

The fast-moving consumer goods (FMCG) industry is undergoing major transformation as online shopping habits change and data-driven analysis holds key to improving customer satisfaction. Businesses are accelerating their cloud adoption and efforts to modernize their legacy IT infrastructure to become digitally resilient.

Asia/Pacific FMCG Industry Rides on Digital Technology Wave to Boost Innovation

August 2022

Written by: Nishant Bansal, Senior Research Manager, IDC Asia/Pacific Telecom Research

Introduction

The two years of lockdowns have forever changed consumer behaviors and preferences, and there is no turning back for the fast-moving consumer goods (FMCG) sector. Facing myriad disruptions, FMCG organizations have had to accelerate both the pace and scale of their digital technology adoption, not just in sales and marketing but the entire supply chain network. The race is on to redefine their sales and marketing strategies to align with new consumer preferences as well as customers that are habituated to new ways of shopping. Besides digitalization of the sales and marketing communication process, organizations are also investing in a digitally resilient supply chain network to support their digital sales and marketing strategy as part of their long-term goal for improved efficiency and profitability.

IDC's research points to several key drivers as the catalyst for this continuing digital transformation of the Asia/Pacific FMCG sector in 2022 and beyond:

Data-driven personalized customer experience

With the adoption of digital technology and increase in use of internet by consumers to search for the information on the right product or service before making final decision on the purchase, FMCG companies find on hand great amounts of data on consumer purchasing behavior and patterns which they can use to provide more personalized products and solutions, instead of generic ones. By analyzing the purchasing data, organizations can develop customized solutions for consumers, which help increase loyalty while expanding the customer base at the same time.

Improved customer communication

In the age of social media, a tweet, Facebook post or a YouTube advertisement can go viral in a matter of hours and create positive and negative impacts. With the availability of relevant data, organizations can get a better feel of

AT A GLANCE

KEY TAKEAWAYS

- » FMCG organizations need an omnichannel presence to cater to all types of customers and offer data-driven personalized customer experience.
- » Only 27% of organizations across Asia/Pacific feel their network is modern enough for a future enterprise.
- » Multicloud networking revenue in the Asia/Pacific is forecasted to grow at a CAGR of 102% between 2021 and 2026.

IDC OPINION

Multicloud SD-WAN adoption is key for FMCG organizations to build an omnichannel presence for improved customer experience and to achieve digital transformation and resiliency.

consumer behavior, turning it into a tool to improve interaction with customers before they buy. That said, interaction cannot be limited to just pre-sales. A negative viral post has the potential to bring down the sales of a company in a matter of hours. Hence, it is imperative that FMCG organizations interact with consumers post-sales as well so that they can identify their problems and work on resolving these issues as quickly as possible.

Omnichannel experience

Having an omnichannel presence allows FMCG companies to reach and serve a greater number of customers faster, and better, not only in the bricks-and-mortar world but also in the online space. With the rise of ecommerce, which saw a surge in online purchases including groceries, FMCG players are growing their presence across all modes of communication in which a consumer can use to purchase a product. These include their own e-commerce platform, also known as direct to consumer or (D2C); a tie-up with third-party e-commerce platforms (like Amazon Pantry); or online B2B marketplaces for bulk ordering. This omnichannel strategy enables organizations to improve sales, save time, optimize resources, automate processes, and increase profitability.

In-house operations improvement

The adoption of digital initiatives will not only enhance an organization's interaction with customers but also result in improved efficiency in its day-to-day operations. With the use of technologies like AI, robotics, cloud computing, blockchain, and others, organizations can aim to achieve optimized performance and improved operational efficiency. The use of digital technology and automation in manufacturing, warehousing and inventory management, and distributor systems can result in smoother, more optimized operations for the organization in the long run.

Supply chain reorientation

The digitalization of supply chains will play a crucial role in bringing FMCG organizations' growth back on track. Almost every FMCG organization would have faced some sort of supply chain disruption during the pandemic, either due to low demand because of lockdowns or high demand with the reopening of the economy. Organizations that invest in building an agile technology architecture for scenario planning, predictive analytics, and real-time visibility of product movement across the supply chain — using technology like Big Data, AI, blockchain, and the Internet of Thing (IOT) to tackle disruptions and demand fluctuations — will likely emerge more digitally resilient than the ones that don't. Should there be a need to recall or replace a product, an autonomous and integrated supply chain ensures end-to-end real-time visibility of goods right from the warehouse, to the truck on which it was loaded — assuring quicker replenishment of goods.

Investment priorities and challenges

Amid accelerated digital transformation of the industry, FMCG organizations need to continue prioritizing a digital-first approach and understand that digital transformation is an ongoing process.

According to IDC's Worldwide Digital Transformation Spending Guide, organizations in Asia/Pacific are expected to increase their spending on cloud-related deployments from \$64 billion in 2022 to \$245.3 billion in 2025, at a compound annual growth rate (CAGR) of 30.8%.

FMCG organizations have faced numerous challenges over the last two years such as sudden nationwide lockdowns, closure of stores, manpower shortage and international supply chain disruptions. As they accelerated digital transformation efforts to meet new market demands and customer behavior, they are also facing new sets of challenges:

Legacy infrastructure

Traditionally, FMCG organizations have relied on brick-and-mortar stores for sales, Microsoft Excel-based systems for inventory management, and regularly scheduled pickup and delivery by distributors for delivery of goods to wholesalers and retailers. Organizations are limited by their legacy technology architecture when they try to respond to today's changing market needs in an opportune and agile manner. Hence, these FMCG organizations need to first upgrade their legacy infrastructure and restructure internally to adopt digital processes. Organizations must appropriately choose their technology infrastructure, making sure it is aligned with their business goals. They must enhance their ways of working and achieve digital resiliency in their operations. By migrating their entire IT infrastructure to the cloud, organizations can also significantly cut expenses incurred for managing their in-house IT infrastructure and networks.

Budgetary constraints

Products with short shelf life and low product margins are a major concern. FMCG products often face a separate set of challenges when sold online, so having one's own D2C platform can be a costly investment, especially with extra packaging and high shipping costs eating into profit margins. However, it is necessary for FMCG organizations to invest in such technology to obtain customer data. Such data will enable them to understand and analyze their customers' behavior for targeted marketing. Without a D2C platform, there is no direct consumer relationship, which means an FMCG organization must rely on third-party apps or retailers to provide data and feedback on market trends and consumer behavior. Hence, while implementing digital transformation requires significant investments in new tools, technologies, and solutions, there are clear benefits as well.

Security

Data in FMCG organizations such as their product recipe, new product plans, and marketing strategy are highly sensitive and confidential in nature. The risk of malicious actors exploiting organizations' privacy through unauthorized access and data leaks is one that is inescapable. Hence, it is imperative that organizations invest in strengthening IT and network security, as a core commitment in their digital transformation efforts.

Challenges to IOT implementation

IOT adoption in the FMCG industry has grown over the last few years. About 44% of manufacturing organizations surveyed across Asia/Pacific have adopted IOT and another 21% plan to do so in 2022. However, the implementation of IOT in FMCG industry is not without obstacles. One of the earliest obstacles with IOT is the high cost of installing an IOT solution and lack of skilled labor especially in developing countries. The willingness and lack of proper training of all stakeholders in the supply chain to deploy advanced technologies are also concerns with IOT implementation. The lack of secure web interfaces, data privacy and software protection can also often lead to data security problems for IOT users and cyber-attacks from malicious users. Besides, manufacturers mostly work in silos and have their own set of standards and defined procedures. When devices from multiple manufacturers are connected to a single IOT network, there may not be uniform communication among devices, which leads to scalability and data aggregation issues. Similarly, IOT generates huge amounts of data from devices such as digital sensors located on products, services, and vehicles. Analysis of such data requires advanced computing devices, which can sometimes overwhelm a network. Latency caused by this can result in inaccurate analytics which can negatively affect manufacturing processes and the supply chain as well.

Strategy: Building robust network infrastructure for tomorrow

Connectivity is both a requirement and a concern as FMCG organizations in Asia/Pacific navigate transformative change in their entire value chains. The lack of proper internet connection and frequent downtime, especially in rural areas, can be a concern for FMCG organizations. Similarly, the lack of awareness among stakeholders in the supply chain and end-consumers about the need for a digitally connected ecosystem can also be a concern. Notably, only 27% of organizations surveyed in Asia/Pacific feel their networks are modern and equipped to handle the demands of the future enterprise.

A multicloud software-defined wide-area network (SD-WAN) that is highly available, offers centralized control and is easy to manage will change the game for FMCG organizations. As more organizations adopt IoT, SD-WAN will ensure safe and secure traffic for these connected devices in the network while improving the quality of experience for all the stakeholders involved (see Figure 1).

Figure 1: **Illustration of a Distributed FMCG Industry Ecosystem**



Source: IDC, 2022

For building a robust network infrastructure, FMCG organizations need to focus on:

Enhanced network connectivity

A global market leader in beverages such as beer has implemented digital technology and connected its barley growing farms across 7 continents. It aggregates data like crop yield, weather patterns, and optimal growing patterns to improve productivity and profitability for both farmers and the organization. FMCG organizations need to be constantly connected to all stakeholders in their supply chain, from suppliers and manufacturers, warehousing, and

logistics, to distribution and delivery of the final goods to their end-customers. Here, SD-WAN can connect organizations of any size. It can also be used within organizations, as IoT devices and other digital technologies grow in number. SD-WAN also supports a range of options such as 4G LTE and 5G, which will be useful if an organization has factories, distribution centers, and warehouses in remote areas where the need for a reliable network for connected devices becomes even more critical.

Bandwidth scalability and flexibility

Multicloud SD-WAN offers scalability and flexibility that can meet increasing bandwidth requirements as business grows. SD-WAN, being a cloud-based solution, gives organizations the flexibility to adapt to new workload requirements. An multicloud SD-WAN can enable organizations to add new offices, warehouses, micro fulfillment centers, logistics centers, and other ecosystem stakeholders in their existing network without disrupting their operations. Compared to other manufacturing organizations, FMCG organizations more frequently add new fulfillment centers and retailers to their supply chain network and that too in rural areas. With a multicloud SD-WAN, these new retailers and fulfillment centers can be connected to the entire company network in a seamless manner within days which earlier would have taken months with legacy infrastructure.

Data security and privacy

An ideal SD-WAN solution will have integrated security features and provide a firewall, malware protection, and threat detection and response services. With the use of IOT by FMCG organizations, IOT application users' data related to their movement, consumption, needs, habits, and interaction with other people are widely available for malicious actors to exploit. These include intellectual property and secret recipes. For example, a beverage company may have its own secret and patented formula for its aerated drinks. It is important that malicious actors are prevented from stealing a manufacturer's intellectual property, proprietary data, or customer personal data. SD-WAN ensures that traffic within the network is encrypted, and a network administrator can manage and implement the security policies from a centralized location.

Return on investment

FMCG organizations have products which have low shelf life and low profit margins. They also have more stakeholders in their network compared to electronics manufacturers. Hence, the cost for an FMCG organization to implement a multicloud SD-WAN strategy may be higher compared to other manufacturers. For them, the ROI needs to be clearly defined to justify the investment. IDC's research shows that lower network/WAN costs are among the top benefits, besides on-demand, or flexible, connectivity and intelligent traffic routing, which organizations consider an important factor when adopting multicloud SD-WAN. SD-WAN offers lower connectivity costs, high reliability, and improved performance, leading to long-term savings and excellent return on investment.

Industry case study

FMCG organizations across the world have seen significant benefits of adopting multicloud and implementing SD-WAN. IDC expects multicloud networking revenue in Asia/Pacific to grow at a CAGR of 102% between 2021 to 2026

(\$15.9 million in 2021 to \$534.3 million in 2026). The following is a case study of an FMCG organization achieving significant milestones in network transformation with the adoption of multicloud and SD-WAN:

Multicloud strategy for efficient digital marketing and enterprise analytics

A leading global FMCG with presence in more than 190 countries and over 170,000 employees wanted to redesign its infrastructure to support its digital marketing approach. The organization had been using an on-premises datacenter to host its web properties but wanted to use cloud to implement the same process. Similarly, owing to changes in consumer purchasing behaviors through omnichannel, direct-to-consumer and recent product trends, the organization needed to ensure that both internal and external data is available faster and can be used for better decision making. Hence, it turned to multicloud for digital marketing and for connecting data from various stakeholders. The organization realized significant benefits as it could scale up and down its infrastructure at the touch of a button, without the need to go through the rigmarole of procuring, installing, and maintaining hardware. Requesting a website for a marketing campaign used to take two weeks but after the cloud migration, the time was reduced to two days, seven times faster than with a traditional on-premises datacenter.

Moving forward in the new normal

Complexities in supply chains make FMCG businesses highly reliant on their networks for accurate flow of information to operate smoothly and efficiently. Here, multicloud SD-WAN is uniquely positioned to provide future-proof infrastructure that is built for new features and capabilities. IDC also expects enterprises undergoing network transformation to take the approach of what IDC refers to as software-defined branch (SD-branch). This is basically the integrated management of campus and branch technologies such as SD-WAN, WLAN, and LAN. As they take a step forward, organizations need to remember to:

- » **Choose the right partner** – Look for a partner with technology capabilities and solutions that align with the organization's objectives. Work with the partner to assess resources and tap the provider's industry experience to identify gaps in existing networks. Some large-scale public cloud providers may offer limited support and resources while smaller third-party providers may offer better resources and industry expertise.
- » **Choose the right telecom carrier** – Without proper network connectivity or reach, FMCG organizations will be challenged to digitally transform. A carrier that can provide seamless connectivity, internally within a single site as well as externally across multiple sites including remote areas, is vital not only for better customer experience and demand planning but also reduced complexities. A telecom carrier that keeps current with evolving technology trends can be a big help in the transformation journey to achieve operational efficiencies and increase business resilience.
- » **No compromise on security** – Assess the security controls and processes provided by the cloud provider and ensure that its security system aligns with the organization's internal security protocols. Mitigating security risks with a multicloud approach is equally important as it reduces the possibility of a devastating cyberattack by malicious actors.

About the Analyst



Nishant Bansal, Senior Research Manager, Telecommunications Research, IDC Asia/Pacific

Nishant Bansal is a senior research manager for IDC's Asia Pacific Telecom Research based in Gurgaon, India. He is responsible for deep-dive research and insights on unified communications and collaboration and back-office systems. In his role, he works with regional telecom teams to produce intelligence reports and market insights and contributes to various consulting projects for leading regional telcos and tech vendors.

MESSAGE FROM THE SPONSOR

Why VMware SD-WAN with Telstra Managed Services

VMware SD-WAN, provided by Telstra, is a pioneer in branch networking with a solution that combines the economics and flexibility of multiple WAN transports with the deployment agility of a cloud-based service. VMware SD-WAN provides a Cloud-ready solution delivered over Telstra's global network as a comprehensive managed WAN service.

About Telstra

Telstra is a leading telecommunication and technology company with a proudly Australian heritage and a longstanding, growing international business. Today, we operate in over 20 countries outside of Australia, providing data and IP networks and network application services to thousands of business, government, carrier and OTT customers.

For more information: <https://www.telstra.com.sg/en>

About VMware

VMware SD-WAN simplifies branch WAN networking by automating deployment and improving performance over private, broadband Internet and LTE links for today's increasingly distributed enterprises, as well as service providers.

For more information: <https://sase.vmware.com/>



The content in this paper was adapted from existing IDC research published on www.idc.com.

IDC Asia/Pacific

83 Clemenceau Avenue
#17-01 UE Square West Wing
Singapore 239920
T 65.6226.0330

Twitter @IDC
idc-insights-community.com
www.idc.com

This publication was produced by IDC Custom Solutions. The opinion, analysis, and research results presented herein are drawn from more detailed research and analysis independently conducted and published by IDC, unless specific vendor sponsorship is noted. IDC Custom Solutions makes IDC content available in a wide range of formats for distribution by various companies. A license to distribute IDC content does not imply endorsement of or opinion about the licensee.

External Publication of IDC Information and Data — Any IDC information that is to be used in advertising, press releases, or promotional materials requires prior written approval from the appropriate IDC Vice President or Country Manager. A draft of the proposed document should accompany any such request. IDC reserves the right to deny approval of external usage for any reason.

Copyright 2022IDC. Reproduction without written permission is completely forbidden.

