Enterprise Software

SPARK Matrix™: Customer Communication Management (CCM), 2022

Market Insights, Competitive Evaluation, and Vendor Rankings

April 2022
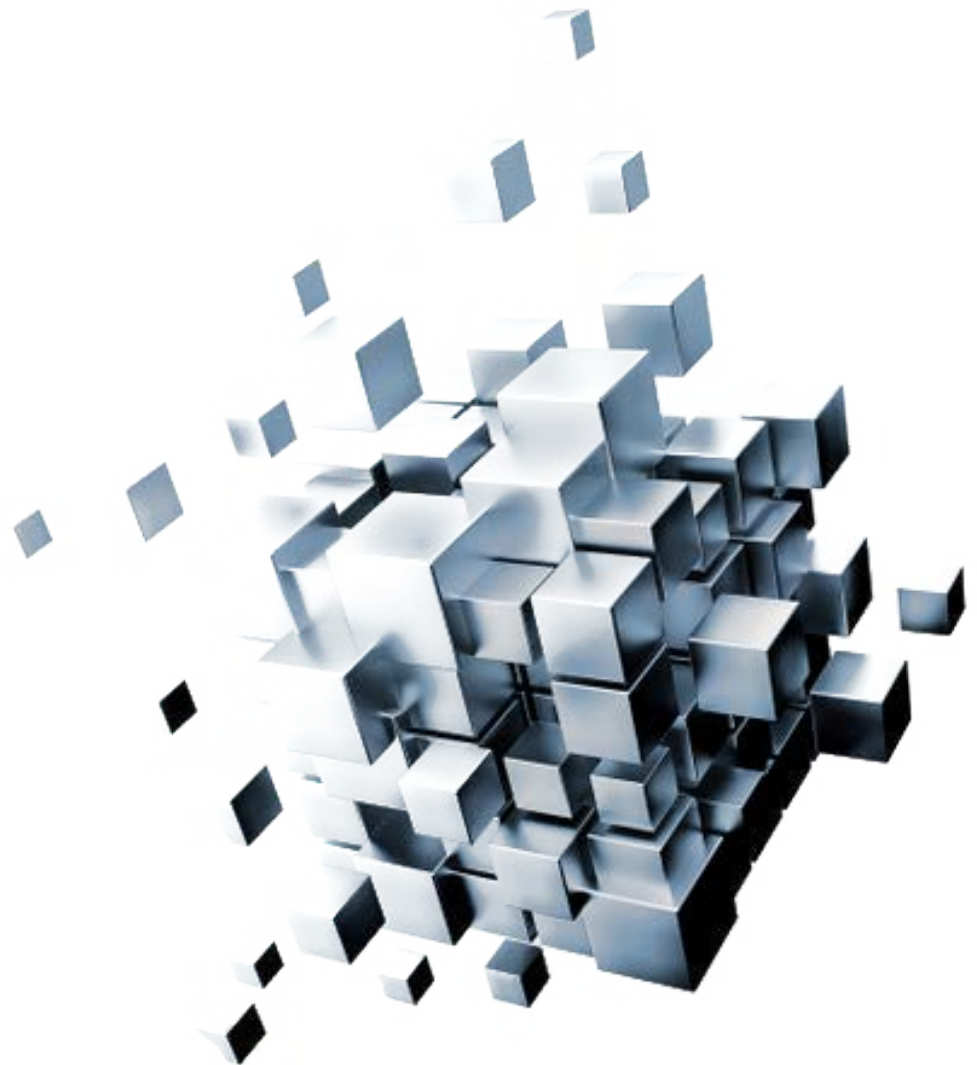
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Executive Overview

This research service includes a detailed analysis of global Customer Communication Management (CCM) platform market dynamics, major trends, vendor landscape, and competitive positioning analysis. The study provides competition analysis and ranking of the leading CCM vendors in the form of SPARK Matrix. This research provides strategic information for technology vendors to better understand the market supporting their growth strategies and for users to evaluate different vendors capabilities, competitive differentiation, and its market position.

Market Dynamics and Overview

A customer communication management (CCM) includes an integrated suite of solutions to create, manage, deliver, store, and retrieve inbound and outbound communications to ensure a consistent and personalized customer experience across different communication channels & touchpoints. The centralized suite enables organizations to perform strategic communication planning, improve overall customer experience, and track performances or requirements to minimize communication risks and proactively make informed communication decisions in alignment with business needs.

CCM is a tool that allows businesses to improve their customer experience by automating communication workflows and providing business users with tools to design responsive, personalized communication across various mediums such as e-mail, SMS, web pages, interactive documents, and so on. It centralizes the process and provides on-demand, batch, and interactive communication to users, ensuring improved delivery to customers, partners, distributors, regulatory bodies, and others. The CCM platform integrates the data from several sources into one single format, making it simple to analyze data patterns and forecast future outcomes.

CCM platforms are being widely adopted due to increasing digital channels and customer expectations of a seamless experience across the customer lifecycle journey. Traditionally, customer communication was limited to in-person communication for customer acquisition. Now however, it has become crucial to enhance the customer experience at every stage of the customer lifecycle (CLC), owing to which organizations are focusing on becoming more customer centric. The customer lifecycle involves a total of five stages—organizational reach, customer acquisition, conversion from prospective to actual customers, customer retention, and customer loyalty. In order to provide a continuous flow of information throughout the customer lifecycle, a CCM platform is critical, as it aids in the management communication across channels while maintaining and enhancing retention & loyalty of users.

So, it takes an extra effort on the part of the organization to maintain a 24x7 approachability & connectivity with their customers. This assures the customer that the organization is constantly willing to incorporate their feedback, grievances & concerns, strengthening their sense of belonging and identification with the

brand. Enhancing the customer experience throughout the product lifecycle will translate into better chances of customer retention and loyalty. As a result, it has become an important part of the customer communication to provide customers with a more personalized and more interactive experience.

With the onset of the digital revolution in the global industrial and corporate sector, apart from the ability of organizations to reach every customer at all the individual possible touchpoints, it is also important to personalize these communications as per the need of user. Additionally, the communication should be personalized as per the need and requirement of the customers, based on exactly what all information bits they might want to consume. Consumers should have access to the information of their interests anywhere, anytime, using any device or operating system of their choice, in the language they are most comfortable with, and should have complete control on the kind of data displayed & the manner in which it is displayed. As a result, a customized communication channel and experience can be created – granting customers maximum control over communication and information management. Apart from the digital mediums including audio, video, messages, & chat supports, the other sources of communication & display on the CCM platform console containing significant information bits that get updated in real time, are also being created in an interactive & intuitive manner, with the help of advanced technologies including AI, ML, RPA, and others - to capture the attention of the consumer and keep them engaged, at any given point of time.

The communication is not only limited to the customers but also gets extended to other stakeholders of the organization. These stakeholders receive direct communication from the company related to data sensitive documents, legal compliance, purchase orders, receipts, bills, annual budget proposals & disbursements, and others. With the increased digital engagement, massive amounts of data are collected, and it hence becomes more crucial to secure the data at the highest possible level. The data can help the organizations to communicate appropriately at all the different levels, internally as well as with the end consumer.

The future of CCM holds limitless possibilities & opportunities by highlighting the real-time personalization of communication across multiple channels, along with stressing the importance of behavior-based personalization depending on the customer response patterns. The CCM platform is also moving towards real-time interactive documents and video communication to further enhance the experience and provide hyper-personalization across channels.

Following are the key capabilities of customer communication management
solution:

- **Data Aggregation:** For an organization to communicate while
maintaining consistency, it is important to have filtered and unified
data. A customer communication management platform helps
organizations integrate the existing data repository and legacy platform
to extract and convert data into a single structured format while
eliminating unwanted data sets. This also helps organizations reduce
data duplication and provides organizations with a rich, accurate, and
uniform database stored in a data warehouse. Furthermore, it enables
organizations to create, manage, and deliver personalized inbound
and outbound communications, while maintaining and supporting
various compliances and corporate standards, consistently ensuring
a quality benchmark.

- **Content Management and Protection:** Customers are digitally
connected at each point of time with the organizations. Each
customer has unique needs and each connect & communication
exchange has an impact on the customer-organization relationship.
A CCM platform integrates data in a single desired format, allowing
organizations to design and create personalized content based on
real-time data. Moreover, with increasing data flow in the system
from multiple sources and various data regulations, including general
data protection regulation (GDPR), California Consumer Privacy
Act (CCPA), and various other state and centralized regulations,
organizations are aggressively focusing on managing and protecting
their content. A CCM platform helps organizations maintain and
protect content by sending alerts in case of any data discrepancy and
upgrading regulations in real-time to reduce discrepancy and based
on the updated terms, ensuring strict legal compliance adherence
and reduction in high penalty and subsequent legal actions.

- **Omnichannel Support:** Customers are connected with organizations
on multiple traditional and digital channels, and each customer has
a preferred channel of communication. A CCM platform allows
organizations to design, create, and deliver unified communication
across multiple channels to cater to the changing needs of customers.
Moreover, a CCM platform generates media-specific communications,

reducing the over-crowding of a particular mode of communication and ensuring the delivery of essential & relevant communications.

- **Multi-language and Format Support:** Digitalization helps organizations connect with people across geographies. However, the linguistic challenges of maintaining consistent communication in local languages have increased significantly. Apart from helping organizations create content in locally & globally accepted languages, a CCM platform also helps gauge regional demands and consumption patterns by storing & understanding finer communication transcripts and gaining insights into the customers' aspirations, concerns, queries, and preferences in general, leading to better business growth in particular geographies. The platform creates communication interactions based on the locally spoken language and processes the same with the flexibility to convert it to the desired language in real-time across multiple channels.

- **On-demand, Batch, and Interactive Communication:** A CCM platform allows the flexibility to design on-demand, batch, and interactive communication as per the requirements. A CCM platform is integrated with various platforms to offer on-demand communication when the request is triggered through chatbots or an individual customer's platform requirements. The platform makes use of AI to minimize the delay in getting back to the customers and swiftly solve their problems. A CCM platform provides capabilities to design and create interactive communication through video messages, interactive charts & graphs in PDF, and audio notes guiding particular sets of instructions, among others.

  A CCM platform eases the scheduled delivery of ongoing communications, such as monthly statements and annual communication highlights by providing one-time updates to large groups, which can be managed effectively by using batch delivery. Organizations can also set workflow rules for specific users to edit and personalize certain parts of the communications, as in the case of certain managers and team leads who would prefer access to a majority of the communication between the clients and team members for reference, especially before sending out fresh communication requests.

- **Personalized Communication:** Personalization in the context of communication has become necessary with the growing digital presence of customers across different countries, along with the rising adoption of various communication devices. It is hence important to engage customers by providing a personalized experience. A CCM platform helps organizations centralize communication creation and delivery, ensuring better, consistent, and personalized delivery with precise results. The platform uses data from all the available data sources, ensuring that each communication stream being produced continuously is personalized as per the needs of individual customers. Additionally, the CCM platform uses various emerging technologies, including machine learning, artificial intelligence, and natural language processing, to personalize communication in real-time to understand customer behavior and patterns.

- **Data Audit, Analysis, and Reporting:** Digitalization has generated an abundance of data in the hands of any organization due to an increase in organizational processes & inter-connected systems, along with a continuous backup of robust & high-capacity servers. A CCM platform helps extract data and convert them into a single usable format to help organizations draw analytics of the data received from each unique customer and form reports accordingly to sync them with the company's goals and standards. A CCM platform comes with a pre-built analytical dashboard, which provides organizations with a holistic view of each communication status and updates.

- **End-to-End Customer Relationship Management:** Customer relationship management has become the heart of any organization's plan as it leads to brand loyalty and increases brand value in the eyes of customers and shareholders. Additionally, customer retention is a challenge in today's diverse & available communication mediums, and competitors attracting customers at every touchpoint. Communication technology is everchanging, and businesses have started realizing the importance of customer engagement and nurturing the relationship throughout the journey's transitions. A CCM platform offers relevant and personalized communication at each stage of the communication lifecycle. The CCM platform provides comprehensive, creative, attractive, and personalized communication across all the communication touchpoints. Additionally, it helps organizations track

and manage the customers throughout the transition and analyze the retention to ensure that the perceived brand value of customers is not distorted.

- **Cloud-enabled Centralized Technology:** With digital transformation, it is important to stay relevant and updated, and cloud computing is one of the steps for the same. Cloud computing leverages technologies such as machine learning, artificial intelligence, robotic process automation, big data analytics, and internet of things (IoT) and reduces the deployment time with the on-premise approach. A CCM platform with cloud capability offers a centralized technology to manage and integrate various communications from different platforms, while constantly adapting to new communication mediums. Apart from integrating with existing legacy platforms, it helps to utilize emerging technologies including ML, AI, RPA, and IoT to its full capacity. Cloud also helps collate a huge chunk of data with ease, reduces processing time, and enhances the ETL (Extract, Transform, Load) process.

Factors Influencing CCM Market: Market Drivers and Trends

The following are the dominant technology and market development influencing the overall global CCM solution and market growth:

The Increasing Influx of Emerging Technologies for Driving Automation and Digitalization for Enhanced Communication Delivery: Customers are increasingly adopting digital means for communication and expect to be connected on every possible touchpoint. In response to this trend, organizations are shifting their communication modes from the traditional print media to digital ones. With an increased indulgence by customers in the digital platforms, organizations have to deal with a huge chunk of unstructured data from varied sources and hence are looking for vendors who can automate the redundant processes of the entire communication cycle while bringing personalization, and also adhering to the compliances.

With an increasing preference towards emerging technologies such as machine learning (ML), artificial intelligence (AI), robotic process automation (RPA), blockchain technologies, and such others, organizations are looking to cut down human intervention, resulting in a reduced manual error and a smooth flow of communication cycle processes. Moreover, these technologies are helping business users to seamlessly design and deliver communication across channels. Updated and enhanced technologies capable of detecting abnormalities are being integrated into the system, which will aid in tracking the actions of the employees, resulting in increased productivity.

Increasing Focus Towards Enhancing the Customer Experience: As more organizations adopt a customer-centric strategy, they are emphasizing the need of sustaining client relationships throughout customer lifecycle and soliciting ongoing feedback and ideas. CCM solution helps organizations to maintain and enhance relationship by providing transparent communication and keeping the lines for interaction open all throughout the product life cycle. CCM vendors are increasingly investing on technologies to provide personalized interactive experience in real-time and across customer lifecycle journey.

Inclination Towards Self-Service Platform and Chatbots: With the increasing focus on a customer-centric approach, customers now expect instantaneous

responses and grievance redressal. Therefore, organizations are creating self-service platforms and chatbots that can instantly address their queries and provide a seamless interactive experience. Organizations are focusing on digitalizing the communication process so that content delivery can be optimized. CCM vendors are also integrating conversation AI to assistant customers with transaction queries. Self-service portals and chatbots are also assisting in structuring and organizing the platform content better based on the target customer, updating the account information periodically, understanding the customer pain-points, focusing on the different customer personas, and measuring the extent of comfort that customers experience in utilizing the product or service, amongst other things.

Standardized and Personalized Communication Across Media Channels: In today's digital world, there are multiple digital channels and touchpoints, and each touchpoint has its own unique offering and capability and hence it becomes important to have standardized yet personalized communication across channels. CCM solution are catering to this need by helping business users create communication that standardizes and personalize content for the preferred channel. Beyond standardization, CCM solution also provides the ability to translate dialects into selected languages without losing the essence of the message. In addition, CCM vendors are offering features that allow users to transition from one touchpoint to another while maintaining the same experience. Unified Content Hub for Data Privacy and Security to Ensure Compliance Adherence: With the rise in digitalization and automation, the data generated has been increasing, simultaneously increasing the risk and security of the data. If the data is left unprotected, the risks of it being misused are great, and with strict data standards and regulations, the fines and costs are massive, not to mention the loss of consumers' faith. Hence, global organizations are increasingly preferring providers who can handle large datasets, comply with regulations, and adopt the most up-to-date data security practices to protect themselves from any perceived threat.

Smart Predictive Analytics helping for Behavioral Analysis: Besides safeguarding the data, analysis of the same is vital as organizations can use this data to make critical and informed decisions. The associated control and responsibility of utilizing the analyzed data lies with the top management. Earlier, the vendors would provide organizations with a simple visual representation of the available data. However, this representation was relevant only to particular clusters of data and hence does not convey the entire story. Additionally, with the increased digital presence, the data captured at each step can be used to track

consumer activity and enhance the customer experience. Data has the ability to improve the experience by allowing for more precise and faster decision-making. To make comprehensive and data-driven decisions, organizations need to get hands-on information with various predictive analysis, and not simply rely on some regular bar, line, or pie charts.

Growing Emphasis on Offering an Open Architecture with Enhanced Capabilities to offer Integration and Interoperability: With the growing speed of digitalization, organizations are demanding cloud-deployment with easy integration with the legacy platform and an open architecture, along with an enhanced communication process. Organizations are expanding their digital reach aggressively and are looking for vendors who can seamlessly deploy and integrate existing models with cloud capabilities and maintain legal compliance. Additionally, the ongoing COVID-19 pandemic and its impact on the current as well as future scenario of communication, has driven the need to create and enhance the cloud integration of communication models along with the migration of existing processes to a more sophisticated and flexible cloud approach. The growing adoption of these platforms can only be possible if they work in a seamless & mutually complementary manner with other software, platforms, and applications used frequently by the organization. In an inter-connected world of today's times, different vendors bring varying degrees of expertise, legacy software, capabilities, and functionalities to the table.

Increasing Demand for CCM in Small and Medium Enterprises: Previously, CCM was a trend amongst large organizations; however, with COVID-19 and the subsequent remote working scenario, medium and small enterprises are also adopting this trend and are looking for vendors who can manage their needs and requirements. The demand for enhanced customer relationship, customer communication platforms, and 24x7 customer communication channels has increased in the recent past. Small and medium enterprises are aggressively adopting CCM platform to connect with their customers and for better inventory management, which drives positive business cycle outcome for medium and small-scale enterprises, resulting in increased profitability.

Increasing inclination towards real-time interactive videos and documents: Customer-focused business units continue to adopt cloud and AI-enhanced platforms to provide enhanced customer experience. Integrating AI and NLP with a CCM platform provides brands with a more personalized communication, campaign, and experience, resulting in increased brand loyalty. Organizations

are looking at vendors who can utilize the increasing amount of data generated across channels and leverage the same to provide real-time interactive video and documents. They are also investing in creating interactive apps or simulations to make the platform more interactive and human-like.

Two-way Communication for Interactive Communication: The need for two-way communication is rapidly increasing through on-demand and interactive communications, and to maintain personalization in such scenarios organizations need to have a tightly integrated ecosystem to maintain consistency and reduce delays in communication. In two-way communication, organizations need to be proactive rather than reactive. Proactiveness aligns highly with the ability of an organization to promptly churn incoming data and provide meaningful insights. This drives the demand for CCM platforms to help formulate an interactive two-way communication.

Competitive Landscape and Analysis

Quadrant Knowledge Solutions conducted an in-depth analysis of the major customer communication management (CCM) vendors by evaluating their products, market presence, and value proposition. The evaluation is based on primary research with expert interviews, analysis of use cases, and Quadrant's internal analysis of the overall CCM market. This study includes an analysis of key vendors, including Adobe, Conga, Crawford Technologies, CSG, Doxee, Doxim, Hyland, iberDok, Intense, ISIS Papyrus, Messagepoint, MHC, Newgen, Nintex, OpenText, Precisely, Quadient, Ricoh, Smart Communications, Topdown, Uluro, and XMPie.

CCM platforms have gained increasing traction in the recent past due to the increasing digital channels and connectivity with customers taking precedence across the globe. Post the impact of the COVID-19 pandemic, an exponential demand has been witnessed for establishing dedicated and 24x7 communication with customers. Moreover, the CCM platform provides connectivity across multiple channels and has the capability to personalize communication in real-time. CCM vendors are also providing interactive videos and documents to engage customers and enhance their experience across the lifecycle journey. Communication management platforms are more essential now than ever before, as companies feel the need to communicate with dedicated genuity, especially to the customers affected by the pandemic situation. Quadient, OpenText, Precisely, Smart Communications, Messagepoint, CSG, Nintex, iberDok, Conga, Doxee, and Doxim are the top performers in the global CCM platform market and have been positioned as the top technology leaders in the 2022 SPARK Matrix analysis of the CCM market.

Quadient is a leading provider of customer experience solutions globally and specializes in business process automation (BPA) and customer experience management (CXM). The company's CCM solution – 'Inspire' assists companies to design, manage and deliver personalized, accurate, and compliant communications across all the channels from a single centralized platform. OpenText is a provider of information management solutions whose CCM solutions help in improving the customer experience through the personalization and automation of customer communications – both for the B2B and B2C scenarios. The companies' omnichannel CCM offering with on-premises and cloud deployment options – called the 'OpenText Exstream' is scalable to fit the needs of individual departments or enterprise environments.

Precisely with its EngageOne product suite (EngageOne Communicate, EngageOne Compose, EngageOne Video, EngageOne Digital Self-Service, and EngageOne Enrichment) provides organizations with data-driven communication models, interactive, personalized videos, and bi-directional omnichannel experience. Smart Communications delivers personalized, omnichannel conversations across the entire customer experience, including the trade documentation capability of SmartDX, the forms transformation capabilities of SmartIQ, and the enterprise-scale customer communications management capability of SmartCOMM.

Messagepoint, with its Rationalizer, MARCIE, and variation management, provides a holistic CCM experience. MARCIE, a proprietary AI, helps to reduce the effort of migration and indulge brand sentiment to the communication sent. CSG provides end-to-end CCM with out-of-the-box integration for multiple channels along with interactive communication and journey orchestration leveraging various emerging technologies, including conversational AI, to provide a seamless, personalized experience.

Nintex CCM's offering includes its easy-to-use interface, user experience, end-to-end CCM solution, scale, and agile architecture, and comprehensive security and compliance. The entire Nintex platform has been built and optimized to improve developer productivity while also empowering business users and simultaneously building sophisticated solutions with low-code and no-code. iberDok is essentially a smart solution for creating and editing template-based documents and forms automatically, wherein static, and dynamic information objects (variables) can be integrated and reused with ease. The platform uses blockchain for document traceability, automatic on-premises translation, integrated business conversational interfaces and template generation.

Conga provides a holistic product offering (Conga Composer, Conga Collaborate, Conga Contracts, Conga Grid, Conga Sign, Conga Orchestrate, Conga Batch, and Conga Trigger) to provide an end-to-end CCM solution. Doxee offers a unique service through its proprietary technology platform and products: document experience (dx) , interactive experience (ix) , and paperless experience (px) . The video tools help to convert data into a personalized interactive video experience for customers.

Doxim provides CCM managed services that leverage a proprietary SaaS platform for document generation, communication and customer engagement which

includes advanced preferences management, print suppression, e-enrollment, campaign management, and interactive PDF,HTML and video communications s. Communications reach the customer through various channels including print & mail, email, SMS, or ePresentment through a hosted customer portal. Doxim clients administer engagement touchpoints through a self-service centralized administration portal.

The global customer communication management market has a number of strong contenders and is expected to have an even more intense race for maintaining the lead in the near future. Global technology scenarios are constantly evolving, adoption rates are accelerating, and compelling developments are taking place round the clock, so vendors must ensure they are keeping pace with the ever-changing customer requirements. The COVID-19 pandemic has changed the perception of digital channels & working patterns of millions of customers around the world, which drives opportunities for the growth of CCM solution offerings. CCM vendors, on their part, must also brainstorm and continuously innovate to offer solutions that make customer and organization experiences more productive and less stressful. Ultimately, any solution that eases the burden of customers and increases their brand association always brings the maximum value to the table, and in that sense, it is an open ground for the global customer communication management providers, who, on their part, could make the best use of the current situation for innovating & establishing themselves further.

Key Competitive Factors and Technology Differentiators

Following are the key competitive factors and differentiators for the evaluation of CCM systems and vendors. While a majority of CCM solutions may provide all the core functionalities, the breadth and depth of functionalities may differ by different vendors' offerings. Driven by increasing competition, vendors are increasingly looking at improving their technology capabilities and overall value proposition to remain competitive. Some of the key differentiators include:

- **Comprehensive Data Integration Capabilities:** A vendor's capabilities in providing comprehensive data integration are essential in improving the performance of communication models. Few vendors may support data ingestion only from out-of-the-box transactional data, account information, and basic customer profiles. In such instances, organizations are required to invest significantly in acquiring data from additional external sources, which is not only monetarily cumbersome, but also extra time-consuming. Users should evaluate vendors based on the comprehensive capabilities to integrate a large volume of data in multiple formats and from contextual data sources across all channels. The platform should also support the complete inclusiveness of data from both online and offline sources. This would help integrate all potential data sources, which could be structured, semi-structured, or unstructured, and may be internal or external in terms of the business operation.

- **Data Visualization and Insights Capabilities:** A customer communication management platform provides customizable and configurable data visualization, dashboard designs, and exploration capabilities. Users should evaluate vendors based on pre-built dashboards, precise data analytics, and use-case specific data visualization, which are the features that allow real-time personalization and insights. The real-time analysis and reporting help marketers seamlessly analyze customer behaviors and patterns on the go through user-friendly UI by using personalized devices. While using the dashboard functionality, organizations prefer to skim through the relevant data and avoid unnecessary and irrelevant information that takes up extra time and attention. Hence, customer communication management vendors are providing dashboards with a high

personalization capability and real-time modifications to ensure that individual communication is offered to every customer.

- **Data Security and Consent Management:** In the present scenario of interconnected personal devices and 24x7 connectivity due to easy access to internet data, accessing individual customers' personal information is a necessity for personal identification markers and segregating different customer groups. However, this has led to concerns regarding phishing attacks and cyber security frauds since individuals provide access to their account information and sensitive data on almost every platform and application they frequently use. A data breach can attract hefty penalties, plus compensation to be paid to the compromised users, which would be disastrous for organizations since it would affect their brand image. Users should hence look for vendors that are compliant with various local and global data compliance regulations, ensuring stringent adherence to the highest standards of ethics on conducting business. CCM platform providers are consolidating customer data from various sources, and data privacy is an important aspect requiring special attention of the platform providers.

- **Ease of Migrating from Legacy to Digital Platform:** With the prevalence of digital communication owing to the convenience and the instant nature of interactions, there has been a decline in various legacy and offline channels such as print, post, and newspapers due to the reduced demand and subsequent shrinking circulation. It thus becomes important for CCM platform providers to be competent with the upcoming digital channels. The legacy channels have generated a lot of data in the offline format over many decades, which is an uphill task since all the relevant information has to be collated and segregated, and every page or data set should be digitized for future reference for documentation purposes. Migrating the offline data into appropriate digital modes without data redundancy and data omission requires considerable time and effort. CCM vendors are continuously enhancing their data migration capability and reducing the time taken for migration, in order to ensure smoother transitions, maximum efficiency, and minimum redundancy.

- **Integration, Interoperability & Scalability:** Seamless integration and interoperability with the organization's existing technologies are amongst the most crucial factors impacting technology deployment and ownership experience. Users should evaluate vendors based on the capability to provide built-in ETL, out-of-the-box integration connectors, well-documented API, and RESTful APIs to achieve seamless integration and interoperability as per the need and size of the organization. The solution should be able to support integration and interoperability with all existing CRM systems, digital channels, and content creation systems. Users should also evaluate the vendor's capability to offer a holistic environment for large-scale organizational setups which involve bulk influx and outflux of large data sets in all types of communication, at any given point. Additionally, the platform should have easy UI and UX and easy deployment across various personal devices so that customers of different demographics and diverse backgrounds find it easy to use.

- **The Communication Channel Supported by Vendors:** The technology domain has become a vast space to coexist with the ongoing advancements in the digital modes of communications, and a continuously shrinking yet persistent existence of the offline modes of communications that still hold a significant position in daily formal conversations. In such a scenario, it is important for users to evaluate vendors based on the digital channel support they offer, and their associated capabilities that are promoted alongside the same, with the growing needs of organizations and customers alike.

  Technological advancements have drastically simplified critical and real-time customer communication, with grievance redressal taking place in a matter of a few seconds for a customer residing in any part of the world, irrespective of the organization's location. Hence, it is important for organizations to have a robust CCM platform that not only supports various digital channels, but also supports a variety of languages, local dialects, accents, and gender-neutral salutations to provide customers with their preferred mode and style of communication.

- **Communication Template Designing Tool:** For organizations, it is important that the communication design tool should be user-friendly,

easy to use, cover a large customer demography, and easy to interact with by any individual. It should also be able to perform complex tasks seamlessly and effortlessly. The designing tool should be supported by the existing legacy tools and should work in collaboration with the same. The content designing team should be able to make changes at any point of time, which should be reflected throughout the communication lifecycle. The designing tool not only helps to personalize the communication but is also used to better interact and engage with customers to understand the finer aspects of customers' needs and their expectations from the brand in general. Various CCM vendors are also engaging customers with real-time interactive videos, communications based on their behavior, languages, and lingo that the customer is most comfortable in, and a UI that fits their sensibilities and mood to offer a complete customized experience.

- **AI and Machine Learning Capabilities:** Owing to a consistent year-on-year digital growth, organizations have witnessed an increase in digital presence and customer size across channels. Thus, the amount of data generated also increases proportionately, creating a challenge of manually keeping track of all the processes, in addition to increasing the risk of human error. Therefore, organizations are looking for vendors who can automate redundant processes, bring about efficiency, and incorporate machine learning (ML), artificial intelligence (AI), and other emerging technologies to streamline business processes, and keep a tab on all the communication activities, sort them based on different parameters, and store the critical data points for future reference. Additionally, technologies like robotic process automation (RPA) facilitate precise & faster data management and data extraction from lengthy communication data sets, apart from fast-tracking other tasks like open-rate, bounce rate, and visibility.

SPARK Matrix™: Strategic Performance Assessment and Ranking

Quadrant Knowledge Solutions' SPARK Matrix provides a snapshot of the market positioning of the key market participants. SPARK Matrix provides a visual representation of market participants and provides strategic insights on how each supplier ranks related to their competitors, concerning various performance parameters based on the category of technology excellence and customer impact. Quadrant's Competitive Landscape Analysis is a useful planning guide for strategic decision makings, such as finding M&A prospects, partnership, geographical expansion, portfolio expansion, and similar others.

Each market participants are analyzed against several parameters of Technology Excellence and Customer Impact. In each of the parameters (see charts), an index is assigned to each supplier from 1 (lowest) to 10 (highest). These ratings are designated to each market participant based on the research findings. Based on the individual participant ratings, X and Y coordinate values are calculated. These coordinates are finally used to make SPARK Matrix.

Technology Excellence	Weightage
Sophistication of Technology	20%
Competitive Differentiation Strategy	20%
Application Diversity	15%
Scalability	15%
Integration & Interoperability	15%
Vision & Roadmap	15%

Customer Impact	Weightage
Product Strategy & Performance	20%
Market Presence	20%
Proven Record	15%
Ease of Deployment & Use	15%
Customer Service Excellence	15%
Unique Value Proposition	15%

Evaluation Criteria: Technology Excellence

- **Application Diversity:** The ability to demonstrate product deployment for a range of industry verticals and/or multiple use cases.

- **Scalability:** The ability to demonstrate that the solution supports enterprise-grade scalability along with customer case examples.

- **Integration & Interoperability:** The ability to offer product and technology platform that supports integration with multiple best-of-breed

technologies, provides prebuilt out-of-the-box integrations, and open API support and services.

- **Vision & Roadmap:** Evaluation of the vendor's product strategy and roadmap with the analysis of key planned enhancements to offer superior products/technology and improve the customer ownership experience.

Evaluation Criteria: Customer Impact

- **Product Strategy & Performance:** Evaluation of multiple aspects of product strategy and performance in terms of product availability, price to performance ratio, excellence in GTM strategy, and other product-specific parameters.

- **Market Presence:** The ability to demonstrate revenue, client base, and market growth along with a presence in various geographical regions and industry verticals.

- **Proven Record:** Evaluation of the existing client base from SMB, mid-market and large enterprise segment, growth rate, and analysis of the customer case studies.

- **Ease of Deployment & Use:** The ability to provide superior deployment experience to clients supporting flexible deployment or demonstrate superior purchase, implementation and usage experience. Additionally, vendors' products are analyzed to offer user-friendly UI and ownership experience.

- **Customer Service Excellence:** The ability to demonstrate vendors capability to provide a range of professional services from consulting, training, and support. Additionally, the company's service partner strategy or system integration capability across geographical regions is also considered.

- **Unique Value Proposition:** The ability to demonstrate unique differentiators driven by ongoing industry trends, industry convergence, technology innovation, and such others.

SPARK Matrix™:
Customer Communication Management (CCM)
Strategic Performance Assessment and Ranking

Figure: 2022 SPARK Matrix™
(Strategic Performance Assessment and Ranking)
Customer Communication Management (CCM) Solution Market

SPARK Matrix™: Customer Communication Management, 2022
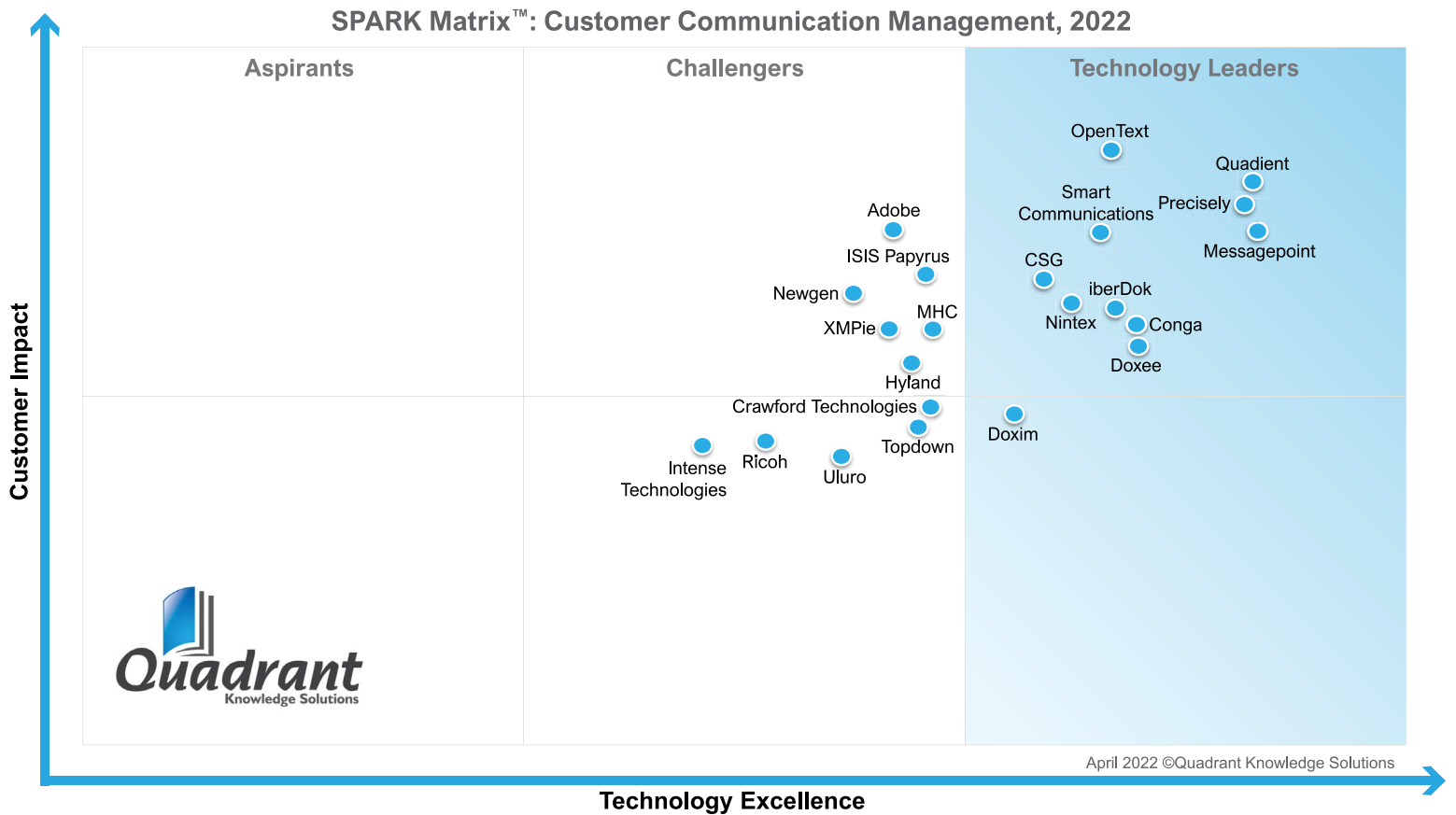
Vendors Profile

Following are the profiles of the customer communication management vendors with a global impact. The following vendor profiles are written based on the information provided by the vendor's executives as part of the research process. Quadrant research team has also referred to the company's website, whitepapers, blogs, and other sources for writing the profile. A detailed vendor profile and analysis of all the vendors, along with various competitive scenarios, are available as a custom research deliverable to our clients. Users are advised to directly speak to respective vendors for a more comprehensive understanding of their technology capabilities. Users are advised to consult Quadrant Knowledge Solutions before making any purchase decisions, regarding know your customer technology and vendor selection based on research findings included in this research service.

OpenText

URL: www.opentext.com

Founded in 1991 and headquartered in Waterloo, Canada, OpenText is a provider of cloud solutions, customer communications management (CCM), digital process automation, enterprise content management (ECM), and ai & analytics. OpenText provides its CCM offering through a range of products, including - OpenText Exstream, OpenText Communications Center Enterprise (CCE), OpenText Document Presentment, OpenText Communications Center (CC), and OpenText Output Server. These solutions help organizations enhance customer experience with personalization and automation of customer communications for both B2B and B2C organizations. OpenText's key capabilities and functionalities include automated business processes, content management, personalized communication, and omnichannel content delivery.

OpenText Exstream utilizes existing data and real-time data to deliver personalized communications across channels. . Exstream offers the ability to generate and maintain efficient communications by designing responsive communications directly from a design database. The platform offers easy-to-use capabilities for non-technical users to create, edit and personalize communication without IT involvement. Moreover, the platform automatically tracks communication delivery status to provide visibility into delivery, tracking, and response. The platform efficiently migrates while also reducing data duplicacy through rationalization tools. Further, the data duplicacy is reduced by integrating the platform with an existing database, platforms, and solutions.

OpenText Communications Center Enterprise (CCE) is a part of Exstream, which provides organizations with a single unified platform for enterprise-wide design, deployment, and multi-channel delivery. Additionally, the platform provides agility and ease of use allowing business users to personalize communication while maintaining consistency throughout the customer lifecycle journey.

OpenText Document Presentment provides organizations with a platform for enterprise-wide design, deployment, and multi-channel delivery of batch and interactive communication. The platform converts documents into dialogues allowing the business user to convert and generate personalized communication in real-time while maintaining consistency across channels.

OpenText Output Management provides a suite of integrated software products that helps organizations deliver communication across channels. The software automates the generation and delivery process of documents while centrally managing the entire process.

Analyst Perspective

Following is the analysis of OpenText's capabilities in the customer communication management (CCM) market:

- OpenText helps organizations with digital transformation programs through its tightly integrated information management platform. The offering helps to organize, integrate, and protect data and communication content across business processes. The OpenText CCM solutions can easily integrate with legacy platforms and systems. Some of the key differentiators for OpenText CCM offering include personalized & interactive customer communication, omnichannel communication, automation of interactive, OnDemand & batch communication, and its output management capabilities. The suite of CCM solutions helps organizations deliver capabilities for dynamic composition, document process automation, and output management.

- Some of the use cases for OpenText CCM offering include automation of communication, omnichannel self-service capabilities, omnichannel document delivery, and streamlined communications. These help organizations to increase efficiency, savings, and customer satisfaction and improves compliance.

- In terms of geographical presence, OpenText has a commanding presence in Europe, Australia, the United Kingdom, and APAC. The company has a considerable scope of expansion in the Middle East & Africa. The company has customers across automotive, banking, consumer goods, defense & intelligence, education, engineering & construction, healthcare, industrial manufacturing, insurance, legal, life sciences, media & entertainment, professional services, public sector, retail, telecommunications, and travel & transportation.

- The company has outlined a comprehensive technological roadmap for its CCM platform that includes enhancing its existing capability

and investing in various emerging technologies. OpenText may face competition from communication technology vendors who are already dominating the rapidly evolving CCM space, emerging vendors with innovative technology offerings, and small vendors offering individual capabilities for CCM. These vendors are successful in gaining a strong market position with increased penetration amongst small to mid-market organizations and are among the primary targets for mergers and acquisitions. However, with its comprehensive roadmap vision, strong partner ecosystem, strong customer value proposition, and robust functional capabilities, OpenText is well-positioned to expand its share in the global CCM market.

Quadient

URL: www.quadient.com

Founded in 1924 and headquartered in Bagneux, France, Quadient is a provider of customer communications management (CCM) and customer experience management (CXM) technology. The company provides solutions that help organizations seamlessly manage and enhance the customer experience for CCM requirements throughout the customer lifecycle. Quadient offers capabilities through Inspire Flex, Inspire Journey, and Inspire Evolve. Inspire Flex is a fully integrated, any-premise enterprise CCM solution. Inspire Flex provides a unified and centralized platform to create and deliver personalized, compliant customer communications across all channels.

Inspire Journey is a cloud-based journey management solution which integrates customer journey mapping, journey analytics, and orchestration technologies to deliver customer-first omnichannel communications experiences. Inspire Evolve is a SaaS customer communications solution. Inspire Evolve integrates four components—content author, front office, generate, and archive—into a centralized hub within the Quadient Cloud to deliver a seamless experience to the communications teams. The key capabilities and functionalities of Quadient's CCM offering include multiple deployment options, omnichannel design and delivery, single screen omnichannel preview, channel-based failover management, integration, data management, and AI-based migration.

Inspire Flex provides a complete end-to-end CCM solution, from design to delivery, and tracking to archiving content, data, and history. Additionally, the platform provides a single architecture for all cloud, on-prem, hybrid, hosted, and other deployment options. This approach allows organizations to move between cloud and on-prem or between private cloud and Hosted Managed Services (HMS) and make other shifts without the need for rewriting applications. The company has designed and deployed all communications and management functions across an omnichannel communication portfolio, providing a single source of data, rules, content, and applications that can be used to generate versions of content across multiple channels, reducing the time and effort taken by business users to design multiple communications. Additionally, it empowers non-technical business users to efficiently design, manage, and deliver personalized, compliant content across all channels.

Quadient's Inspire Flex provides a single screen preview to ensure consistency across omnichannel versions of communications and reduce opportunities for mistakes. Through Inspire, the company offers a channel-based failover management capability. Inspire Scaler, Inspire Flex's integration hub, was started as a scheduling utility for on-demand interactive communications that became the Flex integration hub and scaled at millions of single communications instead of the large batch print. The company then optimized for channel-based failover management. Inspire's Omnichannel Orchestration runs the message until it is delivered and provides alerts on exceptions, non-delivery, and re-iterating analysis.

Quadient provides seamless integration with all the legacy & core systems and data sources in organizations. This helps organizations access data from multiple files, databases, API calls, archived documents, and other sources to speed up the content development, improve communication designs, and create personalized communications delivered across all channels. Inspire allows organizations to test data scenarios to prove logic, test designs, and visualize changes. Additionally, InspireXpress technology helps organizations to consolidate templates and reuse content while tracking the documents.

Analyst Perspective

Following is the analysis of Quadient's capabilities in the customer communication management (CCM) market:

- Quadient provides CCM and CXM technology to help organizations increase engagement with their customers. Quadient's single screen preview for print, email, websites, mobile, tablet, watch, push notification, rich push notification, and others on the same screen allows business users to design correct communication and have visual confirmation of omnichannel consistency.

- Quadient has also added QR code proof, PDF export of omnichannel proofs, simultaneous scrolling proof mode, social commenting, CJM integration, and data overriding to this capability. Some of the key differentiators of Quadient's CCM offering include customer engagement & experience capabilities, hybrid deployment options, pricing strategies, capability to simplify & automate communication process, single-screen preview capability, and pre-CCM migration analysis.

- Quadient's CCM offering provides accuracy, clarity, and speed to enhance customer experience. Quadient has also created Quadient University, Quadient Exchange, and "The Quad" which allow organizations to access samples, articles, reference applications, system benchmarks, partner integrations, and tips and tricks from over 30,000 pieces of content. The InspireXpress migration technology reduces the pre-CCM migration analysis time with the use of technologies such as ML, NLP, and AI to ingest, dissect, and propose optimized communication templates that reduce ongoing work, eliminate duplicate content, and streamline content for conversion into omnichannel customer communications faster.

- The CCM solution caters to various use cases, including customer correspondence for insurance finance, complex contracts for insurance and finance, large-scale outsourced statements, in-house generated statements, omnichannel marketing campaigns, and SMB invoicing. These use cases help organizations with customer onboarding, sales quotations, and customer service with interactive communication generation and omnichannel delivery. The Inspire platform generates complex communications faster and provides multi-step journey-based campaigns with omnichannel nudges and reminders to complete the transaction.

- Quadient has a strong geographical presence in the USA and Europe. The company also has a significant scope of expansion across Asia Pacific, Latin America, Canada, and the Middle East & Africa. From an industry vertical perspective, the company has a strong customer base across various verticals, including banking, service providers that generate outsourced print and digital communications, healthcare & life sciences, government and public sectors, and energy & utilities. The company also has a presence across IT & telecom, education, travel & hospitality, manufacturing, media & entertainment, and retail & eCommerce.

- The company may face competition from large communication technology vendors who are already dominating the rapidly evolving CCM space, emerging vendors with innovative technology offerings, as well as from small vendors offering individual capabilities for CCM. These vendors are successful in gaining a strong market position with

increased penetration amongst small to mid-market organizations and are amongst the primary targets for mergers and acquisitions. However, with its comprehensive roadmap vision, strong partner ecosystem, strong customer value proposition, and robust functional capabilities, Quadient is well-positioned to expand its share in the global CCM market.

- Quadient has outlined a comprehensive technological roadmap for its CCM platform that includes enhancing its existing capability and investing in various emerging technologies. The company is focused on channel expansion, reducing the time to respond to customer queries, and key integrations with adjacent technologies. Additionally, Quadient is continuously working to ensure that the platform supports all the touchpoints. Quadient is also using reference applications, process design technology, and more Bootstrap capabilities to allow mobile teams to provide impactful customer communications target audience of the company as well as the total CCM volume for the enterprise to enhance CX consistency. Lastly, the company focuses on key integrations with adjacent technologies, including bi-directional communications

Precisely

URL: www.precisely.com

Headquartered in Pearl River, New York, USA, Precisely was formed following the amalgamation of technology and data solutions firm Syncsort and then acquired Pitney Bowes software & data business promoting enhanced data integrity along with strong customer communication management (CCM). The company's market offerings include a range of product suites to integrate, verify, locate, enrich, and engage customers accurately, consistently, and in the context of their location. Precisely has acquired CEDAR CX in 2021 to enhance its CCM and hosted managed service capabilities. The acquisition will help Precisely migrate efficiently and swiftly to cloud-native technology and enhance customer experience through advanced engagement channels, including video and chat.

Underlying Precisely's customer engagement offerings is EngageOne, a suite of end-to-end customer communication management solutions, including EngageOne Rapid CX, EngageOne Communicate, EngageOne Compose, EngageOne Video, EngageOne Digital Self-Service, and EngageOne Enrichment. Precisely's comprehensive key capabilities include personalized & multi-channel real-time communication, provisioning of cloud-based digital communications, self-service chatbots, personalized and interactive video communications, omnichannel experience, intelligent email management, data management, and analytics & reporting.

EngageOne Rapid CX helps organizations compose communication for all types of communication—batch, on-demand, interactive, print, email, and postal. The platform also provides capabilities for electronic bill presentation and payment for both B2C and B2B, while allowing the creation of digital wallets and facilitating payment options on the platform. Chatbots are integrated to provide a seamless interaction experience and understand consumers' behavior across the channel and when they move from one channel to another.

EngageOne Communicate is a SaaS-based product suite for CCM used by tier 1 and tier 2 organizations to design, deliver, and monitor mobile-first engagement over email, push notification, and SMS through a unified designer interface. EngageOne Converse falls under the 'Communicate' product suite. The software provides users with self-service chatbots powered by artificial intelligence and natural language processing. The chatbot uses real-time customer data

& location information and can be deployed on messengers, web portals, and mobile applications. The software also allows the customer to control the portal, empowering the customers to make payments easily, enquire for balance, check order status, access technical support, and obtain recommendations.

EngageOne Video is a SaaS-based platform that allows an organization to create personalized, interactive, and engaging video communications. With its real-time analytics, text to speech capability, and a pool of templates, organizations can personalize and change the flow of video in real-time influenced by the customer response and transaction.

EngageOne Compose allows the organization to design and deliver personalized omnichannel communications throughout the customer lifecycle. It also provides reports about the delivery of messages, open status, etc., with the management of the process for outbound replies and communication. The platform's workflow allows a comparative view of the changes on the template to ensure quality control and compliance. EngageOne Compose also provides seamless integration with existing enterprise software to connect & retrieve data from platforms or software across the ecosystem and create data-driven communication models to enhance the customer experience with unique & personalized communication.

EngageOne Digital Self Service provides users, including customers and customer service representatives, with instant access to documents from any source, including multiple print streams & billing systems, and high-speed repository indexes and stores. EngageOne Vault, which is a part of its 'Digital Self Service' suite, promotes speed and flexibility to archive and retrieve customer communications by rendering them into web-viewable formats and scaling them to thousands of simultaneous users. Using EngageOne Digital Self Service provides a bill presentment portal of connected document archives. Users can gain access to an aggregated, interactive view of all bills and invoices, view line-item details, and dispute any bill discrepancies. EngageOne Digital Self Service integrates into existing bill payment solutions to offer secure electronic bill payment.

EngageOne Enrichment is a print-stream re-engineering and output management solution that simplifies advanced distribution strategies, both for hard-copy printing and digital documents. Precisely leverages its expertise in data and provides data-driven insights to drive relevant customer engagement. Customers use EngageOne Enrichment to execute processes such as postal optimization and communications resequencing to reduce print and mail costs, extract data from

print-streams for digital delivery, and update document pages to meet corporate brand standards.

Precisely nurtures robust partner strategies in the areas of coverage, extension, expansion, growth, and scalability. They continue to recruit a partner ecosystem involving OEMs & reselling digital products through non-traditional markets. The company promotes the creation of a scalable support & service organization and enhances the incremental services to improve customer enablement & migration support. Precisely further strengthens its partner strategies through collaborations with ERP & CRM providers and curated API & cloud offerings.

Analyst Perspective

Following is the analysis of Precisely capabilities in the customer communication management (CCM) market:

- Precisely provides a robust, scalable, and innovative platform for customer communication management. The company, with its advanced engineering processes, helps its clients migrate from legacy solutions through migration tools and professional service organizations. Some of the key differentiators of Precisely include data-driven communication models, interactive personalized videos, bi-directional omnichannel experience, ease of deployment, strong data & location capabilities, high scalability & performance, and cost-effective SaaS deployments, amongst others.

- Some of the use cases for Precisely's CCM offering include communications tailored to respective verticals, mobile and digital communication, interactive personalized video, cloud-based communications, and self-service and chatbot solutions. These help organizations to provide full capabilities for CCM communications regardless of the channel, along with deployment options (on-prem, SaaS, or hosted). The platform connects to the organization's data to design the customer communications to support batch processes (bills, statements, and invoices) and real-time correspondence (customer correspondence, claims correspondence, and employee documents) across channels. The solutions also support the customer experience with regard to customer onboarding (welcome kits and product/service onboarding), customer service to drive loyalty & retention, and product/service upsell/cross-sell.

- In terms of geographical presence, Precisely's CCM offering has a commanding presence in Europe and the USA. The company has considerable standing in the Asia Pacific region and has ample scope for expansion and growth in the Latin American, Middle Eastern & African, and Canadian regions. Some of the top industry verticals from the existing customer base for Precisely include banking & finance, insurance, IT & telecom, healthcare & life sciences, energy & utilities, retail & eCommerce, and the government & public sectors, amongst others.

- Precisely's key challenge in CCM involves competition from other well-established vendors with a holistic and established technology offering, as well as from small vendors with product offerings that aim to represent a particular segment of communication. However, the company is well-positioned to grow its market share across sectors and retain its market position in the long term, with a holistic technology, partner network, and domain expertise.

- The product roadmap for Precisely's CCM offering includes continuous investment in technology and innovation to further enhance its existing capabilities and customer experience throughout the product lifecycle, end-to-end hosted managed services, digital self-service, mobile communications, interactive video, data integrity, and seamless omnichannel communications in the cloud. The company is also doubling down on SaaS and restructuring its interfaces to modernize and enable an interactive business user experience. Additionally, it is looking to streamline the review, approval, and template management processes.

- The company is also focusing on increasing its global partner network and expanding the existing involvement programs with Client Connect, Application Adopter, etc. It is aiming to create an easy to deploy communication tools for business users and combining video, conversational experiences, and digital communications, and provide seamless orchestration for a streamlined communication experience. The company is also focusing on enhancing EngageOne Rapid CX to offer an omnichannel HMS platform that combines traditional CCM use cases with end-to-end data integration and cutting-edge digital channels and self-service capabilities.

Smart Communication

URL: www.smartcommunications.com

Founded in 2016 and headquartered in England, Smart Communications is a provider of cloud-enabled customer conversations. The company recently acquired Assentis, a European-based CCM software and solutions provider, to enhance its capabilities in the financial services industry and throughout Continental Europe. Smart Communications provides a range of products, including SmartCOMMTM for personalized communication, SmartDXTM for Capital Markets; and SmartIQTM for forms-based processes. The key functionalities and capabilities of SmartCOMM include multi-channel communication management, personalized communications, interactive communication, data management, and digital transformation.

SmartCOMM is built on 'The Conversation CloudTM' which helps organizations provide personalized, omnichannel conversations across the entire customer lifecycle. The Conversation Cloud's key capabilities include Collecting, Communicating, Collaborating, and Coordinating; underpinned by Integrations and Intelligence. The cloud seamlessly collects customer information by transforming static forms-based processes into intelligent, conversational user experiences. This helps reduce abandonment rates and improve data quality and accuracy. The Collaborate capability helps negotiate and execute business-critical agreements across internal and external stakeholders using experience-driven workflow.

SmartCOMM provides business users with the capabilities to design personalized and interactive communication to be delivered across channels. The company also offers capabilities to engage with customers and turn one-way communications into two-way customer conversations. This helps enhance customer experience and hence create a positive brand image. The platform provides pre-approved document templates which help organizations easily update and circulate communication in a few clicks. Additionally, the platform provides business users with tools to enhance communication and reduce time-to-market for new products and services.

SmartCOMM integrates with existing data repositories and legacy platforms to ensure a single source of data and reduce data duplication. Additionally, it helps provide data-driven personalized communication. Moreover, the pre-integrated emerging technologies use data to better understand existing content and

optimize the communication accordingly.

Analyst Perspective

Following is the analysis of Smart Communications capabilities in the customer communication management (CCM) market:

- Smart Communications is a provider of a cloud-native customer conversations management platform. The company provides digital-focused and customer-driven scalable end-to-end customer communication lifecycle management. Some of the key highlighting differentiators for Smart Communications' CCM solutions include interactive two-way conversations and personalized on-demand & batch communication. The platform intelligently analyses and delivers communication across multiple digital channels as per the customers' preferences.

- Some of the use cases for Smart Communications' CCM offering include improving customer communication, digital-first document management, personalized communication, digital transformation, and data protection & management. These use cases provide organizations with the agility to scale and enhance customer experience during customer acquisition, onboarding and servicing with personalized communication across touchpoints.

- In terms of geographical presence, Smart Communications has a commanding presence in Europe, the USA, and Australia. The company has a considerable scope of expansion in APAC and the Middle East & Africa. The company has customers across banking & financial services, insurance, healthcare & life sciences, the government & public sectors, and energy & utilities. Smart Communications has considerable scope for growth in areas such as IT & telecom, education, manufacturing, media & entertainment, travel & hospitality, and retail & eCommerce.

- The company has outlined a comprehensive technological roadmap for its CCM platform that includes enhancing its existing capability and investing in various emerging technologies. Smart Communications may face competition from communication technology vendors who are already dominating the rapidly evolving CCM space, emerging vendors with innovative technology offerings, and small vendors

offering individual capabilities for CCM. These vendors are successful in gaining a strong market position with increased penetration amongst small to mid-market organizations and are among the primary targets for mergers and acquisitions. However, with its comprehensive roadmap vision, strong partner ecosystem, strong customer value proposition, and robust functional capabilities, Smart Communications is well-positioned to expand its share in the global CCM market.

Messagepoint

URL: www.messagepoint.com

Founded in 1998 and headquartered in Toronto, Canada, Messagepoint is an end-to-end customer communication management (CCM) solutions provider. The company offers a SaaS-based CCM platform 'Messagepoint,' a content migration and analysis solution 'Rationalizer,' and a focused solution for managing healthcare documents called the 'Healthcare Touchpoint Exchange.' These solutions are powered by the Messagepoint Advanced Rationalization and Content Intelligence Engine ('MARCIE'), the company's proprietary artificial intelligence (AI) and machine learning (ML) engine.

Messagepoint's comprehensive capabilities support on-demand, batch, and interactive communications across print and digital channels. The solution focuses on providing business users with an intelligent, centralized content hub in which they can author and manage complex content and rules. Messagepoint enables customers to create, edit, manage, personalize, and reuse content, increasing efficiency, compliance, and consistency. Additionally, it allows organizations to manage, share, and reuse pieces of content over multiple templates and channels. The in-house AI engine MARCIE allows organizations to efficiently optimize, consolidate, and migrate content, in the process of identifying duplicate and similar content, discrepancies in the content, compliance with brand standards, and sentiments expressed therein. MARCIE also uses the 'Flesch and Flesch-Kincaid' readability test to ensure communications comply with organizational standards and in some cases, industry-required reading levels.

Rationalizer leverages MARCIE to help organizations reduce the effort of migrating and optimizing the content from legacy platforms. Rationalizer performs five main functions of content management—intelligent ingestion, discovery through an intuitive dashboard, consolidation of content, optimization of content, and migration to another system. Rationalizer automates the ingestion and tagging of content from legacy document formats and analyses that content to determine content consolidation opportunities and optimization opportunities looking at brand alignment, sentiment, and reading levels. The solution enables the content to be migrated into Messagepoint or other CCM platforms.

The intelligent content hub of Messagepoint for CCM allows business users to centrally manage and share pieces of content across teams, communications,

touchpoints, and channels. This helps reduce time to market and simplify change management while ensuring consistency and compliance. The platform empowers content authors by providing them with full control over creating, editing, and managing content and rules without the need to manage and use spreadsheets and send them to IT for programming. The authoring capability is powered by MARCIE, which identifies the sentiment of messages to evoke the right feelings and emotions from customers across channels. It can also control adherence to brand guidelines with a custom brand profile. The brand profile can flag restricted words and standard treatments to be used for any communication.

Messagepoint's 'SmartText' allows organizations to share common content across individual communication touchpoints and channels while centrally managing that content as a single content object. The platform uses natural language rules that are easy for business users to manage and variables to create personalized communications across all channels. The Messagepoint Touchpoint Exchange enables organizations to create model touchpoints with standard layouts and content to easily publish, update, distribute, and sync model documents while maintaining consistency and preserving customizations throughout the customer experience and ensuring compliance. The organizations can restrict and grant access to users as per their role.

Content in Messagepoint can be leveraged to create fully composed communications, such as printed letters, emails, or HTML that combine content, variable data, and layouts for distribution to customers. The content-centric solution also offers content to be leveraged for other digital channels via packaged integrations with digital solutions including Salesforce Marketing Cloud, Sparkpost, Clickatell, Twilio, and SendGrid or via a headless CCM process in which content is sent in either HTML or JSON formats to digital endpoints in response to an API call.

'Variation Management' is a patented technology of Messagepoint that leverages a master touchpoint that centrally manages and shares standard format and content with its variants, thus reducing the need to create, update, and manage multiple similar touchpoints and templates for documents and correspondence. This technology helps create similar communications efficiently while reducing templates under management and streamlining the overall management of the communications library.

Messagepoint also allows business users to directly proof and test the communication prior to its release to ensure that it conforms to the rules &

compliance restrictions and targets the right individual. It also tracks all edits, allowing users to have a clear view of the entire versioned editing process. It also provides total control of the communication journey and real-time visibility into job statuses.

Messagepoint allows seamless integration with existing digital delivery platforms, Salesforce Journey Builder, and other customer communication management tools that organizations have in place for their print composition capabilities. In addition to connectors and integrations to other CCM and digital experience solutions, Messagepoint also provides an optional enterprise-scale, high-performance composition solution with Messagepoint Composer. The solution is extended with job orchestration, distribution, tracking, and archive options within the Messagepoint ECP (enterprise communications processing) add-on module.

Messagepoint Connected is a solution that helps organizations optimize customer experiences by enabling front-office teams to support interactive communications with the right set of data to be shared across channels (personalized images, offers, notes, and messages). This helps enhance the one-to-one personalized experience and reduce customer turnover while enabling upsell and cross-sell. In terms of the deployment options for Messagepoint's CCM solution, content, touchpoint design, proofing, and testing are always managed in the cloud, but the solution offers an option to either keep customer data on-premises behind their firewall or manage it in the cloud.

Analyst Perspective

Following is the analysis of Messagepoint's' capabilities in the customer communication management (CCM) market:

- Messagepoint is a SaaS-based customer communications management (CCM) solution that enables organizations to enhance customer experiences with optimized communications. For simple correspondence and complex document systems, Messagepoint uniquely enables marketers, customer experience, and servicing teams to create timely, relevant, compliant, and highly personalized customer-facing communications across the print and digital channels. Messagepoint enables organizations to centrally control, share, and brand content across channels.

- Some of the key differentiators for Messagepoint's CCM solutions include Rationalizer, MARCIE, and Variation Management. The platform offers a cloud-first implementation and deployment solution, with content sharing capabilities including the patented 'SmartText' which allows easy reuse of content fragments through multiple communications and channels while centralizing control and change management. It provides headless CCM to connect with leading CCM, email, customer experience, and digital delivery technologies to optimize existing customer ecosystem investments, promoting seamless integrations. Additionally, 'Rationalizer' is used to accelerate the migration of content from legacy systems and for content optimization.

- Some of the use cases for Messagepoint's CCM offering include omnichannel correspondence, letters & disclosure management, content and CCM migration, communication personalization & modernization, contracts, policies, documents, statements, invoices, & billing management, and direct marketing & mail, amongst others. Messagepoint's capabilities help organizations provide better and consistent content, adhere to regulations, enable hyper-personalization for better CX, achieve faster migration and transformation, faster time to market, and reduce redundant work & complexity of managing complex content.

- In terms of geographical presence, Messagepoint has a commanding presence in the USA and a small but significant base in Canada. However, the company has ample scope for expansion in the European, Middle Eastern & African, and Asia Pacific markets as well. Some of the top industry verticals from the existing customer base include healthcare & life sciences, banking & financial services, insurance, government & public sectors, energy & utilities, and IT & telecom. The company has considerable scope for growth in areas such as education, manufacturing, media & entertainment, travel & hospitality, and retail & eCommerce.

- Messagepoint's primary challenges include the growing competition from emerging vendors with innovative technology offerings, as well as from small vendors with local geographical focus, who tend to serve a narrower section of customers. However, the company, with

a holistic technology platform offering, is well-positioned to expand its market size across industries.

- In terms of product and technology roadmap, Messagepoint continues to invest in technology and innovation to further enhance the platform and Messagepoint Advanced Rationalization and Content Intelligence Engine (MARCIE) for additional content optimization capabilities. Apart from supporting dynamic & on-the-glass interactive communications, Messagepoint will continue to expand its connectors and APIs, allowing effortless integration with other enterprise software and a smooth digital delivery system.

CSG

URL: www.csgi.com

Founded in 1982 and headquartered in Greenwood Village, Colorado, USA, CSG is a provider of customer engagement, customer communication management, revenue management and monetization, and payments solutions. These solutions help organizations simplify complex customer interaction and connect anytime, anywhere, and across channels. CSG offers its customer engagement and customer communication management capabilities through the CSG Xponent™ platform. CSG Xponent helps businesses elevate the customer experience to exceed customer expectations and create their best next experience. This platform brings together Journey Orchestration, Interactive Messaging, and a Customer Data Platform to guide customer communications. The key capabilities and functionalities of Xponent include end-to-end customer communication management, data management, customer experience management, customer journey management, and omnichannel communication.

Xponent provides a customer data platform that injects data from the existing database, first-party sources, and third-party sources. These data are extracted to transform into a single unified format which can be used to design communication and gain insights. Moreover, the content design and presentation tools by CSG allow organizations to unify customer communication and experience across channels by reusing common elements and aligning in the best possible way.

Using the different platform features, customers can quickly deploy multi-channel journeys using both back-office data as well as real-time customer behaviors to deliver personalized customer communications. With a centralized decisioning and orchestration platform to seamlessly coordinate interactions across print, email, SMS, mobile, voice IVR and other channels. Journey Orchestration ensures customers no longer receive repetitive, or contradictory messaging. This allows businesses to benefit from proactive upsell/cross-sell opportunities.

CSG Xponent provides out-of-box API into existing channels to seamlessly utilize legacy platforms and solutions. Xponent provides insights into customer messages using its proprietary logic and insights to deliver the right message through the right medium. The analytics tools track customers throughout the customer journey to enhance the customer experience. CSG helps organizations design and develop communication solutions for various channels, including

voice services, SMS text, multimedia messaging service (MMS), mobile push notifications, social, email, and outbound voice notifications, two-way interactions and both inbound and outbound IVR systems. Through these digital channels, CSG sends messages to 210 countries around the world.

CSG's digital messaging capability offers the latest digital channels to connect with customers across channels while integrating customer experience through journey orchestration. Xponent uses Conversation AI to address customer support scenarios and create a consistent customer experience across channels. The platform also uses natural language processing (NLP) to understand customer intent and queries and direct them to the right point of contact, enhancing customer experience and reducing customer wait time. Additionally, the platform has integrated with chatbots, which helps provide the self-service capability for repetitive queries. This helps agents focus on sensitive queries. The chatbots use conversational AI to provide two-way communication and help customers with the next-best actions.

CSG provides organizations with integrated text-to-speech and speech recognition capabilities, which help customers navigate menus, confirm customer identity, ask about order status, and more. The platform allows organizations to effectively utilize the inbound Interactive Voice Response (IVR) through self-service or tagging to the best agent. Additionally, CSG provides CSG Interactive Messaging, which is available in SaaS and PaaS deployment models. CSG Interactive Messaging uses advanced speech recognition, computer telephony integration (CTI), call center integration, agent transfer, and call recording/replay/transcription to provide customers with real-time personalized information. With extensive support for digital channels, CSG also provides print communication capabilities by helping organizations design, deliver, print, and process transactional documents seamlessly.

Analyst Perspective

Following is the analysis of CSG's capabilities in the customer communication management (CCM) market:

- CSG provides a cloud-first architecture to help organizations seamlessly launch new digital services, expand into new markets, and create dynamic experiences across the customer experience. The company provides flexible, personalized customer communications

management solutions and an integrated omnichannel approach across the customer journey.

- Some of the key differentiators of CSG's customer communication management offering include omnichannel support, interactive document, video communication capability, and proprietary logic and insights.

- Some of the use cases for CSG's CCM offering include customer journey management, managing communication across channels, implementing, self-service options, and robust segmentation capabilities. These use cases help organizations enhance customer engagement, reduce churn, reduce operating expenses, easily launch new digital services, and enter new markets efficiently.

- From a geographical presence perspective, CSG has a strong customer base across North America. However, with the growing market traction, the company is currently making inroads into the European Union and APAC. From an industry vertical perspective, the company has a presence across a wide range of industry verticals, including banking, financial services & insurance, retail & e-commerce, telecom, healthcare, and media & publishing sectors.

- In terms of product and technology roadmap, CSG continues to invest in emerging technology and innovation to further enhance the platform. CSG's primary challenges include the growing competition from emerging vendors with innovative technology offerings, as well as from small vendors with a local geographical focus. These vendors are successful in gaining a strong market position with increased penetration amongst small to mid-market organizations and are among the primary targets for mergers and acquisitions. However, with its comprehensive roadmap vision, strong partner ecosystem, strong customer value proposition, and robust functional capabilities, CSG is well-positioned to expand its share in the global CCM market.

iberDok

URL: www.iberdok.com

iberDok is a part of Ibermática, which was founded in 1973 and is headquartered in Donostia, Spain. Ibermática is a provider of Information Technology (ICT) services to business users, focusing mainly on the Spanish market and working in the fields of ICT consulting, integration of information systems, infrastructure services, and outsourcing & implementation of integrated business management solutions, amongst others. iberDok offers a design tool for generating and editing documents and forms based on templates. It features an in-built template editor, document composer, form editor, document editor, and a management console that allows organizations to create, edit and review documents on-demand and in batch communication. iberDok specializes in customer communication management solutions enabling comprehensive key capabilities like interactive & customized communication; easy integration with other platforms; support for multiple languages, devices, and channels; dashboard & reporting; tracking of communication around the entire communication lifecycle; and automation & chatbots, amongst others.

The platform's template editor provides a centralized directory for templates and advanced designs. This allows organizations to easily add data, fields, values, etc. for effective communication. The document editor eases the process of batch production by using various tools and supporting the creator during the entire document editing process. The form editor has a high processing capability. The capability is useful for processes like generating interactive forms based on the information provided by the customers. The platform incorporates a complete administrative management console with features like process monitoring, traceability & statistics, management of versions & documents, and organizational definitions, amongst others.

The platform is equipped with an administration module, which allows an organization to perform a general setup and define hierarchy. The platform also provides users with support for multiple languages, channels, devices, and formats. iberDok uses blockchain technology, encryption, advanced design tools, and a customer-centric model throughout the communication lifecycle to ensure that the generated communication is personalized and secured. The platform offers microservices that allow an organization to use a centralized catalog and generate highly interactive communications.

The platform allows users to track the changes made to the document and revert to an earlier version. iberDok is equipped with a reporting & analytics capability which uses charts and graphs to promote real-time processing of complex information in a streamlined manner. The platform can also automatically number the document's section and sub-sections and restore the previously formatted version while copying from one document to the other. iberDok provides seamless integration between legacy platforms for a smooth flow of data, information, and communication. The organizations can track the process of document generation, providing a clear picture of the document flow.

Analyst Perspective

Following is the analysis of iberDok's capabilities in the global customer communication management market:

- iberDok leverages its experience of over 40 years to provide a robust and scalable customer communication management platform to support the entire customer lifecycle. iberDok is essentially a smart solution for creating and editing template-based documents and forms automatically, wherein static, and dynamic information objects (variables) can be integrated and reused with ease. The platform enables the creation of a single document or form on demand in a guided and interactive way with a high capacity for mass document generation.

- The iberDok process involves different input modes to solve dynamic data sets, the performance of unattended document composition in a single server process to optimize the number of resolution time cycles, and the creation of different output formats according to communication needs. Some of the key differentiators of iberDok include the use of blockchain for document traceability, automatic on-premises translation, integrated business conversational interfaces, template generation with AI & ML, content standardization, customized information panels, and process redesign with integration into existing BPM, amongst others.

- Some of the top use cases of CCM deployments for iberDok based on the existing customer base would include the generation of editable documents for the electronic processing of administrative records,

generation of personalized online forms to be completed by citizens, data collection at the manufacturing plant, digital conversion of client's profiles in business processes of insurance companies, and edition of the budget & general accounts in government & public administration, amongst others.

• In terms of geographical presence, iberDok has a commanding presence in the European region. From an industry vertical perspective, the company majorly focuses on the government & public sectors, banking & financial services, manufacturing, and the insurance sector and has a considerable customer base across a wide range of industries, including education, healthcare & life sciences, energy & utilities, retail & eCommerce, IT & telecom, and travel & hospitality, amongst others.

• iberDok's primary challenges include the growing competition from emerging vendors with holistic CCM & innovative technology offerings and vendors serving multiple countries. These vendors are successful in gaining a strong market position with increased penetration amongst mid to large market organizations. However, iberDok, with a considerable functional capability and a significant customer value proposition, is well-positioned to maintain and grow its market share globally.

• iberDok's product and technology roadmap focus on investing in technology and innovation to further enhance the platform's key offerings by improving customer experience, usability, accessibility, and adaptation along with better use of the device's capabilities. Additionally, iberDok is enhancing its machine learning (ML), artificial intelligence (AI), natural language processing (NLP), robotic process automation (RPA), and blockchain technologies for migrations of collections from legacy platforms and for content extraction & classification.

Nintex

URL: www.nintex.com

Founded in 2006 and headquartered in the Seattle region, USA. Nintex is a leading provider of process intelligence, communication management, and automation software. The company helps users to discover, automate, and optimize their enterprise-wide communication through easy-to-use and powerful process automation management tools. The comprehensive capabilities for Nintex customer communication management (CCM) offering include process mapping, document workflow and generation, eSignatures, analytics, connectors & Xtensions, and self-service mobile app development.

Nintex provides its process mapping capability through Nintex Promapp®. Nintex Promapp® helps organizations to easily map, share, and govern business processes while adhering to regulatory compliances. Teams across an organization can collaborate on process definition and continuous improvement for process standardization for consistent and personalized communication. With one-click integration to Nintex Workflow Cloud, the company's next-generation cloud automation platform, process professionals can turn their mapped processes into automated workflows.

Nintex document workflow and generation capability is an intuitive drag-and-drop designer for implementing advanced workflows and business logic utilizing a flowchart-based paradigm optimized to accelerate developer productivity while enabling business users to build, test and deploy sophisticated process flows. Workflows can be serial, parallel, rules-driven, state-based, or a combination of process types. Workflows can be partitioned into parent and child processes (component workflows) to facilitate good process design, reusability, and ease of testing and maintenance.

Nintex also provides Nintex Gateway, which allows users to leverage Nintex RPA bots, helps organizations to configure and deploy two-way, drag-and-drop interaction between workflows and bots (attended and unattended) within a workflow and integrate with various platforms (cloud and legacy). Additionally, Nintex RPA enables processes to extend to the desktop, interacting with productivity tools, browser-based applications, legacy systems, and local files to address sophisticated automation opportunities. In February 2022, the company acquired Kryon, a process discovery innovator and RPA leader, to further extend the intelligent process automation (IPA) capabilities of the Nintex Process Platform.

Nintex provides Nintex DocGen®, which automatically create documents for both structured and unstructured data. These data can be sourced from multiple sources of the business systems and can be instantly shared to users within few clicks. Additionally, through the company's acquisitions of K2 Software, Inc. in October 2020, and AssureSign in June 2021, Nintex has continued to deepen its platform, adding rapid low-code application development capabilities from K2 and secure e-signatures from AssureSign. Further, Nintex added AI-driven process automation to its platform with its intelligent pdf form converter, which instantly converts PDFs into interactive digital forms.

AssureSign with a full-featured eSignature capability provides organizations with APIs for integration directly into the broader Nintex platform, including Nintex DocGen and Nintex RPA or to other third-party document management systems. This allows organizations to simply drags-and-drops an activity into the workflow canvas and configures standard properties such as recipient, order of signing (or other signing logic), templates, and data sources.

The Nintex Xtensions® framework and pre-built connectors allow organizations to integrate third-party applications within automated workflows and forms through simple configuration utilizing the OpenAPI spec. This enables organizations to orchestrate and connect workflows, tasks, documents, and forms with any platform and system. In addition, the Nintex Gateway further expands automation and orchestration across the entire technology stack by providing a cloud-to-ground interface that enables integration with on-premises data stores and Nintex RPA to support hybrid solutions and bi-directional integration between bots and the cloud.

The Nintex platform automates manual, repetitive tasks to enhance the end-to-end processes by reducing human-computer interactions. Robust forms and mobile app capabilities enable intuitive user experience features for data and content exchange and task management. Nintex workflows are natively mobile-enabled and web-enabled, and the creation of mobile applications does not require a separate development effort. The mobile applications can tap into native device capabilities such as geolocation, camera. These mobile applications can be used both online and offline Nintex adds process intelligence to provide analytics and dashboards capabilities to further deepen insight into workflow execution, showing when documents were viewed and for how long; when they were signed; how they were routed; and what metadata (such as a retention schedule) was applied. Additionally, the business user is also provided with some granular control over

the signed document.

Analyst Perspective

Following is the analysis of Nintex's capabilities in the customer communication management (CCM) market:

- Nintex provides a comprehensive solution for intelligent business process management (iBPM), automation, and CCM. The Nintex process is a fully integrated platform that provides end-to-end process management, automation, and orchestration capabilities and is inclusive of, but not limited to, document-centric use cases. Nintex supports hybrid scenarios enabling customers to take advantage of a cloud-based solution while enabling access to on-premises, legacy systems through a single, integrated solution. The company provides with FedRAMP authorized and compliant with industry standards, including service organization control 2 (SOC2) that require regular testing and audit of our product, people, and procedures.

- Some of the key differentiators of Nintex CCM's offering include its easy-to-use interface, user experience, end-to-end CCM solution, scale and agile architecture, and comprehensive security and compliance. The entire Nintex platform has been built and optimized to improve developer productivity while also empowering business users and, simultaneously to build sophisticated solutions with low-code and no-code. Additionally, the Nintex solution gallery provides more than three hundred templates that can be easily installed and used immediately or customized to fit individual customer needs. The document automation and generation capabilities are intuitive and easy to use for all types of users and are integrated directly into common applications, including salesforce and sharepoint.

- Some of the use cases of Nintex based on the existing customer base for CCM includes managing, automating, and personalizing sales quotes, proposals, customer correspondence, marketing materials and promotions, statements, invoices, legal NDAs, inspections, and certificates.

- From a geographical presence perspective, Nintex has a strong presence in the USA, followed by Europe and the Asia-Pacific (APAC). The company has a significant scope of expansion in the Middle East & Africa, and Latin America. From an industry vertical

perspective, the company has a strong customer base across govt & public sectors, banking & financial services, retail & eCommerce, manufacturing, and IT & telecom. The company also has an ample amount of scope in energy & utilities, healthcare & lifesciences, travel & hospitality, media & entertainment, and education.

- Nintex is presently working to enhance its existing capabilities in the CCM space. The company may face competition from emerging vendors with innovative technology offerings, as well as from small vendors offering individual capabilities for CCM. These vendors are successful in gaining a strong market position with increased penetration amongst small to mid-market organizations and are amongst the primary targets for mergers and acquisitions. However, with its comprehensive roadmap vision, strong partner ecosystem, strong customer value proposition, and robust functional capabilities, Nintex is well-positioned to expand its share in the global CCM market.

- Nintex has outlined a comprehensive technological roadmap for its CCM platform that includes enhancing its existing capability and investing in various emerging technologies. The company focuses on AI/ML-based capabilities to improve process design and optimization along with process and task mining capabilities. Additionally, the company will provide deeper document automation capabilities along with advanced OCR and additional line-of-business connectors to expand the number and type of use cases supported.

Conga

URL: www.conga.com

Founded in 2006 and headquartered in San Mateo, California, USA, Conga is a provider of an end-to-end digital document transformation and customer communication management platform and solution. The Conga product suite has a variety of products to help organizations with their digital needs ranging from document generation & report-based documents to contract lifecycle management (CLM) & HTML email creation. Conga's product suite now includes its digital document products such as Conga Composer, Conga Collaborate, Conga Contracts, Conga Grid, Conga Sign, Conga Orchestrate, Conga Batch, and Conga Trigger, along with a complete quote-to-cash suite including CRM investments like the Configure, Price, Quote solution, in addition to the previously mentioned CLM. Additionally, the platform includes AI capabilities for automating business productivity. The comprehensive capabilities of Conga's offerings include document generation for multiple use cases, personalization of documents including tracking the document history, document notification, ease of document processing via a secure link, reporting & analytics, automation of workflow, and pre-built templates for ease of operation.

Conga Composer, a Salesforce application, automates documents and allows organizations to create, edit, and share documents via Salesforce. Additionally, Composer's document automation wizard allows organizations to utilize various pre-built templates, build their templates, and generate communications making use of MS Office, PDF, HTML, etc. throughout the customer lifecycle. The platform comes with four pre-built templates: sales proposal, sales quote, client letter, and account brief. Conga's Composer provides a secured infrastructure for data management and privacy by gathering data from any Salesforce object as well as from external SQL databases via OData connection, ensuring data accuracy and consistency. Conga's Batch & Trigger solutions allow organizations to automate workflows and send batch documents on schedule or on-demand with other standard Salesforce reports or SOQL queries.

Conga's product suite provides users with the flexibility to work on a variety of documents, contracts, etc. The documents can be electronically signed with Conga Sign and shared across communication channels & devices, allowing organizations to engage and communicate at every touchpoint in real-time. The platform converts large files into a secured link for ease of delivery to the customers.

These communication documents can also be distributed as an email attachment, e-signature document, content records, or a Salesforce record attachment, amongst other options. Additionally, the platform automatically updates customer information and saves documents across the CRM systems.

The platform also provides reports and insights on various customer engagements. Conga Collaborate helps organizations utilize these reports and insights and real-time data to personalize and improve customer communication. Conga Grid allows organizations to manage data on salesforce channels and analyze various patterns and relationships amongst the data. The platform also allows for ease of navigation and the creation of an actionable data set with a single-window of operation, promoting faster data updates and deep insights.

Analyst Perspective

Following is the analysis of Conga's capabilities in the global customer communication management market:

- Conga provides a robust and scalable SaaS solution for digital transformation to automate documents, contracts, and eSignature processes. Conga's key differentiators include its holistic product offering which promotes real-time reporting of customer engagement. Conga's Batch and Trigger solution can initiate batch communication at the business level without any human intervention or click. The eSignature can be accessed on any device.

- Additionally, the Conga Composer can be utilized for a variety of document template formats and use cases across business verticals for document delivery. The platform eases the receipt of communication in the pipeline to ensure a consistent and recurring engagement prospect, in addition to securing instant notifications and timely reporting. the platform supports other external SQL databases equally, apart from supporting the Salesforce channel. The solution also provides a no-click trigger to kick off business processes for enhanced efficiency. In terms of data security & privacy, the Conga Composer promotes encryption for external communications, complete network access control, effective network bandwidth & latency handling, firewall & intrusion prevention, and effective scalability options, amongst others.

- Some of the use cases for Conga's CCM offering are managing, maintaining, personalizing, and automating agreements, invoices, quotes, proposals, and presentations across channels.

- In terms of geographical presence, Conga has a very strong presence in North America and Latin America. It has a comparatively lesser but significant presence in the EMEA (Europe, Middle East, and Africa) region. The company also has sufficient scope for expansion in the Asia Pacific market in the near future. From an industry vertical perspective, the company has a strong customer base in the areas of IT & telecom, services & consulting, healthcare & life sciences, manufacturing & wholesalers, and banking & financial services, while it has ample scope for expansion in verticals including energy & utilities, retail & eCommerce, media & entertainment, education & non-profits, travel & hospitality, and the government & public sectors.

- Some of the top use cases of CCM deployments for Conga based on the existing customer base are proposals, quotes, contracts, invoices, account statements, account briefs, correspondence, agreements, and reports. These use cases enhance the quality of customer action plans resulting in the reduction of resource drain, effective creation of quotes promoting time savings, and streamlining the infield process of work orders & case logs, ensuring reduction in time while placing an order, amongst many others.

- Conga's primary challenges include the growing competition from emerging vendors with innovative technology offerings, as well as from small vendors with a local geographical focus who tend to serve a certain section of the communication cycle. These vendors are successful in gaining a strong market position with increased penetration amongst small to mid-market organizations and are amongst the primary targets for mergers and acquisitions. However, Conga, with its comprehensive functional capabilities, compelling customer references, and robust customer value proposition, is well-positioned to maintain and grow its market share globally.

- In terms of the technology and product roadmap for the foreseeable future, Conga would continue to invest in omnichannel delivery & communication, delivery of documents, public API, latest UI/

UX, proposal management offerings, and self-service enhanced template designs. Additionally, the company is looking to migrate to a full microservice architecture and integrate Conga's document generation technologies into a single point offering for offline and online documents.

Doxee

URL: www.doxee.com

Founded in 2001 and headquartered in Modena, Italy, Doxee is a provider of customer communication management and digital customer experience platform. The company offers the following proprietary technology platform, the Doxee Platform® and its products: dx (document experience), ix (interactive experience), and px (paperless experience). Doxee's comprehensive capabilities include multichannel document distribution, document composition, visual web extract, transform, and load (ETL) tools, analytics & reporting, content collaboration, electronic invoicing & ordering, HTML5 personalized videos, self-service personalized video authoring tool, and digital & legal document archiving.

Doxee dx helps organizations create, personalize, archive, and distribute communication for batch, on-demand, and interactive communication across multiple digital and traditional channels as per the regulatory compliance. The platform can handle various types of communication, including marketing communication, SMS, business correspondence, financial reporting, a welcome kit for new users, cross-media marketing, delivery notes & invoices, and bills & bank statements, amongst others. Additionally, dx can monitor customer journeys throughout the lifecycle to ensure compliance and visibility as per the Service Level Agreement (SLA) and KPIs for each channel. It also comes with an in-built connector and APIs to integrate with the existing software, standardize the data outflow, and provide organizations with analytical insights. Dx's collaboration and co-authoring capability enables various departments to work together without risking overlapping. The tools offered by dx adhere to the regulatory compliances and allow organizations to view, approve, reject, and check the quantity of communication produced during the entire cycle.

The Doxee ix product line consists of Doxee Pvideo® and Doxee Pweb®. The ix platform utilizes customer data & analytics to provide insights and build personalized two-way interactive videos and websites. This capability helps organizations deliver relevant content, products, and services while enhancing the entire customer journey experience by leveraging ready-to-use API and connectors. Pvideo uses behavioral analysis and user dynamic storytelling to collect the data and information of customers in real-time and enhance the overall experience by changing the video in real-time. Meanwhile, Pweb offers an interactive and personalized website to help organizations upsell and cross-sell

by converting bills, documents, and reports into an interactive application.

Doxee px is a scalable and secure product that helps organizations comply with the updated RegTech and the ever-changing Italian and European standards, while leveraging technological evolution, stimulating the simplification of application maps, adopting new services, and streamlining internal procedures. Doxee px offers electronic invoicing, standard digital storage, and electronic ordering operated by qualified specialists, state-of-the-art technological tools, and certified procedures for quality service. The electronic invoicing capability helps organizations automate, manage, and notarize the complete invoicing processes of both active and passive cycles. The digital preservation capability allows organizations to legally archive documents by extracting, configuring, and verifying documents. Doxee's Compliant Digital Storage converts the documents with a time and digital signature to archive them in accordance with tax and employment regulations. Electronic ordering with the Nodo Smistamento Ordini (NSO) platform allows the sorting and digital transmission of the purchase order. The platform comes with in-built technical rules to perform various activities and sort orders in the Universal Business Language (UBL) format.

Doxee uses AI reasoning to effectively analyze the right mode and time of communication to increase the communication response rate. It also automatically generates two-way communication, predicts dunning, and identifies trends and patterns of consumers. Doxee has also integrated a chatbot to enhance customer communication by nurturing the lead, helping chat recovery, providing contact center outbound, and automating marketing communication.

Analyst Perspective

Following is the analysis of Doxee's capabilities in the customer communication management (CCM) market:

- Doxee offers a scalable, robust, and data-driven personalized interactive approach to customer communication across channels for global enterprise companies that need to standardize their CCM, digital customer experience, and digitization processes. The multi-tenant cloud-based platform offers integration with existing enterprise systems for uniform data flow. Additionally, Doxee provides designers with more specific designs for personalized videos, as well as for Microsoft and HTML formats, to provide multi-experience delivery

across multiple channels to enhance the entire customer journey.

- Doxee offers a fully native cloud platform for both SaaS and PaaS functionalities. With its microservices architecture and easy deployment, the Doxee Platform is available in the PaaS model for partners and can easily be integrated to provide CCM features in new applications. The company is transitioning to a full cloud by providing hybrid cloud capabilities to meet the security and privacy needs from specific industries.

- Some of the key differentiators of the platform include its propriety Pvideo and Pweb tools, configurable APIs, ETL process automation, self-service personalized video authoring tool, zero-rendering vector-graphic multi-channel delivery, electronic invoicing, and behavioral analysis.

- With dx, overlapping is reduced as departments can work simultaneously. Doxee Pvideo and Doxee Pweb convert customer data into a personalized video and micro-site to make the communication interactive. The platform uses behavioral analysis and story-telling methods to interact with customers. Additionally, the paperless experience stores maintain the order-invoice cycle digitally and adhere to the updated rules and regulations of compliance.

- Some of the top use cases of CCM deployments for Doxee based on the existing customer base include paper or digital advertising in marketing communication, SMS facility used in the service information, covers & letters for business correspondence, and personalized reports & graphics in financial reporting. The company also supports use cases for billing, contracts, onboarding, reminders, and account balance communication across multiple channels. These help organizations deliver the right communication to the right contacts through the preferred mode of communication channel.

- In terms of geographical presence, Doxee has a strong presence in Europe, followed by Latin America. The company has a considerable scope of expansion in the USA and the APAC region. From an industry vertical perspective, the company majorly focuses on banking & financial services, IT & telecom, energy & utilities, media

& entertainment, and government sectors. The company has ample scope of expansion across healthcare & life sciences, education, manufacturing, retail & eCommerce, and travel & hospitality.

• Doxee's key challenges include competition from well-established vendors with holistic and established technology offerings, as well as from small geography-focused vendors with an advanced offering that aims to deliver communication for specific markets, apart from the need to remain competitive and incorporate the latest updated features. Doxee is continuously working on transitioning from traditional CCM features to advanced capabilities by integrating new features with best-of-breed vendors, as well as building features & capabilities on their own. However, the company is well-positioned to grow its market share across sectors and retain its market position in the long term with holistic technology and domain expertise.

• Doxee continues to invest in technology and innovation to further enhance platform integration and interoperability. Additionally, it would focus on automation, increase technical knowledge in the cloud computing technology, develop native connectors for commonly adopted CRM and marketing automation applications, and provide paperless endpoint e-procurement in accordance with European standards, including PEPPOL (Pan-European Public Procurement Online) specifications. The company would also continue working toward offering a full microservice API-first architecture and relevant application designs & managed services.

Doxim

URL: www.doxim.com

Founded in 2000 and headquartered in Markham, Ontario, Canada, Doxim provides CCM as a SaaS platform and managed service offering to regulated industries helping, them simplify the complexity of generating transactional communications and optimize their delivery either by print or digital channels. By outsourcing to Doxim, clients control their compliance risk, lower costs, improve quality and delivery, and provide a modern and interactive CX that increases customer satisfaction, loyalty, and wallet share. Doxim has nationwide reach with operations strategically located across the US and Canada for optimal service and cost efficiency. The platform provides end-to-end service - from consumer and transactional data to omnichannel delivery - to help clients realize benefits by consolidating services from multiple vendors into a single offering. The comprehensive capabilities for Doxim's CCM offering include managing and generating omnichannel communication, security & compliance, personalization, campaign management, self-service administration, reporting & insights, and template management.

Doxim generates personalized, omnichannel, and compliance-regulated communication, via batch and on-demand processing, for various types of regulated documents, including transactional documents, trade confirmation, and tax documents. They also generate non-regulated documents related to onboarding, marketing and loyalty communications, as well as interactive documents and communications, scheduled and triggered account messages and notifications. The company automates and centralizes end-to-end processes through a composition engine, which leverages best-in-class technology from the partner ecosystem. This helps organizations provide an efficient, streamlined, and resilient process for document generation at scale across channels preferred by customers, including print, email, text/SMS, web portal, IVR, secure interactive documents, and personalized interactive videos.

Doxim's proprietary Doxim Standard XML format is agnostic, enablingoutput in any format. With the help of Doxim Standard XML, organizations can analyze and transform any type of structured data from any system/application to provide omnichannel output and engagement. Additionally, the platform can ingest and deliver precomposed documents from multiple touchpoints and data sources. This allows the platform to easily adapt and align with new channels as they come into existence.

The security & compliance capabilities allow organizations to align with changing regulatory compliance. To provide organizations with maximum security, Doxim's technology, best practices, and infrastructure are audited and verified by third parties. Additionally, the company has a verified cyber security posture for visibility and transparency, which provides real-time updates and alerts on the discrepancy. Doxim also provides a scalable network for mail facilities as they are a US Postal Service (USPS) certified vendor.

Doxim also offers 'Doxim ECM,' a secured cloud-based archive to manage, store, and share documents across the client's business to strengthen engagement throughout the lifecycle. Organizations can also use Doxim's ECM as their enterprise system of record to store a wide range of corporate documents and inbound customer communications. The clients' customers can access their archived documents through Doxim's Customer Experience Portal (CXP), a consumer-facing portal wherein end customers have on-demand access to communications and convenient, seamless access to the Customer Support team via two-way "in portal" messaging. The CXP can be hosted by Doxim or deployed by API. The portal can also display a variety of advertisements and marketing messages which help organizations enhance engagement, upsell, and cross-sell. Moreover, organizations can leverage customer data to deliver personalized and interactive videos, HTML or PDF statements, invoices, and onboarding and servicing communications.

Through the Doxim CCM Admin Portal (DAP), the clients' business users can administer various communications across touchpoints throughout the customer journey and gain access to results and reports. The business user can have access to reporting and analytics along with engagement metrics at every stage in the customer communication cycle. The Doxim CCM platform supports one-way and two-way notifications and communications sent to the end consumer through SMS or email triggered based on account activity. The DAP has pre-defined templates through which the messages can be authored and then reviewed. Additionally, organizations can view the queue of in-portal customer enquiries authored by the customer in the CXP.

Doxim's self-serve correspondence tool helps organizations send out urgent and impromptu business communications through a set of standard templates. The template can be customized, reviewed, approved, and submitted directly into Doxim production for delivery by print and mail, or into Doxim ECM for digital distribution / ePresentment. Additionally, Doxim offers strategic consulting to help organizations achieve goals in digital transformation and communication excellence.

Analyst Perspective

Following is the analysis of Doxim's capabilities in the customer communication management (CCM) market:

- Doxim is a provider of customer communications management and engagement technology which allows organizations to communicate reliably and effectively while improving cross-sell and upsell opportunities. The personalized communication by Doxim helps to increase customer loyalty. The platform addresses key digitization, operational efficiency, regulatory compliance, and customer experience challenges through a suite of plug-and-play, integrated SaaS software and technology solutions.

- Some of the differentiators of Doxim's CCM offering include its SaaS platform, Doxim Document Factory (DDF), Advanced Preferences Management, Print Suppression, e-Enrollment, Campaign Management, and Interactive PDF & HTML Documents. Through the SaaS platform, Doxim can provide its core innovation and new release features, and digital document accessibility efficiently. The DDF technology for document generation and orchestration with Doxim Standard XML helps organizations manage personalized communication across channels.

- Some of the use cases of Doxim based on the existing customer base for CCM include managing, personalization, and creation of regulated, transactional statements & e-statements; year-end tax forms; healthcare benefits and claims communications; customer acquisition & marketing, onboarding & welcome kits; servicing communications and breach notifications; billing & payment; and e-adoption campaigns & reporting.

- In terms of geographical presence, Doxim has a strong presence in the USA and Canada, followed by Europe. The company has significant scope for expansion in APAC, the Middle East & Africa, and Latin America. From an industry vertical perspective, the company has a strong customer base across banking & financial services, energy & utilities, healthcare & life sciences, and the government & public sectors. The company also has ample scope in IT & telecom,

education, manufacturing, media & entertainment, travel & hospitality, and retail & eCommerce.

- The company may face competition from emerging vendors with innovative technology offerings, as well as from small vendors offering individual capabilities for CCM. These vendors are successful in gaining a strong market position with increased penetration amongst small to mid-market organizations and are amongst the primary targets for mergers and acquisitions. However, with its comprehensive roadmap vision, strong partner ecosystem, strong customer value proposition, and robust functional capabilities, Doxim is well-positioned to expand its share in the global CCM market.

- Doxim has outlined a comprehensive technological roadmap for its CCM platform that includes enhancing its existing capability and investing in various emerging technologies. The company focuses on data analytics, third-party AI/ML engine integrations, content management workflow enhancements, governance functionality enhancements, and billing & payment solutions for industries beyond utilities.

Research Methodologies

Quadrant Knowledge Solutions uses a comprehensive approach to conduct global market outlook research for various technologies. Quadrant's research approach provides our analysts with the most effective framework to identify market and technology trends and helps in formulating meaningful growth strategies for our clients. All the sections of our research report are prepared with a considerable amount of time and thought process before moving on to the next step. Following is the brief description of the major sections of our research methodologies.
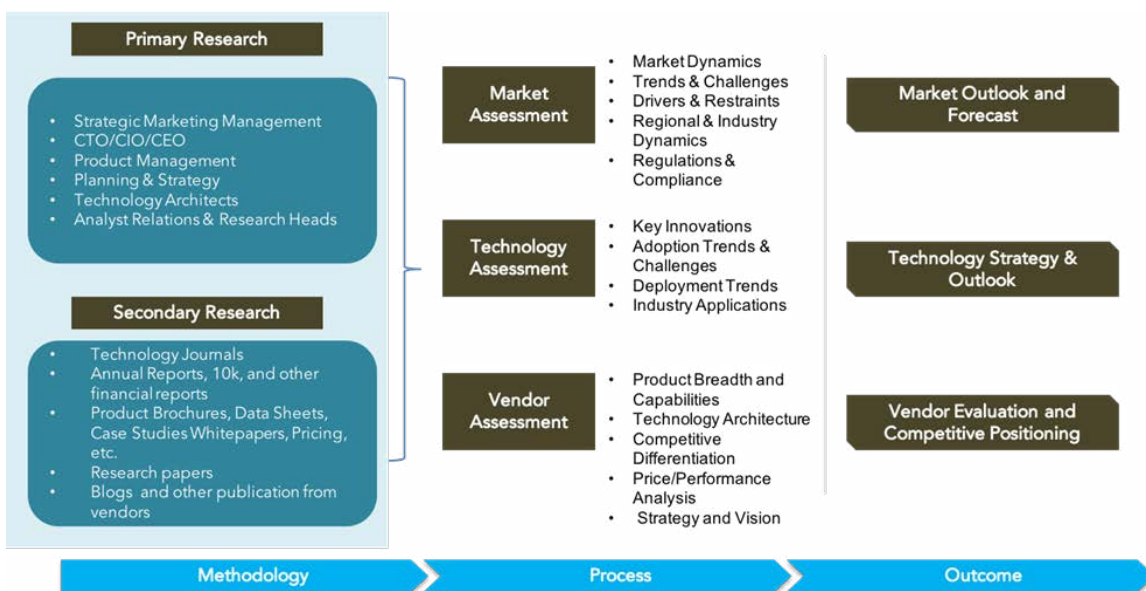
Secondary Research

Following are the major sources of information for conducting secondary research:

Quadrant's Internal Database

Quadrant Knowledge Solutions maintains a proprietary database in several technology marketplaces. This database provides our analyst with an adequate foundation to kick-start the research project. This database includes information from the following sources:

- Annual reports and other financial reports
- Industry participant lists
- Published secondary data on companies and their products

- Database of market sizes and forecast data for different market segments
- Major market and technology trends

Literature Research

Quadrant Knowledge Solutions leverages on several magazine subscriptions and other publications that cover a wide range of subjects related to technology research. We also use the extensive library of directories and Journals on various technology domains. Our analysts use blog posts, whitepapers, case studies, and other literature published by major technology vendors, online experts, and industry news publications.

Inputs from Industry Participants

Quadrant analysts collect relevant documents such as whitepaper, brochures, case studies, price lists, datasheet, and other reports from all major industry participants.

Primary Research

Quadrant analysts use a two-step process for conducting primary research that helps us in capturing meaningful and most accurate market information. Below is the two-step process of our primary research:

Market Estimation: Based on the top-down and bottom-up approach, our analyst analyses all industry participants to estimate their business in the technology market for various market segments. We also seek information and verification of client business performance as part of our primary research interviews or through a detailed market questionnaire. The Quadrant research team conducts a detailed analysis of the comments and inputs provided by the industry participants.

Client Interview: Quadrant analyst team conducts a detailed telephonic interview of all major industry participants to get their perspectives of the current and future market dynamics. Our analyst also gets their first-hand experience with the vendor's product demo to understand their technology capabilities, user experience, product features, and other aspects. Based on the requirements, Quadrant analysts interview with more than one person from each of the market participants to verify the accuracy of the information provided. We typically engage

with client personnel in one of the following functions:
- Strategic Marketing Management
- Product Management
- Product Planning
- Planning & Strategy

Feedback from Channel Partners and End Users

Quadrant research team researches with various sales channel partners, including distributors, system integrators, and consultants to understand the detailed perspective of the market. Our analysts also get feedback from end-users from multiple industries and geographical regions to understand key issues, technology trends, and supplier capabilities in the technology market.

Data Analysis:
Market Forecast & Competition Analysis

Quadrant's analysts' team gathers all the necessary information from secondary research and primary research to a computer database. These databases are then analyzed, verified, and cross-tabulated in numerous ways to get the right picture of the overall market and its segments. After analyzing all the market data, industry trends, market trends, technology trends, and key issues, we prepare preliminary market forecasts. This preliminary market forecast is tested against several market scenarios, economic scenario, industry trends, and economic dynamics. Finally, the analyst team arrives at the most accurate forecast scenario for the overall market and its segments.

In addition to market forecasts, our team conducts a detailed review of industry participants to prepare competitive landscape and market positioning analysis for the overall market as well as for various market segments.

SPARK Matrix:
Strategic Performance Assessment and Ranking

Quadrant Knowledge Solutions' SPARK Matrix provides a snapshot of the market positioning of the key market participants. SPARK Matrix representation provides a visual representation of market participants and provides strategic insights on how each supplier ranks in comparison to their competitors, concerning various performance parameters based on the category of technology excellence and customer impact.

Final Report Preparation

After finalization of market analysis and forecasts, our analyst prepares necessary graphs, charts, and table to get further insights and preparation of the final research report. Our final research report includes information including market forecast; competitive analysis; major market & technology trends; market drivers; vendor profiles, and such others.

Client Support

For information on hard-copy or electronic reprints, please contact Client Support at
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