ΟΜΟΙΛ UNIVERSE

Publication date 12 July 2022

Author

Mila D'Antonio Principal Analyst, Business Platforms & Applications Charles Juniper Associate Principal Analyst, Enterprise IT

Customer Engagement Platforms, 2022–23



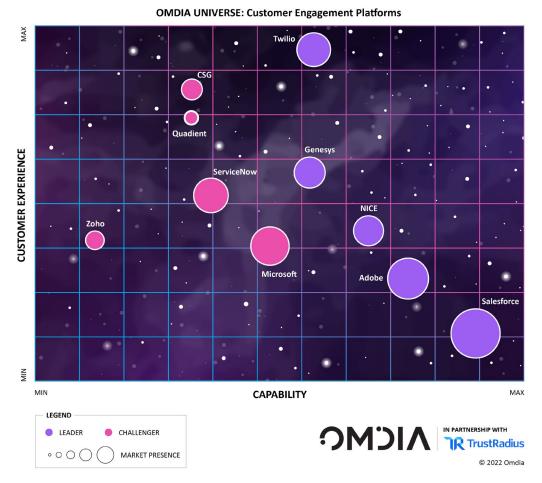
OMDIA

Summary

Catalyst

This Omdia Universe report on customer engagement platforms (CEPs) analyzes the market dynamics of an expanding ecosystem, as well as the well-known vendors in the space. The report is not intended to advocate an individual vendor. Rather, it aims to guide and inform the selection process to ensure all relevant options are evaluated efficiently. Using formal selection criteria, Omdia has picked the leading solutions in the market for comparison (see **Figure 1**).

Figure 1: The Omdia Universe for CEPs



Source: Omdia

νιςως

The research represents a snapshot of the market. For instance, enterprise vendors Pega, Oracle, and SAP declined to participate. Additionally, the focus of other vendors has changed since Omdia published its first comprehensive report covering CEPs in 2018 (Ovum Decision Matrix: Selecting a Customer Engagement Platform, 2018–19). Vendors like LiveVox and Verint, which were rooted in workforce engagement, now offer omnichannel communications platforms. Cloud-based contact center provider Five9 offers Engagement Workflow to interpret unstructured data and deliver interaction context to agents. Communications platform as a service (CPaaS) providers like 8x8, RingCentral, and Vonage offer cloud-based contact center and digital customer engagement solutions. Finally, low code, no code platform providers like Edify, IntelePeer, and UJET are becoming established newer players in this shifting vendor landscape as enterprises look for faster ways to innovate and scale their customer experience (CX) innovations.

For this report, vendors were evaluated based on their responses to a series of probing questions pertaining to their capabilities across three layers (see **Figure 3**) that comprise the functional architecture of a CEP, as well as the underlying enterprise infrastructure. Using in-depth reviews on TrustRadius to derive insights about the CX together with the analyst's knowledge of the market, Omdia's findings gravitate toward the customer's perspective and likely requirements.

Omdia view

Omdia's research on CEPs began in 2018 with the publication of an Omdia Universe (formerly Ovum Decision Matrix) that examined the players in the emerging CEP market. At the time, the CEP vendors were morphing from customer relationship management (CRM) applications that were failing to meet the complex omnichannel demands of business-to-consumer (B2C) companies.

Today, the market is witnessing further convergence from different legacy starting points, including contact center vendors and customer communications management providers. Omdia's Market Landscape: The Customer Journey Orchestration Ecosystem report pointed to the early signs of the market taking shape. It examined the convergence of the market's categories, including customer data platforms (CDPs), customer journey analytics, customer journey mapping and visualization, digital asset management, customer journey orchestration, and marketing optimization. Since then, the market has seen further convergence between contact center as a service (CCaaS), unified communications as a service (UCaaS), and CPaaS providers. Anticipated benefits of this expanded ecosystem include the following:

- The convergence of CCaaS and UCaaS creates end-to-end visibility that enables agents and specialists throughout the enterprise to easily collaborate.
- The convergence of CCaaS and CPaaS streamlines and modernizes communications functions.
- The merger of journey analytics and journey orchestration platforms enhances orchestration capabilities.
- The integration of conversational artificial intelligence (AI) into systems of engagement creates conversational experiences across digital channels.



The above confluence is a direct response to rapidly evolving customer behaviors and expectations accelerated by the COVID-19 pandemic. Customers' interactions now start and stop along myriad digital doorsteps, and customer journeys are complex as a result.

But to a customer, it is not complex at all. To them, the differentiation between online and offline channels does not and should not matter. Such complexity requires enterprises to calculate the "next best action" for every customer and respond at key moments with relevant communications, interactions, and offers. All customer-facing employees across an enterprise must have the capability to proactively engage with customers—from awareness to purchase.

This requires the capability to interact seamlessly along those digital journeys with little to no friction on the customers' end. Wherever customers choose to interact, be it on a third-party reseller's website, their own app, a messaging channel, or in a physical store, they must be met with a relevant and consistent presence that enables them to pick up the thread of their journey and continue it smoothly.

Analyzing the CEP universe

Market definition

The COVID-19 pandemic has exposed the limitations within many organizations in being able to engage with customers through digital means. CRM systems, often deployed in departmental silos, cannot support customers throughout their various interaction journeys. They lack individual customer context, AI assistance, and automation to trigger the most relevant response at scale.

Additionally, the contact center market has been rooted in premise-based systems for years, causing limitations in meeting today's CX needs. These limitations require omnichannel capabilities and connectivity and collaboration with customer-facing employees outside of the contact center.

Today's cloud infrastructure market and the hyperfocus on digital transformation are reshaping the customer service and customer engagement markets into CEP offerings. Due to the rapid and continual convergence of the CEP space, there lacks a single comprehensive definition for CEPs. However, to effectively examine the CEP market, the dynamics within it, and the actions of key players, it is essential to understand what is meant by a CEP. Omdia therefore defines a CEP as follows:

A platform that enables an enterprise to capture and unify customer data from multiple sources and view the customer journeys holistically. A CEP interprets, as well as intelligently and proactively orchestrates, personalized and relevant content, offers, or responses regardless of channel or device. A CEP also allows an enterprise to continuously analyze, learn, and amend how it engages to continually enhance the customer's experience.

Furthermore, CEPs enable an omnichannel approach powered by unified data, digital-first mindsets, and connected workstreams to deliver personalized engagements and real-time responses. They provide a rapid route to an omnichannel capability, especially when connected with operational systems, to close the loop on brand promises and give customers greater control.

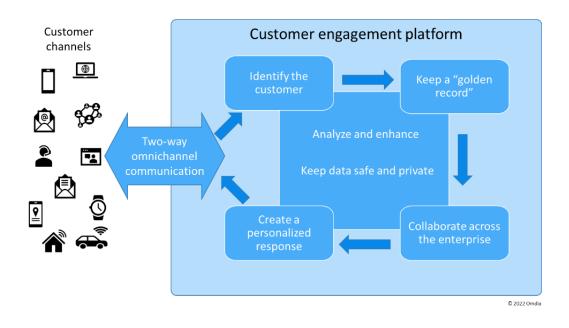
In contrast to traditional CRM and contact center solutions, CEPs can solve the complex challenges of providing individual context along customer journeys and responding at scale. They aim to deliver a holistic enterprisewide perspective to orchestrate relevant content or guidance and to trigger the most appropriate action at every customer touchpoint, regardless of where the journey starts and ends. And they enable enterprises to sense behavioral change and adapt accordingly, maintaining customer relevance and loyalty.

ΩΝΩΝ

CEPs must offer a broad range of capability

Omdia believes a CEP should achieve seven conceptual concepts (see Figure 2).

Figure 2: Conceptual requirements of a CEP



Source: Omdia

Customer engagement enabled by a CEP is not a linear process but a continuous and ongoing cycle. The key requirements of a CEP include the following:

- Enable two-way omnichannel communication: The growing number of ways in which customers and enterprises can engage means a CEP must be able to ingest inbound customer interactions and communicate an enterprise's response through a multitude of channels.
- Identify the customer: A CEP must have the capability to identify customers or prospects from the mass of inbound data—much of which will be anonymous.
- Keep a "golden record": The wealth of data must be linked and consolidated into a comprehensive and accurate profile of each customer, prospect, or entity, such as a household or business account. This profile must be dynamic and persistent, allowing an enterprise to discern changing trends in profiles over time.

νιςως

- **Collaborate across the enterprise:** Unified profiles must be accessible to all functions that interact with customers within an enterprise. This allows a coordinated and aligned response from an enterprise when engaging with customers.
- **Create a personalized response:** Analysis of the customer data and history allows an enterprise to orchestrate the most appropriate content, messaging, offers, etc., to create a personalized engagement delivered at the optimum time through the customers' preferred channels.
- Analyze and enhance: A foundational requirement of a CEP is to interpret actions and intentions across all engagements to build an increasingly detailed and comprehensive view of the customer. This requires the capability to capture, analyze, and visualize all customer interactions and use this to continually align and enhance the customers' experiences with the enterprise.
- Keep data safe and private: Across all stages of a customer engagement, data must be stored securely both to comply with increasing regulatory oversight and maintain the customers' trust that the enterprise will not misuse their data.

CEPs are implemented through a layered architecture

For this report, vendors were evaluated based on their responses to a series of probing questions pertaining to their capabilities across three layers (see **Figure 3**) that comprise the functional architecture of a CEP, as well as the underlying enterprise infrastructure.

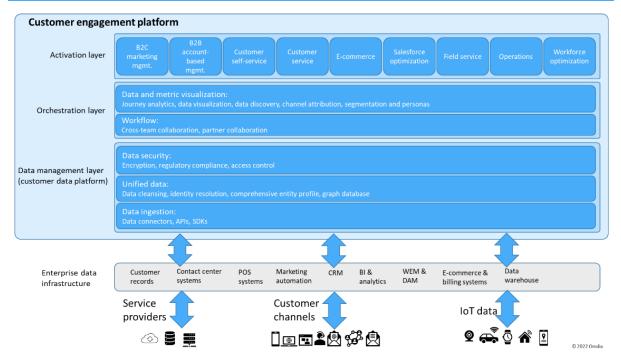


Figure 3: Layered architecture of a CEP

Source: Omdia

ΟΜΟΙΛ

Some enterprises have already implemented at least some of the functionality required for a comprehensive CEP. Most commonly, this consists of the lower layers shown in **Figure 2** supporting the data management aspects, which Omdia defines as a customer data platform (CDP).

In some cases, an enterprise has already implemented a CDP but wants to attain the full functionality of a CEP. This can be achieved by adding an orchestration layer and whichever elements of the activation layer meet the needs of the business on top of an existing CDP.

However, vendors are increasingly offering platforms that provide native functionality across all the layers. They are offering organizations that have yet to deploy a CDP and are looking for a more complete CEP solution the opportunity to implement this within one platform provided by a single vendor.

For the sake of completeness, the following sections describe the functionality of the CDP.

Data management layer (CDP)

Data ingestion

An effective CEP must have the capability to ingest inbound customer interaction from whatever channel or combination of channels customers choose. Increasingly, this means digital channels such as websites, email, and social media, as well as more traditional channels such as contact centers. For many sectors, this must also include offline channels such as paper documents via mail and fax.

Much of this first-party data (i.e., gathered directly by the enterprise) is captured and resides within an enterprise's internal systems, such as customer account systems, point-of-sale (POS) systems, billing systems, CRM systems, and data warehouses.

In addition, a CEP must increasingly be able to ingest real-time stream data from Internet of Things (IoT) devices. These include vehicle telematics, building sensors, and home hubs, as well as personal devices such as smart watches, telehealth, and other wearable devices.

This variety of customer channels and information sources results in a broad range of data types with vastly varying characteristics. Examples include structured, unstructured, and semi-structured data; batch and real-time data; identifiable/personally identifiable information (PII); and anonymous and pseudo-anonymous data—all of which can vary significantly in volume, quality, accuracy, and speed.

Therefore, it is critical for a CEP to have the capability to easily connect to and accommodate a wide range of data sources. This is achieved through providing prebuilt connectors for the most commonly used data sources, such as the main social media channels. These should be available through no code/low code and "drag-and-drop" workspaces that allow non-technical users to easily attach and configure data sources. For more specific connection needs, a CEP should also offer application programming interfaces (APIs) and software development kit (SDK) interfaces.

ΩΝΌΙΛ

Unified data

A fundamental aim of a CEP is to combine all relevant data points relating to a specific entity into a unique, comprehensive, and accurate profile—the so-called golden record. This record also needs to be persistent and dynamic in that it will continually integrate new data points over time (potentially years) to enrich and deepen the organization's understanding of a specific entity. For B2C enterprises, this entity is usually an individual customer or prospect, as well as a B2B company with multiple stakeholders and contacts.

In their interactions with customers and prospects through digital channels, enterprises have a number of tools at their disposal, such as HTTP cookies, tracking pixels, and urchin tracking module (UTM) codes, as well as the use of JavaScript code snippets, to gather device IDs, IP address, operating system used, browser type, screen resolution, etc. Although the data captured can be comprehensive (e.g., tracking cookies can provide a detailed trail of pages, products viewed, and actions taken by a visitor), it is anonymous unless the user chooses to identify themselves through a logon or product purchase, for example.

As a result, correlating anonymous data points from inbound channels back to a particular entity, particularly as browsers, social media channels, and regulators increasingly assert the right to privacy, presents a significant challenge. This challenge is compounded by the many internal enterprise systems, such as CRM, customer record, POS, and customer service platforms. Individuals often store this data using different ID schemas and varying formats, validation rules, and data lifetime policies.

Therefore, to create a unified profile, a CEP should have the capabilities to do the following:

- **Cleanse data:** A CEP should validate, standardize, merge, and de-duplicate the data to overcome variations in accuracy, format, and completeness when consolidating multiple data sources.
- **Resolve to a single identity:** A CEP should link enterprise assigned identifiers such as cookie ID, campaign ID, or device ID to a known personal identifier where possible, such as an email address or phone number, and resolve these into a single master customer profile with a unique master identifier (also known as a canonical ID). A CEP should have the capabilities to resolve identities by using a number of techniques, including fuzzy matching (linking approximately similar data; e.g., Joe Smith is linked to Joseph Smith), deterministic (linking cookie ID to an individual who has identified themselves on a website), and probabilistic (using predictive algorithms based on common attributes such as an IP address).
- Build a comprehensive profile: A CEP must have the capability to store the multiple linked data
 points within an entity profile. The data stored in a profile will vary between enterprises. Beyond
 basic unified personal data (name, email, age, login details, device IDs, cookie data, etc.), a
 profile could also consist of interactional data (page views, backlink clicks, queries, etc.),
 behavioral data (login frequency, time, duration, etc.), and more attitudinal data such as
 survey/voice of the customer (VoC) results, Net Promoter Scores (NPS), complaints, social media
 likes, and shares.

ΟΜΟΙΛ

• Store profiles in a graph database: Entity profiles can be stored in relational databases; however, the rigidity of data schemas makes it difficult to store, analyze, and reconfigure the complex and indirect relationships that exist across the multiple sources of data. To overcome these constraints, CEPs are increasingly storing profiles in native graph databases such as Neo4j. Graph databases store data points as nodes that are linked via relationships and are optimized for highly connected and disbursed data. This approach makes it far easier to analyze and discover connections and insights within the data that are difficult to achieve with other database technologies.

Data security

Ensuring customers' data is kept private and secure is an essential capability both to build the customers' trust in the enterprise and to comply with increasing regulatory requirements. Regulatory requirements continue to become more stringent with the global trend toward greater consumer protection through regulations such as the EU's General Data Protection Regulation (GDPR) and the California Consumer Protection Act (CCPA), as well as industry-specific initiatives such as Treating Customer Fairly (TCF) regulation within the financial service sector.

Therefore, a CEP should offer

- A compliance framework that accommodates GDPR, CCPA, and other regulatory standards as they evolve. These frameworks should offer methods to manage and control data usage based on location, customer consent, data sensitivity, etc.
- The ability to respond to subject access requests (SARs), including the ability to delete all data relating to a particular entity.

Orchestration layer

Workflow

Customer engagement is not the sole responsibility of a single unit within an enterprise and can typically involve stakeholders from marketing, sales, and customer service, as well as product marketing, operations, HR, and potentially external partners. Optimized engagement requires a coordinated response aligning the relevant business functions from across an enterprise to deliver a consistent, convenient, and valued experience to the customer. This necessitates that a CEP makes the unified customer data available to and supports collaboration across different groups within an enterprise.

In addition, different users within the enterprise will use a CEP in different ways. For example, a contact center agent will need real-time access to case data when responding to an insurance claim or a next best action such as a premium reduction when responding to a renewal query. In contrast, digital marketing may need to understand why potential customers are stalling within a website, or those focused on campaign marketing may need to identify the defining characteristics, buying motivations, and key performance indicators (KPIs) of different customer segments.

This requires that unified data and the means to analyze it are readily accessible and usable by a variety of users from multiple functional units, many of which will not be expert-level data scientists.

νιςως

An effective CEP must therefore allow users to deploy these capabilities flexibly and easily using means such as no code/low code workspaces, preconfigured connectors, dashboards, and data visualization.

Data and metrics visualization

Customer habits, needs, and actions change over time, with no two customers evolving in the same way. An effective CEP must allow an organization to capture, analyze, understand, and respond to both short-term transactional engagements and longer-term underlying trends if the relationship is to remain relevant and valued by the customer. An effective CEP should also allow an enterprise to harness all the data points in a unified profile to categorize and group customers into different segments and personas. This requires a CEP have the capability to support marketing and other groups in easily building sophisticated segments using customers' product preferences, communication preferences (channel, time, day, frequency, etc.), propensity to spend, average spend, etc. These segments should also be dynamic and automatically updated as customers change (e.g., when a lapsed customer re-engages with an enterprise or new customers are acquired).

Significant advances in AI/machine learning (ML) over the last five years have enabled CEPs to increasingly provide the means to gather deep insight around customer actions and behavior with accuracy and at a scale simply not possible a few years ago.

A CEP should include AI/ML capabilities that provide

- The functionality to utilize the unified profiles to quickly build templated models as well as more specific customer models.
- A non-technical workbench with prebuilt common segmentation approaches, such as recency, frequency, monetary (RFM), lifetime value (LTV), and "propensity to buy," as well as the capability to create custom segments.
- Unsupervised AI/ML functionality to discover potential new attributes, features, and segments that allow an enterprise to target previously undetected customer/ prospect groups.
- Data visualization functionality such as link graphs, geographic maps, heat maps, pivot tables, and dashboards allows the output from models, customer journeys, and profile segments to be examined.
- A recommendation engine that responds in real time to a customer interaction by determining the next action based on the customer/prospects profile and segment.
- Simple connection and bidirectional data exchange to external business intelligence (BI) and analytics tools and platforms, such as Mixpanel, Google Analytics, SAS, etc.
- Bidirectional exchange of segment data to external service providers, such as data management platforms and ad exchanges, to drive new customer acquisition by targeting "lookalike" audiences.

Activation layer

The activation layer is where customer engagement, guided by the output of the analysis of the unified customer profiles, is actioned. The ways in which this engagement is actioned are specific to an enterprise's customer base, requiring a CEP to have the capability to support a wide range of vertical-specific industry needs and business models, including B2C, B2B, and business-to-business-to-consumer (B2B2C). In the case of the insurance sector, this requires that an effective CEP can support the needs of insurers—whether offering personal line property and casualty (P&C) and life products, health, group benefits, or complex commercial lines and whether directly written or sold via intermediary channels.

One of the most important impacts of a CEP is the ability for an enterprise to link customer interactions garnered from different departments and different channels and use these as explicit indicators of where a customer or prospect is on an enterprise's view of a customer lifecycle (e.g., awareness, infrequent purchaser, loyal customer, lapsed customer, etc.). These signals then trigger the most appropriate response in terms of next best action, preferred channel, optimal frequency, timing, etc. This capability allows an enterprise to move away from a rigid, siloed, and mainly campaign-based mindset toward a more flexible response that continuously aligns with a customer-specific action.

The wide variety of different engagement activities means that the activation layer is the most varied in terms of the functionality supported within a platform. Some of these activities may be supported natively within the platform, while others are supported by third-party products. Typical capabilities residing in the activation layer are outlined below, although it is unlikely that all will be natively encompassed or even needed within a single enterprise's CEP.

B2C marketing management

A CEP should offer support for the development of specific marketing activities to target particular prospects or customer segments, such as new customer acquisition by targeting a lookalike audience. This requires the coordination of content and marketing assets across different communication channels, together with the ability to pass segmented customer/prospect data to the relevant enterprise system or external service provider (e.g., an email service provider) for execution. In addition, the CEP should support the tracking and analysis of customer/prospect responses at a project/campaign level to determine effectiveness and ROI. Additional features could also include loyalty management capabilities that control points programs and administer awards.

B2B account-based management

A CEP should support account-based management (ABM) to orchestrate B2B account activities across the entire ABM lifecycle—from marketing to sales. This support includes capabilities that range from lead nurturing to digital content creation to opportunity management.

Customer self-service

A CEP should allow end customers to carry out self-service activities such as amend basic details (e.g., email address, phone number, or physical address), make inquiries, return items, and make transactions, as well as view a record of any complaints or issues the customer may have had with

the enterprise. This capability should be supported across a broad range of channels, including websites, mobile apps, and intelligent digital assistants.

An increasingly important aspect of self-service will be the need for a CEP to support the growing regulatory requirements giving customers the right to view all their data and the right to have that data deleted if requested.

Customer service

A CEP should support customer service by providing customer service agents with comprehensive access to customer data within a single application. This could also include customer feedback and survey data. In addition, a CEP should provide guided engagement in the form of real-time "next best" or "agent assist" capabilities in the form of scripts/checklists that guide them during a "live" engagement with a customer on the phone or via webchat. More recent customer service capabilities also include workforce optimization (WFO) features.

E-commerce

A CEP should support payment transactions using multiple payment methods (debit, PayPal, mobile payments, etc.) across multiple channels and should support both one-off purchases and ongoing subscription billing. In addition, the CEP should provide the customer with payment history and future payment schedules across multiple channels.

Salesforce optimization

A CEP should support salesforce automation capabilities that offer productivity features that allow employees to view meetings, join conference calls, or take notes, as well as track accounts through integrated CRM data, obtain views of sales performance, and collaborate with team members.

Field service

A CEP should support field service optimization capabilities that configure communications, schedules, and processes throughout the daily service journey, from the order to the day of service. Field service management tools should optimize technicians' productivity while enabling a digital-first, frictionless experience for the customers. Field service should also integrate into billing and order management systems for seamless information flow.

Workforce optimization

A CEP should also offer support for WFO that typically combines recording, workforce performance management, quality monitoring, liability recording, coaching and eLearning, and potentially speech analytics. WFO functionality should also extend to integrating data and reporting on multiple different functions within the enterprise beyond the contact center.

νιςως

Operations

A CEP should support integration with operational systems within an enterprise. These systems could include order fulfillment/distribution, logistics, or even manufacturing platforms. Integration with operational systems allows an enterprise to enhance the CX in a variety of ways by providing features such as product configuration by the customer, order status tracking, choosing delivery date/times, etc.

Market dynamics

Enterprises are prioritizing omnichannel customer engagement

The mad dash in 2020 to adopt an enterprisewide digital-first approach to customer and employee engagement has resulted in a comprehensive digital adoption across all sectors more quickly than many organizations originally anticipated. Key digital transformation priorities have also become top of mind post-COVID-19. According to Omdia's IT Drivers and Technology Priorities – IT Enterprise Insights 2022, which surveys 5,000 global IT leaders, "building the modern workplace," "building a digital ecosystem," and "transforming the customer experience" ranked high among their top three priorities post-COVID-19 (see **Figure 4**).

Build the modern workplace 78% Build a digital ecosystem 72% Transform the customer 72% experience Adopt cloud services 72% Intelligent automation and AI 71% Exploit business information 69% for insights 60% 65% 70% 75% 80% © 2022 Omdia

Percentages represent the number of respondents who said the designated technologies are significantly more or more important post-COVID-19

Figure 4: Transforming CX and building the modern workplace are key priorities post-COVID-19

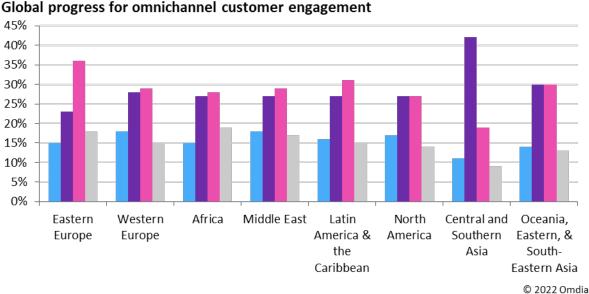
Source: Omdia, IT Drivers and Technology Priorities – IT Enterprise Insights 2022

νιςως

The same study revealed significant progress toward enabling omnichannel engagement across the globe (see **Figure 5**). Two leading regions include Western Europe, where 46% report their omnichannel engagement has either been completed or is well advanced, and Central and Southern Asia, where 53% said the same.

While the insights reveal optimism, digital transformation and the customer engagement journey are never complete. Keeping up with customers' changing expectations and evolving digital device and channel usage requires continual adoption of processes and emerging technologies. Therefore, organizations cannot rest on their laurels.

Figure 5: Survey data underscores a strong focus on omnichannel customer engagement



Global prograss for ampichannal sustamor angagement

Source: Omdia, IT Drivers and Technology Priorities – IT Enterprise Insights 2022

Market leaders

Vendors within the market leaders group include Adobe, Genesys, NICE, Salesforce, and Twilio. All these vendors are characterized by having the best score in terms of functionality and capabilities (see the individual profiles for more details on each vendor).

The market leader group also Illustrates the variety of technology starting points seen in the CEP vendor space. Genesys has grown from a contact center background; NICE was originally a WFO provider; and Adobe hails from a printing and publishing environment. Twilio and Salesforce are the vendors with perhaps the most obvious CX origins.

Despite the differing roots, this group is also characterized by each having a clearly stated strategy of moving rapidly to offer comprehensive, integrated, and highly functional CEPs. In addition, this group demonstrates their commitment to this strategy by often making significant and highly

νιςως

relevant acquisitions that move them closer to their strategic goals. Very recent examples of this include Genesys' acquisition of Pointillist, Bold360, and Exceed.ai; Salesforce's acquisition of Slack, among multiple others; and Twilio's acquisition of Segment. Further details of this group include the following:

- Adobe: Founded in 1982, Adobe has grown from a design, printing, and publishing software developer to a full CX software provider. Personalization and composability are the top objectives of the Adobe Experience Platform (AEP), and the company's CDP serves as the data and decisioning engine. Its roadmap focuses on journey performance management and further integration into systems.
 - Additionally, Adobe Experience Cloud's CX management capabilities are supported by a global ecosystem of over 300 AEP partner integrations.
- Genesys: Genesys was originally founded in 1990 as a call center software business. Since 2019, it has been moving to position itself as an "experience orchestration company." This strategy is manifested in the continual development of the core platforms with functionality moving beyond the contact center in areas such as workforce experience management (WEM). In addition, Genesys has increased its focus on digital engagement, aided by the 2021 acquisitions of Bold360, Exceed.ai, and Pointillist.
 - Genesys has a well-articulated strategy and is taking decisive steps to execute it, particularly with regard to the acquisition of relevant technology. It has strong native data management and orchestration capabilities, particularly following the acquisition of Pointillist.
- NICE: NICE started out as a WFO provider in 1996. Today, after several acquisitions, the company's offerings focus on CX. Full orchestration is achieved through its digital entry point solutions that give customers the right content and provide guided assistance at "digital doorsteps," which include search engines, apps, proactive service, and websites. Its architecture sits atop five pillars: journey orchestration, smart self-service, prepared contact center agents, complete performance solutions, and data management.
 - Omdia sees three unique strengths with NICE CXone: universal AI models for all the major CX use cases and an AI framework that enables continuous learning across the CXone portfolio; its focus on conversational self-service, CX domain expertise (WFO, CCaaS, and CX platform), and agent preparation efforts for digital adoption; and its open cloud platform with hundreds of APIs.
- Salesforce: Salesforce launched in 1999 and has since grown its footprint to offices in 26 countries, more than 70,000 employees, and more than \$26bn in revenue. Since 2019, Salesforce has fortified Customer 360 with a series of acquisitions, with the most recent one, Slack, being the most notable. Customer 360's integrated platform offering includes Salesforce Marketing Cloud, Commerce Cloud, Service Cloud, and Sales Cloud. The platform stack starts

ΩΝΟΜΟ

with a foundation of Hyperforce, layers on Einstein and Customer 360 and industry solutions, and then Slack for collaborative work.

- Salesforce offers a wide range of industry-focused cloud offerings and a powerful data engine. The company has planned multiyear projects to help drive customer success and is constantly observing and responding to customer feedback and market forces.
- **Twilio:** Twilio began its CX journey in 2008. Today, several products comprise Twilio's CEP, including Twilio Engage, Twilio Segment, and Twilio Flex. The product vision for the CEP leverages an API-led approach to help companies meet customers where they are. Twilio affirms that companies cannot achieve that vision without a solid data management foundation and accessible data to all teams across an enterprise. Its objective is to drive personalized real-time customer engagement at scale.
 - Twilio demonstrates strong leadership in the CPaaS and CDP categories. Companies that
 want to give business users control when configuring the user interface (UI) and adding
 custom channels and widgets would find Twilio appealing. The company offers the ability
 to create and customize an engagement platform without hardcoding it.

Market challengers

Vendors within the market challenger group include CSG, Microsoft, Quadient, ServiceNow, and Zoho. The challenger group currently scores less well in terms of overall solution capability. Further details of this group include the following:

- **CSG**: CSG was founded in 1982. The CSG Experiences Practice was created from the January 2020 acquisition of some assets of Tekzenit, Inc., a global digital design firm focused on end-toend business model innovations. The CEP (Xponent) coalesced with the acquisition of Kitewheel in July 2021. Kitewheel's customer journey and analytics platform serves as Xponent's decision engine and is positioned at the center of its portfolio. The acquisition extends CSG's position into customer engagement and CX management by tying together the company's communications engagement channel solutions into CSG Xponent. It achieves this by combining a CDP, customer journey orchestration and analytics, and omnichannel communications in one solution.
 - CSG manages the customer journey from a centralized platform. The CDP integrates customer interactions and gains actionable insights.
- Microsoft: Unlike other vendors covered in this assessment, the revenue generated through CEPs and customer services represent a small proportion of Microsoft's total sales. Its D365 portfolio overall and the customer engagement components have experienced strong year-overyear revenue growth of the order of 50% over the last three years. During that time, Microsoft has moved aggressively to integrate individual components within the D365 portfolio.
 - Considerable strides have been made toward achieving this goal, particularly around data management and embedded AI supported by the Power BI platform and the Azure analytics capabilities. The process of greater integration and enhancement continues, with

ΩΝΟΜΟ

a key milestone being the launch of the Microsoft Unified Customer Experience Platform in November 2021.

- The recent investment and development by Microsoft are resulting in an increasingly functional, integrated, and enterprise-scale CEP. In addition, Microsoft has a clear strategy going forward, together with the financial and technology resources to ensure it is executed.
- Quadient: Since 2019, Quadient has been pursuing a strategy of refocusing its business on smart hardware and cloud-based software solutions with high growth potential. The Intelligent Communications Automation (ICA) business unit is seen as a critical element of this strategy and a key driver of the company's future growth. The first phase of the Quadient strategy began two years ago and involved the divestment of non-core businesses, including YayPay and Beanworks, focused on accounts receivable (AR) and accounts payable (AP) automation, respectively. Quadient is now in phase two of its strategy, focusing on organic development involving the increased development of existing offerings and the launch of new products across all solutions, a greater drive toward a software as a service (SaaS) and subscription-based business service model, and cross-selling to migrate existing customer base to these newer offerings.
- ServiceNow: Established in 2004, ServiceNow is a publicly traded company headquartered in Santa Clara, California, generating annual revenue of \$5.6bn as of the end of December 2021, a 30% increase from the previous fiscal year. The ServiceNow approach differs from other vendors covered in this report. The company's proposition is to not see customer engagement as a specific process within an organization requiring a dedicated platform, but rather, to use a common organizationwide data platform (the Now platform) that links all data regardless of function. ServiceNow then enables the design and implementation of different workflows needed by the business, including customer engagement, to be overlayed across the organization's common data platform.
- Zoho: Founded in 1996, Zoho has its international headquarters in Chennai, India, with North American headquarters in Austin, Texas. It offers a broad range of software suites focused on CRM, financials, secure email, recruitment, HR management, workplace collaboration, and IT management. Zoho's software products can be purchased individually or as a complete suite (Zoho One) consisting of 45 applications. Its market presence is primarily within the small and medium business (SMB) space, but it has some larger clients, including Apple, Amazon (India), and KPMG. The Zoho CRM platform is the largest product line for the company and was first launched in 2005; the product has been in continuous development since that time.
 - Zoho offers a broad range of functionality for both customer engagement and wider organizational processes, allowing an enterprise to fulfill most operational needs from within a single vendor platform.

Figure 6: Vendors' capabilities across Omdia's three CEP architectural layers

Vendor	Data management	Orchestration	Activation
Adobe			•
CSG			
Genesys	•	•	•
Microsoft			
NICE	•	•	
Quadient			
Salesforce			
ServiceNow			
Twilio	•	•	•
Zoho			
			© 2022 Omd

Notes: The table serves as a visual representation of the weighted scores for the vendor's data management, orchestration, and activation functionalities.

Source: Omdia

Opportunities

Enterprises want to build a digital workplace

According to Omdia's *IT Drivers and Technology Priorities – IT Enterprise Insights 2022*, 19% of overall respondents said their efforts to support a digital culture and organizational structure are complete, 32% said they are well advanced, 26% said they are in progress, and 13% said they are in early stages. These statistics represent a heightened level of sophistication and interest in continuous digital investments for enterprises.

Ideally, CEPs should empower multifaceted teams to collaborate and develop meaningful business functions that resonate with business users. CEPs provide a real opportunity for enterprises that wish to build a cohesive organization. Their integrated workflows, real-time insights, and single-pane interfaces should allow diverse groups to deliver on their shared objectives to accelerate the change. Low code or no code solutions offer that edge to each team, so technology is not a barrier to accomplishing business transformations.

Vendor consolidation requires full stack offerings

While some enterprises may pursue a "best-of-breed" modular approach to building their CEP, most clients will increasingly be looking for a comprehensive and integrated platform solution to provide their customer engagement infrastructure.

ϿϺϽͿΛ

This presents an opportunity for vendors in the CEP space to build or acquire capabilities across the entire stack (data management layer, orchestration layer, and activation layer), as described in Omdia's definition of a CEP. There is already significant consolidation among vendors occurring in this space (e.g., the recent acquisition of Pointillist by Genesys), and Omdia expects this to continue over the next 12 to 18 months.

Consumers expect genuine social responsibility

Although product, price, service, and convenience all remain prerequisites, customers see an organization's role in wider society as an increasingly important determinant of their buying behavior. Growing numbers of customers expect companies to act in socially responsible ways, such as reducing their environmental impact, promoting diversity, or reducing inequality. Customers are also increasingly aware of any cynical expression of these aims by companies without evidence of real action, and there is a risk of significant brand damage if companies do not live up to their rhetoric. Such responsible social media expectations present an opportunity for both vendors and enterprises to adopt socially responsible practices and marketing messaging around their strategies and plans.

Reliance on first-party data requires collection of zero-party data

Companies must significantly rethink how they target and engage prospects and customers online due to the deprecation of third-party cookies. The plans of Google to disable 3P cookies in its Chrome browser, representing more than 60% of global browser traffic, by the end of 2022 is the most significant move. Such plans represent a great opportunity for CEP providers to highlight how greater reliance on first-party data collected directly from the consumer with their explicit permission will require highly effective and innovative customer engagement. These types of plans also require a compelling proposition and engender high levels of trust in prospects and customers if they are to exchange their personal details. In addition, the presence of CDPs that can effectively collect and activate first-party data along all digital and traditional entry points is critical.

Rapid digital adoption requires comprehensive CX services

As enterprises remain steadfast in implementing new infrastructures, integrating data and technology, and developing new operating models, they will require a framework that assimilates several elements. And as they quickly deploy CEPs, conduct data integration, and engineer automation, they will require employee expertise to design, develop, and expand customer-centric initiatives at a rather quick pace. This need can be seen as an opportunity for vendors to offer services that accompany CEP deployments that help guide their internal journeys and even assist with hiring and training for digital skill sets.

Low code, no code platform entrants make it easier to build and scale quickly

Low code, no code CEP providers are offering the flexibility to quickly integrate into existing systems and applications and build modern technologies onto legacy systems. In short, enterprises see the business value in adopting solutions that allow them to innovate and scale quickly while reducing operating costs. Currently, there is a hesitancy among vendors to adopt "composable" messaging. However, as the scalability and cost savings needs of enterprises become more urgent, they will look for immediate capabilities to help them quickly achieve their goals. In response, vendors must evaluate their messaging around low code, no code, APIs, and composable workflows.

Threats

New and emerging channels require the ability to scale quickly

Engaging customer via digital channels is not a fixed IT project, but an ongoing strategic process as technology and channels continue to evolve. The emergence of home voice assistants over the last five years and the phenomenal rise of TikTok are just two examples of this continual change. Consumers increasingly expect organizations to adopt new ways of engaging as quickly as they do and expect companies to increasingly deliver frictionless interactions via these channels. Enterprises that are slow to respond will face the threat of competitors that adopt new channels quickly.

Growing data regulations and privacy concerns require trusted online partners

Concerns among consumers, governments, and regulators about how citizens' online data is collected and used, often without their knowledge, have resulted in increased regulation. Most notably, the EU-wide GDPR and California's CCPA, which came into force in 2018 and 2020, respectively.

Enterprises' investment priorities have shifted as a result. According to *Omdia's IT Drivers and Technology Priorities – IT Enterprise Insights 2022*, 49% of respondents indicated that having the tools to manage security, identity, and privacy was among their top three objectives for their IT investments.

While customers are willing to offer their information to drive a better understanding of their needs, they trust that a company will not misuse this data—and any level of mistrust will drive significant defection. Enterprises that fail to make their data security and privacy measures transparent may face the threat of customers' objections. And vendors that do not discuss how their CEPs are equipped to manage data regulations and protect data may face threats from competitors that do.

Market outlook

CEPs can help win the battle for talent

Effective customer engagement is not just about outward communication to a customer. An equally important aspect is ensuring an organization's internal channels are flexible and as frictionless as possible, whether that be in an office setting, remotely, or both. According to Omdia's 2021 Future of Work Survey, investing in technical and digital support for employees ranked among the top five priorities (see **Figure 7**). CEPs can help to mitigate the potential downsides of hybrid working by ensuring all teams that affect the overall CX can interact easily and freely and are supported by automated workflow.

Figure 7: Survey data shows planned investments in enabling a digital workforce



Source: Omdia, 2021 Future of Work Survey

ϿϺʹϽΙΛ

Vendors will include customer communications management to fill a gap

Business and customer communications are the last mile in CX; however, there is a realization in the market that the center of CX is communication. Excluding a couple of vendors, few offer a customer communications management (CCM) solution. As its core component, CCM creates high volume documents like credit card statements, explanations of benefits, and compliance-related documents in large batches.

A well-integrated CCM solution delivers responses in real time, especially when the need is urgent. A digital-first, on-demand CCM solution can prioritize and personalize the responses, as well as automate the delivery of the communication via a chat bot.

To meet current enterprise needs, CCM will start becoming a piece of the larger CX ecosystem. By integrating CCM into the enterprise systems that activate and orchestrate customer engagement, enterprises will gain the ability to respond to key moments in real time with the right business communication.

CEPs will become the control center for composable and configurable processes

The idea of a composable enterprise is about integration, scalability, transparency, and accelerated change via APIs, microservices, and services architecture, so it is modular and customizable per individual organization. This thinking mitigates vendor dependencies, custom integrations, data silos, and costly upgrades, and competing roles and redundant projects are avoided with its architecture.

In the coming months and years, platforms will focus on extending end-to-end visibility while preserving end-to-end consistency. In achieving that, CEPs will become the control center that helps enterprises configure and/or extend their own processes. This approach will help enterprises build resilience by creating environments that enable businesses to consume business processes in a composable fashion and orchestrate them across system boundaries.

AI will become embedded throughout platforms

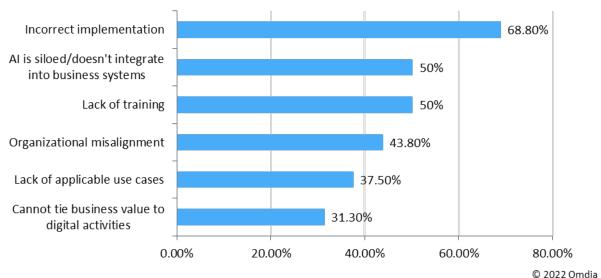
ONDIV

Since the start of the pandemic, business leaders have realized that omnichannel engagement, personalization, and automation are essential for survival. That realization has sparked a reimagining of customer engagement that looks to take AI out of its siloed instances and integrate it across all workflows.

In an omnichannel customer engagement environment, the interaction permutations are endless, and behaviors and expectations are always evolving. Siloed, rules-based approaches cannot cope with this level of complexity and behavioral volatility. Recent survey data highlights how siloed instances of AI do not deliver value. According to Omdia's 2022 Digital-First Survey, 50% of respondents said their AI implementation is not delivering value because it is siloed or not integrated into business systems (see **Figure 8**).

Companies like NICE and Genesys are giving serious consideration to this opportunity and have hired hundreds of AI developers as a result. The market will see vendors further embedding AI so that enterprises can harness its real value when AI is removed from siloed instances.

Figure 8: Top reasons why AI delivers limited value



Why AI delivers limited value

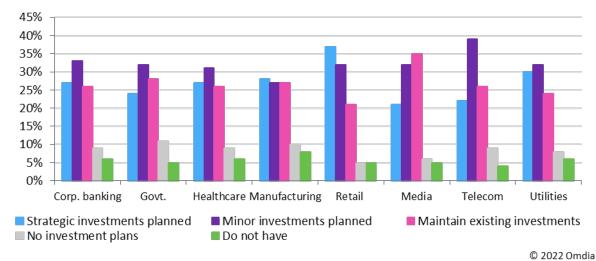
Source: Omdia, 2022 Digital-First Survey

Customer engagement is a work in progress across sectors

ONDIV

According to Omdia's *IT Drivers and Technology Priorities – IT Enterprise Insights 2022,* most respondents across all sectors have significant and minor investments planned for platform adoption (see **Figure 9**).

Figure 9: Planned investments in 2022–23 for CEPs across sectors



% of respondents who said they have planned investments for customer engagement platforms during 2022–23

Source: Omdia, IT Drivers and Technology Priorities – IT Enterprise Insights 2022

The urgency to meet customers' new digital-first demands has resulted in the growth of the tools, technologies, and platforms that enhance customer engagement. Advances in cloud and other emerging technologies, a burgeoning digital engagement technology ecosystem, and faster adoption through innovation are all factors shaping the CEP market and mounting interest in technology investments.

ΩΜΟΙΛ

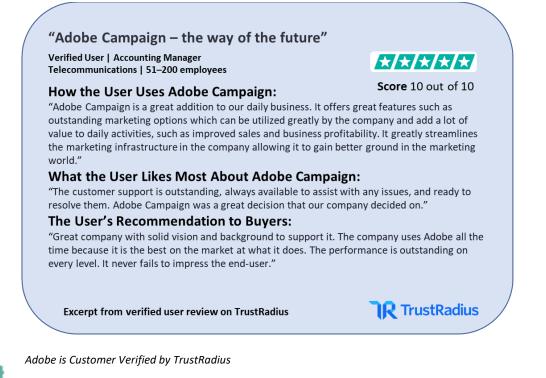
Vendor analysis

Adobe (Omdia recommendation: Leader)

Adobe should appear on your shortlist if:

• You want a platform that offers an expansive global ecosystem of partner integrations.

Figure 10: Adobe Campaign – Adobe customers refer to Adobe Campaign as "the way of the future"



Source: Omdia

Overview

Adobe's vision has matured since the company's inception in 1982 as a design, printing, and publishing software developer. Today, Adobe is widely known in the B2C and B2B markets as an SaaS-based customer engagement brand with a presence in 27 countries.

ΩΝΩΙΛ

With the aid of acquisitions, Adobe has expanded its share of the CX ecosystem with marketing, analytics, and e-commerce products (see **Table 1**) that are supported by the underlying AEP architecture. CEO Shantanu Narayen is counting on these efforts to help push the company toward a long-term goal of \$20bn in annual revenue. Adobe's latest full fiscal year revenue totaled \$12.9bn, with its CEP revenue comprising \$3.1bn of that total—an 8.7% increase over the previous fiscal year.

Table 1: Adobe acquisitions since 2018

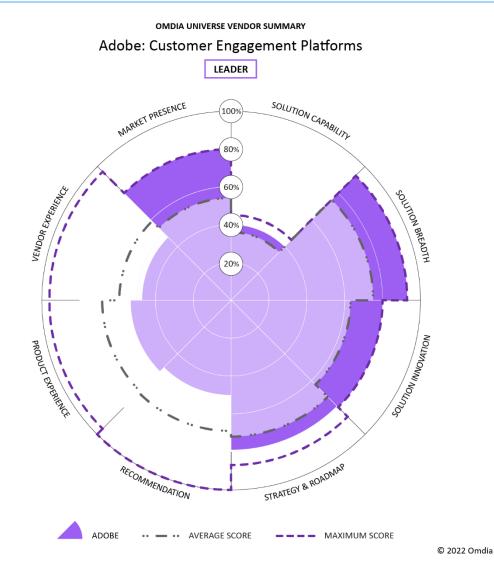
May 2018	Magento is a marketing commerce platform.
September 2018	Marketo is a provider of B2B marketing automation, lead management, and account-based marketing.
November 2020 Source: Omdia	Workfront is a work management platform.

Personalization and composability are top objectives of the AEP. According to Klaasjan Tukker, senior director, Product Marketing, AEP, the industry transition to using first-party data has served as a major driver of the evolution of companies adopting a CEP. "The use of third-party cookies has made us complacent as an industry," he said. "Companies need to understand who their customers are, how to acquire them, and how to build a trustful relationship."

Adobe is guiding that first-party personalization journey by focusing on data and content enabled through AEP. The Adobe Summit event in March bolstered that objective, where the overall theme centered on making the digital economy personal. "The digital economy becomes personal when individual experiences are tailored," said Adam Justis, director of Product Marketing, Adobe Experience Cloud.

Finally, Tukker acknowledged that the composable nature of Adobe's software is coming together both internally and through third-party developers to blend creativity with data to enable holistic engagement. "This is our vision for how experiences are created and delivered," he explained.

Figure 11: Omdia Universe ratings – Adobe



Source: Omdia

Data management

AEP is built API-first, and all platform capabilities are available to third-party developers for integration and extension. Real-time input is made possible through a process called streaming ingestion, which performs computations and makes decisions to deliver individualized experiences.

Adobe Real-Time CDP integrates with specialized tools that enable marketing campaign planning, scheduling, and execution ability. A Real-Time Customer Profile is at the heart of AEP. Using the Identity Graph, each customer profile includes attributes of the consumer, cross-channel behavior of the consumer, segments that the profile is a member of, as well as other factors. The Real-Time

26

Customer Profile, once formed, provides access to both individual customer profiles and related time series events. With the addition of Real-Time CDP, B2B edition, Adobe also supports account profiles.

Orchestration

Orchestration requires unified data and the means to analyze it, and it should be readily accessible and usable by a variety of users from multiple functional units. Adobe Experience Cloud achieves this through dashboards for monitoring KPIs and creating ad hoc analysis projects that support unlimited data drill-down and relationships, comparisons (of dates, segments, etc.), and multiple data visualizations in a drag-and-drop interface. Users can control the layout of visualizations and data tables and can adjust size/shape/etc. Segments can be created directly from the UI during the analysis workflow by selecting any data point the user wants to turn into a segment. Reports for A/B testing, rules-based targeting, and recommendations include visual representations showing confidence, interval, and lift.

Personalization capabilities are the centerpiece of any orchestration layer, and Adobe Journey Optimizer provides the capability to create personalized, optimized, and orchestrated experiences in applications running on AEP. With Journey Optimizer, users can determine the best option from a set of available choices in the form of offers, content components for a web experience, conversation scripts, and actions to take.

Personalization is achieved through a more complex decisioning algorithm. Adobe Experience Manager offers a built-in personalization engine that allows delivering targeted content and experiences for arbitrary segments/audiences. Switching into targeting mode, any content element can be turned into a targeted component that delivers personalized content/experiences based on a user's group, segment, audience, etc. In the underlying Context Hub, any available data to a user from various sources (including geolocation, e-commerce, social media, header data, user profile, CRM, etc.) can be aggregated and organized in data stores. It also allows for the simulation of the appearance and behavior of a website for a specific user/persona and to preview the delivered personalized experience.

Advanced personalization capabilities are available through integration with Adobe Target to provide A/B/n testing and the delivery of contextual recommendations based on recent browsing behavior, as well as automatically swap out content after feedback has been captured. Adobe Experience Manager also uses the AI and ML capabilities of Adobe Sensei for tailored content creation.

Activation

Activation happens when customer engagement is guided by the output of the analysis of unified customer profiles. Adobe Experience Cloud (AEC) achieves that through Adobe Campaign, which supports contact centers, interactive voice response (IVR), and online chat agents with the ability to generate a list with the desired fields for use in contact center systems. Adobe Campaign can also connect to an IVR and chat agents via API calls to personalize the CX through offers, promotions, and Q&A. Marketers can manage how many times an offer is displayed cumulatively and individually. If an offer is not actioned, Adobe Campaign will automatically propose the next best offer. Adobe

ΟΜΟΙΛ

Campaign directly captures interaction and response data on digital channels, attributing it to each individual and to the offer.

Also, with Adobe Workfront, users can manage the end-to-end lifecycle of work and content—from strategy to delivery. Functionality includes the ability to plan and prioritize work; centralize and automate work processes; collaborate on, review, and approve work; and measure for quality and compliance.

Additionally, Adobe Workfront Fusion, a codeless integration platform, connects data sources across the enterprise tech stack to integrate team performance with enterprise data (finances, customers, talent, etc.). Customers can measure, analyze, and optimize with tailored data sets, which are presented via role-based reports/dashboards. Adobe intends to broaden the impact of Workfront next year so that it serves as the operating model across its customer organizations (see **Figure 12**).

Figure 12: Adobe's short- and long-term roadmap

	2022–23 priorities
Roadmap	 Grow the ecosystem of AEC across partners and ISVs Extend and build out the value of the content supply chain Broaden the impact of work management and the acquisition of Workfront Ensure HIPAA readiness across multiple AEC applications Expand security, privacy, encryption, and consent Develop greater integration between Marketo Engage and Real-time CDP for B2B

Source: Omdia, Adobe

Strengths

 The Adobe Exchange partner program governs technology partners with more than 3,000 members and thousands of applications and extensions in the Exchange Marketplace. Adobe offers a variety of support services to help partners create prepackaged integrations and connectors. Services include sandbox provisioning, demo hubs, certification courses, technical sales programs, learner journeys, and API/service documentation, as well as co-marketing and co-selling. Adobe's Solution Partner Program supports systems integrator/agency/consulting partners. Partners are adept at implementing and running Adobe Experience Cloud solutions to help drive adoption in key verticals.

@ 2022 Omdia

ΩΝΩΝ

- Adobe Experience Cloud's CX management capabilities are supported by a global ecosystem of over 399 Adobe Experience Cloud partner integrations. And Adobe Experience Cloud is supported by a broad ecosystem of over 4,000 partners. Adobe has announced new partnerships with The Weather Company, an IBM Business, to personalize digital experiences with weather data; OneTrust to help brands manage user consent; and Anaplan to combine financial planning and marketing workflows for on-time and on-budget campaign execution. Partnerships with Walmart, FedEx, and PayPal enable brands to give consumers more payment and delivery options.
- The Adobe Sensei AI/ML framework is infused across products, apps, and services. Adobe offers a number of AI/ML services designed specifically for marketers to power better CXs. The AI/ML services aim to inform, augment, and standardize attribution, customer journey management, lead scoring, and content into a single unified experience across all of Adobe Experience Cloud.
- Adobe is committed to developing AI in an ethical way and has taken great measures and steps to ensure AI is developed responsibly.

Limitations

• Adobe does not offer native capabilities to capture customer feedback. Nor does it offer native voice/speech analytics capabilities to detect emotion.

CSG (Omdia recommendation: Challenger)

CSG should appear on your shortlist if:

• You want a platform that offers end-to-end CX visibility and orchestration.

Overview

CSG was founded in 1982 under the name Cable Services Group (CSG) as a division of the payment processing company First Data Corp., which provided revenue management and payments solutions. When the company went public in 1996, CSG grew from \$80m in annual revenue when it was acquired to \$132.3m and \$171.7m by 1997. In 2021, CSG reported \$1.046bn in annual revenue, with revenue from CSG Xponent, its CEP, totaling approximately \$180m.

The CSG Experiences Practice was created from the January 2020 acquisition of some assets of Tekzenit, Inc., a global digital design firm focused on end-to-end business model innovations (see **Table 2**).

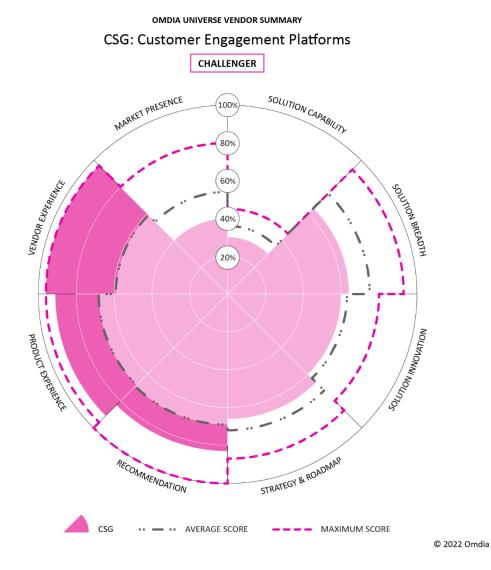
Table 2: CSG acquisitions since 2020

January 2020	Tekzenit
May 26, 2021	Tango Telecom
July 14, 2021	Kitewheel
October 11, 2021 Source: Omdia	DGIT (focused on monetization around telecoms)

However, the CSG Xponent platform did not really coalesce until the acquisition of Kitewheel in July 2021. Kitewheel's customer journey and analytics platform serves as Xponent's decision engine and is positioned at the center of the Xponent portfolio. The acquisition extends CSG's position into customer engagement and CX management by tying together the company's communications engagement channel solutions into CSG Xponent. It achieves this by combining a CDP, customer journey orchestration and analytics, and omnichannel communications in one solution. CSG manages the customer journey from a centralized platform; the CDP integrates customer interactions and gains actionable insights, and CSG's Journey as a Service offers prepackaged experience design services to launch journeys.

The customer journey in today's digital world is complex. Customer interactions are non-linear, which means customers find themselves on different paths at different stages over the entire journey. Cohesive customer journey orchestration relies on a unified platform that provides a deep understanding of the customer across every channel and leverages that understanding to orchestrate the right response or outreach in the right channel at the right time. The Xponent decision engine aims to solve the modern customer engagement challenge of bridging the gaps created by digital expansion.

Figure 13: Omdia Universe ratings – CSG



Source: Omdia

Data management

The CDP is a source of truth for all customer data. Connecting new data sources and applications to the CSG CDP for data assessment is a process well supported in the platform. Any sources accessible as files in cloud storage, on an (S)FTP location or Fileshare, or via an ODBC/JDBC connection can be easily configured by an end user through the UI. This eases the process of onboarding customers with existing data lakes or enterprise data warehouses. Sources accessible through a REST API can also be configured.

ΩΝΟΙΛ

The CDP leverages a library of prebuilt connectors to ingest and activate data to and from third-party applications and campaign execution tools. Within the CDP, companies can activate attributes and segments to their various campaign execution platforms, including the CSG Journey Orchestration tool for personalized marketing journeys. Additionally, campaign performance data can feed back into the CDP for closed-loop multi-channel attribution reporting.

A core feature of the CSG CDP is the 360-degree profile using an identity resolution process across any type of dataset. CSG's identity resolution engine offers three complimentary unified components: a device graph, a probabilistic matching engine incorporating digital and other signals, and a master data management (MDM) system for matching offline data (which includes data standardization/hygiene and fuzzy routines). CSG also integrates with a variety of leading device graphs and data providers and can incorporate "golden IDs" generated from other systems as an input to the CDP native engine.

CSG Xponent resolves identities between channels whenever possible and builds a single profile store for all customers, known or anonymous. It combs through real-time and historical data to find profiles that share the unique identifiers and collapse them into a single profile with all the associated customer attributes, interactions, and journey step definitions. CSG Xponent also supports data hygiene and matching procedures.

CSG provides users with packaged analytical models and offers a workbench to build predictive models using statistical and ML algorithms to support decisioning natively. The company also integrates this capability into external systems. CSG tracks and stores customer engagement scores automatically, and the CDP can be used to track customer state and context as defined by users.

Orchestration

Customer experience is the sum of customer journeys. As such, the customer lifecycle stops and starts where the customers decide. The more touchpoints companies can have along the way, the more engaged their customers are and the more digital breadcrumbs they will leave.

CSG offers end-to-end management of customer communication channels to respond to those digital breadcrumbs. It designs and develops communication solutions for voice, print, SMS, MMS, email, chat, virtual assistants, and mobile push notifications.

Business users can also perform their own journey optimization by using CSG's Performance Dashboard and real-time metrics to adapt rules and models to test and optimize the journey processes. This year, CSG plans to advance its capabilities in data integration, visibility and design simplification, journey automation, and journey step prediction (see **Figure 14**).

CSG's Performance Dashboard shows breakdowns into critical segments and comparisons of various journeys as needed. This allows companies to answer business questions about churn rate, journey success or cost, NPS, etc. The dashboard gives businesses the ability to mix and match the building blocks they will need to present ad hoc analysis tied to the businesses' analytics database.

Additionally, CSG's Journey Steps solution provides and standardizes an end-to-end customer journey measurement framework. The Journey Step Management interface allows for streamlined creation and tracking of critical business steps and KPIs. Each journey step created is associated with

ΩΝΩΝ

a positive, negative, or neutral outcome label that gives businesses a way to establish a baseline of the locations and reasons for key bottlenecks for customers within the journey.

Activation

The platform offers API, no code interfaces, and web services to integrate into other systems, including customer contact systems such as call center and campaign management, as well as social channels, operational systems, databases, and reporting and analytics tools. It enables segment and attribute creation and activation to external channels.

Companies can then manage the entire journey from a centralized platform, spanning journey strategy, customer data management, and omnichannel engagement. CSG is channel agnostic and specializes in providing a single central repository of global decisioning rules, logic, and analytics. CSG Xponent offers a native API to embed data collection as well as orchestration decisions. This API can enable 150 integrations in multiple channels, including websites, emails, applications, and mobile applications.

CSG's NBX decision engine is designed to execute individual decisions at a large scale in real time. The decision engine is used to create and execute journey flows like onboarding, collections, or fraud notification.

Figure 14: CSG's short- and long-term roadmap

	2022 priorities	2022–23 priorities
Roadmap	 Increase its number of use cases Enhance and advance capabilities in data integration, visibility and design simplification, journey automation, and journey-step prediction Advance real-time contextual engagement and journey capabilities in CSG's own channel solutions and applications, as well as key ecosystem partners Increase the speed of deployments 	 Create new domain expertise Offer zero-touch experience management solutions that allow smaller organizations to have access to and leverage advanced real-time engagement solutions Bring contextual experience through the entire value chain via advanced communications networks, 5G, cloud, and IoT Optimize augmented and immersive engagement experiences

© 2022 Omdia

Source: Omdia, CSG

Strengths

- CSG offers a "crawl, walk, run" approach to deploying its platform and scaling through a set of templated use cases and best practices per each industry.
- CSG offers journey consulting workshops to help clients develop in-house skills around adding new journeys, journey mapping, channels, rules, metrics, etc.



• The company's end-to-end agnostic approach allows it to link into existing systems to overlay a customer journey without the need for the implementation of or changes to technology.

Limitations

ϿϺʹϽΙΛ

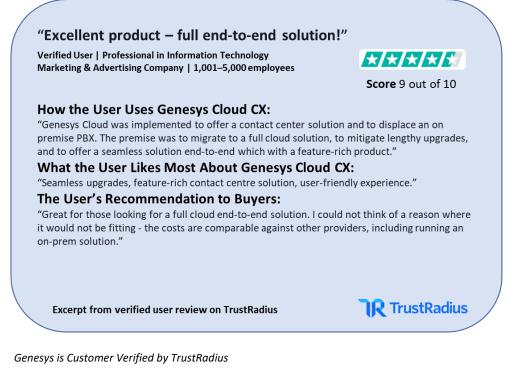
- While CSG has strength within the customer service space, there may be a perception that there are limitations to how the platform is used. However, customers are using Xponent for marketing and sales implementations in addition to customer service.
- CSG Xponent does not support traditional on-premises deployment, but the solution can be deployed within a customer's private cloud implementation.

Genesys (Omdia recommendation: Leader)

Genesys should appear on your shortlist if:

• You want strong data management and orchestration capabilities together with seamless interoperability with platforms such as Salesforce or Adobe.

Figure 15: Genesys Cloud CX (formerly Genesys Cloud) – Clients see Genesys Cloud CX as a comprehensive, end-to-end solution



Source: Omdia

ΩΝΌΙΛ

Overview

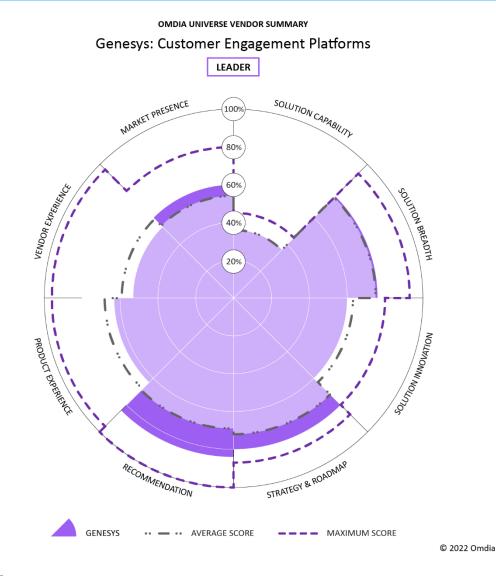
Headquartered in Daly City, California, Genesys was originally founded in 1990 as a call center software business. It is currently owned by investment companies Permira, Technology Crossover Ventures, and Hellman & Friedman. Most current total revenue figures for the fiscal year ending January 2022 are \$1.9bn. Genesys has deployments in over 100 countries and has approximately 6,000 employees. Its client base is principally global and large enterprises across a broad range of industries; financial services (including insurance) is the most significant segment for the company.

Although the company's origins are in call center software, since 2019, Genesys has been moving to position itself as an "experience orchestration company." This strategy is manifested in the continual development of the core platforms with functionality moving beyond the contact center in areas such as WEM. In addition, Genesys has increased its focus on digital engagement, AI, and customer journey management, aided by the recent acquisitions of Bold360 (May 2021) and Exceed.ai and Pointillist (December 2021).

The complete Genesys product offering has been assessed for this report:

- **Genesys Cloud CX:** Unified cloud contact center and orchestration platform, bringing together customer and employee experiences across phone, email, chat, text, and social channels.
- **Genesys Multicloud CX:** Contact center platform aimed at large or global enterprise clients with the requirement to deploy across multiple cloud providers.
- **Genesys Cloud Digital:** Digital-only customer engagement solution with emphasis on orchestration and embedded AI. Genesys Cloud Digital was launched in June 2021, and it brings together the digital and AI capabilities from Genesys and the Bold360 acquisition.
- Pointillist by Genesys: Customer journey management platform that was acquired by Genesys in December 2021 and offers customer journey data management, journey analytics, and journey orchestration capabilities.

Figure 16: Omdia Universe ratings – Genesys



Source: Omdia

Data management

With the acquisition of Pointillist, Genesys offers strong native data ingestion capabilities from multiple source categories, including DXP and external analytics providers such as Google and Adobe, contact centers (including from competitors such as Avaya and NICE), VoC systems (e.g., Qualtrics, Medallia), CRM systems (e.g., Salesforce, Oracle, Pega), and text and speech systems (e.g., Clarabridge, Nuance). All inbound data is captured as an event within an event schema. Events undergo automated real-time identity resolution to connect customer interactions across multiple touchpoints without the need to share primary keys or require manual mapping.

Orchestration

The Pointillist acquisition also enables Genesys to significantly enhance its native customer orchestration and analysis capabilities. Genesys and Pointillist have been partners since 2019, with integrations available through the AppFoundry starting in 2020. Further integration of Pointillist capabilities is a key development priority for Genesys, and Omdia anticipates this will be completed by the end of 2022. These integrated capabilities include strong journey visualization, offering a centralized view of a customer's active and past interactions; predictive engagement, such as offering a chat session or other help to drive toward a desired outcome; Al-supported predictive routing to direct customers to the most appropriate agent; and embedded Al and analytics (including of voice communication) to understand the effectiveness of interactions and identify potential issues.

Activation

The Genesys platforms have limited native capabilities within Omdia's definition of the activation layer. However, Genesys has developed strong strategic relationships with key players, such as Salesforce, Adobe, Microsoft, and Zoom, and implemented connectors that provide very high levels of interoperability with these platforms. For example, the interoperability between Genesys and Salesforce provides Salesforce users with advanced pop-ups with call information and journey data and supports the transfer of all call data with agents and automated updates of Salesforce records with call interaction. It also provides agent scripts, support for webRTC for distributed working, and integration with Salesforce Einstein AI capabilities.

The Genesys CX platforms offer strong native WEM capabilities, including the following:

- Employee performance management with real-time analysis to highlight coaching/training needs
- Gamification to drive performance
- Decision tools to support call volumes predictions, skill planning, and contact center forecasting
- Automated policy-driven interaction recording and screen capture for compliance needs across all channels
- Text and speech analytics to identify training needs and sentiment analysis
- Topic spotting to monitor performance and CX

Figure 17: Genesys' short- and long-term roadmap

	12-month priorities	24-month priorities
Roadmap	 Add Experience Index capabilities—a metric that measures the overall customer experience across all channels Add Smart Advisor to support agents with real-time knowledge Enhance native conversational AI, including multi-language capabilities, NLU tuning, and bot authoring Create roll-up of metrics so that they can be seen at the individual customer, segment, journey, or global level Enhance WEM, including recording QA, trending issues/topics, and extended sentiment support Enhance channels and messaging templates, as well as carousel options and video and document attachment Enhance routing capabilities to include work item routing and digital predictive routing Enhance external data enrichment capabilities 	 Lead qualification bots Next best action framework Enhanced ML model engagement Knowledge discovery and expert model capabilities Community integration and open event stream capabilities

Source: Omdia, Genesys

Strengths

- Genesys has a well-articulated strategy and is taking decisive steps to execute it, particularly with regard to the acquisition of relevant technology.
- Strong native data management and orchestration capabilities, particularly following the acquisition of Pointillist.
- Strong partnerships and strategic alliances with major cloud providers and customer engagement players, including Salesforce, Adobe, Microsoft, AWS, and Google.
- Large and well-established partner ecosystem through the Genesys AppFoundry, allowing over 500 external app providers to add capabilities to the Genesys platforms.

Limitations

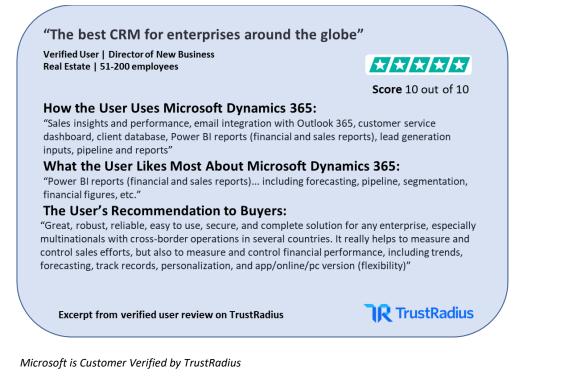
 Native capabilities within the activation layer may not meet the needs of all clients, with Genesys relying on vendors such as Adobe Experience Cloud and Salesforce to provide this functionality. However, Genesys offers very high levels of interoperability with such platforms. ΩΝΩΝΟ

Microsoft (Omdia recommendation: Challenger)

Microsoft should appear on your shortlist if:

• You want a CEP that offers the ability to incrementally add a wide range of native functionality as needed and that seamlessly interoperates across the whole business.

Figure 18: Microsoft Dynamics 365 (formerly Microsoft Dynamics CRM) – Clients see Microsoft Dynamics 365 as a comprehensive and easy-to-use platform



Source: Omdia

Overview

Founded in 1975, Microsoft is one of the largest software companies in the world, with annual revenue of approximately \$170bn. Its customer engagement offerings sit within the Microsoft Dynamic 365 (D365) product set.

Specifically, for the purposes of this report, the following product subsets of the wider D365 offering have been evaluated:

- Dynamics 365 Customer Insights
- Dynamics 365 Marketing
- Dynamics 365 Sales

ONDIV

- Dynamics 365 Customer Service
- Dynamics 365 Field Service

Unlike other vendors covered in this assessment, the revenue generated through CEPs and services represents just a small proportion of Microsoft's total sales. Omdia estimates the revenue contribution from CEPs (as per Omdia's definition) amounts to less than 3% of Microsoft's total revenue. However, this still equates to approximately \$4bn; consequently, Microsoft has a significant market presence in this space. In addition, the D365 portfolio overall, and the customer engagement components in particular, have experienced strong year-over-year revenue growth of approximately 50% over the last three years.

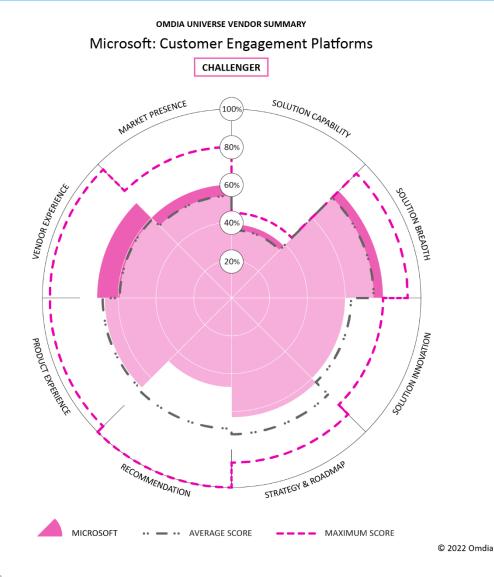
The D365 offering has a strong, established presence among SMBs across most industry verticals, and the portfolio continues to gain greater traction among larger Fortune 100 enterprises. While Microsoft is a truly global organization with some 180,000 staff, approximately 50% of the D365 revenue is generated in North America, with an additional 32% coming from European-based clients.

The Microsoft strategy is to provide a robust, enterprise-scale, and unified CEP that will allow organizations to effectively interact and engage with customers. Over the last three years, Microsoft has moved aggressively to bring this about by integrating individual components within the D365 portfolio, some of which had varying degrees of interoperability previously. Considerable strides have been made toward achieving this goal, particularly around data management and embedded AI supported by the Power BI platform and the Azure analytics capabilities. The process of greater integration and enhancement continues; a key milestone was the launch of the Microsoft Unified Customer Experience Platform at the company's Ignite event in November 2021.

In addition, Microsoft continues to add more capabilities to the D365 offering through acquisitions. Recent examples related to customer engagement include the following:

- Nuance (April 2021): Conversational AI, particularly in the healthcare provider sector
- Suplari (July 2021): Analytics that optimize and predict supplier spend
- Orion (July 2020): AI-based video analysis
- **Softomotive (May 2020):** Enhancements to existing robotic process automation (RPA) capabilities within the D365 portfolio

Figure 19: Omdia Universe ratings – Microsoft



Source: Omdia

Data management

The D365 Customer Insights app provides the CDP functionality within the wider Microsoft Customer Experience Platform. The app ingests data using a number of methods, including over 740 Power Queries and over 60 prebuilt connectors to access internal and external data sources and systems.

Ingested data is then cleansed, standardized, and resolved through a map, match, and merge process to create a unified customer profile.

The Customer Insight app has significant embedded out-of-the-box AI-supported analytics capabilities that operate on the profile data. This includes transactional churn, subscription churn,

ΩΝΟΜΟ

customer lifetime value, suggested profile segmentation, and common KPIs. In addition, Azure service tools and Azure Synapse Analytics provide the capabilities to develop and train predictive ML models using customer profiles and other data sources.

Orchestration

Most of the customer orchestration capabilities of the Microsoft CX platform reside in the D365 Marketing app. The module allows the drag-and-drop design of marketing campaigns with the ability to automate multi-channel campaigns by creating personalized emails, executing follow-up activities, and triggering workflows depending on customer response. Again, out-of-the-box embedded AI supports orchestration activities such as templated promotion, newsletter, emergency communication, optimization of email and SMS timings, channel recommendations, and sentiment analysis. D365 Marketing also provides the capability to create online customer surveys using the D365 Customer Voice app, with the sentiment, feedback, trigger words, and survey activities being captured within the customer's profile. D365 Marketing also provides dashboards and reporting to track and analyze the effectiveness of marketing initiatives.

Activation

Within the D365 Customer Experience Platform, there are a number of modules to support customer activation, although not all are covered in this report. Key customer activation-related apps include the following:

- Microsoft Advertising
- Microsoft PromotelQ
- D365 Sales
- D365 Customer Service
- D365 Commerce
- D365 Field Service
- D365 Remote Assist

Beyond apps that directly support customer activation, the Microsoft Customer Experience Platform benefits from the very close coupling with the wider Microsoft productivity and office software, such as Teams, supporting cross-organizational and customer collaboration.

D365 Sales

Actioning of an organization's sales process resides in the D365 Sales app. D365 Sales is offered as a tiered product depending on the sophistication and scale required by the organization, varying from Sales Professional level (offering sales automation) to the Sales Premium level (offering AI-supported conversational and relationship analysis, predictive sales and opportunity modeling, ABM functionality, and advanced integration to LinkedIn Sales Navigator). The D365 Sales modules are

ΟΜΌΙΛ

closely integrated with the Marketing app and Customer Insights CDP to allow customer profiles and marketing data to be readily available to sales teams.

D365 Customer Service

The D365 Customer Service app provides multi-channel customer support (voice, text, webchat, email), skills-based routing, case management, case resolution per individual customers, AI-driven embedded insights, and analytics to improve customer satisfaction.

D365 Field Service

The Dynamics 365 Field Service modules (together with D365 Field Service and D365 Remote Assist) offer onsite service functionality, including scheduling algorithms to reduce travel and vehicle use; track resolution of customer issues; communicate arrival time to customers; provide account and equipment history to field technicians; and provide customer updates about service call status and expected resolution.

Figure 20: Microsoft's short- and long-term roadmap

	12-month priorities	24-month priorities
Roadmap	 Continued focus on embedding AI across D365 portfolio apps Greater integration with wider Microsoft 365 and Teams offerings to reduce application switching apps Enhanced Customer Insights to include multichannel analytics from other channels and greater connectivity with Microsoft Search and Advertisement 	 Continued focus on consistent and cohesive customer journey across all channels Addition of journey discovery capabilities Enhancement of mobile in-app and web personalization capabilities

Source: Omdia, Microsoft

Strengths

- The recent investment and developments by Microsoft are resulting in an increasingly functional, integrated, and enterprise-scale CEP. In addition, the company has a clear strategy going forward, together with the financial and technology resources to ensure it is executed.
- Highly modular and extensible architecture allows enterprises to use only components required but with the flexibility to add capabilities as required.
- Highly integrated with a broad range of productivity applications/tools that are already ubiquitous in many organizations, such as Microsoft Office 365, Teams, etc.

© 2022 Omdia

Limitations

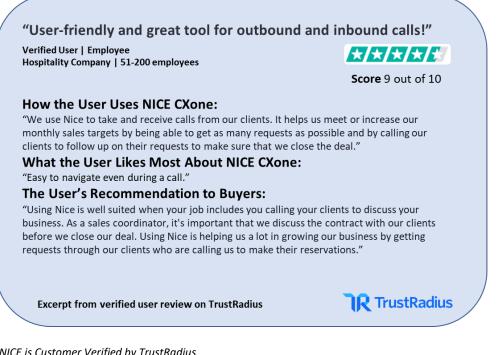
The company currently lacks some native orchestration capabilities (e.g., marketing asset creation). However, it can easily extend capabilities with the use of third-party software through the AppSource. In addition, Microsoft continues to develop and/or acquire this native capability.

NICE (Omdia recommendation: Leader)

NICE should appear on your shortlist if:

You want a platform that lays the groundwork for end-to-end digital-first engagement with embedded AI for continuous learning.

Figure 21: NICE CXone (formerly NICE inContact) – NICE customers say the tool is user-friendly



NICE is Customer Verified by TrustRadius

Source: Omdia

ΩΝΟΜΟ

Overview

Founded in 1996, NICE started out as a provider of WFO. Following the acquisition of inContact in 2016, NICE launched CXone, integrating WFO, analytics, and omnichannel routing into a unified cloud platform and transitioning the traditional contact center into an "experience center." The company is now taking it to the next step with a full CXi offering.

Over the past three years, NICE has made multiple acquisitions to continue to strengthen its digital CX portfolio (see **Table 3**) as well as organic developments, including its Enlighten AI purpose-built AI engine. The expanded portfolio has likely contributed to a steady climb in revenue for its CEP since 2019. The most recent fiscal year 2021 saw a 1.7% increase to \$1.35bn. The reinforced company today employs more than 8,000 employees and is present in 20 geographies.

Table 3: NICE acquisitions since 2019

August 12, 2021	GoMoxie is a provider of digital assistance tools that anticipate customer needs and guide them through their online digital journey with relevant snippets of information.
July 7, 2021	SmartReach is an AI-powered solution that enables organizations to have proactive, multi-day, asynchronous conversations—interacting with customers through their channels of choice even before they reach out for service.
April 20, 2021	MindTouch is an AI-powered knowledge management solution that reduces friction by projecting personalized content to customers seeking self-service while injecting crucial insights throughout the customer journey.
May 16, 2019	Brand Embassy is a provider of digital customer engagement.

At the NICE Analyst Summit last October, Paul Jarman, CEO of CXone, described the recent shift in customer engagement. He said most customer interactions start at what NICE describes as "digital doorsteps" like a search engine or an app. Companies need to embed more intelligence and knowledge at these doorsteps and across an orchestrated journey as well as better prepare agents with proactive knowledge about the customers' recent behaviors and transactions.

CXone's overarching objective is to create frictionless experiences and help companies of all sizes orchestrate AI and data on the end-to-end customer journey, meeting their customers wherever their journey begins. It does that by enabling resolution through data-driven smart self-service and preparing agents to successfully resolve any customer needs.

ϿϺϽͿΛ

NICE calls this approach Customer Experience Interactions (CXi). CXi is a new framework delivered through a unified suite of applications on the CXone platform. It empowers organizations to intelligently meet their customers wherever their journey begins through a combination of CCaaS, WFO, analytics, AI, and digital self-service based on CXone.

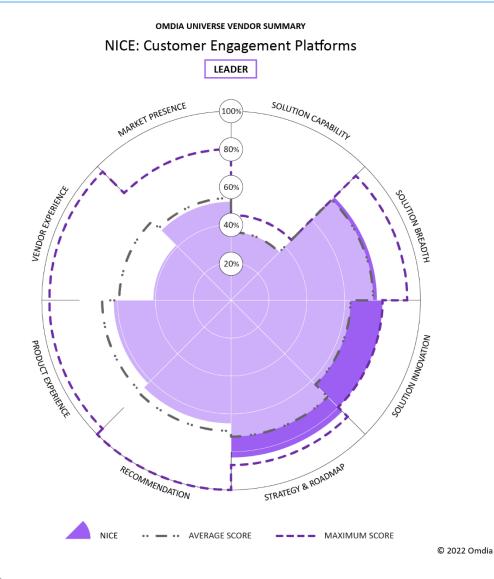
CXi enables resolution through AI and data driven self-service and prepares agents to successfully resolve any customer needs event.

At NICE Interactions in May, CEO Barak Eilam described CXi as a framework that helps companies exceed the boundaries of the contact center. "Customer needs events don't always originate in the contact center," he explained. "With so many digital channels now, customer support organizations require a digital platform to provide a 'full CX orchestration' for the entire journey."

Such full orchestration is achieved through CXi's infrastructure, which is built atop five pillars:

- **Digital entry point solutions** that give customers the right content and provide guided assistance at "digital doorsteps," which include search engines, apps, proactive service, and websites.
- **Full journey orchestration solutions** connect and route customers across their entire journey by combining digital channels, voice, self-service, and agent assist as one.
- Smart self-service capabilities that enable organizations to build intelligent automated conversations through two features: self-service via chat and virtual agents (NICE has OEM'ed Amelia) and proactive outreach to an agent via AI-powered routing.
- **Prepared contact center agents** via workforce solutions to manage time, work from anywhere, grow through self-assessment and on-demand learning, and help customers prepare through real-time guidance.
- **Complete performance solutions** based on NICE's suite of WFO, analytics, and VoC solutions to help understand, analyze, and improve journeys.

Figure 22: Omdia Universe ratings – NICE



Source: Omdia

Data management

NICE offers native CDP capabilities with unified ingestion capabilities across a wide set of channels. The Enlighten Data Platform captures and anonymizes data across channels, fuses and annotates data into journeys, derives CX data attributes, then aggregates the data and operationalizes derived CX data by indexing it for usage.

 NICE also offers low code, no code connectors to configure data sources through both APIs and SDKs. Then NICE's unified data capabilities apply data cleansing, singular identity resolution, and profile building. Omdia Universe: Customer Engagement Platforms, 2022–23

ϿϺϽͿΛ

- A golden record of journey insights provides real-time guidance, real-time adherence (PII protection), and post-engagement needs such as customer satisfaction (CSAT), coaching, and follow-up. More than 250 out-of-the-box metrics and 90 prebuilt reports are available.
- Customers can access CXexchange, an online marketplace that offers 130+ prebuilt integrations. Customers can buy pre-integrated applications and services through CXexchange or build customized applications using hundreds of APIs and Developer Community resources.

Orchestration

The NICE CXone platform is unified and embedded with native AI at its core—AI is operationalized across the entire product portfolio. The company's Enlighten Data Platform offers out-of-the-box AI models purpose-built for CX.

- CXone Smart Omnichannel Routing, powered by Enlighten AI, pairs callers and agents in real time based on targeted business outcomes (e.g., average handle time [AHT], CSAT). Powered by Enlighten AI, the intelligent routing feature pairs each consumer in real time with the agent based on targeted business outcomes and an expanding set of skills, personality, and customer analytics data across natively supported digital channels (or bring your own computer [BYOC]). A unified agent interface includes AI-driven guidance, scheduling capabilities, and quality management.
- CXone Feedback Management (VoC) collects direct feedback via adaptive surveys delivered natively in any channel, including IVR, SMS, email, online, and in-app. The captured information is presented in configurable role-based dashboards and reports.
- NICE VoC enables real-time alerts and automated action workflows.
- CXone Interactions Analytics identifies root causes and trends across customer interactions and delivers insights through the full customer journey.
- NICE's Real-Time Guidance provides guidance based on AI-based behavioral models correlated with Interaction Analytics capabilities.

ΩΝΩΙΛ

Activation

NICE helps businesses move to a conversational approach to self-service by leveraging customers' own conversational data. This includes voice recordings, chats, and emails. From these interactions, companies can prioritize which customer intents are best for smart self-service based on the volume and complexity of the interaction.

- NICE CXone offers outbound campaign capabilities across channels and orchestrates proactive campaigns across agent-assisted, agentless (message laydown), two-way email, and SMS.
- CXone automates end-to-end self-service and transfers customers from self-service to live assistance with full context for the agent, as needed.
- CXone Smart Assist is a conversational AI solution that handles interactions using voice as well as chat and also understands customer sentiment. Enlighten XO leverages the businesses' own conversational data to understand the most frequent requests that agents receive. It continuously provides feedback on new opportunities for smart self-service as the business evolves. Real-Time Interaction Guidance uses conversational AI to guide agents on live interactions for improved outcomes.
- CXone orchestrates self-service and proactive notifications across agent-assisted, agentless (message lay down), and two-way email and SMS. Combines channels into one communication cadence and executes a collection of contact records across supported channels. CXone Self-Service Analytics examines self-service journeys and pinpoints opportunities for IVR journey improvements.
- CXone automates end-to-end conversational voice and chatbot self-service with elevation from bot to agent with context, using natural language understanding and processing (NLU/NLP) for classification, sentiment analysis, and language recognition.
- Customer Journey Analytics provides a picture of customer interactions across all channels and helps predict and act on customer insights to optimize self-service processes such as websites, mobile apps, and virtual assistants.
- NICE Sales Performance Management combines calculations and control for managing incentives for millions of transactions and thousands of sales personnel.

Figure 23: NICE's short- and long-term roadmap

 Composable, component-based agent experience Al/digital supervisor workspace with insights across unified suite Expansion of Enlighten AI capabilities across the platform, including self-service with advanced bot workflow learning and dashboards, faster system self- training, new bot options, and deeper analytics, and agent real-time guidance supported by Enlighten AI Adaptation of digital WEM (forecasting, recording, QM, policy management) with digital nuances Cross-platform analytics enhancements Advanced digital routing Interaction channel preference management Advanced forecasting and scheduling models

Source: Omdia, NICE

Strengths

- Omdia sees three unique strengths with NICE CXone: universal AI models for all the major CX use cases and an AI framework that enables continuous learning across the CXone portfolio; its focus on conversational self-service, CX domain expertise (WFO, CCaaS, and CX platform), and agent preparation efforts for digital adoption; and its open cloud platform with hundreds of APIs.
- CXone is built on a modern cloud native tech stack with a microservices architecture. This allows
 for the platform to be deployed in multiple models and provides the flexibility and availability, as
 well as the elements, to enable digital-first CX.
- CXone combines solutions for digital entry points, conversational self-service, and CCaaS with solutions including WFO, VoC, and analytics. This combination creates a closed loop of continuous improvement.
- NICE offers training and education services, including instructor-led classroom training, remote instructor-led training, and self-paced eLearning. Monthly "Power Hours" provide the opportunity to hear from and interact with industry peers and technical subject matter experts (SMEs) who share insights, demos, tips, and success stories. NICE CXone customers also receive access to the company's global online customer community that provides customers with complementary learning resources.

• NICE boasts a comprehensive set of integrations into key enterprise systems and platforms.

Limitations

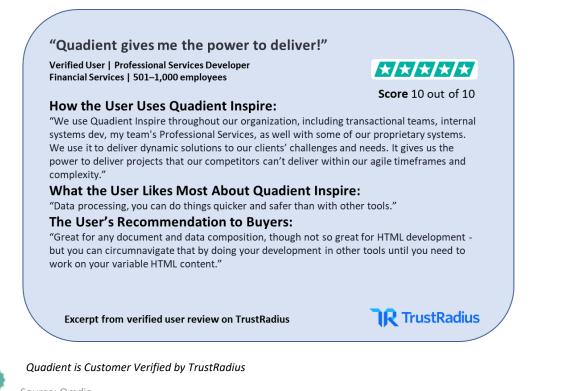
 CXone is currently geared toward large enterprise customers. However, since growth for midmarket companies means advancing their technology adoption and becoming more digitally capable, NICE would find ample opportunities to enable these companies with the technical capacity.

Quadient (Omdia recommendation: Challenger)

Quadient should appear on your shortlist if:

• You want to enhance customer engagement through both digital and physical channels but are restrained by a disparate and fragmented systems landscape.

Figure 24: Quadient Inspire – Customer likes the ability to use any asset across the organization's sectors



ΟΜΟΙΛ

ΩΝΟΙΛ

Overview

Quadient is publicly traded on the Euronext and has its headquarters in Paris, France. The company offers a range of products of services encompassing mail-related solutions, parcel locker solutions, business process automation, and CX management and generated total revenue of €1,042m (~\$1,233m) for the year ended December 2021.

Quadient has approximately 5,000 employees and a direct presence in Australia, Brazil, Canada, China, Czech Republic, France, Germany, Ireland, Japan, Mexico, Netherlands, Singapore, Spain, Switzerland, Turkey, the UK, and the US.

Its client base is principally medium size and some larger organizations, with a historical presence among printer service providers. However, Quadient has been successful in broadening its sector presence over the last five years, with financial services and insurance now being particularly important verticals for the company. North America is Quadient's most significant regional market, contributing 55% of revenue in 2021; European-based clients accounted for a further 40%.

Intelligent Communications Automation

Quadient is structured as three strategic business units: ICA, Mail-related Solutions, and Parcel Locker Solutions, accounting for 21%, 70%, and 9% of 2021 revenue, respectively.

Since 2019, the company has been pursuing a strategy of refocusing its business on smart hardware and cloud-based software solutions with high growth potential. Its ICA business unit is seen as a critical element of this strategy and a key driver of Quadient's future growth.

Quadient acquired YayPay (in August 2020) and Beanworks (in March 2021), focused on AR and AP automation, respectively (see **Table 4**). Both these acquisitions sit within the ICA business unit.

Table 4: Quadient acquisitions since 2020

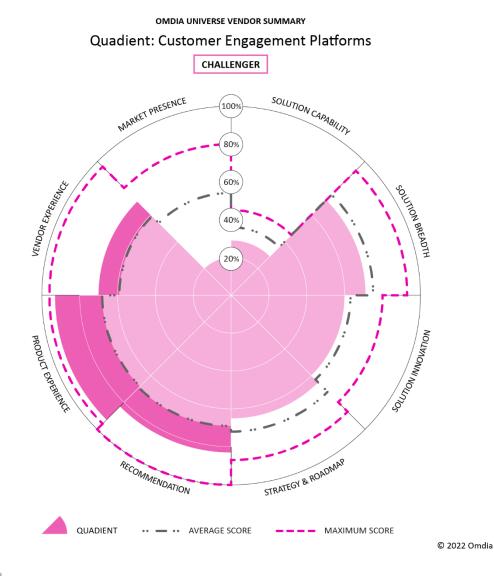
August 2020	Quadient acquired YayPay, a provider of SaaS-based AR automation.
March 2021	Quadient acquired Beanworks, a provider of SaaS-based AP automation solutions.
Source: Omdia	

Quadient is now in phase two of its strategy, focusing on organic development. This phase involves the increased development of existing offerings and the launch of new products across all solutions. It also involves a greater drive toward SaaS and subscription-based business service models and cross-selling to migrate the existing customer base to these newer offerings.

The Quadient customer engagement offerings sit within the ICA business unit and consist of Inspire Flex, Inspire Journey, InspireXpress, Inspire Evolve (SaaS), and Quadient Hosted Managed Services.

The ICA business unit, which also includes finance and accounting automation and document digitization products and services, generated €201m (~\$240m) of revenue in 2021 and was the fastest growing unit across the company that year.

Figure 25: Omdia Universe ratings – Quadient



Source: Omdia

Data management

The data management functionality of the Quadient offerings is provided by the Inspire platforms: Inspire Flex, offering an "any premises" solution, and Inspire Evolve as an entirely SaaS cloud-based offering.

Since they are primarily CCM platforms, the Inspire platforms do not offer native CDP functionality, instead relying on third-party vendors to provide this capability. However, as a result of its continuous development since 2004, Inspire Flex offers extremely strong ingestion capabilities. It

accepts data from multiple sources, including flat files, database calls, APIs, XML, over 50 document spool types, as well as HTML, email, Word, and WhatsApp.

In addition, Quadient has implemented connector and integration tools for Salesforce Sales and Service Clouds. Within the insurance sector, the company has prebuilt integration with both the Guidewire and Duck Creek core insurance processing platforms.

Orchestration

Quadient solutions offer orchestration capabilities through the Inspire Scaler and Inspire Journey products. Inspire Scaler acts as the hub linking Quadient's content and asset management capabilities with bidirectional customer communication and interactions across a customer's preferred channel. Inspire Scaler supports sophisticated communications workflows (e.g., automating message redelivery via alternate channels in the event of a channel failover).

Inspire Journey offers dynamic customer journey maps and dashboards directly integrated with ingested data sources so that users can identify potential bottlenecks or issues, see KPIs in real time, and measure customer sentiment as they progress through a journey across multiple channels. It offers a browser-based interface to a journey design UI with prebuilt "swim lane" templates and the ability to link and manage multiple journeys into global customer maps.

Journey orchestration is achieved through user-defined business rules at the segment or persona level that will dictate the next action depending on the customers' actions and behavior. Inspire Journey lacks native embedded AI/ML and analytics support but offers a broad range of integration methods and APIs that allow third-party platforms, such as Power BI, to extract data for further analysis or to incorporate external data into customer maps and dashboards.

Activation

Quadient supports elements of customer engagement activation with its Impress Distribute and Impress Automate products. Impress Automate centralizes outbound document preparation and distribution, offering workflows for the creation, distribution, and output of invoices, statements, notices, and letters. Impress Distribute is a cloud-based multi-channel document delivery system that manages the preparation and delivery of customer communications, both physical mail and via digital channels (secure branded customer portal, tracked email, and SMS).

Figure 26: Quadient's short- and long-term roadmap

 Further enhancing the capabilities to import and export content, templates, and assets to increase interoperability with other platforms Functionality to support more social channel customer engagement Expansion of embedded AI/ML capabilities to include predictive content for customer-facing employees 		12-month priorities	24-month priorities
	Roadmap	 import and export content, templates, and assets to increase interoperability with other platforms Functionality to support more social channel customer engagement Expansion of embedded AI/ML capabilities to include predictive content 	particularly across marketing, CX, product development, support, sales,

Source: Omdia, Quadient

Strengths

- Strong data ingestion capabilities across a very broad range of data sources and enterprise systems.
- Strong customer journey mapping and orchestration capabilities.
- ICA is a critical element of the company's growth strategy and, as a result, Quadient is likely to see continued development of its customer engagement offerings through organic development and further acquisitions.
- Strong presence in the insurance sector with close and proven integration with Duck Creek and Guidewire platforms.

Limitations

Quadient does not offer the full customer engagement stack, lacking native CDP functionality
and limited native AI/ML support. However, this is offset to some extent by the very strong data
ingestion capabilities and range of integration methods supported, allowing these capabilities to
be bolted on.

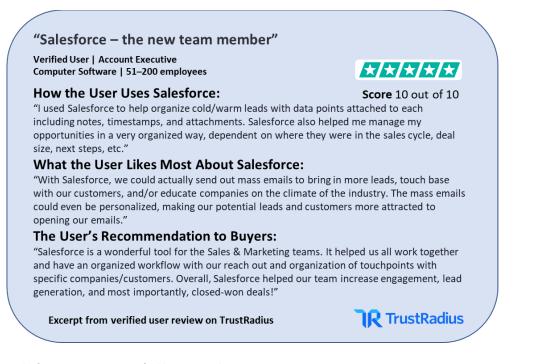
Salesforce (Omdia recommendation: Leader)

Salesforce should appear on your shortlist if:

• You want a platform that offers a wide range of industry-focused cloud offerings and a powerful data engine.

© 2022 Omdia

Figure 27: Salesforce – Customers report improved workflows, increased engagement, and lead generation





Salesforce is Customer Verified by TrustRadius

Source: Omdia

Overview

At the Salesforce Analyst Summit in April, co-CEO Bret Taylor referred to Customer 360, the company's CEP, as a company's "single source of truth" because he said it provides a complete view of the customer across every touchpoint. "If you're defining the next generation of customer experience, you can't do it in silos," he said. "Your CX needs to be where your customers are, not where your technology is."

Salesforce, which launched in 1999 and has since grown its footprint to offices in 26 countries, more than 77,000 employees, and more than \$26bn in revenue, is betting on Customer 360 providing that single source of truth for its customers. The financials show that it is a bet worth taking. Its CEP FY 2022 revenue totaled nearly \$26.49bn, a 25% increase over the previous fiscal year. And since 2019, Salesforce has fortified Customer 360 with a series of acquisitions, with the most recent one, Slack, being the most notable (see **Table 5**).

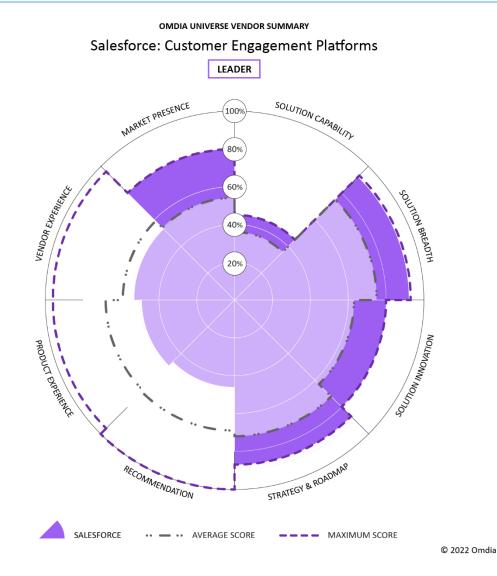
Table 5: Salesforce acquisitions since 2019

July 21, 2021	Salesforce completed its acquisition of Slack Technologies, Inc. Together, Salesforce and Slack are creating the digital HQ for success from anywhere.
February 1, 2021	Salesforce completed its acquisition of Acumen Solutions, a professional services firm with industry expertise across public sector, manufacturing, and financial services.
June 1, 2020	Salesforce completed its acquisition of Vlocity, a provider of industry-specific cloud and mobile software for communications, media and entertainment, energy and utilities, insurance, health, and government organizations.
February 3, 2020	Salesforce completed its acquisition of Evergage, a personalization software platform.
October 1, 2019	Salesforce completed its acquisition of ClickSoftware, a field service management solutions provider.
August 1, 2019	Salesforce completed its acquisition of Tableau Software, a leading analytics platform.
June 3, 2019	Salesforce.org was integrated into Salesforce.
May 30, 2019	Salesforce completed its acquisition of MapAnything, a location-based intelligence software provider built natively on the Salesforce Platform.

Source: Omdia

Salesforce's Customer 360 is an integrated platform offering that includes Salesforce Marketing Cloud, Commerce Cloud, Service Cloud, Sales Cloud, Tableau, and MuleSoft. The platform stack starts with a foundation of Hyperforce, then layers on Einstein, Customer 360, industry solutions, and then Slack for collaborative work. Taylor calls the integrated offering "the fastest path to digital transformation." And customers report experiencing organized workflow across all touchpoints (see **Figure 27**).

Figure 28: Omdia Universe ratings – Salesforce



Source: Omdia

Data management

The Salesforce Marketing Cloud Customer Data Platform ingests data from inside the Salesforce ecosystem using native connectors as well as external systems via native connectors and MuleSoft with Amazon S3 and Google Cloud Platform (GCP). Ingested data is then cleansed, standardized, and resolved through a map, match, and merge process to create a unified customer profile. This is achieved by connecting identities, engagement data, customer orders, loyalty, marketing journeys, and privacy management.

νιςως

Salesforce maintains APIs as a connection point for leading demand-side platforms (DSPs) to integrate (e.g., Annalect, Yahoo!, The Trade Desk, Nine, Media Math, MetaRouter, WPP). It does not have a preferred DSP and supports the client's choice of DSP.

Users have the option to calculate a customer's LTV or engagement score with Calculated Insights to further enrich unified profiles and then build targeted customer audience segments through an intuitive drag-and-drop segment builder. Customers also have the ability to create a targeted seed segment using the segment builder and then leverage Einstein Lookalike models to expand that segment to "find customers who look like my best customers" (as an example). They can also visualize audience data in the BI platform, Tableau, and optimize marketing with audience insights in Marketing Cloud Intelligence. Provisioning measures and dashboards for opt-outs and consent flags enables compliance with GDPR and CCPA.

Orchestration

Most of the orchestration is conducted via Marketing Cloud Personalization (formerly Interaction Studio) and Journey Builder, which reside in Salesforce Marketing Cloud. Personalization allows customers to map their context and combine this with a user profile that contains real-time and historical behavior, attributes, and affinities. Users can schedule cross-channel interactions to be recurring or triggered by a range of event types. Einstein tools in Personalization include advanced ML algorithms that are used to boost content or product engagement/discovery on a website, mobile app, emails, or onsite search. The predictive algorithms available in Marketing Cloud Personalization can dynamically adjust to temporary shifts in consumer behavior. With Einstein tools like Engagement Scoring in Journey Builder, customers are given guidance on optimal send time, frequency of engagement, and suggested channel.

Journey Builder's orchestration tool provides multi-channel and cross-channel engagement capabilities. Messaging channels include email, SMS, mobile push, LINE, and WhatsApp, as well as other partner integrations. Journey Builder also supports native CRM integrations across sales, service, and marketing for journey interactions across the enterprise and via CDP or MuleSoft for Commerce.

Marketers can use Marketing Cloud Intelligence to ingest the various marketing touchpoints in their customer journeys. Intelligence Reports allow customers to view dashboards on their journey performance, create pivot tables, and schedule reports. Customers can also use the Tableau connector to build narratives and visualizations in Tableau's interface.

Marketing Cloud provides native content management capabilities focused on message execution assets and content (images, blocks, etc.). Broader digital asset management (documents) can be provided through productized integrations with Sitecore, Aprimo, and Bynder.

Activation

B2C marketing management

Marketing Cloud provides campaign planning. Journey Builder allows users to create multi-channel (email, push, SMS, chat), cross-cloud, behavior-triggered campaigns that can be pre-scheduled, recurring, or triggered by a wide range of event types. And Path Optimizer gives users the ability to run A/B or more complex multivariate tests.

Campaign Execution: Journey Builder sends transactional and promotional messages across email, SMS, push notifications, and chat apps at a B2C scale. With built-in AI, marketers can leverage the platform for multivariate testing to drive campaign execution and optimization based on user preferences and engagement. In addition to native messaging capabilities, Journey Builder can connect to offline or assisted channels like direct mail, a sales rep, or customer service through Salesforce activities or custom activities for a partner or brand-specific API triggers. Salesforce will continue to make AI enhancements in 2022 (see **Figure 29**).

B2B account-based management

Marketing Cloud Account Engagement (formerly Pardot), a marketing automation solution Salesforce acquired in 2012, provides B2B marketers the capabilities to build and execute accountbased marketing campaigns. For example, marketing touchpoints for buyers within each account can be automated or scheduled. Al-powered ABM features allow marketers to prioritize accounts. Comprehensive analytics include ABM dashboards that give companies deep insights into how key buyers across accounts are engaging with their marketing and sales touchpoints. Most importantly, marketers can measure their impact on engagement and opportunity pipeline within their target accounts.

Customer self-service

Experience Cloud allows customers to create secure websites, portals, and apps to share information and collaborate with customers, partners, or employees. Einstein enables information discovery to see what is trending, as well as the most relevant questions. Integration into Service Cloud allows unanswered questions to automatically escalate to an agent.

Customer service

In Service Cloud, agents use the Service Console as the single pane of glass with customizable layouts and access to relevant knowledge articles, complete customer history (Experience Cloud community activity, e-commerce activity, even web browsing) and contact information, and the history of the ongoing issue in the Case Feed. Collaboration tools like Slack and Quip, embedded in the console, allow for instant collaboration, swarming, and access to SMEs in a hybrid work world. For agents, engagement is supported by efficiency tools such as Macros, Quick Text, Einstein Next Best Action (delivers decision support across the customer service solution), recommendations, and guided workflows via Lightning Flow. For supervisors, routing at the queue or logic level is easily achieved with Lightning Flow, allowing the drag-and-drop design of routing logic to the ultimate assignment. Real-time statistics are available in the supervisor dashboard for dynamic reassignment and reskilling of agents.

Salesforce Optimizer

With Salesforce Optimizer, administrators can improve features, clean up customizations, reduce complexity, and drive feature adoption. A personalized report is delivered with feedback, including advice and recommendations.

νιςως

Salesforce Field Service

Salesforce Field Service automates and optimizes scheduling and streamlines complex asset management processes. It also leverages AI to equip every mobile worker with the right tools and information to complete work on time and provides insights to power end-to-end service delivery. Field Service enables collaboration and visibility across organizations and the customers they serve.

Service Cloud Workforce Engagement (workforce optimization)

Service Cloud Workforce Engagement offers Intelligent Forecasting to forecast demand for customer service cases based on past trends in the business and with the identification of outliers that can affect case volume. It also provides Omni-Channel Planning to schedule agents to handle case volumes based on role, expertise, availability, location, regulations, and agent preferences (e.g., language, schedule). Agent Engagement enables supervisors to prepare teams by delivering training modules pushed directly to the agent in real time, paired with in-moment monitoring and coaching.

2022 priorities 2022–23 priorities Investing in data connections, marketing data extensibility to enterprise business intelligence, data warehouse orchestration, expanded data modeling, Reimagining the Customer 360 product and purpose-built analytics solutions experience with Slack with an ecosystem Making improvements to Slack of apps and workflows Delivering a unified commerce platform Investing in customer success for B2B and B2C Adding support for 10 additional Investing in AI enhancements countries for Hyperforce as well as Roadmap Enhancing composable headless product functionality commerce solutions Delivering new functionality for each of the 12 industry solutions Deploying platform extensibility solutions © 2022 Omdia

Figure 29: Salesforce's short- and long-term roadmap

Source: Omdia, Salesforce

Strengths

- Salesforce has an Office of Ethical and Humane Use that partners with product development teams to ensure employees, customers, and partners are developing and using AI responsibly, accurately, and ethically. Five guiding principles govern the development and ethical use of AI in the company's products: responsible, accountable, transparent, empowering, and inclusive.
- Salesforce has strong embedded and integrated analytic BI capabilities with the acquisition of Tableau.



- Salesforce believes that a posture of neutrality in the market gives clients a choice and removes incentives or bias to one platform that would degrade client performance.
- Salesforce offers 12 industry clouds built on Customer 360.
- The company starts every product strategy with customer success. Gathering continuous feedback helps to ensure every product strategy aligns with customers' evolving business needs.
- Salesforce is engineering Slack to become the platform of engagement for Customer 360. This strategy will unify the enterprise and give employees a digital entry point to all work and customer engagement.
- Efforts are underway to further integrate and embed Einstein throughout all the clouds.
- "Rapid innovation" is one of Salesforce's core values. The company has planned multiyear
 projects to help drive customer success and is constantly observing and responding to customer
 feedback and market forces. For example, Salesforce said its acquisition of Slack was driven by
 the shift in how the pandemic changed the way people work.

Limitations

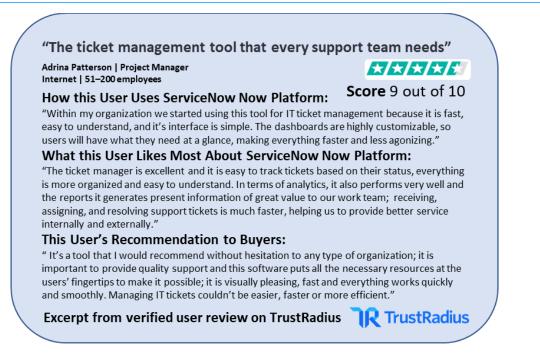
• Salesforce currently facilitates document creation and management through partner integrations.

ServiceNow (Omdia recommendation: Challenger)

ServiceNow should appear on your shortlist if:

• You want to optimize their existing data and system investment but also want to build a highly flexible process architecture within the business.

Figure 30: ServiceNow – The ticket management offered by ServiceNow is seen as a differentiator by clients





ServiceNow is Customer Verified by TrustRadius

Source: Omdia

Overview

Established in 2004, ServiceNow is a publicly traded company headquartered in Santa Clara, California. It generated annual revenue of \$5.9bn (GAAP) as of the end of December 2021, a 30% increase from the previous fiscal year. The majority of ServiceNow revenue is generated in North America (63%), with a further 27% contributed by Europe, Middle East, and Africa (EMEA)-based clients. ServiceNow has multiple offices in the US and a direct presence in 28 other countries globally, covering all major regional markets.

The company mainly sells to large multinational or global enterprises and has a presence in a broad range of sectors. These include tech, telecom and media, financial services, healthcare, government, education, retail, and manufacturing.

The ServiceNow approach differs from that of other vendors covered in this report. Its proposition is to not see customer engagement as a specific process within an organization requiring a dedicated platform, but rather, to use a common organizationwide people, processes, and data platform (the Now platform) that links all of a company's processes and data regardless of function. ServiceNow then enables the design and implementation of different workflows needed by the business, including customer engagement, to be overlayed across the organization's common data platform. Its products can be deployed as an on-premises offering for regulated industries, such as insurance,

ΟΜΟΙΛ

although this accounts for only 5% of deployments. The platform is principally deployed as a cloud-based SaaS offering.

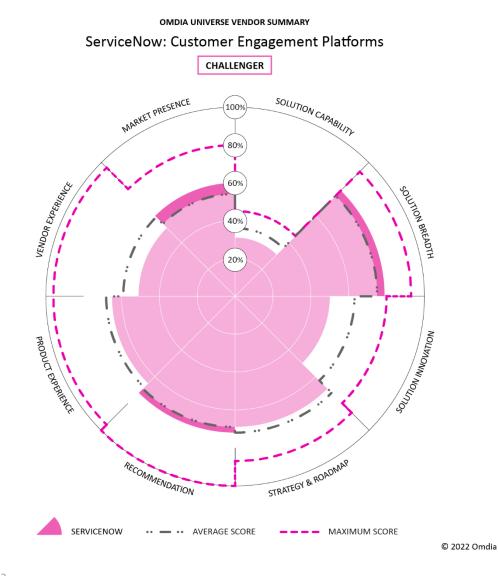
ServiceNow has an active acquisition policy, primarily acquiring small and medium size tech players to enhance specific aspects of the ServiceNow offering. Recent acquisitions include the following:

- DotWalk (2021): Automates upgrades and testing of ServiceNow applications.
- **Gekkobrain (2021):** Extends the ServiceNow Creator Workflows and App Engine to help organizations modernize their enterprise resource planning (ERP) systems.
- Mapwize (2021): Provides indoor mapping enabling employees to navigate offices, reserve seats, conference rooms, workspaces, and workplace resources from desktops or mobile devices and helps optimize floor usage and changing real estate needs.
- Swarm64 (2021): High speed and mass-scale data analytics.
- Lightstep (2021): A next-generation observability leader that extends the benefits of observability across the enterprise through digital workflows that convert real-time insights into action across the technologies, people, and processes that enable digital business.
- Intellibot (2021): Enhances ServiceNow's RPA capabilities to automate repetitive tasks and extend core workflow functionality.
- Element AI (2021): AI capabilities around text, language, chat, images, search, question response, and summarization.
- **Sweagle (2020):** Configuration data management capabilities to extend ServiceNow's DevOps and IT operations management (ITOM) capabilities.
- Passage AI (2020): Conversational AI capabilities.
- Loom Systems (2020): Extends ServiceNow's AlOps.
- Fairchild Resiliency Systems (2019): Business continuity management (BCM).

The ServiceNow approach to customer engagement

ServiceNow's approach to customer engagement differs from that of most of the vendors assessed in this report in that it does not provide a native underlying CDP and specific customer engagement applications utilizing the customer data. Instead, ServiceNow ensures that an organization's data is easily accessible and can be fed into organizationwide workflows that meet the process demands of the business and orchestrate key customer processes such as order processing, onboarding, provisioning, and servicing. As a result, ServiceNow is likely to require a third-party CDP and possibly other customer engagement applications to support specific customer engagement capabilities (such as complex identity resolution) that cannot be configured within a ServiceNow workflow.

Figure 31: Omdia Universe ratings – ServiceNow



Source: Omdia

Data management

The ServiceNow platform includes ITOM discovery that automatically populates a configuration management database (CMDB) to identify data sources across an organization. The ServiceNow Integration Hub then supports systems interconnection through hundreds of prebuilt connectors that the company calls "spokes." Custom spokes can also be built for specific integration tasks using REST, SOAP, JDBC, and JSON interfaces. These capabilities simplify the integration of third-party CDPs, allowing customer data/profiles to be easily fed into any workflows in support of customer engagement.

Orchestration

The ServiceNow platform offers natural language and flowchart type diagramming to build conditional and event-triggered workflows for all business processes. In addition, the company develops, maintains, and certifies industry and task-specific data models and workflow templates, implementing industry standards where necessary, alleviating the need for most organizations to build workflows from scratch.

Activation

Customer engagement activities are supported through three component suites that operate on the ServiceNow platform: Customer Service Management (CSM), Order Management (OM), and, for organizations requiring field service, Field Service Management.

CSM capabilities include agent single panel view with AI-supported recommendations (agent assist) and the ability to interact with customers from the agent workspace via web, chat, autopilot (delegating to virtual agent), email, phone, social channels, and walk-in experience (in-person using mobile devices). It also includes intelligent agent routing, case management capability, and guided decision support for agents. CSM has embedded AI capabilities such as cluster and regression analysis, as well as both out-of-the-box and customizable ML models. It also provides significant customer self-service capabilities, including customer self-help portals, supporting customer/expert communities, knowledge libraries, and virtual agents addressing common questions/queries.

The generic capabilities of ServiceNow that support enhanced customer engagement include workforce and process optimization.

OM capabilities include product catalog, order capture from upstream systems, order decomposition to break down complex products into fulfillment components, and orchestration across teams, systems, or even organizations. OM also includes fallout management to ensure hand-offs are not missed with tracking and lifecycle management to give internal visibility to partners and customers. It works seamlessly with the CSM components, including the agent workspace, self-service portals, and virtual agents.

Figure 32: ServiceNow's short- and long-term roadmap

12-mont	h priorities 24-month priorities
 mobile messaging support appointin message and age hand-off Convert agent live asynchronous mo Continue to the e design and config Workspace Introduce a new w increased usabilit Launch a new hea experience solution Introduce enhance experiences with workspace side p workspace layout components definition 	delnhance the visualurability of Agentvisual design withy for Agent Workspaceulthcare industry patientoned playbookadditional dynamicanels and predefineds and contextual UI

Source: Omdia, ServiceNow

Strengths

- The ServiceNow strategy of making a company's data easily accessible and usable via flexible workflows allows enterprises to create flexible customer engagement processes while utilizing the data and protecting the investment in existing legacy CRM and marketing systems.
- The ServiceNow offering allows customer engagement processes to be fully integrated within the wider organization process flows such as manufacturing, distribution, finance, etc., which may be an important consideration for some companies such as online retailers that require front- and back-end integrations.

Limitations

 Does not have native CDP and limited native outbound customer engagement capabilities compared to more specialist CEP vendors. Consequently, companies requiring cutting-edge customer engagement will need additional third-party capabilities. Omdia Universe: Customer Engagement Platforms, 2022–23

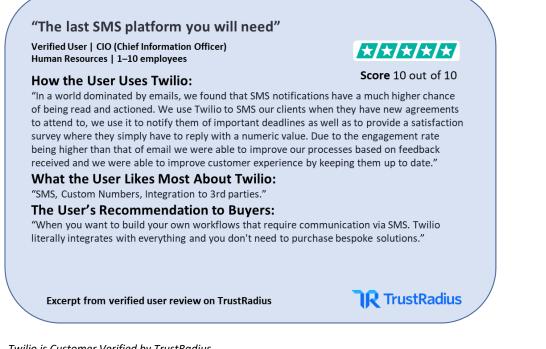
Twilio (Omdia recommendation: Leader)

Twilio should appear on your shortlist if:

ONDIV

• You want a data-rich CDP at the core of your customer engagement platform.

Figure 33: Twilio – Twilio customers give high marks for the ability to integrate





Twilio is Customer Verified by TrustRadius

Source: Omdia

Overview

Twilio began its CX journey in 2008 when it launched Twilio Voice, an API to make and receive phone calls completely hosted in the cloud. After several funding series, acquisitions (see **Table 6**), and product expansions, Twilio now occupies offices in 26 countries. Revenue for the company's last full fiscal year (2021) totaled \$2.76bn, up from \$1.76bn the previous year.

Omdia Universe: Customer Engagement Platforms, 2022–23

ΩΝΩΙΛ

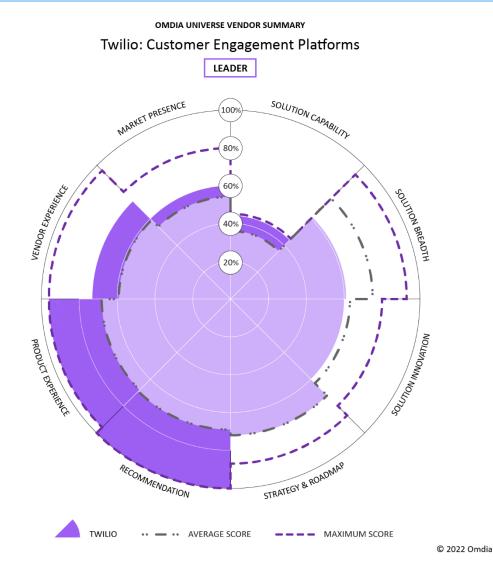
Twilio defines its CEP as all its products combined. This includes Twilio Engage, Twilio Segment, and Twilio Flex, which are offerings designed for specific users (contact center, sales, marketing) to consume customer information and interact with them. The platform also includes Segment (CDP) and Digital Reach (CPaaS). This combination provides data insights to understand all aspects of customers, plus digital channels to communicate and the ability to customize a solution.

The product vision for the CEP leverages an API-led approach to help companies meet customers where they are. Twilio affirms that companies cannot achieve that vision without a solid data management foundation and accessible data to all teams across an enterprise. Scott Edwards, senior director of Product Marketing, told Omdia that when Twilio talks about the CEP, "The narrative is the ability to collect, govern, and activate data to drive personalized real-time customer engagement at scale."

Table 6: Twilio acquisitions since 2017

February 2017	Beepsend, an application-to-person (A2P) SMS messaging provider
August 2018	Core Network Dynamics, a developer of EPC, a framework for providing converged voice and data on a 4G network
February 2019	SendGrid, an email API platform
November 2019	Teravoz, hosted PBX Platform for SMBs and call centers, and telephony APIs
November 2020	Segment, a CDP
March 2021	ValueFirst, an India-based CPaaS provider
April 2021	Ionic Security, a data security platform that helps enforce access and privacy requirements
July 2021 Source: Omdia	ZipWhip, a provider of toll-free messaging in the US

Figure 34: Omdia Universe ratings – Twilio



Source: Omdia

Data management

Twilio Segment, the company's CDP, serves as the data engine to drive such real-time engagement. Segment serves as the core enabler for building an integrated data layer. The company acquired Segment in November 2020 with the goal of establishing an infrastructure to connect customer insights across channels and partners and enable a single view of customers.

While many CDPs primarily serve marketers, Twilio begins with a holistic customer experience perspective across all touchpoints and incorporates data and communications. The company's Segment Connections helps collect, unify, and connect customer data. It also comes with 400 out-of-

Omdia Universe: Customer Engagement Platforms, 2022–23

the-box integrations for activating this data, a feature that is highly rated by customers (see **Figure 35**). Segment Connections collects, unifies, and connects customer data and real-time data streams.

With the integration of Twilio and Segment, customers can

- Collect user data from every interaction
- Combine data from different sources
- Create a single, unified profile

ONDIV

- Integrate customer data into every interaction
- Validate the data and check data quality issues
- Identify audiences across touchpoints and channels
- Personalize engagement experiences in real-time and anticipate needs

Twilio Segment Privacy Portal also automates privacy requests, and Segment's open-source consent manager helps maintain compliance with GDPR guidelines.

Orchestration

Twilio's approach differs from other players in this space because it automatically creates data building blocks that help to intersect and automate conversations across customer journeys. It achieves that through a variety of products:

- Twilio Segment's Personas helps businesses create unified customer profiles. With Segment
 Personas, businesses can build, enrich, and activate audiences across marketing tools. It uses
 identity resolution to take event data from across devices and channels and intelligently merge it
 into complete user- or account-level profiles. This gives organizations a single view of their
 customer base. Journeys, a feature of Segment Personas, enable marketers to define steps in a
 user's journey based on event behavior and traits. Marketers can build Journeys by tracking
 events, traits, computed traits, or audiences.
- Twilio Media Streams can identify and score the sentiment of a conversation for real-time action. For text messages, Task Router can be configured with a bot to determine sentiment before routing the message to the appropriate response.

νιςως

Activation

Together, Twilio Flex, Twilio Engage, Twilio for Operations, and Twilio Marketing Campaigns deliver real-time, tailored insights and analysis.

- **Twilio Flex** is a cloud contact center solution for two-way customer engagements across voice and digital channels from a single UI. When integrated with Segment CDP, first-party data is activated and provided to agents to aid in personalized engagements. Further, transcriptions of agent-customer conversations can be mined with the help of AI solutions to automatically and, in real time, contribute insights back into the CDP to maintain the currency and accuracy of the customer profile.
- Twilio Engage is an omnichannel growth platform that empowers businesses to use any combination of tools, data integrations, analytics, and channels they need to build and optimize marketing campaigns. Twilio Engage delivers real-time customer data within the UI, removing data team dependencies and empowering marketers to design engagement strategies across all channels and integrations from a single platform. Marketers use Twilio Engage to deliver lifecycle and customer retention campaigns.
- **Twilio for Operations** delivers job alerts to specific employees with the right set of skills. Twilio integrates with Field Service Management, allowing users to programmatically contact specific employees, departments, and specialists. Notifications to customers can also be tailored to channel and frequency based on customers' preferences.
- **Twilio Marketing Campaigns** are enabled through SendGrid. Users can conduct email management, as well as design email using visual tools, HTML, or a mix of both. Audiences can be targeted with intuitive segmentation and track performance with actionable analytics. Also, lead qualifications can be conducted via chatbots, and qualifying leads are triggered to salespeople via SMS, email, or calls.

	2022–23 priorities
 Implement regional deployment of Twilio Segment CDP Develop additional data warehouse orchestration capabilities Create platform extensibility solutions to build integrations with the Twilio Segment platform Grow messaging and email with developer experience Incorporate Flex 1.5 Segment data into Flex 2.0 	 Release Twilio Engage Enhance Personas capabilities Offer additional Journeys features for omnichannel orchestration

Figure 35: Twilio's short- and long-term roadmap

Source: Omdia, Twilio

© 2022 Omdia

ΩΝΟΜΟ

Strengths

- At its core, Twilio started out as a communications API company but can now integrate with most ERP and CRM solutions. Consequently, the platform allows enterprises to customize for their unique needs.
- Companies that want to give business users control when configuring the UI and adding custom channels and widgets would find Twilio appealing. Twilio offers the ability to create and customize an engagement platform without hardcoding it.
- The Twilio Segment Privacy Portal is a unique way of helping companies automate their approach to keeping customers' data private.
- Segment CDP offers a strong catalog of integrations and analytics for startups and enterprises alike.
- Twilio demonstrates strong leadership in the CPaaS and CDP categories.

Limitations

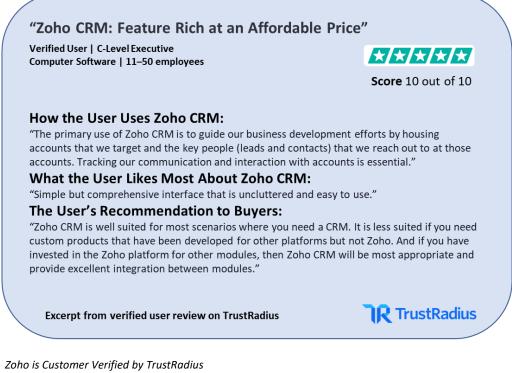
- While Twilio's Flex's settings can be configured through a drag-and-drop builder, composing the platform in the beginning may prove to be time-consuming because of the need to configure all settings. Standard contact center technology may be more appealing for SMBs whose tight budgets or lack of developer skills may cause constraints.
- Twilio's platform does not support native WFO and performance management capabilities. Instead, customers can obtain these features through partners.
- The company declines to share timeline estimates regarding its largest deployments.
- Twilio's platform still largely orients itself in the developer community. The company is looking to adopt an enterprise engagement messaging that appeals to C-level executives looking to create a holistic solution across contact centers, marketing, sales, and engineering.

Zoho (Omdia recommendation: Challenger)

Zoho should appear on your shortlist if:

• You are looking to reduce organizational complexity by using a single comprehensive and consistent enterprisewide platform that fulfills most customer engagement and business workflow needs.

Figure 36: Zoho CRM – Clients see Zoho CRM as an integrated and cost-effective offering



Source: Omdia

Overview

Founded in 1996, Zoho has its international headquarters in Chennai, India, with North American headquarters in Austin, Texas. Zoho is a privately held company with approximately 10,000 staff, and Omdia estimates the company's revenue at approximately \$750m for the year ending in 2021. In addition to India and the US, Zoho has offices in the Netherlands, China, Japan, Singapore, Australia, Mexico, Dubai, UAE, and South Africa.

The company offers a broad range of software suites focused on CRM, financials, secure email, recruitment, HR management, workplace collaboration, and IT management. Zoho's software products can be purchased individually or as a complete suite (Zoho One) consisting of 45 applications. Its market presence is primarily within the SMB space, but it has a number of larger clients, including Apple, Amazon (India), and KPMG.

The Zoho CRM platform is the largest product line for the company and was first launched in 2005; the product has been in continuous development since that time. The solution evaluated in this report is the Zoho CRM Plus platform, which consists of products that traverse the three layers of Omdia's CEP definition.

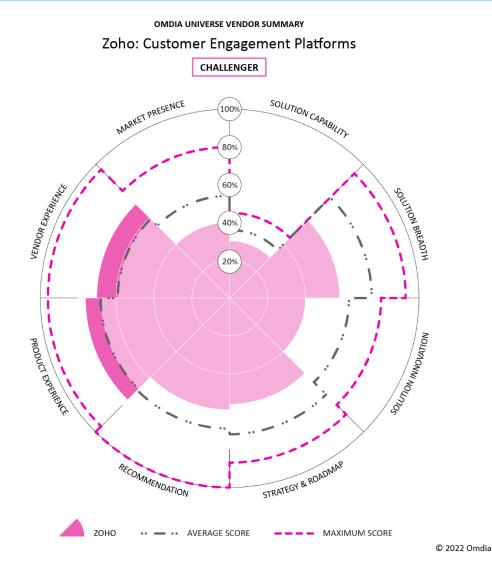
ΩΝΟΙΛ

The individual components include the following:

- Zoho CRM
- Zoho Desk
- Zoho Campaigns
- Zoho Marketing Automation
- Zoho Social, Surveys
- Zoho SalesIQ
- Zoho Analytics
- Zoho Projects

CRM Plus is an entirely SaaS-based offering and is built on a four-layer architecture consisting of an application layer (loosely equivalent to the Omdia Activation layer), personalization layer (loosely equivalent to the Omdia Orchestration layer), platform layer (loosely equivalent to the Omdia data management layer), and infrastructure layer.

Figure 37: Omdia Universe ratings – Zoho



Source: Omdia

Data management

Customer data is held within a profile schema that is predefined by a systems administrator. Zoho provides prebuilt connectors to major social channels such as Facebook, Twitter, Instagram, LinkedIn, and Google My Business, as well as connectors for most third-party platforms such as Google Analytics and Mixpanel. It also offers a data migration wizard. Inbound social media data can be configured to trigger on a particular event, though this is not at an individual customer level and does not automatically update a specific customer profile. Zoho CRM provides the capability to capture customer interactions from landing pages hosted on WordPress, Unbounce, Joomla, and other content management systems using low code web forms. Zoho CRM Plus also provides profile

ΩΝΩΝ

deduplication and merge capabilities that require an administrator to identify unique field keys and manually assign master records.

Orchestration

The principal orchestration activities are supported by the Zoho CommandCenter, which is included with Zoho CRM. CommandCenter uses a visual editor to construct customer journeys that can be deployed across multiple channels (email, SMS, call, chat) and can incorporate cross-organizational groups or departments. Journey administrators can define expected timeframes, incorporate approval flows, create functions, and model business processes, along with dependencies. The close coupling of CommandCenter with Zoho's wider CRM suite allows for the coordination of messaging and engagements across sales, marketing, and customer service teams. It can also link up with third-party applications for internal collaboration or external stakeholder communication. CommandCenter includes built-in metrics to analyze and report numbers and times taken at different stages of a journey to identify issues, bottlenecks, or shifting customer requirements.

Other orchestration components include the following:

- **Zoho SalesIQ:** A live chat and digital customer engagement tool that supports customer-facing teams when interacting with website visitors. Visitor information is automatically pushed to the database where possible matches are identified. If a match is identified, the database profile is simultaneously displayed with the visitor information to the sales agents. Sales teams can track visitor behavior on their website, identify the geolocation, engage via chatbot or directly and categorize the interaction (hot, cold, or warm lead).
- **Zoho SalesInbox:** An email client for salespeople that organizes emails according to different deal stages by integrating with Zoho CRM. It allows sales reps to categorize emails into custom folders, label them, and set automated alerts to progress sales leads.
- **Zoho Analytics:** Native reporting and BI that offer approximately 100 pre-installed reports and dashboards with a drag-and-drop interface to blend data across sales, marketing, customer service, social media, and operations. Zoho Analytics also allows for the creation of custom dashboards to monitor trends and measure performance using KPIs. Additionally, it comes with Zia, Zoho's proprietary ML capability.

Activation

A number of applications within the Zoho CRM Plus suite support customer activation, including the following:

- **Zoho Campaigns:** A tool to create and send email marketing campaigns. Marketing teams can design and send mass emails to customers and monitor the effectiveness of the response. Features include subscriber management, A/B testing, email automation, and predesigned templates.
- **Zoho Social:** Allows businesses to manage their social media platforms through its social listening and analytics functionalities. Marketers can schedule posts, engage with customers across Facebook, Twitter, Instagram, and LinkedIn and set up lead generation from likes,

ΩΝΟΜΟ

comments, or interactions on these platforms, funneling them into the Zoho CRM for follow-up. A monitoring dashboard displays notifications of tweets, posts, or mentions of the organization on any of the connected social media platforms.

- **Zoho Desk:** A customer service module that supports agents in managing and resolving support tickets by automation of regular service processes such as assigning tickets, prioritizing tickets, escalation based on service-level agreements (SLAs), and customer follow-up. Zoho Desk allows businesses to create a help center on their website equipped with support bots, a knowledge base, and a support forum enabling customers to find answers directly.
- **Zoho Surveys:** Zoho Surveys help businesses capture customer feedback through surveys that automatically add responses to a customer's profile.

	12-month priorities	24-month priorities
Roadmap	 Enhanced capabilities in support of customer-facing employees, including configuring price quotes and ABM Integration of cross-channel customer feedback (email, surveys, tickets, calls, events, notes, and social channels) to enhance VoC insight Prescriptive analytics to support creation of hypothetical scenarios and extrapolate outcomes based on various attributes Use of Zoho's Al-based assistant, Zia, to identify next best action using customer's lifecycle, customer sentiment, demographic/ firmographic characteristics, and behavioral and purchase patterns Greater integration with third-party applications into Zoho's CRM workflows Use of gamification to increase employee motivation and involvement Enhanced prep and cleansing functionality 	 Enhanced partner relationship management capabilities (PRM), including joint planning, recruitment, onboarding, and co-marketing/sales campaigns Commission and incentive management capabilities Enhanced intelligent service routing Reporting based on customer profiles Unified marketing calendar and tracking

Figure 38: Zoho's short- and long-term roadmap

Source: Omdia, Zoho

© 2022 Omdia

- Highly modular, consistent, and tightly integrated architecture with a large number of component applications.
- Broad range of functionality for both customer engagement and wider organizational processes, allowing an enterprise to fulfill most operational needs from within a single vendor platform.

Limitations

- Zoho's underlying data management capabilities show the CRM system origins of the platform and lack some CDP functionality, such as automated identity stitching or the use of graph databases.
- Zoho has an in-house development strategy and has not undertaken any acquisitions to date. This leads to a highly integrated and coherent offering but may present a challenge in keeping pace with a rapidly evolving market. However, this risk can be offset through Zoho's ecosystem of partners that extend the CX platform by adding new custom capabilities.

ONDIV

Methodology

This report was prepared using information gathered from vendor events and analyst briefings, vendor meetings, technology assessments, interviews with end users, and Omdia datasets.

Omdia Universe

The following steps were taken to build this Universe:

- Omdia analysts performed an in-depth review of the market using our market forecasting data and Enterprise Insights survey data.
- Omdia created a matrix of capabilities, attributes, and features that we consider to be important now and in the next 12-18 months for the market.
- Vendors were interviewed and provided in-depth briefings on current solutions and future plans.
- Analysts supplemented these briefings with other information obtained from industry events and user conferences.
- The Universe was peer-reviewed by other Omdia analysts before being proofread by a team of dedicated editors.

Omdia ratings

The scoring for the Universe is performed by independent analysts against a common maturity model, and the average score for each subcategory and dimension is calculated. The overall position is based on the weighted average score, where each subcategory in a dimension is allocated a significance weighting based on the analyst's assessment of its relative significance in the selection criteria:

- Market leader: This category represents the leading solutions that Omdia believes are worthy of a place on most technology selection shortlists. The vendor has established a commanding market position with a product that is widely accepted as best of breed.
- Market challenger: The vendors in this category have a good market positioning and are selling and marketing the product well. The products offer competitive functionality and a good priceperformance proposition and should be considered as part of the technology selection.

νιςως

 Market prospect: The solutions in this category provide the core functionality needed but either lack some advanced features or suffer from a low CSAT rating. A niche or relatively new vendor with select innovative products and strategies may fall into this category and should be explored as part of the technology selection.

Solution capabilities evaluated in this Universe

Solution capability	Description
Data ingestion	An effective CEP must have the capability to ingest inbound customer interaction from whatever channel or combination
-	of channels customers choose.
Unified data	A fundamental aim of a CEP is to combine all relevant data points relating to a specific entity into a unique,
	comprehensive, and accurate profile—the so called "golden record".
Data security	Ensuring customers' data is kept private and secure is an essential capability both to build the customers' trust in the
-	enterprise and to comply with increasing regulatory requirements.
Workflow	A CEP should make the unified customer data available to and support collaboration across different groups within an
	enterprise.
Data and metrics visualization	An effective CEP must allow an organization to capture, analyze, understand, and respond to both short-term
	transactional engagements and longer-term underlying trends if the relationship is to remain relevant and valued by the
	customer.
B2C marketing management	Coordination of marketing activities to target specific prospects or segments across different communication channels is
J	a requirement.
B2B account-based management	A CEP should support ABM to orchestrate B2B account activities across the entire ABM lifecycle—from marketing to
	sales.
Customer self-service	A CEP should allow end customers to carry out self-service activities such as amend basic details (e.g., email address,
	phone number, or physical address), make inquiries, return items, and make transactions, as well as view a record of any
	complaints or issues the customer may have had with the enterprise.
Customer service	A CEP should support customer service by providing customer service agents with comprehensive access to a customer
	data within a single application. This could also include customer feedback and survey data. In addition, a CEP should
	provide guided engagement in the form of real-time "next best" or "agent assist" capabilities in the form of
	scripts/checklists that guide them during a "live" engagement with a customer on the phone or via webchat.
E-commerce	A CEP should support payment transactions using multiple payment methods (debit, PayPal, mobile payments, etc.)
	across multiple channels and should support both one-off purchases and ongoing subscription billing.
Salesforce optimization	A CEP should support salesforce automation capabilities that offer productivity features that allow employees to view
	meetings, join conference calls, or take notes, as well as track accounts through integrated CRM data, obtain views of
Field service	sales performance, and collaborate with team members. A CEP should support field service optimization capabilities that configure communications, schedules, and processes
	throughout the daily service journey, from the order to the day of service. Field service management tools should
	optimize technicians' productivity while enabling a digital-first, frictionless experience for the customers.
Workforce optimization	A CEP should offer support for WFO that typically combines recording, workforce performance management, quality
Operations	monitoring, liability recording, coaching and eLearning, and potentially speech analytics.
Operations	A CEP should support integration with operational systems within an enterprise.

Figure 39: Solutions capabilities for CEPs

Source: Omdia

ΩΝΩΝΟ

Inclusion criteria

The criteria for the inclusion of a vendor solution in the Omdia Universe: Customer Engagement Platforms, 2022–23 are as follows:

Inclusion criteria

- The vendor must be a global vendor and have customers in at least three regions: Asia & Oceania, EMEA, and North America.
- The vendor must offer a global solution and have referenceable customers in at least three regions: Asia & Oceania, EMEA, and North America.
- The vendor must have at least 500 customers, consisting of a mix of SMBs and midsize enterprises (from 50 to 999 users). The vendor must also have at least 50 large enterprise customers (organizations of 1,000 users and above).
- The vendor must have at least five of the seven CEP criteria:
 - Enable two-way omnichannel communication: The growing number of ways in which customers and enterprises can engage means a CEP must be able to ingest inbound customer interactions and communicate an enterprise's response through a multitude of channels.
 - **Identify the customer:** A CEP must have the capability to identify customers or prospects from the mass of inbound data-much of which will be anonymous.
 - **Keep a golden record:** The wealth of data must be linked and consolidated into a comprehensive and accurate profile of each customer, prospect, or entity, such as a household or business account. This profile must be dynamic and persistent, allowing an enterprise to discern changing trends in profiles over time.
 - **Collaborate across the enterprise:** Unified profiles must be accessible to all functions that interact with customers within an enterprise. This allows a coordinated and aligned response from an enterprise when engaging with customers.
 - Create a personalized response: Analysis of the customer data and history allows an enterprise to orchestrate the most appropriate content, messaging, offers, etc., to create a personalized engagement delivered at the optimum time through the customers' preferred channels.

ΩΝΩΝΟ

- **Analyze and enhance:** A foundational requirement of a CEP is to interpret actions and intentions across all engagements to build an increasingly detailed and comprehensive view of the customer. This requires the capability to capture, analyze, and visualize all customer interactions and use this to continually align and enhance the customers' experiences with the enterprise.
- **Keep data safe and private:** Across all stages of a customer engagement, data must be stored securely both to comply with increasing regulatory oversight and maintain the customers' trust that the enterprise will not misuse their data.

ONDIA

Appendix

Further reading

Omdia Universe: Digital Customer Engagement Platforms in Insurance (coming soon in July 2022) IT Drivers and Technology Priorities – IT Enterprise Insights 2022 (October 2021) Market Landscape: The Customer Journey Orchestration Ecosystem (April 2021)

Authors

Mila D'Antonio, Principal Analyst, Business Platforms & Applications Charles Juniper, Associate Principal Analyst, Enterprise IT askananalyst@omdia.com

Citation policy

Request external citation and usage of Omdia research and data via citations@omdia.com.

Omdia consulting

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 you. For more information about Omdia's consulting capabilities, please contact us directly at consulting@omdia.com.

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") or its third party data providers 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, agents, and third party data providers 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.

CONTACT US

omdia.com askananalyst@omdia.com