiveness



## **Key capability for overcoming barriers to CX: High-performing technical architecture for managing complex B2B use cases**

Just as in B2C environments, slow processing of key actions within B2B sales journeys creates a poor impression. This is only made more problematic by the fact that B2B propositions are significantly more complex, and the volumes of data points in enterprise orders are vastly more challenging.

Even a single individual enterprise can have requirements that an unprepared provider may require weeks to generate quotes for: multiple locations, thousands of employees, multi-level user permissions and roles.

To take another example: when a CSP integrates a new offer into an existing product, service or plan in order to stay ahead of the competition, the effectiveness of that strategy depends on rolling it out to their entire customer base quickly.

Without a powerful underlying platform, bulk changes at this scale can take weeks or even months. In a hotly contested market, the delay between a sales promise and activation damages the customer experience; B2B buyers expect upgrades to be made available almost in real time.

To satisfy these demands, solution-to-fulfillment platforms need exceptional levels of data processing power. By separating heavy duty data crunching from the standard operations that connect to your CRM platform, workflows can remain fast and efficient.

**B2B propositions are complex. To run sales journeys smoothly, solution-to-fulfillment platforms need exceptional levels of data processing power.**

# time to market



## Key capability for overcoming barriers to CX: Flexible product catalog for enabling rapid updates and new solutions

Throughout the contract lifecycle, the promise of creative new offers that meet specific business pain points remains an important element in the B2B customer experience. When innovation stagnates following the initial sale, a buyer's perception of their provider is negatively impacted.

The challenge for successful CSPs is not merely to devise new portfolio concepts, but to bring these innovations to market quickly.

A flexible product catalog plays a critical role in achieving this, with key capabilities including:

- Permitting product managers to define and roll out new products and services from a single interface without relying on hardcoding and customization support from IT
- Creating static or dynamic bundles that include products, services, subscriptions and third-party offerings
- Making changes and publishing new offers, promotions and bundles to any channel in minutes, rather than in months

Focusing on these product catalog capabilities will deliver a step change speed of bringing innovations to market for your enterprise clients.

**Energize customers by introducing innovative new offers rapidly.**

# accessibility



## **Key capability for overcoming barriers to CX: Self-service options that allow B2B customers to use their preferred channel**

Giving customers the freedom to make their own purchasing decisions in an intuitive UI across multiple channels has clear positive implications for customer experience.

An effective self-service platform should be able to quickly consume multiple complex product portfolios - especially for businesses that host B2B marketplaces - and support back-end configuration of rules governing which products are presented to whom based on company, role and location, e.g. preventing a Singapore-based customer from seeing connectivity options that are only available in Europe.

With rules in place, all permitted portfolios, products, services and subscriptions are surfaced to the shopfront, allowing customers to independently create product bundles, calculate prices and pay, without having to speak to a representative of their provider.

The modern buyer journey naturally jumps across channels and is rarely continuous or unbroken, with customers liable to abandoning orders, only to return on a different channel. Any future-proof architecture will ensure that all customer touch points, including self-service portals, are accessible through any channel. This may include through a business' own ERP, e.g. HR ordering new laptops and phones for staff.

**Customer-journeys must be omnichannel to meet B2B buyer expectations for a digital-first experience.**

# time to fulfillment



**Key capability for overcoming barriers to CX: Automate order management to eliminate inaccuracies and delays**

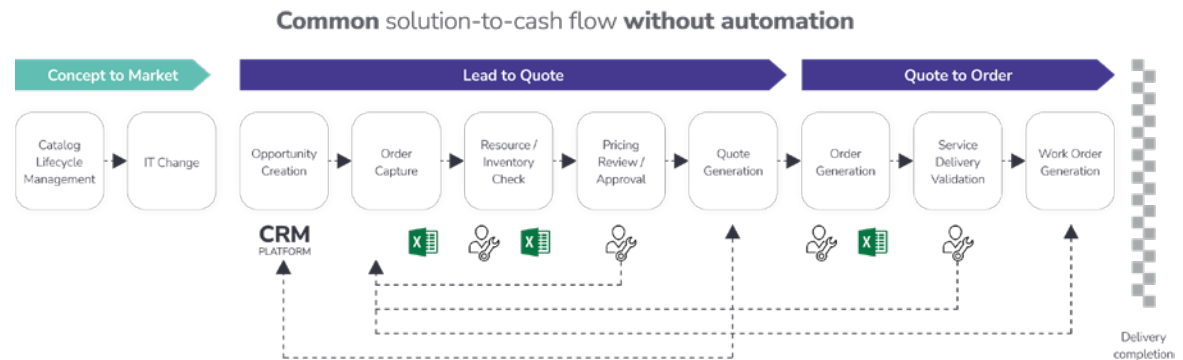
Automation is a requirement for any CSP aiming to manage scale and complexity.

By building a powerful business process orchestrator into your architecture, you can create robust automation for end-to-end sales and order management workflows, and overcome the challenges of scale and complexity.

Smooth data flows that disassemble complex orders and send them straight into operational delivery systems, transform the experience for your end customers.

Fast, transparent fulfillment of orders, that aren't hindered by manual re-entries, can practically eliminate inaccuracies and have a major impact on your NPS scores.

Automations needn't be limited to initial orders, but be applied to updates and changes for service contracts that are in flight, helping you increase your reputation for responsiveness and further bolster customer loyalty.



Selecting a configure, price, quote (CPQ) platform to underpin your end-to-end solution-to-fulfillment process will directly impact customer experience in multiple ways. For B2B customer relationships it's important that your platform couples the power to support the complex use cases that are common to this part of the market with the flexibility to respond to customer needs fluidly.

## about CloudSense

The CloudSense Configure, Price, Quote (CPQ) application suite powers increased productivity and profits for ambitious enterprises allowing them to launch faster, sell more and fulfill orders faultlessly. Its growing global community of customers rely on CloudSense to deliver sales transformation within the Communications and Media industries. Leading brands including Telefonica, Telstra, and Informa use CloudSense's portfolio of applications to streamline the entire customer lifecycle, providing a better customer experience while improving business performance.

To find out more, visit [cloudsense.com](https://cloudsense.com)



## Meet the Research & Media team



**Author:**  
Ed Finegold  
Contributing Analyst  
efinegold@tmforum.org



**Editor:**  
Anne Morris  
Contributing Editor  
amorris@tmforum.org



**Chief Analyst:**  
Mark Newman  
mnewman@tmforum.org



**Managing Editor:**  
Ian Kemp  
ikemp@tmforum.org



**Principal Analyst:**  
Dean Ramsay  
dramsay@tmforum.org



**Editor in Chief, Inform:**  
Joanne Taaffe  
jtaaffe@tmfourm.org



**Head of operations**  
Ali Groves  
agroves@tmforum.org



**Digital Marketing Manager:**  
Anna Kurmanbaeva  
akurmanbaeva@tmforum.org



**Commercial Manager,  
Research & Media:**  
Tim Edwards  
tedwards@tmforum.org



**Global Account Director:**  
Carine Vandevelde  
cvandevelde@tmforum.org



**Sponsor Success Manager:**  
Maryssa Ramsey  
mramsey@tmforum.org



**Digital Media & Events  
Coordinator:**  
Ellie Hsu  
ehsu@tmforum.org

### Published by:

**TM Forum  
4 Century Drive,  
Parsippany,  
NJ 07054  
USA**

**www.tmforum.org**

**Phone: +1 973-944-5100**

**Fax: +1 973-944-5110**

**ISBN: 978-1-955998-37-6**

© 2022. The entire contents of this publication are protected by copyright. All rights reserved. The Forum would like to thank the sponsors and advertisers who have enabled the publication of this fully independently researched report. The views and opinions expressed by individual authors and contributors in this publication are provided in the writers' personal capacities and are their sole responsibility. Their publication does not imply that they represent the views or opinions of TM Forum and must neither be regarded as constituting advice on any matter whatsoever, nor be interpreted as such. The reproduction of advertisements and sponsored features in this publication does not in any way imply endorsement by TM Forum of products or services referred to therein.

**For more about how TM  
Forum can help improve the  
customer experience please  
contact Aaron Boasman-Patel  
[aboasman@tmforum.org](mailto:aboasman@tmforum.org)**