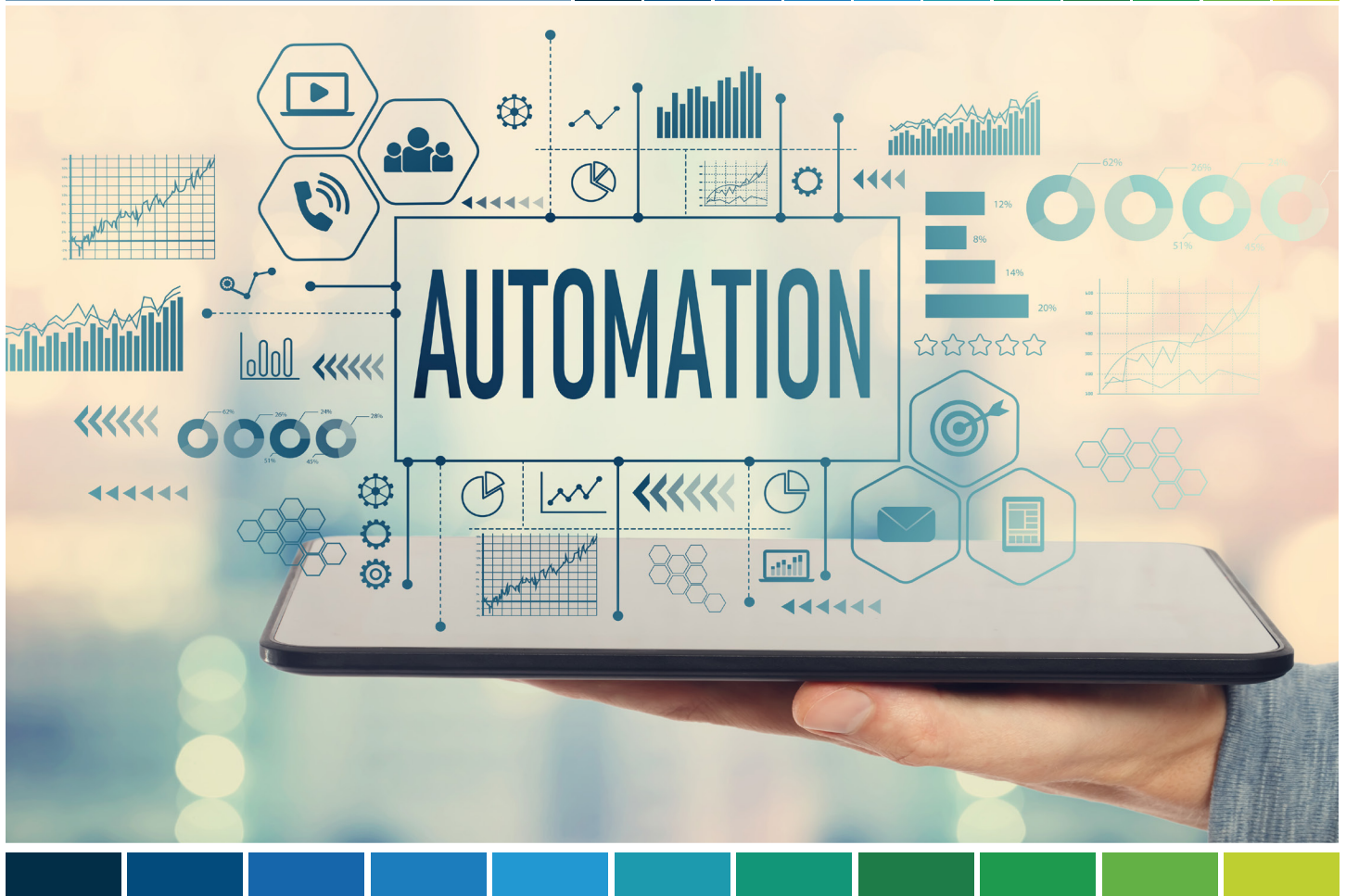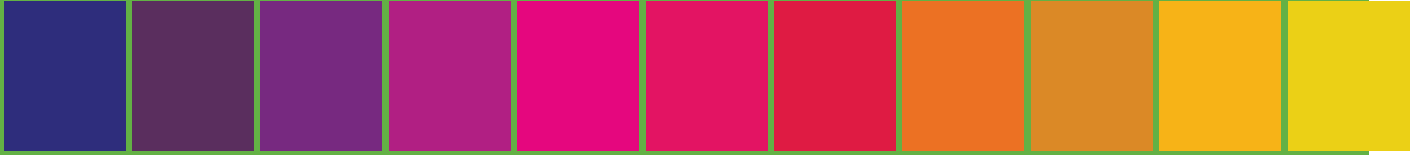# 2020-2021
# Cloud-Based Contact Center
Infrastructure Product
and Market Report

*This is the 13th annual edition of DMG Consulting LLC's **Cloud-Based Contact Center Infrastructure Product and Market Report**. The Report explores the competitive landscape, market share, projections and adoption rates, and the business, market and technological trends that are driving the rapid growth of this essential segment. DMG provides the most thorough and comprehensive coverage of the cloud-based contact center infrastructure (CBCCI) market (also known as contact center as a service, CCaaS). This year's Report discusses the impact of the coronavirus pandemic on the short- and long-term future of this increasingly important sector. It looks to the future and provides best practices for post-pandemic disaster recovery/business continuity (DR/BC) planning as well as for the management of work-at-home agents.*

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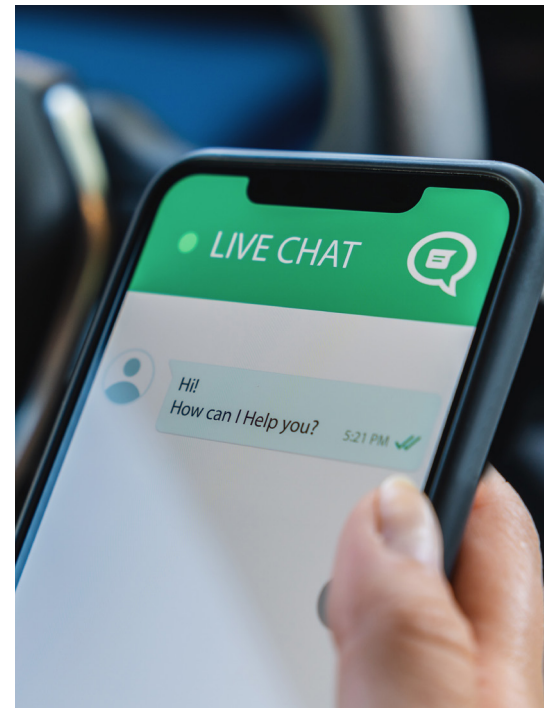
The COVID-19 pandemic has had a profound impact on economies, businesses and individuals throughout the world. Traditional offices and contact center sites have been shuttered for months, with no end in sight. Contact center employees have been sent home to work. Despite the unexpected upheaval, many contact centers have done an amazing job of setting up their employees to be highly productive in their homes, in a matter of days, with little disruption in service. Enterprises that were already using cloud-based solutions have had an advantage in migrating their agents to remote work. And many companies and government agencies that were not yet using cloud-based contact center solutions quickly adopted them, with the assistance of CCaaS vendors who rose to the challenge.

The CBCCI market has become red-hot during the pandemic. Companies worldwide, many of which were planning to transition to a CCaaS solution from their on-premise infrastructure (automatic call distributor (ACD) or dialer), have accelerated their move to the cloud by anywhere from 2 – 6 years, a remarkable rate for the traditionally staid contact center technology market. Enterprises have also moved as many transactions as possible to digital channels, including self-service applications, to address unprecedented volumes of service inquiries.

Among the lessons learned from the pandemic is that the work-at-home business model is here to stay. Contact centers are, in fact, better positioned than most departments to have their employees work remotely, because of the many applications and tools available to oversee and manage their workers, regardless of their location. Interaction (speech and text) analytics can empower contact center agents with the information and context they need to handle inquiries, and also identify trends and challenges for the entire enterprise. Voice and screen recording capabilities allow managers to track their remote employees' performance throughout the day. Quality management (QM) and analytics-enabled quality management (AQM) can identify training and coaching opportunities, and mobile-enabled workforce management (WFM) solutions help keep track of employees and allow agents to adjust their working hours, regardless of where they are located.

Aside from the pandemic, another major trend in the contact center world is the convergence of CBCCI and workforce optimization (WFO) solutions. CBCCI vendors have been selling recording and QM, the core capabilities of WFO solutions, for years, but today CBCCI vendors are increasingly expected to offer their own WFO capabilities in order to be considered industry-leading. Enterprises are also asking their CCaaS vendors to provide a fully integrated administration environment for both the contact center infrastructure and WFO functions to greatly simplify the management of the solutions, the contact center and agents.

CBCCI vendors are the "general contractors" of the contact center technology world and are expected to provide all of their customers' functional requirements. A small number of CBCCI vendors own all of the applications that they sell; others integrate with third-party applications via customized application programming interfaces (APIs) to deliver the needed functionality. A third approach is to offer an open platform along with programmable APIs to allow users to build customized contact center solutions. In all three scenarios, it's helpful to have ecosystems or partnerships with third-party vendors to provide a variety of complementary capabilities.

The CCaaS market experienced a rapid adoption rate during the past decade. In 2010, DMG reported that the number of CCaaS seats was 483,875 out of an estimated 14 million worldwide contact center infrastructure seats, an adoption rate of 3.5%. As of the end of July 2020, the CCaaS adoption rate was 19.9%; of the estimated 19,427,055 worldwide contact center infrastructure seats, 3,869,897 were in the cloud, although not all of these were public cloud seats. (DMG depends on third-party sources for the number of worldwide contact center seats.) DMG believes that the adoption rate of CBCCI solutions may increase another 2% – 4% by the end of the calendar year, and 2021 is expected to be a record year for this market.

The *2020-2021 Cloud-Based Contact Center Infrastructure Product and Market Report* features 9 leading and contending vendors: 8x8, Aspect, Cisco, Edify, Five9, NICE inContact, Puzzel, Twilio and Vonage. The Report thoroughly analyzes the CBCCI vendors, products, functional capabilities, market activity and pricing. It also includes satisfaction survey results for each of the featured vendors. The Report is intended to help contact center, IT and enterprise leaders and managers in companies of all sizes select the right solution, functionality and partner to meet their organization's current and future CCaaS needs.

Key Reasons to Buy this Report

⇒ Overview of the core functional components of CBCCI solutions, including a high-level overview of the core, optional and partner-provided functional components that comprise each of the featured CBCCI solutions

⇒ Insightful look at the broader impacts of the COVID-19 pandemic on economic and industry trends and specific CBCCI trends and challenges that are influencing investments, innovation and adoption

⇒ CBCCI market innovation, including a review of capabilities and functionality that have been recently introduced or are planned to be delivered in the next 12 – 18 months

⇒ Timely discussion of the critical role of CBCCI solutions in keeping contact centers and service organizations up and running during the COVID-19 pandemic, including their ability to support a work-at-home (WAH) model

⇒ Review of the increasing requirements for omni-channel support, including consumers' growing preferences for self-service and digital channel support

⇒ A look at the relationship between workforce optimization (WFO) and CBCCI solutions, and a high-level overview of the WFO components in each of the 9 CBCCI solutions featured in this analysis

⇒ Examination of the importance of, and new requirements for, business continuity (BC)/disaster recovery (DR) plans as a result of the COVID crisis, including WAH provisions

⇒ CBCCI market activity and market share analysis, including trends, adoption rate, and 5-year projections

⇒ Review and assessment of the CBCCI competitive landscape, including a high-level company overview

⇒ Analysis of the key functional and technical capabilities of the 9 featured cloud-based contact center infrastructure solutions

⇒ Implementation analysis, including vendor methodology, best practices, integration capabilities and service level agreements (SLAs)

⇒ Customer satisfaction survey results that measure and rank the vendors across 12 vendor categories, 7 product capabilities, 7 WFO applications and 12 platform components

⇒ Vendor pricing structure and a breakdown of one-time and ongoing costs for a 250-seat CBCCI implementation for a voice only, omni-channel and digital-channel-only implementation for the 9 solutions covered in this Report

⇒ Detailed company reports for the 9 featured CBCCI vendors, analyzing their products, functionality and future research and development (R&D) plans

⇒ CBCCI Vendor Directory

Report Highlights

- **The pandemic has positively impacted the CBCCI market:** This highly competitive market was doing very well before the onset of COVID-19, and the pandemic has fueled even more rapid growth. Companies that were planning investments in CCaaS solutions prior to the pandemic have accelerated their plans, and innovation in these solutions, including investments in artificial intelligence (AI), intelligent virtual agents (IVAs) and other forms of digital service, is proceeding rapidly.

- **CBCCI solutions are poised to address long-term changes brought about by the pandemic:** Companies that had CCaaS solutions in place at the outset of the pandemic were better prepared than their on-premise counterparts to move employees out of the office and into the safety of their homes. Post-pandemic, many enterprises will likely keep some or all of their employees working remotely. Cloud-based solutions such as voice and screen recording, interaction analytics, AQM and WFM are well-suited to addressing the needs of the work-at-home business model.

- **CBCCI and WFO solutions are coming together:** While CBCCI vendors have been selling recording, QM, WFM, interaction analytics and surveying solutions for a long time, often via partnerships, prospects are increasingly asking them to provide native WFO capabilities. Enterprise users want their CBCCI solution to come with a fully integrated administration environment that addresses both contact center infrastructure and WFO capabilities.

- **The CBCCI market is red-hot:** Already one of the fastest-growing IT sectors in the contact center prior to the pandemic, the CBCCI sector is seeing rapid growth, driven by companies' pandemic-related needs. As of the end of July 2020, the CCaaS adoption rate was 19.9%. DMG believes that the adoption rate may increase by another 2% - 4% by the end of the calendar year, and 2021 will continue to show record-breaking growth.

CBCCI Functional and Technical Building Blocks

Synchronous and Asynchronous Omni-Channel

Voice | Web | Email | SMS/chat/messaging | Mobile apps | Social media | Co-browse/screenshare | Video | Fax

CORE COMPONENTS

Integrations

CRM
Ticketing system
Back-office systems
KM
ERP
Supply chain
HRIS
Collections
Field service & dispatch
Third-party apps/app store

Omni-channel agent desktop
Supervisor UI
Admin environment
Omni-channel design and development environment
UC/presence
Mobility
Universal queue
Omni-channel routing and queuing engine
IVR
ACD (voice)
CTI
Dialer/campaign management
Proactive outbound

Voice recording/SIPRec
Screen recording
Email response management
Interaction analytics
Chatbot/virtual assistant (digital/voice)
RPA
Real-time agent guidance
Sentiment analysis
QM/AQM
WFM
VoC/Surveying
Verification/authentication (customer)
Reporting/Dashboards

Optional Components

KM
RPA
CJA
Performance management
PCI DSS/GDPR compliance
Voice biometrics
E-signature

Underlying Technology

Computing
Softswitch
Data infrastructure
Voice infrastructure

Telephony (voice & data carriers)
Network management & automation tools
Knowledge base
AI/machine learning

NLP/NLU
Intent analysis/categorization engine
Rules/workflow engine
Integration tools

Security
Databases
Predictive analytics
WebRTC

Source: DMG Consulting LLC, November 2020

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