

**Publication date:**

September 2020

**Author:**

Mila D'Antonio

# A Digital Customer Experience Awakening

As a global crisis mandates a shift to digital, B2B and B2C firms must close the gap in customer expectations by investing in emerging technologies that enable next-stage customer engagement

In partnership with Adobe:



Brought to you by Informa Tech

---

# Contents

---

Summary	2
COVID-19 exposes cracks in digital customer engagement	4
CX progress linked to digital proficiency	7
Firms look to enable one-to-one customer engagement with its 2021 investments	17
Conclusion	20
Appendix	21

---

# Summary

---

The current COVID-19 crisis has placed an urgent requirement on businesses to keep pace with shifting customer behaviors and expectations. To win in this new environment, enterprises must ensure that their customer experience (CX) initiatives can deliver personalized and relevant interactions at every customer touch point, especially through digital.

This requires digital transformation that is intimately tied to customer experience and an emphasis on business resilience to drive the right digital investments that will fortify the long-term health of companies.

Both B2B and B2C enterprises face challenges unique to the market, product, and regulatory and competitive situations of their individual sectors. However, while the journey will be influenced by the specific industry dynamics, the target outcome—successfully navigating the route from analog to digital business—will remain the same.

During this crisis and afterward, customers will not only want but will demand effortless experiences, digital engagement, self-service, conversational interactions, and seamless omnichannel engagement. This is especially true of B2B customers, which have always had high expectations. Ultimately, understanding what B2B customers expect from the company is incredibly important, but understanding is meaningless without the ability to deliver on those expectations.

Accordingly, there is a need for business leaders, whether B2B or B2C, to compare their investment in digital with that of their peers and evaluate their progress toward delivering next-level customer experiences. This effort will yield an understanding of the digital strategies that will define the future of their organizations.

Against this backdrop, Adobe and Omdia partnered in May 2020 to conduct a comprehensive quantitative survey program to explore the extent to which B2B organizations are adopting B2C practices and following B2C trends. The resulting thought-leadership research highlights the state of digital transformation and CX for both B2B and B2C firms during a disruptive global pandemic. It also reveals the measures digital leaders are taking to create value by finding optimal audiences, developing new revenue streams, and delivering augmented customer experiences. Finally, it includes benchmarks that compare B2B and B2C responses to determine whether B2B firms are adopting B2C strategies (see **Appendix** for the detailed survey methodology).

## Key findings

- The lockdown has accelerated “always-on” expectations.
- Both B2B and B2C businesses say they are challenged with engaging across communications channels, a key for engaging proactively and contextually with customers.

- 
- Firms must close the gaps between digital progress perception and customer experience reality.
  - Digital commerce capabilities have a greater impact on elevating the customer experience than other digital technologies.
  - B2B and B2C firms must look to agile customer engagement platforms and customer data platforms to enable connected journeys.
  - B2B firms are increasingly reliant on digital assistants.
  - In the wake of a breakdown of face-to-face sales, B2B organizations must more closely align sales and marketing efforts.
  - Becoming data driven is a top priority across the board, but companies must first solve challenges, such as identity management, that impede customer journeys and prevent firms from delivering consistent and proactive engagement.
  - B2B and B2C firms plan increased investments in artificial intelligence (AI) in 2021 with the goal of cultivating deeper customer insights.

---

# COVID-19 exposes cracks in digital customer engagement capabilities

---

## The lockdown has accelerated “always-on” expectations

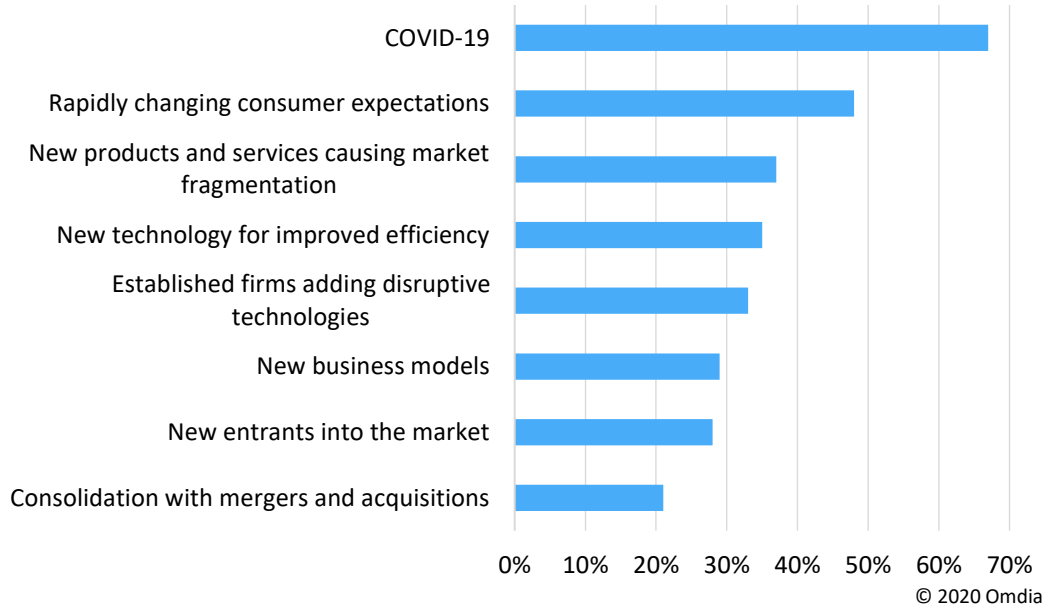
### Achieving digital omnichannel engagement is a necessity

The sudden and massive shift to remote working prompted by the COVID-19 pandemic has had a profound impact on how companies sell to and buy from one another, creating a new “digital-first” norm. While digital transformation has been touted as a necessity for several years, the current environment has enacted a literal shift. Enterprises have been forced to move to digital to interact with customers where those customers are. Pivoting quickly requires agility, mobility, and a digitally focused business and culture.

As disruption often does, this crisis has required leaders to take unprecedented steps to protect the health of their businesses. According to findings from the survey, which interviewed leaders from 300 companies across B2B and B2C brands in the high-tech, manufacturing, and consumer packaged goods (CPG) sectors in North America; Europe, the Middle East, and Africa (EMEA); and Asia Pacific, an overwhelming and disquieting 65% of respondents (both B2B and B2C) cited the pandemic as the top business disruptor (see Figure 1), followed by 49% citing rapidly changing customer preferences and expectations, and 36% saying new products and services are creating fragmentation.

**Figure 1: COVID-19 is the dominant business disruptor for both B2B and B2C firms, followed by changing customer expectations**

**What is the primary cause of disruption in your industry?**



Source: Omdia

Among the many impacts of COVID-19, one thing is clear: how organizations design the customer experience has changed dramatically. Customers expect relationships that are “always on.” They demand ongoing conversations and quick responses to inquiries across a variety of channels and devices. It is no longer just about the product; it is about how a customer feels they are treated: the overall customer experience matters more than ever.

Customers increasingly prefer self-education through online research, peer opinions, and social media. Connecting those pathways to gain a holistic understanding of customers’ transactions and their behaviors—both online and offline—is integral to providing proactive and relevant experiences to both B2B and B2C customers.

**Competing on price remains top customer requirement for both B2B and B2C, but engagement across channels and proactive service is key for B2B firms**

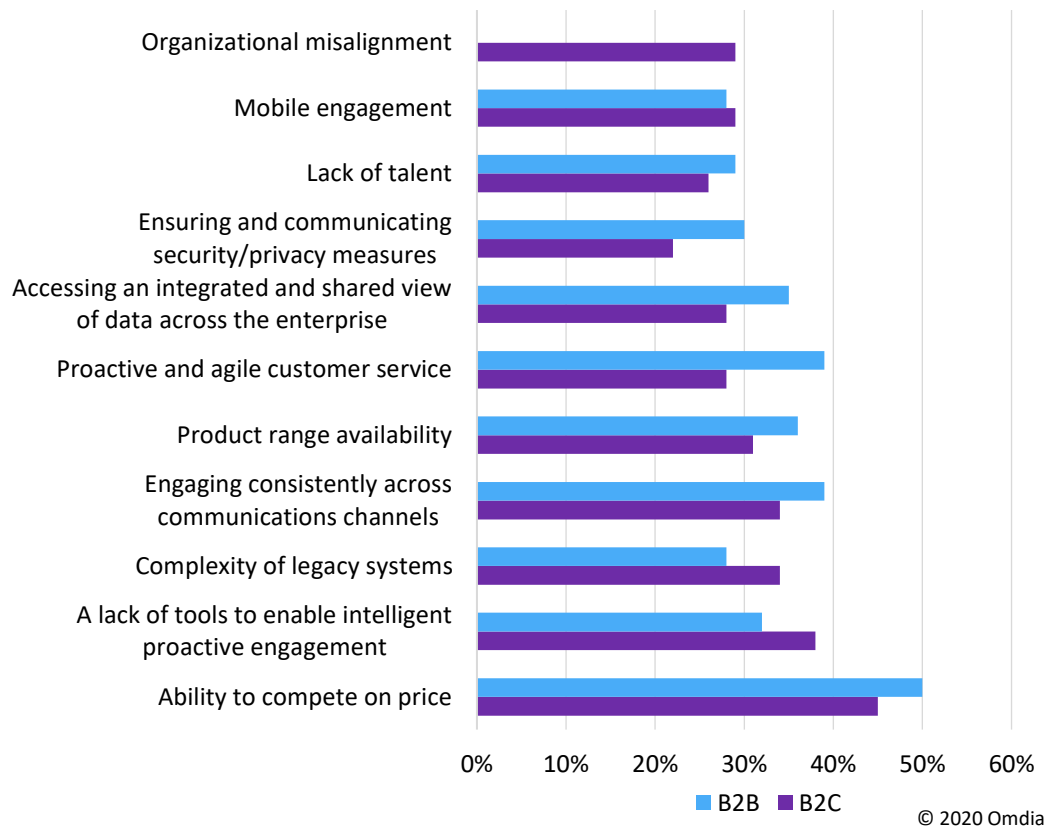
Despite the fundamental differences that exist between B2B and B2C purchasing behaviors, transaction processes, sales cycles, and decision-making dynamics, both are challenged to deliver proactive and personalized experience. When asked to identify key challenges in meeting customer needs and expectations, both B2C and B2B organizations, not surprisingly, identified “the ability to compete on price” as the number one challenge.

However, many of the other challenges relate to the backend. For instance, B2B firms cited greater challenges with “engaging across all channels in a relevant fashion” and “delivering proactive and agile service” (see Figure 2). Surprisingly, B2C firms reported a

lack of tools to enable intelligent engagement. These challenges impede the delivery and orchestration of proactive and relevant customer engagement.

Figure 2: Both B2B and B2C are challenged with competing on price

**What do you see as key challenges in meeting customer needs and expectations?**



Source: Omdia

Furthermore, a closer look at the challenges across industries reveals important nuances about each industry. The high-tech sector, for example, reported being more challenged than CPG and manufacturing with “ensuring privacy/security measures and communicating the policy” and with having “tools that enable intelligent, proactive engagement.”

All three sectors across both B2B and B2C firms must ensure that their CX initiatives can deliver personalized and relevant interactions at every customer touch point, especially through digital. Gaps in the customer experience in the customer journeys will create a cumulative effect on customers’ perception of the brand.

# CX progress linked to digital proficiency

## Firms must close the gaps between digital progress perception and customer experience reality

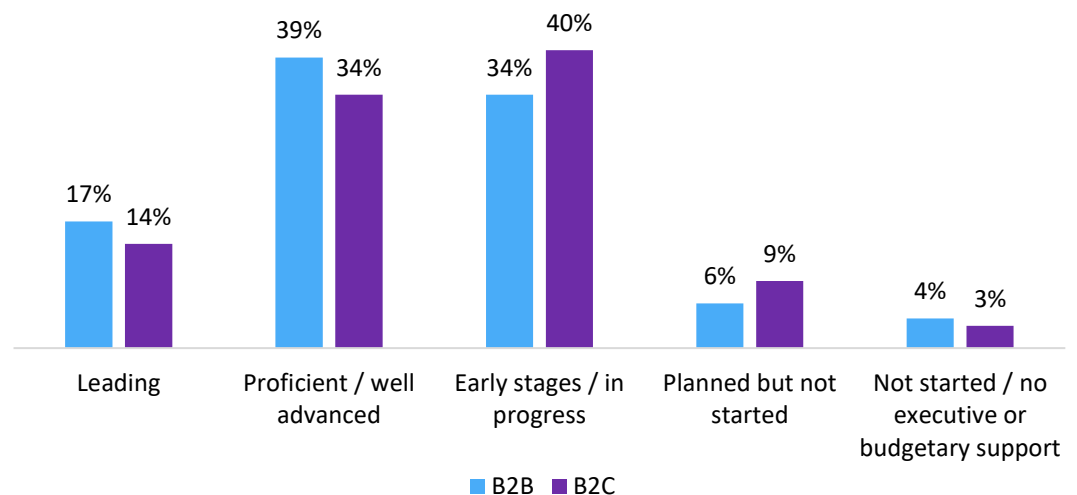
### Digital transformation will help to impact the customer experience in positive ways

In recent years, B2C companies have undertaken digital transformation to some degree. Conversely, B2B companies tend to be much slower to adopt new digital technologies. One of the main reasons for the slower adoption is the complexity of the B2B environment, including longer deal cycles, complicated tendering processes, and intricate partner and vendor relationships.

Results of the survey show that the tide is turning. B2B firms are now reporting greater progress with digital transformation efforts than their B2C counterparts, with 17% saying they are “leading” in their digital progress, compared to 14% in B2C that said the same (see Figure 3). Additionally, 39% of B2B companies said they are proficient in digital transformation, while 34% of B2C firms reported the same.

**Figure 3: B2B firms indicate they are more leading and proficient than B2C firms**

### B2B, B2C comparison of progress toward enterprisewide digital transformation

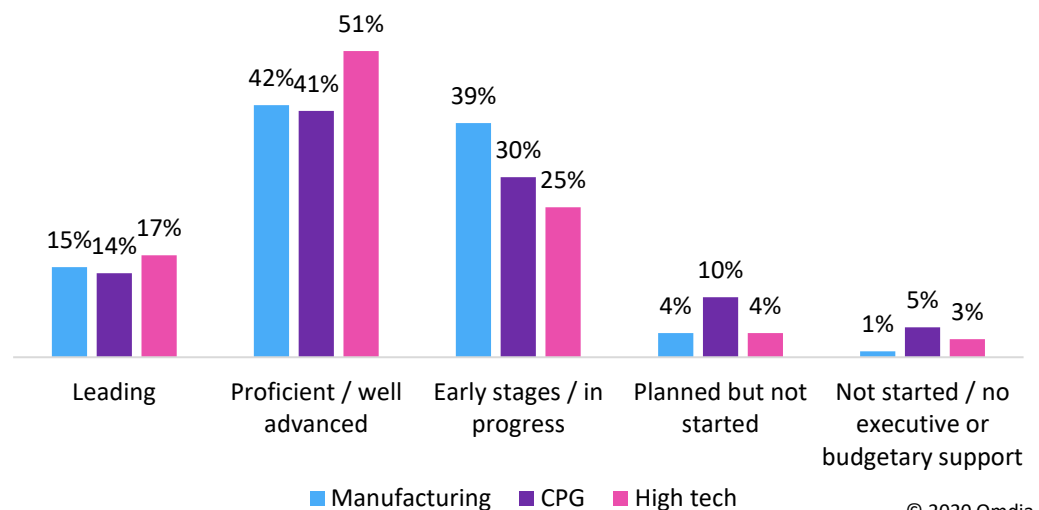




While digital transformation is a widespread trend that many enterprises are using to overcome challenges and uncover new opportunities, some industries are moving to a digital model more swiftly than others. High tech, for example, reports that it is more advanced in digital transformation, with 17% of respondents leading in their efforts and 51% identifying as proficient; whereas 14% of CPG firms said they are leading and 41% said they are proficient (see Figure 4). Although 15% of manufacturing reported that they were leading and 42% were proficient, 39% said they remained in early stages.

**Figure 4: High-tech B2B and B2C firms lead in digital transformation, while CPG lags**

**Sector comparison of progress toward enterprise digital transformation**



© 2020 Omdia

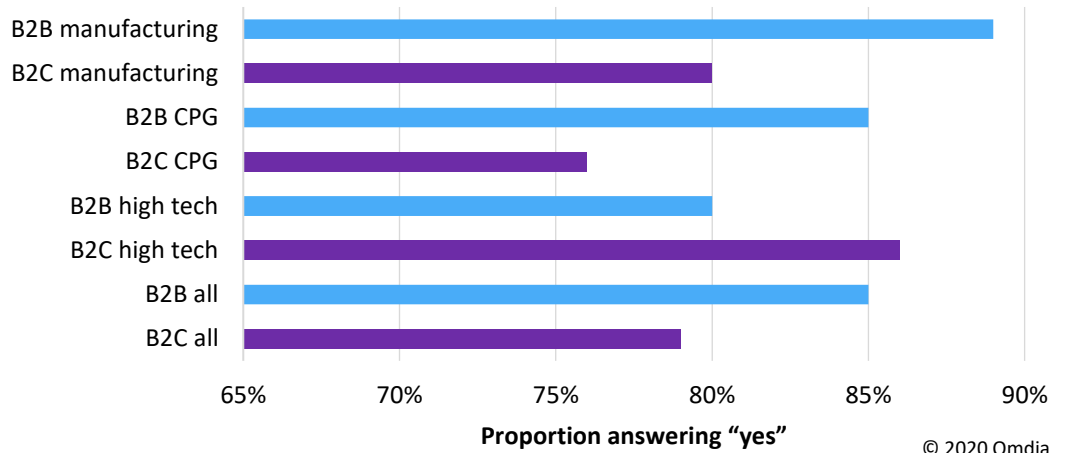
Source: Omdia

When done in the right way, digital transformation strengthens every aspect of a business, including the customer experience. Although the majority of firms surveyed fall in the “proficient” or “early stage” categories with their digital efforts, the findings nonetheless suggest a link between digital adoption and improvements in the customer experience.

The survey results reveal that 86% of B2B customers said their digital customer experiences match their customer expectations. This surpasses B2C responses, where 79% said experience matches expectations. When sectors are compared, B2C high tech leads in meeting customer expectations and manufacturing leads among B2B firms (see Figure 5). This correlates to manufacturing firms reporting high digital proficiency.

**Figure 5: Among B2B firms, manufacturing leads in meeting customer expectations; high tech leads among B2C brands**

**Does your B2B digital customer experience match your current customer expectations?**



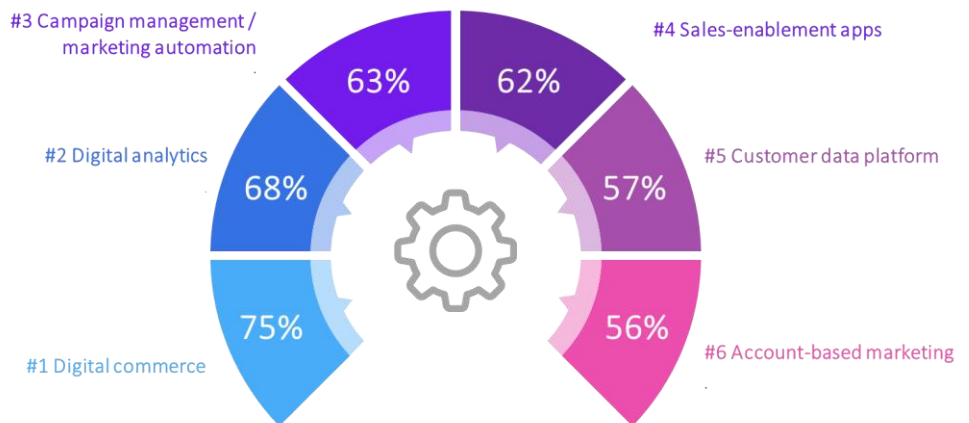
Source: Omdia

## Digital technologies are elevating the customer experience

### Digital commerce is having significant value above all else

To win in this new environment, B2B and B2C firms must push their digital transformation efforts to the next level. Both B2B and B2C firms report that digital-focused technologies are adding significant value to their CX initiatives. Specifically, when digital transformation leaders were asked which technologies were adding value to the customer experience, 75% cited digital commerce, 68% said digital analytics, 63% said campaign management, 62% said sales enablement apps, 57% said customer data platforms, and 56% said account-based marketing (see Figure 6).

**Figure 6: Top six initiatives from which B2B and B2C digital transformation leaders derive the most value toward elevating the customer experience**



© 2020 Omdia

Source: Omdia

In a postpandemic world, digital is here to stay. Omdia believes that as more people use mobile and seek out convenient ways to shop using personal devices, digital commerce will become essential in helping marketers adjust pricing, serve up content, and acquire customers. Digital commerce spans and connects a set of personalized experiences across the customer journey from awareness through post sale.

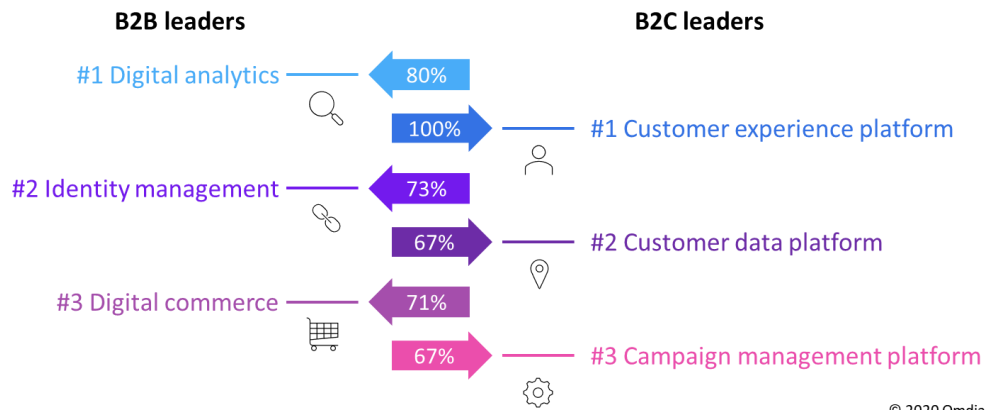
Digital commerce will continue to create significant value for both B2B and B2C firms; those leading in digital transformation are already realizing the benefits. Firms that want to accomplish ongoing and consistent growth with digital commerce should establish a strong technological foundation that will grow with their digital efforts.

**B2B and B2C firms are finding value in customer engagement platforms, customer data platforms, and content management systems**

Although customer behaviors are difficult to predict in this fast-moving era, firms can provide seamless purchasing experiences by staying abreast of digital trends including analytics, identity management, and a platform approach to following and acting on customer behaviors. B2B digital leaders, in fact, said they are seeing the most value from digital analytics, while B2C digital leaders cited customer experience platforms as yielding the most value (see Figure 7).

**Figure 7: B2B digital leaders cite digital analytics as having value; B2C leaders point to CX platforms**

**Top three technologies driving significant value for B2B and B2C digital leaders**



© 2020 Omdia

Source: Omdia

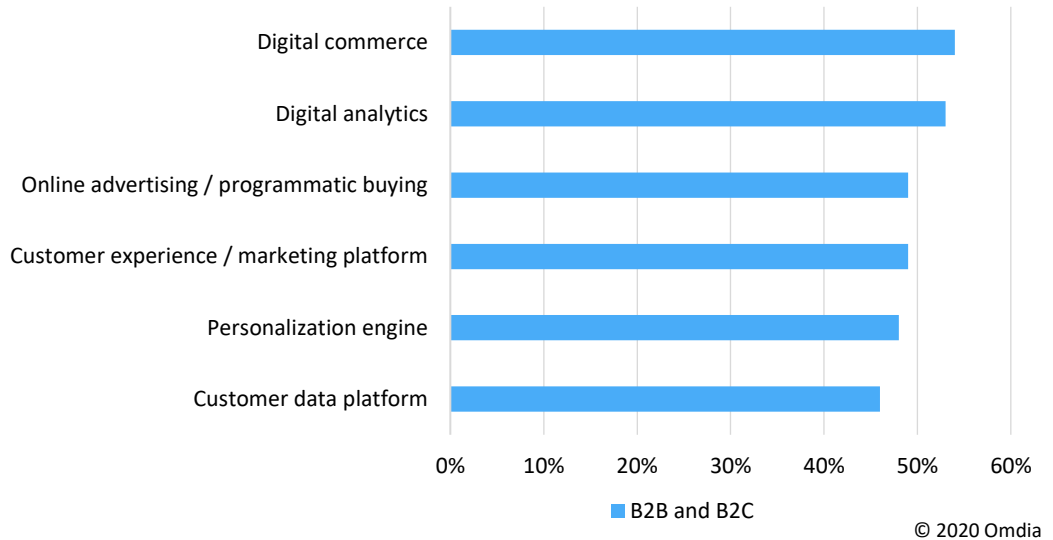
According to the survey findings, both B2B and B2C firms also point to a host of other digital technologies driving value in the customer experience. While digital commerce and digital analytics rank in the top two, customer experience platforms and customer data platforms are also helping to elevate the customer experience. In fact, 49% of all B2B and B2C firms said they are seeing value from customer experience platforms, and 46% said the same about customer data platforms (see Figure 8).

The future belongs to brands that can deliver an intelligent, contextual, and real-time data-driven human experience that connects customers with what matters most. These evolutionary enterprise platforms will help B2B and B2C firms move from having the ability to understand a single customer session to comprehending all the touch points in a customer's journey, and they will put enterprises on the path toward customer lifecycle orchestration.

The transparent and continuous communication of data and intelligence among these customer engagement and data platforms will open new opportunities such as omnichannel attribution, improved predictions on activities happening across the customer journey, accurate recommendations on next best actions, and the ability to automate customers' entire journeys.

**Figure 8: Overall, digital leaders in B2B and B2C firms say the most value is achieved from digital commerce**

**Comparisons of current digital technologies driving “significant” value**



Source: Omdia

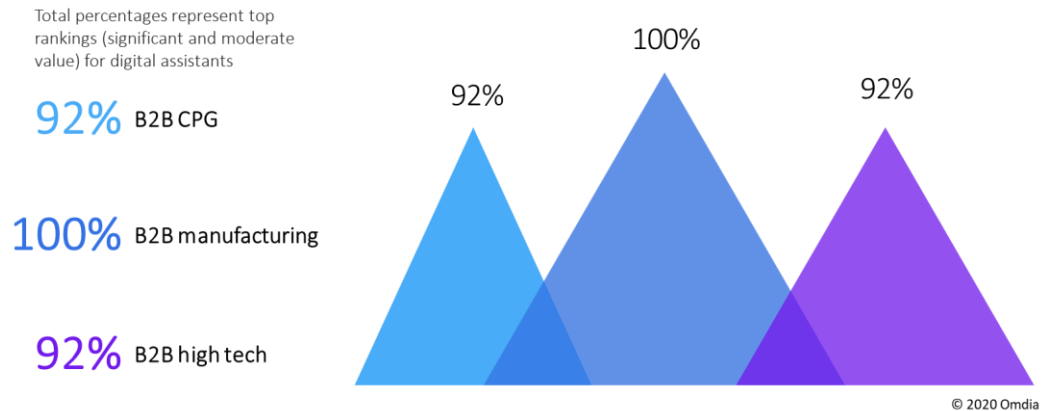
**B2B firms rely on digital assistants to enhance the customer experience; significant value reported**

Most enterprises are now conducting a balancing act between reducing costs and meeting customer expectations; this is where digital assistants can help. In this new environment, opportunities exist for digital assistants to make an impact on B2B and B2C firms across the entire buying process by tightening the sales cycle and delivering more leads. B2B and B2C digital leaders report that investments in AI and technologies are also adding significant value by cultivating deeper insights.

Digital assistants can handle multiple calls simultaneously and can easily scale up or down depending on call density, so they are perfect in running campaigns and other irregular, burst-type activities. They are also perfect for fielding the bulk of calls that are not demanding, such as those to IT support for resetting passwords, thus allowing agents to handle more value-added work.

A sector analysis also reveals that 100% of B2B manufacturing firms report either significant or moderate value from digital assistants in the customer experience; 92% of B2B high-tech firms said the same as did 92% of CPG firms (see Figure 9). In a time when reliance on automation is critical, digital assistants allow B2B firms to easily optimize their processes. Both B2B and B2C firms should look to these subsectors for use cases and explore how investments in digital assistants could lead to positive business outcomes.

**Figure 9: B2B firms in all three subsectors report high value from digital assistants**



Source: Omdia

## The breakdown of face-to-face sales requires sales and marketing alignment

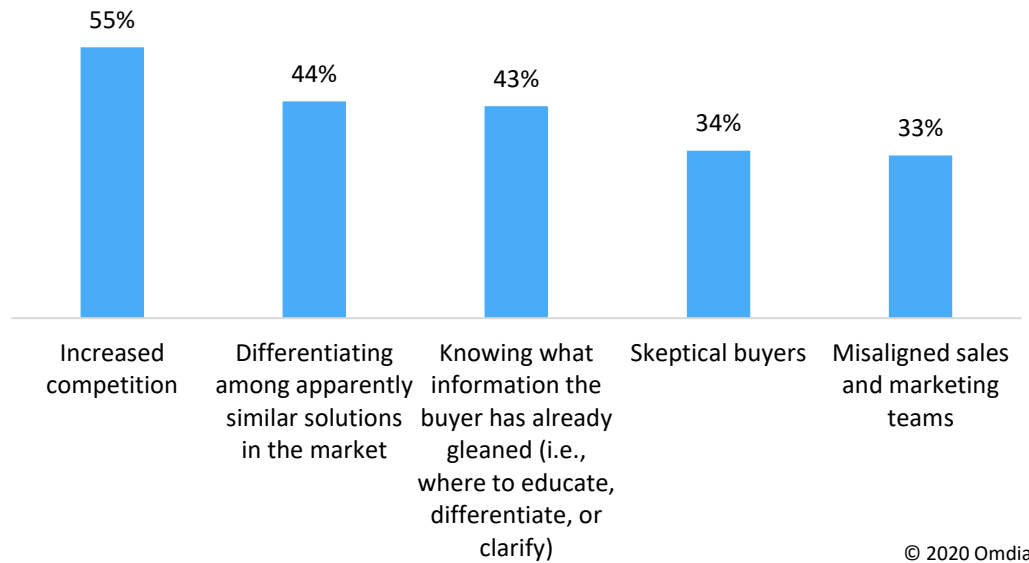
### B2B and B2C firms need to accelerate digital selling

If B2B and B2C firms are unable to capture the attention of customers, build relationships with them, and sustain brand loyalty, the result is less-certain revenue and a higher cost of sales. However, survey results point to a breakdown of face-to-face sales as one of the most disruptive business consequences of the COVID-19 pandemic (see Figure 2).

Additionally, when asked what challenges sales organizations must overcome, 55% of B2B firms said, “increased competition,” 44% said, “differentiating among apparently similar solutions in the market,” and 43% said, “knowing what information the buyer has already gleaned.” (see Figure 10).

**Figure 10: B2B and B2C selling organizations face increased competition and the need to differentiate**

**What challenges does your B2B sales team have to overcome?**



Source: Omdia

According to the survey research, 63% of B2C digital leaders said that their sales and marketing teams consistently use the same messaging and are aware of each other’s activities, which points to tools and processes that enable transparency and collaboration across the enterprise. Only 45% of B2B digital leaders reported the same, which could impede critical engagements along the buyer journey, causing customer defection.

Sales organizations still living in an analog world risk falling behind the competition. In time, buyers will become more self-sufficient, purchasing directly via online channels and using salespeople only for help with their most complex purchasing decisions. To compete in today’s world, companies need to embrace digital selling to empower sales teams and share appropriate insights so they can enhance their relevance to customers.

With the collapse of face-to-face sales, practically every aspect of the sales organization will accelerate along the path of digital experiences and innovation. Sales managers will become more comfortable coaching and managing remotely. Sales organizations will leverage technology to make sales recruiting, training, and other programs more effective and efficient, and even interactions with their accounts will continue to shift to digital.

However, the new reliance on digital selling requires sales organizations to be in lockstep with marketing. The virality of digital usage is accelerating the climb up the digital learning curve for customers, salespeople, and entire sales organizations. Along the way, that climb must include the alignment of marketing and sales, one of the largest opportunities for improving business performance today. A synergetic approach often results in a better transfer of leads to ensure sales reps can spend their valuable time on prospects that are willing and able to buy. When marketing and sales teams unite around

---

a single revenue cycle, they dramatically improve marketing return on investment, sales productivity, and most importantly, top-line growth.

## Firms need to become data-driven organizations

They first must solve challenges that impede customer journeys and prevent firms from delivering consistent and proactive engagement.

The urgent demand caused by COVID-19 to meet customers in digital channels and to provide proactive omnichannel engagement requires a realignment of businesses, both internally and around the customers. It also requires agile enterprise platforms that enable customer-facing employees to visualize insights and act in real time and the capability to synthesize data and quickly respond to customers in any channel and at the right time with the right message.

These capabilities require data-driven companies to distill customer information to better understand buying journeys. Companies proactively orchestrate relevant offers and communications at the right times and stages in the journey. But if the data from customers of both B2B and B2C firms is not carefully tracked, integrated, and associated with each individual customer, it often results in multiple identities for the same customer and a failure to “connect the dots,” causing inconsistent experiences. When brands enrich the data effectively by expanding and deepening the identities, they form a more complete picture. This ensures consistency for the customer and enables interesting analysis and insights that inform future campaigns and engagement strategies.

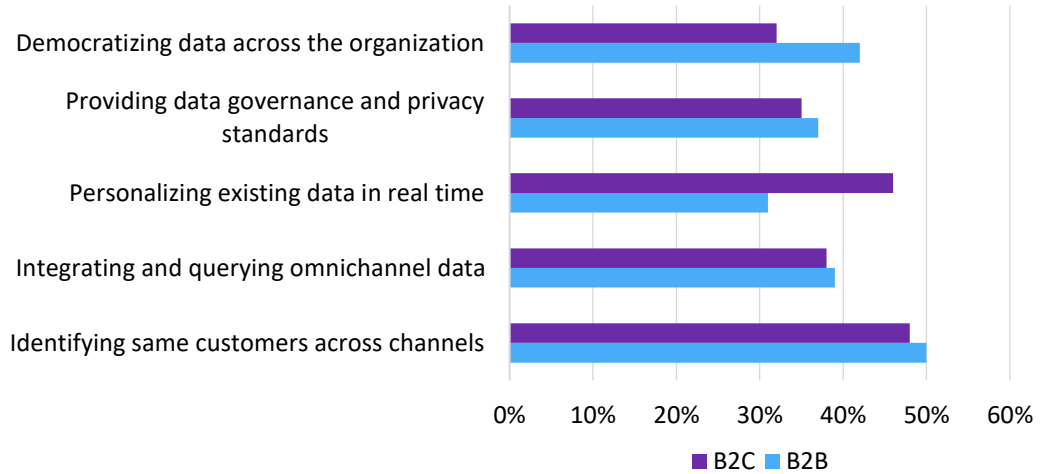
However, the results of the survey point to difficulties in enabling integrated customer journeys and in identifying customers along the paths they take to interact with brands. Of B2B firms, 70% ranked an “inability to identify the same customer across channels and create unified profiles” as one of their top three challenges within the realm of leveraging data in the organization; 65% said, “integrating and querying omnichannel data from multiple systems was tedious and time consuming,” and 59% said, “democratizing data across the organization” is one of their top three difficulties (see Figure 11). These challenges will impede customer journeys and prevent firms from delivering consistent and proactive engagement.

While B2B firms were challenged by aggregating the data, B2C firms reported difficulty with acting on it. B2C firms also said they are challenged with engaging in real-time personalization (46%) and identifying the same customers across channels (48%). Conversely, and not surprisingly, digital leaders reported that real-time personalization was not as much of a challenge, with only 34% of both B2B and B2C firms reporting it as the first or second-highest challenge. Similarly, only 40% said customer identification across channels proved challenging.



Figure 11: Both B2B and B2C firms struggle with identifying customers across channels

**B2B vs. B2C comparison of top data challenges**



Note: shows top two challenges by percentage

© 2020 Omdia

Source: Omdia

While data is essential for personalization and customer-journey orchestration, the simple acquisition of data is not enough. Leveraging and utilizing customer data requires a foundation of disciplined and structured data management. Digital advancement requires understanding the metrics that matter, developing deep insights from first- and third-party data, sharing insights broadly across business units, and communicating the value to the broader business and stakeholders. It also requires an in-depth data governance framework, a step that even the digital leaders surveyed reported as a top organizational data challenge.

---

# Firms look to enable one-to-one customer engagement with 2021 investments

---

## B2B and B2C firms want to cultivate deeper customer insights

[AI will play a starring role in that data transformation to enabling granular insights](#)

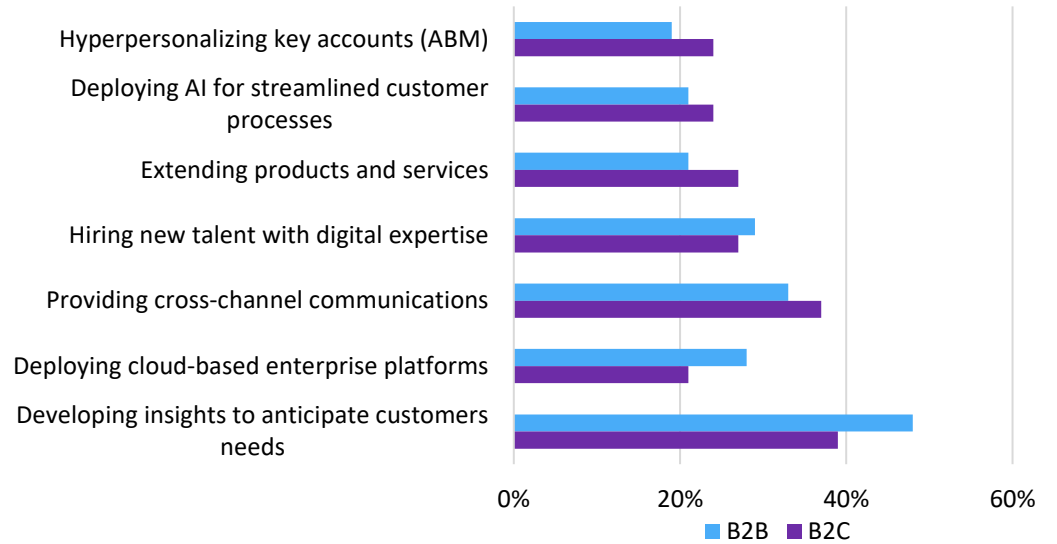
No two customers behave the same; neither do any two businesses. Therefore, it is crucial for both B2B and B2C marketers and CX leaders to understand their target audiences as well as the underlying behaviors, needs, and expectations of individual target customers.

For enterprises to achieve long-term growth, they must understand customers' expectations and preferences, such as the convenience of online shopping, the desire for personalized experiences, the need for information availability, and the preference for self-service. They must respond to key moments in real time, anticipate customers' journeys, understand which channels they intend to use, and prepare relevant content, offers, and solutions. This level of intelligence and agility requires joining customer data from different sources to drive intelligence throughout the enterprise and to predict customer actions. It also requires innovation and investment in emerging technologies.

The survey results reveal that B2B firms are beginning to cultivate real-time insights. For instance, to improve the customer experience, 39% are developing deeper insights to anticipate customers' needs (see Figure 12) as a top strategic initiative, while 48% of B2C firms are doing the same; 33% are encouraging customer feedback at all levels, however, which rivals the 29% of B2C firms.

Figure 12: Both B2B and B2C firms are prioritizing capabilities to develop deep insights

Top-ranked strategic response to improve CX



© 2020 Omdia

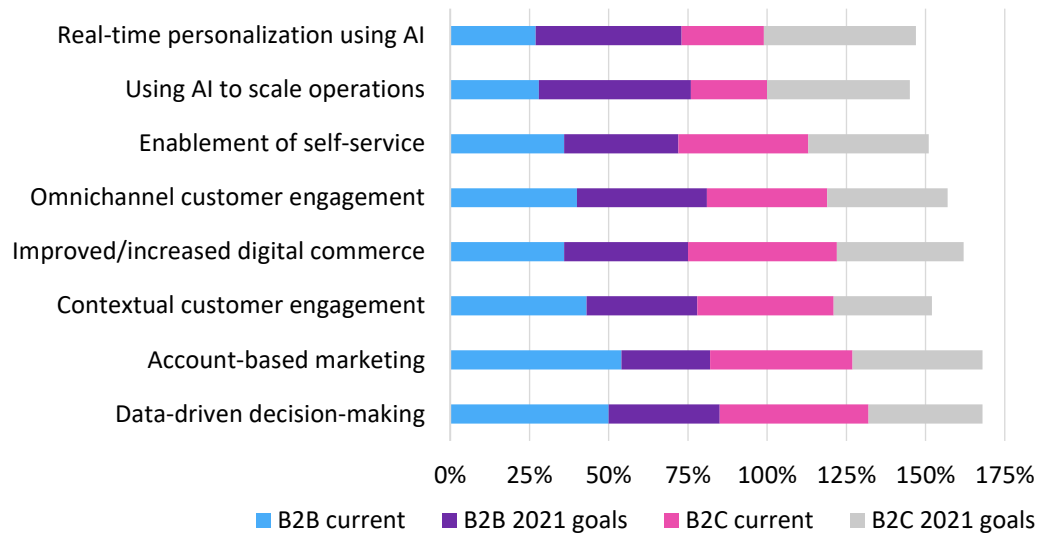
Source: Omdia

Thanks to advancements in AI, machine learning, interconnected partner ecosystems, and the interoperability of data to enable integrated insights, the competitive drivers of growth through CX will increasingly come to light. These include real-time data insights, data unification for a single view of the customer, and enterprise access to business context.

As a result, applying AI to scale the operation and enable personalization will see the biggest jumps in 2021 for both B2B and B2C firms (see Figure 13). While 27% of B2B firms and only 26% of B2C firms said they currently use AI for real-time personalization, both will increase that substantially next year. Chatbots and digital assistants will also see a spike in investments next year: 41% of both B2B and B2C firms said they plan to invest in the technology in 2021.

**Figure 13: B2B and B2C firms look to prioritize AI for personalization and scaling the operations in 2021**

**B2B vs. B2C comparison of expected outcomes from digital investments**



© 2020 Omdia

Source: Omdia

Despite the planned deployments, many still have no plans to deploy AI. In fact, 31% of B2C firms said they will not deploy AI to scale their operations, and 24% of B2B firms reported the same; 26% of B2C said they will not deploy AI to enable real-time personalization, and 28% of B2B firms said the same.

There are many reasons why some businesses have not adopted AI. Factors include the need for specialized talent and hardware, the need for the right types and quantities of data for training and refining machine learning models, and the broader complexities of introducing a new way of working inside an organization. But above all, AI can be challenging to apply to very specific business needs. Widescale deployment, therefore, might still be in the distant future for both B2C and B2B firms.

---

# Conclusion

---

The COVID-19 pandemic has shone a spotlight on the value of digital transformation, and organizations should use this time to accelerate the transition. Companies are evolving to become more digital with an increasing number of customer interactions happening not in person but over a screen.

Enterprises must act as a coordinated system of value creation and delivery if they are to gain any value from digital transformation initiatives in the pursuit of consistent positive customer experiences, digital workplaces, or skills development. This involves a shift to a more holistic enterprisewide approach to customers.

Technology investments that enable intelligent, unified, and collaborative environments that allow customers to interact throughout diverse journeys and across digital and physical channels will be critical to enable digital, omnichannel customer engagement and personalized offers. The enterprises that thrive will have deployed a range of capabilities including data ingestion and analysis, engagement orchestration, and journey visualization. Fundamental to the success of any B2B or B2C enterprise is that it has the capabilities to sense, respond, and adapt at the right pace to ensure persistent customer relevance.

Finally, as digital transformation success becomes more intimately tied to customer experience, that emphasis will continue to drive business investments in digital transformation. This is especially true as organizations transition from building internal competencies and improving efficiencies to delivering value by finding optimal audiences, creating new revenue streams, and delivering customer lifetime value.

---

# Appendix

---

## Methodology

Omdia, in partnership with Adobe, interviewed chief marketing officers, chief digital officers, and chief experience officers at 334 firms in North America, EMEA, and Asia Pacific in the B2B category. The interviews were conducted in May 2020 across the manufacturing, high-tech, and consumer packaged goods sectors to determine respondents' level of involvement in and progress toward B2B and B2C digital transformation. The survey also sought insights to help highlight the critical technologies that enable proactive and relevant digital customer engagements and to reveal the barriers to digital transformation.

Survey respondents represented sales, customer experience, IT, digital marketing, and marketing across the high-tech (33%), CPG (34%), and industrial manufacturing (33%) sectors in North America (33%), EMEA (33%), and Asia Pacific (34%). Subsectors included professional IT services, consumer packaged goods, food manufacturing, apparel manufacturing, industrial and commercial machinery manufacturing, electronic and electrical manufacturing, software, construction, consumer electronics, technology manufacturing, internet companies, metal manufacturing, chemical, and aerospace.

## Author

### **Mila D'Antonio**

Principal Analyst, Customer Engagement  
mila.dantonio@omdia.com

---

## Get in touch

[www.omnia.com](http://www.omnia.com)  
[askananalyst@omnia.com](mailto:askananalyst@omnia.com)

## Omdia consulting

Omdia is a market-leading data, research, and consulting business focused on helping digital service providers, technology companies, and enterprise decision makers thrive in the connected digital economy. Through our global base of analysts, we offer expert analysis and strategic insight across the IT, telecoms, and media industries.

We create business advantage for our customers by providing actionable insight to support business planning, product development, and go-to-market initiatives.

Our unique combination of authoritative data, market analysis, and vertical industry expertise is designed to empower decision-making, helping our clients profit from new technologies and capitalize on evolving business models.

Omdia is part of Informa Tech, a B2B information services business serving the technology, media, and telecoms sector. The Informa group is listed on the London Stock Exchange.

We hope that this analysis will help you make informed and imaginative business decisions. If you have further requirements, Omdia's consulting team may be able to help your company identify future trends and opportunities.

## Copyright notice and disclaimer

The Omdia research, data and information referenced herein (the “Omdia Materials”) are the copyrighted property of Informa Tech and its subsidiaries or affiliates (together “Informa Tech”) and represent data, research, opinions, or viewpoints published by Informa Tech and are not representations of fact.

The Omdia Materials reflect information and opinions from the original publication date and not from the date of this document. The information and opinions expressed in the Omdia Materials are subject to change without notice, and Informa Tech does not have any duty or responsibility to update the Omdia Materials or this publication as a result.

Omdia Materials are delivered on an “as-is” and “as-available” basis. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness, or correctness of the information, opinions, and conclusions contained in Omdia Materials.

To the maximum extent permitted by law, Informa Tech and its affiliates, officers, directors, employees, and agents disclaim any liability (including, without limitation, any liability arising from fault or negligence) as to the accuracy or completeness or use of the Omdia Materials. Informa Tech will not, under any circumstance whatsoever, be liable for any trading, investment, commercial, or other decisions based on or made in reliance of the Omdia Materials.