

Customer Experience & Commerce

SPARK Matrix™: Customer Data Platform (CDP), 2022

Market Insights, Competitive Evaluation, and Vendor Rankings

May 2022

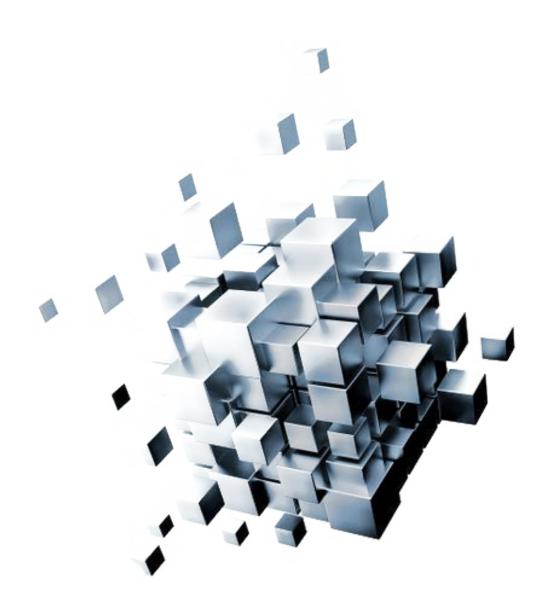


TABLE OF CONTENTS

Executive Overview	1
Market Dynamics and Overview	2
Market Drivers and Trends	8
Competitive Landscape and Analysis	12
Key Competitive Factors and Technology Differentiators	15
SPARK Matrix™: Strategic Performance Assessment and Ranking	19
Vendors Profile	22
Research Methodologies	64

Executive Overview

This research service includes a detailed analysis of global customer data platform market dynamics, major trends, vendor landscape, and competitive positioning analysis. The study provides competition analysis and ranking of the leading customer data platform 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

Quadrant Knowledge Solutions defines a CDP as: A Customer Data Platform (CDP) centralizes data collection from multiple channels and sources, performs data cleansing and identity resolution, and unifies customer profiles to create a unified, persistent customer profile database. The database is accessible to other systems for marketing, customer service, and customer experience management. A CDP platform integrates data from first-party, second-party, and third-party sources, such as websites, web forms, social media, emails, eCommerce channels, CRM, DMP, POS systems, and such others. It integrates a variety of customer data types, including personal, demographic, behavioral, transactional, engagement, device data, and such others. The CDP stitches comprehensive structured and unstructured data together, performs analytics to create a persistent profile for individual customers, and creates micro-segments of various customer types. This, in turn, enables marketers to execute effective marketing campaigns for exceptional customer experiences across the interaction channels and touchpoints.

The CDP market has emerged to solve these challenges by providing an advanced data fabric platform for centralized data integration, profile unification from disparate data sources, audience segmentation, and activation in appropriate channels. A CDP platform works as a foundation that ties the data from multiple systems in real-time for effective segmentation and targeting for various marketing campaigns. The CDP technology enables marketers to implement data-driven marketing initiatives to improve customer engagement, conversion rate, and overall experience.

Organizations have invested in multiple marketing and data warehouse systems over the years. However, these technologies are often resulting in data silos. These systems may provide a capability for centralized data integration and customer-level data for various marketing use-cases. However, customer data unification at an individual level remains a challenge. Marketers continue to spend significant time and resources in data integration, preparation, and unification. The ever-growing complexities, volume, and speed of customer data across consumer interaction channels are further adding to the challenges.

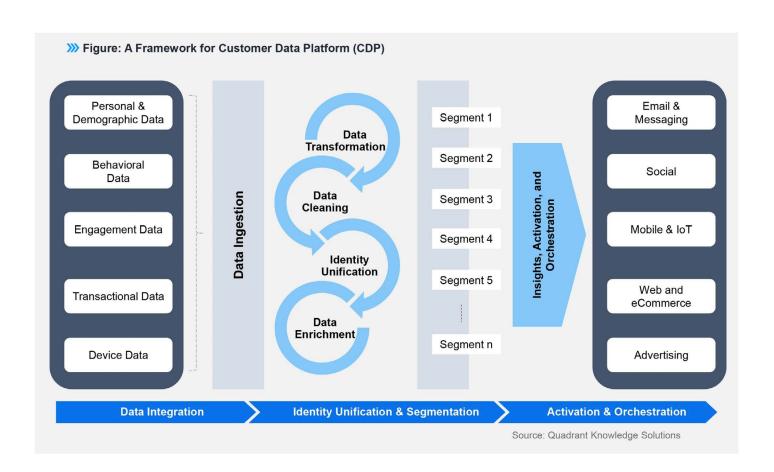
Following are the key capabilities of customer data platforms:

- Data Integration: CDP platforms integrate individual-level contextual, behavioral, and transactional customer data in real-time from multiple customer data sources, including online and offline sources. This integrated data can be further enriched with data ingested from other systems such as CRM, data warehouses, marketing automation, call centers, and such others. CDP platforms make integration simpler with external systems and databases through real-time APIs, prebuilt connectors, and user-operated interfaces.
- Identity Resolution and Profile Unification: A CDP platform links and consolidates contextual customer data to create a unified customer profile at an individual level. The unified profile may include customer data such as emails, phone numbers, places, multiple devices, and such others. CDP analyzes discrete customer information across multiple platforms or devices to create a unified customer profile of each known and anonymous user. It identifies a particular user with a unique identifier (UID) by mapping customer information across touchpoints. CDP binds customer profiles together through deterministic matching or probabilistic matching to eradicate the issue of incorrect profile merging. The comprehensive data collated during past and present customer activities helps marketers and CX professionals deliver tailored messages to drive new customer acquisition.
- Intelligent Customer Segmentation: A CDP platform provides
 a user interface to create and manage customer segments in realtime based on the level of engagement. Depending on the vendors'
 capability, a CDP platform may use rule-based engine or advanced
 analytics and data science technologies to create advanced microsegmentation or 1:1 segmentation for an effective targeted campaign
 driving engagement and conversion rate.
- Reporting and Visualization: A CDP platform provides built-in reporting capability and integrates with external reporting tools for comprehensive visualization of various marketing metrics. A CDP platform often provides several out-of-the-box templates in addition to customizable dashboards, enabling business and IT users to create

dynamic visualizations. Users can customize the dashboards to track various KPIs and identify trends and insights for smarter decisionmaking.

Activation: A CDP platform provides an ability to export segment-level audience data along with instructions concerning its activation to various external marketing execution systems. Depending on the vendors' capability, a CDP platform may provide prebuilt integrations with major execution channels or may require additional efforts for the integration.

Figure: A Framework for Customer Data Platforms (CDP)



Factors Influencing Customer Data Platform Market: Market Drivers and Trends

The followings are the dominant technology and market development influencing the overall global Customer Data Platforms and market growth:

CDP Market is Transitioning to Rapid Growth Stage of the Overall Product Lifecycle: CDP vendors continue to post strong growth momentum across a wide range of industry verticals and geographical regions. Driven by substantial growth opportunities, a majority of the CDP vendors continue to receive external investments to capture market opportunities and improve product functionalities. Collecting and integrating data has been a significant challenge for marketers for many years. Marketers have traditionally adopted a variety of proprietary Big Data technologies, including data lakes, data warehouses, and such others to achieve this goal. However, creating, maintaining, and continuously updating unified customer profiles remains a challenge. Therefore, CDP systems were developed to create a single, unified customer profile to serve the purpose of delivering tailored experiences and enhancing customer loyalty.

Customer data platforms' value proposition of integrating a wide variety of online, offline, and streaming customer data and integrating them to provide a unified, 360-degree customer profile is significantly appealing to marketers. CDP platforms continue to improve to cater to a wide variety of operational, customer experience, and digital commerce use cases. The CDP market is still in the early adoption phase of the overall product lifecycle. However, with continued product innovation and aggressive growth strategy by CDP leaders, the global CDP market is expected to shift to a rapid growth stage in the next two years. CDP leaders are increasingly focusing on improving the awareness about CDPs capabilities and value proposition in providing a personalized customer experience. Additionally, the vendors are also partnering with large marketing technology vendors to improve technology adoption.

As per Quadrant Knowledge Solutions analysis, the CDP market is expected to cross 2.89 billion by 2026. The CDP technology is expected to play a major role in providing the foundation for marketers' personalized customer experience strategies.

A CDP platform is primarily used for integrating a wide variety of customer data and stitching together to create a single, unified customer profile. Depending on the vendor's capabilities and the maturity of machine learning and customer analytics, a CDP provides a range of actionable insights to drive the marketer's CX strategy to improve engagement and build customer loyalties. However, driven by the continued investments by vendors, CDP platforms have transformed to provide micro-segments of customer profiles and activation to a variety of marketing execution systems.

CDP platforms' value proposition in providing adaptive, real-time microsegmentation and the ability to activate these customer segments across a range of execution platforms is emerging as one of the most powerful tools for marketers. However, driven by the intensifying competition, continued emergence of CDP innovators, and growing interest of MarTech vendors in the CDP market, CDP technology is continuously transforming. The most sophisticated CDP platforms are now capable of performing real-time, 1:1 segmentation and activation across a range of execution technologies. While the current capabilities of CDP platforms in performing 1:1 segmentation are not well-established and proven, the market is certainly heading towards 1:1 personalization. CDP is poised to become an established technology not only to provide a repository for unified profiles and customer insights but also to act as a foundation for the marketers and CX professionals' 1:1 personalized customer experience strategy.

Growing Investments Across CDP Market to Incorporate and Enhance Predictive Analytics AI, and Machine Learning Technologies to Optimize Marketing Campaigns: CDP vendors are continuously trying to keep pace with the constantly changing market demands, especially since the onset of the Covid-19 pandemic. AI/ML is playing a significant role in augmenting customer data platforms catering to the B2B and B2C segments. The AI/ML-driven technologies are helping brands execute marketing campaigns across all channels with relevant content and offers. Al-infused CDPs are able to provide automation and intelligence to solve and cater to complex, data-intensive marketing use cases.

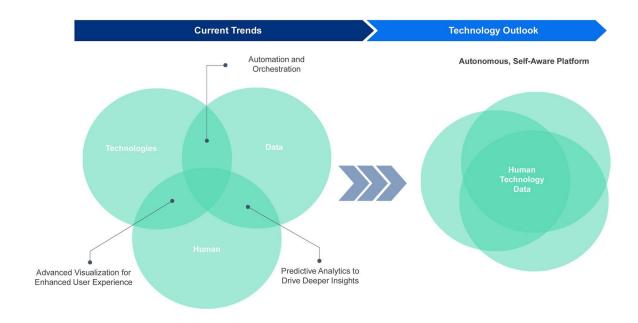
Along with core CDP capabilities, personalization has become an important element to deliver seamless and tailored customer experiences. Many CDP vendors are either natively embedding personalization capabilities into their platform or integrating with third-party personalization tools. Incorporating a 1:1 omnichannel personalization engine in the CDP platform remains a primary focus of most vendors' roadmap. A CDP platform infused with personalization capability

enables organizations to manage the personalization of content across the web, email, and mobile channels. This digital content includes web behavior and transactional and behavioral content across all customer-facing channels. Vendors are increasingly looking at offering a robust AI framework for organizations and their data scientists to build, train, and deploy or import MI-driven models and perform simulations within the CDP platform. CDPs are marrying unified customer profiles with the output of out-of-the-box predictive models such as propensity, customer lifetime value (CLV), lookalike, and churn to leverage the outcome for segmentation and data activation further.

CDPs are also helping organizations deliver onsite customer experiences using dynamic content linked to customer behavior and interests. Vendors are looking at enhancing their CDP platform with data-driven decisioning and orchestration tools to strengthen cross-channel campaigns and personalization. Although next-best-action and Al/ML capabilities are majorly implemented across large enterprises, vendors are continuously working towards enhancing these capabilities to fit in with the SMB and mid-market segment's requirements as well. Also, brands are struggling to sustain themselves because of the uncertainty and disruption brought on by the global pandemic. They are constantly looking at MarTech, such as CDP, to decode unprecedented customer behavior observed during the pandemic. Owing to this scenario, many CDP vendors are working on providing Covid-specific comprehensive customer and business insights.

MegaTrend and Technology Convergence: The convergence of Automation, Machine Learning, and AI: Vendors of customer data platforms are leveraging automation, machine learning, and AI to automate repetitive tasks and manual processes and improve process efficiency, resource utilization, and productivity. Machine learning and AI can significantly improve organizations' efficiencies in performing multi-dimensional customer segments and predict outcomes. Several vendors are investing in providing self-learning machine learning and out-of-the-box calculations for several marketing measurements to improve campaign effectiveness.

As per Quadrant's analysis of the overall market, marketing technologies are becoming collaborated, automated, and intelligent. The adoption of automation, machine learning, and AI is amongst the most significant trend and is expected to influence several technology markets during 2021-2026. Machine learning and artificial intelligence are expected to drive the next generation of marketing and customer experience solutions with the emergence of self-aware platforms integrating humans, data, and technologies.



CDP Platforms are Becoming Sophisticated to Provide Personalized, 1:1 Segment Activation: A CDP platform is primarily used for integrating a wide variety of customer data and stitching together to create a single, unified customer profile. Depending on the vendor's capabilities and the maturity of machine learning and customer analytics, a CDP provides a range of actionable insights to drive the marketer's CX strategy to improve engagement and build customer loyalties. However, driven by the continued investments by vendors, CDP platforms have transformed to provide micro-segments of customer profiles and activation to a variety of marketing execution systems.

CDP platforms' value proposition in providing adaptive, real-time microsegmentation and the ability to activate these customer segments across a range of execution platforms is emerging as one of the most powerful tools for marketers. However, driven by the intensifying competition, continued emergence of CDP innovators, and growing interest of MarTech vendors in the CDP market, CDP technology is continuously transforming. The most sophisticated CDP platforms are now capable of performing real-time, 1:1 segmentation and activation across a range of execution technologies. While the current capabilities of CDP platforms in performing 1:1 segmentation are not well-established and proven, the market is certainly heading towards 1:1 personalization. CDP is poised to become an established technology not only to provide a repository for unified profiles and customer insights but also to act as a foundation for the marketers and CX professionals' 1:1 personalized customer experience strategy

Figure: Customer Data Platforms are Becoming the Foundation for Personalized Engagement Strategies



CDP Vendors Focusing on Catering to Advanced Use Cases: A CDP platform can support a wide range of use cases across various industry verticals. However, brands need to analyze and prioritize use cases and choose a CDP vendor whose offering can fulfill those specific use cases to impact their business positively. Many CDP platforms cater to common use cases, including data collection, unified customer profile, real-time personalization, and predictive customer segmentation to deliver smart campaign orchestration, behavioral orchestration, and more. However, brands need to clearly understand why they want to collect the customer data and what should be the output of CDP implementation. Brands need to envision the CDP project outcome, map out the requirements including the technical and business use cases and validate the achieved outcome metrics with the KPIs for effective implementation of CDP. Other crucial variables while selecting or implementing a CDP platform include the type of business model, resource involvement/capacity, and project timelines for considering if any planned marketing campaigns are planned are crucial factors in selecting or implementing a CDP platform.

The Covid-19 pandemic and ensuing lockdowns have led marketers to rethink their marketing strategies, considering the change in customer behavior and preferences. The pandemic-induced social distancing norms have triggered the growing trend of digitalization. As a result, digital engagement has become the way forward for brands. With an increasing number of customers engaging with brands across multiple new channels, online portals, apps, etc., brands have witnessed an exponential rise in customer data. Brands have realized that reengaging with the customers based on this new data is the way forward to sustain during these times of economic uncertainty. While marketers are reformulating their marketing strategies, CDP has become an integral part of their digital engagement strategies. As a result, the rise in the adoption of CDPs across various industries is generating some interesting use cases as well.

Brands are adopting CDPs that can support a wide range of use cases, including identifying customers who have traveled to pandemic hotspot areas, identify target customers for digital subscriptions, planning an effective loyalty program strategy based on the new customer data, generating customer-specific alerts and notifications, and more, during the pandemic. CDP vendors are increasingly enhancing their platforms with various new capabilities and features to support organizations with the emerging operational, marketing, and business use cases. Brands across industry verticals such as retail, healthcare, banking and insurance, hospitality have already started enjoying the benefits of fully-featured CDPs that are proving to be helpful in supporting their industry-specific use cases during the pandemic.

Overall, the CDP platform's customer segmentation capabilities are helping organizations understand the overall customer buying and browsing trends, facilitate targeted marketing to the high-value customers, improve the customer retention rates, and ultimately scale up their business growth. The advanced Al/ML-powered CDP platforms use predictive modeling to support a wide range of emerging use cases, including outbound marketing, e-commerce recommendations, and optimization, aggregate offline data across POS, connected smart devices, QR code reading, and other connected devices.

Digital marketers are constantly making efforts to implement effective marketing strategies by adopting several market automation tools. A modern CDP platform plays an integral role in helping brands and marketers achieve intelligent marketing automation and drive sales. With Al/ML-powered CDPs using predictive analytics, CDPs will continue to evolve and offer crisper, richer, and accurate customer profiles. The Al-powered CDPs will continue to support organizations in managing huge volumes of data across the ever-increasing numbers of emerging channels and touchpoints, offer business intelligence and automation, and boost customer engagement and sales.

CDP Enables Personalization in the Age of Ever-Increasing Security and Data Privacy Regulations: Stringent compliance requirements, driven by regulations such as FISMA, PIC-DSS, NERC, ISO/IEC 27001, CCPA, and the GDPR are significantly impacting the overall CDP market. While compliance with the global regulations helps improve the organization's security, non-compliance means a higher risk of information theft or misuse, huge penalties, negative publicity, and such others. Global regulations are increasingly becoming complex, requiring organizations to focus on building robust security infrastructures and

implementing the best practices. The EU general data protection regulation (GDPR) has significantly impacted the overall CDP market. The regulation requires organizations to account for all sensitive customer data and the access granted to it. The regulation includes the provision of fines up to 4% of the organization's annual turnover, or 20 million Euros, whichever is higher. The data security and privacy regulations are helping organizations secure a wide range of devices and users and improve compliance with global regulations and avoid costly security breaches.

Global privacy regulations and movements have a significant impact on delivering an effective CDP and personalization strategy. Since the primary value proposition of CDP is to track, store, and analyze known customer records, integrated privacy features are essential to the success of CDP. However, the compliance regulations such as GDPR and CCPA allow customers to opt-out of tracking and being treated as anonymous customers instead. Due to a lack of awareness, the CDP platform – designed to track known customer data – is often perceived as the major roadblock to customer privacy and compliance with privacy regulations. However, the CDP platform with integrated privacy control is helping brands to comply with evergrowing compliance around data privacy. CDP provides an ability for customers to review what information they are sharing with brands and make changes based on their preferences.

Competitive Landscape and Analysis

Quadrant Knowledge Solutions conducted an in-depth analysis of major customer data platform 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 CDP market. This study includes analysis of key CDP vendors, including Acquia, ActionIQ, Adobe, Algonomy, Amperity, Ascent360, BlueConic, Commanders Act, Contactlab, CrossEngage, CSG, D4t4 Solutions, Informatica, Lytics, Microsoft, mParticle, NGDATA, Quaero (Cloudera), QuickPivot, Redpoint Global, Salesforce, SessionM, Tealium, Treasure Data, Twilio (Segment), and Upland BlueVenn.

ActionIQ, Amperity, Algonomy, BlueConic, Contactlab, CSG, Lytics, Redpoint Global, Salesforce, SessionM, Tealium, and Treasure Data are amongst the top performers and technology leaders in the 2022 SPARK Matrix analysis of the global customer data platforms market. These companies provide a sophisticated and comprehensive technology platform to address a variety of CDP use cases to drive personalized customer engagements in an omnichannel environment. These vendors are also at the forefront in providing modern architecture, comprehensive out-of-the-box capabilities, and integration & interoperability with various data sources and marketing execution systems.

Vendors such as Acquia, Adobe, Informatica, Microsoft, mParticle, and Twilio (Segment) have been positioned amongst the primary challengers. These companies provide comprehensive technology capabilities and are rapidly gaining market traction across industry and geographical regions. These companies are also cognizant of the upcoming market trends and have outlined comprehensive roadmaps to tap into future growth opportunities. The other key vendors captured in the 2022 SPARK Matrix include Ascent360, Commanders Act, CrossEngage, D4t4 Solutions, NGDATA, Quaero (Cloudera), QuickPivot, and Upland BlueVenn. ActionIQ's CDP platform is powered with Alq – an enterprise artificial intelligence framework that links the customer data from all dimensions to augment modeling across the organization's marketing ecosystem. The company provides a strong customer value proposition by enabling its clients to enhance customer relationships and scale best practices.

Amperity's continues to retain its leader position through its agnostic and holistic approach towards offering its robust customer data platform is helping brands identify & manage their customer data, better understand their customers,

optimize their experiences, design effective omni-channel marketing programs, measure and optimize marketing spend.

Algonomy delivers a strong customer ownership experience by helping marketers optimize spend across the customers' buying journey, reduce dependency on IT, improve personalization efforts and grow customer lifetime value. The CDP platform is scalable to meet the requirements of large retail conglomerates with multiple formats and a large number of stores, and an e-commerce presence. BlueConic enables marketers to leverage the rich customer data to build audience-based products and achieve marketing goals by delivering 1:1 correlated content and product recommendation. The differentiated capabilities of BlueConic's Al Workbench significantly improve the company's CDP value proposition to offer a robust customer ownership experience, especially to the large enterprise segments.

Contactlab remains amongst the leaders through its platform's key differentiators including API-first, data centric, easy-to-use, data protection by design, and cloud-based platform. The Engagement Marketing platform helps brands personalize customer engagements by offering a comprehensive view of customer data in a multi-channel environment.

CSG empowers organizations to drive personalization at scale by targeting customers based on their unique profiles, activating with CX technologies, and leveraging segmentation and AI modeling capabilities.

Lytics through its CDP platform offers comprehensive capabilities including data integration and unified customer profiles, decisioning and machine learning, audience management, content recommendation, journey orchestration, and automation to help brands integrate data, transform it into intelligence, and leverage this intelligence to drive interactions and deliver personalized experiences at scale.

Redpoint Global's CDP provides agility with its no-code support, enabling organizations to ingest structured, semi-structured, or unstructured data and make it operational. Users are preferring its CDP due to its ability to serve omnichannel personalization, single customer view, digital advertising & acquisition, privacy & compliance, real-time interactions, data quality & integration and other such requirements.

Salesforce leads the pack by empowering organizations to deliver compelling customer experiences through a data-driven approach. The company is continuously focusing on helping organizations deliver a 1:1 customer experiences across engagement channels through integrated data management and personalization capabilities.

SessionM through its platform offers a strong customer value proposition by resolving issues regarding legacy technology and disparate customer data, and enabling organizations to build unique, 360-degree profiles for each customer. SessionM possesses expertise in catering to mid-market and large enterprises.

Tealium remains amongst the leaders and has proven its expertise in catering to SMB, mid-market, and large enterprises requirements. Its innovative and robust technology platform is capable to address crucial business needs, including activation and orchestration, identity resolution, consent management, regulatory compliance, and leveragaging machine learning models to drive informed decision making.

Treasure Data Enterprise CDP empowers and enables marketers to collect, unify, analyze, and activate rich customer data along each stage of the customer journey to optimize engagements at scale. The CDP armed with robust Al/ML capabilities, including data-driven multi-touch attribution, customer lifetime value prediction, keyword extraction, churn prediction, and more, facilitates organizations in delivering personalized experience.

The other key vendors captured in the 2022 SPARK Matrix include Ascent360, Commanders Act, CrossEngage, D4t4 Solutions, NGDATA, Quaero (Cloudera), QuickPivot, and Upland BlueVenn.

Ascent360's data-driven approach and focus towards offering integrity is helping B2C brands to foster engagement with their customers. Ascent360's CDP helps brands monitor the customer's event feedback, interests, and pre-and post-sales by assessing the data gathered through marketing initiatives.

Commanders Act's flexible CDP platform can cater to organizations' requirements such as cost optimization, optimizing resource allocation, providing business agility, and more. The company's managed service approach helps organizations to optimize their business by providing recommendations and specific analyses based on their requirements. Organizations are leveraging the platform to optimize

their marketing investments by understanding the influence of every campaign influence on the revenues generated from offline stores.

CrossEngage platform equipped with out-of-the-box integration and crosschannel campaign management capabilities enable marketers to collect and act upon the first-party data to drive engagement. The platform offers high-level data security and privacy support with trusted industry-leading organizations and a network of professional partners.

D4t4 Solutions platform's key technology differentiators, including data enrichment, real-time data delivery, easy integration with enterprise applications, customer profiles at scale, and patented tagging-free data capture, helps the company to delivers value to its customer. The platform enables marketers and CX teams to drive deeper customer engagement and achieve 1:1 personalization by enhancing prevailing customer data with behavior and experience data.

NGDATA continues to fulfill its customers' requirements with core CDP functionalities, facilitating marketers to gain precise understanding of customer behavior at every journey stage and increase customer satisfaction and engagement with advanced predictive insights.

Quaero's CDP offers a robust technology proposition with comprehensive capabilities for extracting, cleansing, and synchronizing data, segmenting, reporting, and analytics that helps organizations (marketers, data scientists, analysts) to maximize data utilization, make it actionable, and improve customer engagement.

QuickPivot platform's integrated core CDP capabilities provide a one-stop-shop for The company's new and existing customers looking at building a direct-to-consumer (D2C) model. QuickPivot's growing partner network is enabling organizations to acquire customers and meet their requirements at scale.

Upland BlueVenn provides highly scalable platform that can support integration with any upcoming marketing technologies. It facilitates the analysis and segmentation of millions or billions of data points, without any breakdown in system performance. The platform delivers value by connecting businesses with specific, preferred execution channels that match their requirements.

Continued efforts of CDP vendors in improving the overall value proposition in terms of enhanced data integration, enrichment, management, activation,

and governance with the application of advanced AI and machine learning are significantly driving the adoption of CDPs amongst SMBs and mid-sized and large enterprise organizations. Some of the major differentiators of the customer data platform market include comprehensive data integration, robust identity resolution, advanced segmentation capability, the performance of AI and machine learning, robust integration and interoperability, and vendor's technology vision & roadmap. Organizations are consistently looking at CDPs that adapt to their evolving business models and enable them to efficiently design businesses and customer-centric strategies. As the CDP market consists of multiple vendors with varying platform capabilities and supporting services, organizations often encounter challenges in understanding the best-fit CDP tools for their high-level business-critical requirements.

Key Competitive Factors and Technology Differentiators

The following are the key competitive factors and differentiators for the evaluation of customer data platform and vendors. While the majority of customer data platform 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 customer data platform technology capabilities and overall value proposition to remain competitive. Some of the key differentiators include:

The Sophistication of Technology Capabilities: Comprehensive Data Integration Capability: The vendors' capability to providing comprehensive data integration is essential in improving the performance of the CDP solution. The platform should support the complete inclusiveness of data from both online and offline sources through out-of-the-box connectors, open APIs, and custom connectors. It should integrate a wide variety of structured, semi-structured, and unstructured data from both internal and external sources. These sources may include POS and eCommerce, CRM systems, loyalty management systems, campaign management and response systems, mobile clickstream data, social media, call center logs, customer surveys, postal addresses, and such others. Few CDPs may support data ingestion only from digital channels with no support for physical-driven customer data such as POS, call center logs, and others. Traditionally, marketers are facing significant challenges in putting efforts (and additional investments) in acquiring data from sources not supported by their data warehouse systems. CDP solutions' ability to integrate a large volume and variety of customer data in multiple formats and from contextual data sources across all interaction channels and product types provides a significant competitive advantage to marketers and CX professionals. Apart from data integration, few vendors may also offer robust data transformation capability to perform data extraction, transformation, and loading (ETL) for cleansing and validation.

Integration and Interoperability: Seamless integration and interoperability with the organization's existing technologies are amongst the most crucial factors impacting technology deployment & ownership experience. The CDP solution should offer seamless integration and interoperability with a wide range of customer interaction channels, marketing technology stack, and execution systems to drive customer engagement in an omnichannel environment. CDP vendors may provide

out-of-the-box integration connectors, well-documented API, and a RESTful API to achieve integration with multiple channels and marketing execution systems. Users should evaluate vendors' capability in providing out-of-the-box integration for best-of-breed technologies and custom integration with various marketing, CRM, AdTech, DMP, and POS systems. Also, users should assess the CDP in offering breadth and depth of integration capability specific to their existing tools and infrastructure. Some integration and APIs are not comprehensive and may only provide limited functionality.

Robust Identity Resolution: A CDP unifies all events, available campaigns, and transaction data associated with each customer in real-time. Its identity resolution engine resolves customer identities to bring sparse profiles together across siloed systems. It tracks both anonymous and known customers for identity and events. A backstitching subsystem connects events to known customers when an anonymous visitor becomes identified through a unique identifier. Identities are stitched together to form a master customer record using deterministic and probabilistic matching. A CDP solution may leverage advanced machine learning-powered identity resolution to generate a dynamic first-party identity graph and a stable and universal ID across all records. Further, it matches, merges, and analyzes data on an ongoing basis to form an always up-to-date and comprehensive 360-degree profile view with numerous attributes on every profile. Users should evaluate the ability of the vendor's CDP algorithm to perform identity resolution functions and create unified, 360-degree customer profiles.

Maturity of Al & Machine Learning Capability: CDP vendors' competence in providing embedded Al and machine learning capabilities may significantly differ. Users should evaluate a CDP solution that offers real-time behavioral clustering, behavioral scoring, adaptive customer segmentation, and activation capability powered by a sophisticated machine learning algorithm. Organizations should assess the CDP vendor's value proposition in providing multiple out-of-the-box predictive machine learning models for various performance metrics, including customer lifetime value, propensity, lookalike, likelihood to buy, churn prediction, next-best-offer recommendation, segment discovery, and such others. Additionally, CDP vendors should also support easy importing of models or enable business users without a data science background to build a custom model for organization-specific use cases. Depending on the vendors' capabilities, CDP vendors may also provide sandboxing capabilities to perform A/B and multivariate testing for optimizing campaign effectiveness and overall performance.

The solution should be equipped with real-time, robust reporting and customizable/ configurable, interactive dashboarding capabilities. These dashboards should enable users to visualize operational level/ cross-functional insights and easily share these visualizations with team members in the format of PDFs, excel spreadsheets, etc. The solution should enable users to build complex reports as well as leverage pre-built template-based reports with minimal training. Users should also assess the platforms that support predictive analytics to anticipate key drivers and variables influencing the sales, marketing, and overall business results.

Advanced Segmentation Capability: The ability to provide customer segmentation based on various performance parameters is amongst the primary capabilities of CDP solutions. CDP solutions often provide a user-friendly UI designed for business users without the necessary technical knowledge to create, edit, and manage a wide variety of customer segments. Most of the basic CDP solution users leverage rule-based algorithms to create these customer segments. The segments are updated in real-time to reflect customer behavior and intent and can then be passed to downstream tools. Users move in and out of the specific segments as their needs and behaviors change. CDP vendors may also provide an advanced segmentation capability powered by machine learning and predictive analytics. Advanced segmentation allows marketers to granularly personalize the create variant, messaging, and promotion based on real-time customer behavior and predictive customer insights. Additionally, marketers can leverage CDP to discover targeted segments powered by machine learning and perform predictive analytics to drive effective marketing campaigns based on micro-segment targeting.

Data Security and Consent Management: The CDP solutions' capabilities in providing data security and consent management functionalities to help organizations improve compliance with ever-growing regulations are important to provide a secure environment. Users should evaluate the depth of the CDP's capabilities to provide individual consent management for each marketing use case and synchronizing the consent status of individual profiles across a range of organizations MarTech ecosystem.

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 Application Diversity	20% 15%
Integration & Interoperability Vision & Roadmap	15%
	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, midmarket 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.

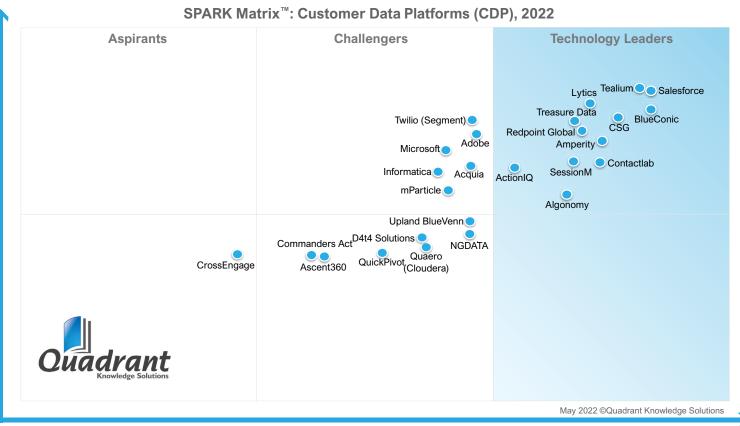
Customer Impact

SPARK Matrix™: Customer Data Platform (CDP)

Strategic Performance Assessment and Ranking

Figure: 2022 SPARK Matrix™

(Strategic Performance Assessment and Ranking)
Customer Data Platform (CDP)



Technology Excellence

Vendors Profile

Following are the profiles of the leading customer data platform 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 customer data platform technology and vendor selection based on research findings included in this research service.

ActionIQ

URL: www.actioniq.com

Founded in 2014 and headquartered in New York, United States, ActionIQ provides a Smart Hub-based enterprise customer data platform (CDP). The company specializes in customer data, marketing, marketing acceleration, marketing optimization, data integration, data segmentation, centralized data hub, and data-driven marketing. ActionIQ's Customer Data Platform (CDP) helps organizations integrate their first-party data and gain data-driven customer insights to drive revenue, innovation, and customer engagement. The platform offers native capabilities, including data ingestion, Customer 360 (PersonMatch, Attributes), Customer Intelligence (Audience, Models Insights), Customer Experiences (Journeys, Schedules, Triggers), and activation.

The ActionIQ CDP supports direct integration of raw customer data from various sources without any need to transform it to any format or predefined schema. These sources typically include web activities, email campaigns, transactions, CRM, paid media, social operational systems, and more. The CDP facilitates data ingestion using real-time or REST API for direct ingestion from the source.

ActionIQ's Customer360 module enables organizations to get a single view of the customer by unifying customer data to create a unified customer profile. The module includes PersonMatch to achieve this. PersonMatch is an identity resolution capability to tie together siloed and incomplete customer data across multiple touchpoints. It validates, standardizes, and cleanses the customer records for enhancement. It matches the customer data using matching methods such as deterministic, probabilistic, clustering, and master. Further, it stitches data by linking the master customer ID with all new or existing data. The platform also offers Attributes – a self-service interface for users to define attributes for new customers instantly.

The ML-powered Customer Intelligence module helps organizations leverage their data to understand and anticipate customer journeys. The Customer Intelligence comprises a no-code interface that helps organizations create and assess customer segments by leveraging their customer data. It helps users gain audience insights through fallout reporting, overlap analysis, attribute distribution, and dimension count. It also helps users to manage audience calculation rules and export destinations. The platform offers a machine learning framework

that enables organizations to leverage a set of native or custom-built models to understand their audience in a better way. Users can manage and activate the models to generate new customer experiences and data-driven insights. The built-in drag-and-drop dashboards enable business users to gain customer insights, assess the behaviors, uncover bottlenecks, and visualize trends as well.

ActionIQ CDP's Customer Experiences module fully integrates with Customer 360 and Customer Intelligence for centrally orchestrating experiences in real-time across customer-preferred channels. The platform includes a triggers feature that activates the customer experiences in real-time using streaming data sources and past profiles. It offers a drag-and-drop canvas to create end-to-end customer journey experiences. Users can orchestrate multi-step journeys across their channels with optimization of channels in real-time. The platform also enables users to schedule the activation of customer experiences and omnichannel audience activations.

In addition, ActionIQ enables organizations to integrate and activate all their data to their execution systems, such as engagement, sales and service, advertisements, and other systems. Organizations can activate all their data (batch or real-time) regardless of volume in any preferred channel from a single platform. Founded in 2014 and headquartered in New York, United States, ActionIQ provides a Smart Hub-based enterprise customer data platform (CDP). The company specializes in customer data, marketing, marketing acceleration, marketing optimization, data integration, data segmentation, centralized data hub, and data-driven marketing. ActionIQ's Customer Data Platform (CDP) helps organizations integrate their first-party data and gain data-driven customer insights to drive revenue, innovation, and customer engagement. The platform offers native capabilities, including data ingestion, Customer 360 (PersonMatch, Attributes), Customer Intelligence (Audience, Models Insights), Customer Experiences (Journeys, Schedules, Triggers), and activation.

The ActionIQ CDP supports direct integration of raw customer data from various sources without any need to transform it to any format or predefined schema. These sources typically include web activities, email campaigns, transactions, CRM, paid media, social operational systems, and more. The CDP facilitates data ingestion using real-time or REST API for direct ingestion from the source.

ActionIQ's Customer360 module enables organizations to get a single view of the customer by unifying customer data to create a unified customer profile. The module includes PersonMatch to achieve this. PersonMatch is an identity resolution capability to tie together siloed and incomplete customer data across multiple touchpoints. It validates, standardizes, and cleanses the customer records for enhancement. It matches the customer data using matching methods such as deterministic, probabilistic, clustering, and master. Further, it stitches data by linking the master customer ID with all new or existing data. The platform also offers Attributes – a self-service interface for users to define attributes for new customers instantly.

The ML-powered Customer Intelligence module helps organizations leverage their data to understand and anticipate customer journeys. The Customer Intelligence comprises a no-code interface that helps organizations create and assess customer segments by leveraging their customer data. It helps users gain audience insights through fallout reporting, overlap analysis, attribute distribution, and dimension count. It also helps users to manage audience calculation rules and export destinations. The platform offers a machine learning framework that enables organizations to leverage a set of native or custom-built models to understand their audience in a better way. Users can manage and activate the models to generate new customer experiences and data-driven insights. The built-in drag-and-drop dashboards enable business users to gain customer insights, assess the behaviors, uncover bottlenecks, and visualize trends as well.

ActionIQ CDP's Customer Experiences module fully integrates with Customer 360 and Customer Intelligence for centrally orchestrating experiences in real-time across customer-preferred channels. The platform includes a triggers feature that activates the customer experiences in real-time using streaming data sources and past profiles. It offers a drag-and-drop canvas to create end-to-end customer journey experiences. Users can orchestrate multi-step journeys across their channels with optimization of channels in real-time. The platform also enables users to schedule the activation of customer experiences and omnichannel audience activations.

In addition, ActionIQ enables organizations to integrate and activate all their data to their execution systems, such as engagement, sales and service, advertisements, and other systems. Organizations can activate all their data (batch or real-time) regardless of volume in any preferred channel from a single platform.

Analyst Perspective

Following is the analysis of ActionIQ's capabilities in the global CDP market:

- The ActionIQ CDP platform is powered with Alq an enterprise artificial intelligence framework that links the customer data from all dimensions to augment modeling across the organization's marketing ecosystem. It offers white-box, configurable native models, providing its users the ability to custom-build models as per their specific requirements and use cases. Users can leverage FLAME and Dynamic Attributes for creating any feature dynamically for streamlining data wrangling. ActionIQ also provides a strong customer value proposition by enabling its clients to enhance customer relationships and scale best practices. The ActionIQ CDP platform's key technology differentiation includes flexible audience creation, multichannel campaign measurement and management, actionable intelligence, and enterprise grade platform.
- ActionIQ offers InfiniteCompute a proprietary data infrastructure
 that offers high computation power and can immediately scale to
 meet the customer's needs. This data infrastructure can automatically
 scale up or down and accordingly allocate resources to serve the
 received request. It also enables organizations teams to collaborate
 and innovate around customer-centric initiatives. The platform caters
 to various marketing use cases, including customer retention, product
 cross-sell, 360-degree view of customer activity, high-value retention,
 new products, trial to paid, mitigate churn, grow LTV, and more.
- From a geographical presence perspective, ActionIQ has a strong presence across the North American region. From an industry vertical perspective, the company holds a strong customer base across various verticals, including financial services, media and advertising, retail and CPG, and technology.
- ActionIQ may face growing competition from emerging and wellestablished CDP vendors offering robust data management capabilities to cater to mid-market and large enterprises. However, ActionIQ, with its enterprise-grade architecture and scalability, compelling Al/ ML capabilities, and strong customer support, is well-positioned to expand its market share in the global CDP market.

Algonomy

URL: www.algonomy.com

Founded in 2004 and headquartered in Bangalore, Karnataka, Algonomy was formed post the merger of Manthan Systems and San Francisco-headquartered RichRelevance. Algonomy empowers brands to become digital-first with the real-time Customer Data Platform consisting built-in customer activation and analytics for the retail industry. With its comprehensive Al-driven solution, retailers can anticipate and respond to changing conditions while delivering highly personalized experiences to shoppers across all touchpoints. Algonomy is a trusted partner to more than 400 global retail brands and offers compelling retail expertise and breadth of digital best practices across data management, marketing, merchandising, analytics, and ecommerce.

The company offers Algorithmic Customer Engagement (ACE) Platform. The key components of the ACE platform are:

Real-time Customer Data Platform: Algonomy's CDP enables real-time audience activation by creating granular segments with unified customer data, across online & stores.

Customer Analytics: Algonomy's advanced Customer Analytics is a cloud-based analytics module that enables Al-powered, autonomous decision-making for retailers.

Omnichannel Personalization: With Algonomy, commerce teams can turn every digital interaction into a personal experience by connecting digital touchpoints such as search, browsing, content and product recommendations.

Customer Journey Orchestration: Algonomy enables retailers to authentically engage audiences with perfectly timed personalized campaigns and offers across all channels.

Algonomy CDP enables marketers to provide consistent personalized customer engagement in the moment by enabling real-time activation of audiences across channels. Built for retail with 1000+ retail-specific domains and measures enables faster time to value at scale. The CDP enables omnichannel ingestion of comprehensive customer data, including customer identities from POS, website, mobile channels, behavioral data, transactional data, customer service data,

and other third-party data sources using an ecosystem of 560+ out-of-the-box connectors. It performs both deterministic and probabilistic matching for identity resolution and enables the creation of unified 360-degree customer profiles or golden customer records. The platform handles end-to-end data management, including standardization, enrichment, deduplication, and merging and profiling.

The platform offers multiple modules for dynamic, real-time customer segmentation, including RFM (recency, frequency, and monetary value) segmentation, rule-based, and ML-powered micro-segmentation. The company also provides multiple modules for predictive modeling. It offers packaged predictive models for various use cases, including churn prediction and customer lifetime value. It includes propensity modeling to allow marketers to create a model against any customer behavior. The platform includes an intuitive UI to build the models, score customers, and activate the output for analysis and marketing campaign execution in real-time

Algonomy provides native data visualization, dashboard design, and exploration capabilities. Marketers can leverage pre-built dashboards, analytical views and use case-specific data visualizations to improve marketing analytics and customer acquisition. They can connect with customers in the moment by activating intelligent audiences, in real-time, across all touchpoints and provide consistent customer engagement. It is built for retail with online and offline data management capabilities and tracks customer behavior using over 1,200 measures and dimensions out of the box.

Analyst Perspective

Following is the analysis of Algonomy's capabilities in the global CDP market:

Algonomy's offers a CDP with built-in customer activation and retail
cloud analytics. It enables retailers and brands to identify customers
from traffic, stitch together a comprehensive customer profile in real
time, including householding, and surface look-alike audiences across
channels using a library of pre-built algorithms and extensible data
science models. It comes with pre-built connectors allowing companies
to easily centralize all customer data, whether it be structured or
unstructured, online or stores, and create a golden customer record.
Using APIs, customers can activate these micro segments across

owned, paid, and social properties for rapid and profitable new customer acquisition, help grow wallet share, retain loyal customers, and win back lost ones. Algonomy helps marketers optimize spend across the customers' buying journey, reduce dependency on IT, improve personalization efforts and grow customer lifetime value.

- Algonomy firmly serves mid-market to large enterprise segments having B2C specific requirements. The company's CDP platform is scalable to meet the requirements of large retail conglomerates with multiple formats and a large number of stores, and an e-commerce presence. The platform supports several marketing use cases, including a cross-format single view of the customer, behavioral segmentation, and auto-discovery of segments, increasing loyal customer spend, churn prediction, and maximizing customer lifetime value. The platform enables marketers to leverage behavioral data for creating granular segments and further perform upselling and cross-selling by providing contextual recommendations to existing customers. With its omnichannel personalization tool supported by a real-time customer data and analytics platform and global retail expertise Algonomy enables retailers engage customers with contextually relevant experiences across their lifecycle.
- From a geographical presence perspective, Algonomy has a strong presence in North America, followed by APAC. The company also has a customer base across other regions, including Middle East & Africa, Latin America, and European Union. From an industry vertical perspective, the company primarily focuses on the retail & e-commerce industry with specialization in the grocery, fashion & lifestyle, and apparel sectors. The company also focuses on quick-service restaurants and fast-casual sectors.
- Algonomy may face growing competition from CDP vendors offering capabilities to cater to B2C segments across various industry verticals.
 The company may also face competition from vendors that provide a marketing cloud and from point solutions. However, with its strong customer value proposition, retail focus and overall robust technology functionalities, Algonomy is poised to expand its market share in the global CDP market.

 Concerning Algonomy's future roadmap, the company continues to invest in enhancing its real-time CDP with powerful Al/ML capabilities.
 The company is also looking at offering its clients a full suite covering data, decisioning and delivery following the merger with RichRelevance, a Omnichannel Personalization leader.

Amperity

URL: www.amperity.com

Founded in 2016 with two headquarters in Seattle, Washington, and New York, Amperity is a provider of an Al-powered Customer Data Platform specializing in marketing technology, machine learning, Customer 360, customer data management, and identity resolution. The Amperity Customer Data Platform helps brands leverage machine learning to get a 360-degree view of their customers so they can make informed business decisions. The Amperity CDP offers an end-to-end Customer Data Platform with three products. Brands can purchase all or customize any combination of the three:

AmpID: Al-powered customer identity management

Amp360: The enterprise Customer 360

AmplQ: The hub for customer intelligence and activation

Powered by DataGrid: Multi-patented real-time customer data infrastructure with closed-loop sync to over 200+ common ecosystem technologies including Adobe, Oracle, SFDC, Azure, AWS, GCP, Snowflake, and more.

Amperity's platform ingests customer data from various systems and applications, online and offline channels, and other sources in a raw format with no requirement of transformation or pre-processing. Traditional data integration projects that involved Extract-Transform-Load(ETL) and fixed schemas require significant time to deploy and difficult to maintain. Because of this approach, Amperity significantly reduces IT efforts for data integration and maintenance. The platform offers machine learning-powered identity resolution to generate a dynamic first-party identity graph and a unified customer profile for both anonymous and known customers. The customer profiles are updated in real-time and always kept up to date by ensuring real-time matching, merging, and analysis of data on an ongoing basis. All changes in Amperity happen in a parallel Sandbox environment, enabling technical teams to make changes, test, preview, and validate the impacts to customer data workflows before merging to production.

Amperity offers comprehensive analytic suites and machine learning capabilities to provide predictive insights for each individual customer. The Customer

360 profiles are enriched with over 70 attributes and predictive insights on each customer, including customer lifetime value, churn propensity, product and channel affinity, lifecycle status, loyalty membership, and more. Analytics and Data Administrators can create multiple databases and tables for various use cases including multi-brand or multi-country data management, BI workflows to common BI platforms like Tableau, PowerBI and more, continuous sync workflows to EDW and beyond. Customer data can be queried and automatically exported down to individual customers, and up to audiences, segments, and full databases. With a suite of marketing intelligence and activation tools, Amperity offers speed-to-insights and easy campaign building. Marketers can discover, develop, track, and deploy high-value customer segments. The platform provides direct access and ability to create, customize, and activate customer segments through a SQL workbench or visual audience builder and point-and-click UI for various marketing use cases and customer data exploration.

The activation and orchestration solution enables marketers to execute and manage all types of simple and sophisticated omni channel campaigns and journeys. It supports campaign control groups, experimental design, A/B testing, multivariate testing, and cross-channel response measurement. Amperity provides over 200 out-of-the-box connectors across a range of 1:1 messaging, web, mobile, advertising, analytics, and CX tools enabling marketers to activate predictive individual-level insights across the marketing stack for real-time cross-channel personalization to improve digital engagements.

Analyst Perspective

Following is the analysis of Amperity's capabilities in the global CDP market:

• Amperity's agnostic and holistic approach towards offering its robust customer data platform is helping brands identify & manage their customer data, better understand their customers, optimize their experiences, design effective omni-channel marketing programs, measure and optimize marketing spend. The Amperity Customer Data Management platform's key technology differentiators include ETL data ingestion framework, Al-powered identity resolution, end-to-end C360 management, Ml-powered user insights, and interfaces for multiple users. The platform can process and unify millions of records daily, providing higher scalability and availability to meet the requirements of large enterprise customers.

- Amperity's CDP platform is equipped with a patented Al-driven identity resolution capability that provides brands a single view of customers to design and deliver impactful campaigns. The native ETL data ingestion framework supports the integration of raw customer data without any need for transformation or schema mapping, further enhancing the accuracy of the identity resolution module. From the use case perspective, Amperity primarily focuses on the B2C segment. The company caters to complex B2C requirements by supporting comprehensive enterprise use cases, including customer 360, multibrand customer data management, real-time event and data routing, audience expansion, identity resolution for known and anonymous customers, householding and clustering, advanced analytics and BI workflow enablement, advanced segmentation and decisioning, omni-channel activation, attribution, and CLV-growth focused use cases such as churn prevention and 1-2x buyer conversion.
- From a geographical presence perspective, a majority of the Amperity customers are from North America. The company also holds a presence across the European Union and the Asia Pacific region and runs multi-country CDP programs for large global brands. From an industry vertical perspective, the company has a presence across B2C such as retail & e-commerce, hospitality & travel, banking & financial services, telco, auto, and quick-serve restaurants.
- Amperity may face growing competition from emerging as well as established CDP vendors having a significant market presence beyond North America and are extensively focusing on implementing market penetration strategies. However, with its sophisticated technology platform, comprehensive functional capabilities, and strong customer value proposition, the company is poised to expand its market share in the global CDP market.
- Concerning product strategy and roadmap, Amperity is focusing
 on enhancing its platform capabilities. Its planned enhancements
 comprise innovative role-based solutions across IT, marketing, and
 analytics, including adding new ad-tech integrations and identity
 solutions for post third-party cookie marketing reach and attribution,
 new features and partners to enable hyper-personalization at scale,
 and more powerful analytics and IT admin self-service capabilities.

BlueConic

URL: www.blueconic.com

Founded in 2010 and headquartered in Boston, MA, BlueConic is a pure-play customer data platform provider (CDP) with specialization in data collection, activation, and insights to help companies make the best use of first-party data to drive growth. The company offers a SaaS-based CDP that helps marketers create a unified customer profile, build multi-dimensional segmentation, use modeling and analytics, and activate customer data for personalized marketing at every point of the customer lifecycle. The BlueConic CDP platform offers comprehensive capabilities including data collection and integration, unified customer profile, multi-dimensional segmentation, customer lifecycle orchestration, and modeling and analytics.

The BlueConic CDP platform supports automated data collection and integration from multiple channels and technologies. It provides over 100 certified, out-of-the-box connections with best-of-breed marketing and advertising technologies. It also offers numerous universal ways to connect with the BlueConic platform, including server-to-server and client-side data integration, CSV, and batch processing, webhook, data layer connection, embedded connections, and DIY data integration.

The BlueConic CDP platform creates unified customer profile that captures unlimited customer attributes (such as behavioral, demographics, interests, consent and privacy preferences, or transactional) for both anonymous and known individuals. The platform integrates a variety of data points associated with customers via direct ingestion of data, connections with third-party systems, and through native data collection onsite and makes it immediately available for activation. The platform also uses identity resolution functions to tie individual customers with the right rich data and in a unified customer profile. Users can define rules or use machine learning techniques to merge customer profiles based on any combination of unique identifiers to create a single view of the customer. The platform also supports progressive profiling to automatically update customer interests, behavioral data, customer scores, transactional data and more to support real-time customer lifecycle orchestration.

Marketers and other non-technical users can build dynamic, multi-dimensional segmentation in under two minutes using any combination of profile attributes

with its point-and-click UI. Profiles update as users' behaviors or attributes, such as order value, consent status, CLV score, or propensity to buy change. Profiles move in and out of segments dynamically. Segments sent to activation systems via integrations update in real time so marketers can activate 1:1 marketing across channels as and when the intent is revealed. The platform provides users with insights to enable them to understand high-value audiences, identify audience overlap, compare segments, and drill down into customer interests and preferences.

The BlueConic platform's customer lifecycle orchestration capabilities gives marketers and other growth teams the authority to activate their data across channels to improve customer experiences. The intuitive Lifecycles interface enables users to visualize and manage the marketing touchpoints as their customers behaviors and attributes (transactions, events, points-in-time) change which qualifies them to move from one stage of the lifecycle to the next, or move to a different lifecycle entirely. The platform is also equipped with a machine learning-driven recommendation engine that enables marketers to deliver real-time personalized recommendations across on and offline channels (website, email, in-store) based on customers' behaviors, interests, and preferences. The BlueConic platform, with its built-in personalization capabilities, allows marketers to personalize and optimize conversations across every stage of the customer lifecycle, over the lifetime of a customer. It serves as the "brain" behind activation platforms to deliver relevant messaging with precision targeting.

The BlueConic platform also offers teams native analytics and insights capabilities to optimize their marketing and growth initiatives. The platform allows users to gain actionable insights by configuring, customizing, and sharing dashboards among users. Teams can use insights to discover new data points, such as new segments, and design different types of visualizations and track KPIs using a pluggable insights gallery. Teams can also leverage integrations to export customer data to other data analytics and visualizations tools.

BlueConic's proprietary Al Workbench provides built-in modeling and analytics capabilities to enable non-technical teams to use customer scores in real-time. Data scientists can import or build their own models within Al Workbench or modify out-of-the-box models in the BlueConic platform that run on top of their first-party data asset. The Al Workbench is fully integrated with the BlueConic CDP and allows users to test, validate, and deploy the model to enrich profiles with intelligent customer scores, enable smart segmentation, and activate personalized

marketing as often as needed. Increasing the proximity between modeling and marketing activation systems collapses time-to-market and allows both analytics and marketing teams to gain operational efficiencies while delivering more relevant customer experiences.

The company also offers its customers an end-to-end compliance solution to ensure compliance with GDPR, CCPA, and other data privacy, protection, and security regulations as a feature of its CDP platform. It provides robust consent management capabilities to capture individual rights requests and federates consent status across organizations marketing technologies to enable marketers to maintain customer privacy and meet stringent regulatory requirements.

Analyst Perspective

Following is the analysis of BlueConic's capabilities in the global CDP market:

- BlueConic enables growth-focused teams to leverage the rich customer data to innovate and diversify revenue with tactics like building new audience-based products, democratizing data and analytics, and supporting customer lifecycle orchestration. The company offers a robust technology value proposition with its key technology differentiators including superior platform architecture supporting schema-less profile database, comprehensive data integration support, business user-friendly UI with technical-user capabilities, flexibility in defining any profile attribute as a unique identifier, and embedded consent management for privacy regulations. The pluggability support enables organizations to introduce new functionalities for business agility and flexibility in supporting emerging market scenarios and complex requirements. BlueConic has expertise in catering to SMB, mid-market, and large enterprises, however, majority of its client base belongs to an enterprise segment.
- The differentiated capabilities of BlueConic's Al Workbench significantly improve the company's CDP value proposition to offer robust capabilities that help non-technical teams innovate on powerful customer experiences, especially to the large enterprise segments. Organizations leverage the native Al Workbench to develop and optimize the predictive models using data within the profile database;

and activate model output instantly through connections to activation systems. The platform possesses expertise in catering to diverse marketing use cases (for SMB, mid-market, and large enterprises) including discovering and monetizing new audiences, unifying cross-channel data to deliver cohesive on-and off-line experiences, improving the effectiveness of Google and Facebook audience targeting and suppression, powering direct-to-consumer marketing strategies and more.

- From a geographical presence perspective, BlueConic has a strong presence in North America and Europe region. In the year 2022, the company has also marked its presence in the APAC region as well.
 From the industry vertical perspectives, the company has a presence across media & publishing, retail and e-commerce, entertainment & sports, telecom, hospitality & BFSI and travel, sectors.
- BlueConic may face competition from CDP vendors having a strong market presence across various geographical regions. The company may focus on formulating compelling market growth strategies to expand its presence in the APAC, MEA, and Latin American markets. However, the company, with its differentiated technology value proposition, comprehensive functional capabilities, and strong customer value proposition, is well-positioned to expand its market share in the global CDP market.
- BlueConic focuses on strategically prioritizing its product enhancements across core platform categories including scalability, governance & security, lifecycle orchestration, unified profiles, modeling & analytics, and segmentation. The company significantly plans to invest in capabilities such as data clean rooms, out-of-thebox Al notebooks, global consent and privacy management, and connections.

Contactlab

URL: www.Contactlab.com

Headquartered in Italy, founded in 1998 and part of the Growens group since May 2022, Contactlab offers an engagement marketing platform together with professional services and strategic consultants for personalized digital marketing and customer engagement. The Contactlab Marketing Cloud platform offers a suite of functionalities including a customer data platform (CDP), marketing automation and journey builder, multi-channel 1:1 campaigner, and dashboards and reports. These capabilities help clients easily and quickly transform visitors into customers, increase their value, reduce churn, and boost revenue.

Contactlab's SaaS-based CDP enables brands to build complete customer profiles and gain valuable insights such as statistics and predictive analytics (e.g., RFM, CLV and engagement level clusters) to perform sophisticated clustering and strengthen customers relationships by delivering personalized and in real-time experiences. The key features include a flexible and extendable data model, an automatic unique customer view creation, data enhancement through Al, an advanced segmentation, an engineered marketing automation, dashboarding, authentication and authorization, GDPR-compliance, and privacy by design.

Contactlab's CDP focuses on creating a unique customer view by capturing and integrating data across all the available online and offline touchpoints. It collects data from e.g., in-store registration forms or during the website purchases, or again responses to digital campaigns (email, SMS, 1:1 communications) in real-time and so on. The platform offers a pre-defined customer profile with standard attributes. It provides more than 50 pre-defined different event types and both profiles and each of the event types can be extended with custom attributes. Further, this customer data can be organized into workspaces and separate nodes to match the organization's business requirements, such as by brands, markets, countries, and more. The platform also offers user access defined on a per-node basis.

The platform builds customer profiles based on demographic and behavioral customer information captured from different and independent data sources such as in-store payment systems and e-commerce purchases, loyalty programs and web browsing. 'Unique customer properties' can be specified on a per-node basis. Here, the platform automatically associates information to a single customer

profile matching that property's value, irrespective of the type of data sources. It also allows the users to select two or more different nodes to define a proper matching criterion such as name, surname, date of birth, and aggregate profiles with information from the different nodes where the matching criteria are satisfied. Also, any behavioral data stored into the CDP such as data about purchases or service subscriptions can be used as a trigger to insert the customer into a journey designed with the together engineered Marketing Automation tools.

Moreover, the availability of a predefined algorithms and predictive analytics catalog (including CLV, RFM, email engagement level, purchases preferences and digital campaign preferences and statistics) allows the customer profiles enhancement and enables profiling based on behavioral patterns. The platform is also open to custom algorithms developed upon customer request.

The platform offers all the stored customer data including demographic and behavioral data for advanced segmentation to enable users to create targeted marketing campaigns. The simple and intuitive UI does not require any technical knowledge of databases or querying languages. Users can mix and match several conditions on available data with logic operators according to needs. Users can further combine these blocks of conditions to obtain more and more refined targets. Marketers can plan and run their digital marketing campaign directly from the CDP UI. They can also use the behavioral data stored in the platform as a trigger to target the customer into a journey designed with the platform's Marketing Automation functionality.

The platform offers several dashboards to monitor the critical campaign KPIs and the most relevant information around the customer base and the data import, the segments performance, and the influenced revenue.

The CDP platform also manages all the GDPR norms regarding customer personal data by providing out-of-the-box tools for privacy regulations. The platform also ensures security by authenticating the users with an identity management system and provides role-based access to perform a specific set of actions.

Analyst Perspective

Following is the analysis of Contactlab's capabilities in the global CDP platform market:

- Contactlab offers an Engagement Marketing platform that helps brands personalize customer engagements by offering a comprehensive view of customer data in a multi-channel environment. The platform's advanced segmentation and AI-enabled data enhancement capabilities help brands to create targeted marketing campaigns in real-time. The company serves the B2B2C model and sells its Customer Data Platform to brands in several different market segments and these companies use the CDP and Marketing Cloud for marketing activities targeting their final customers. The platform's key differentiators include API-first, data centric, easy-to-use, data protection by design, and cloud-based platform.
- The Contactlab Marketing Cloud is built on an API-first approach.
 With public REST APIs any client or system integrator can set the
 automatic import of data (profiles or events) into the CDP in real-time.
 The platform can seamlessly integrate data from several sources
 like CRM, in-store payment systems, e-commerce platforms, loyalty
 platforms, service subscription systems, and more.
- Contactlab provides specific SDKs for the most popular programming languages and operating systems to help its clients to integrate their applications and systems with the Contactlab CDP and Marketing Cloud. The platform's key differentiators include API-first approach, data-driven model, easy-to-use solution, data protection by design, and price performance. The Contactlab CDP platform is highly scalable and can handle millions of profiles and events per client. The platform caters to a wide range of use cases including strategic direct digital marketing to improve sales, collect customer information to generate sales, and manage digital direct marketing.
- From a geographical presence perspective, the company holds a
 major market presence in Italy. The company also has a presence in
 Europe and worldwide. From industry vertical presence perspective,
 the has a strong customer base across industries including fashion
 and luxury, retail, e-commerce, PCG, media & publishing, healthcare,
 hospitality, and travel, and more.

- Contactlab may face competition from emerging vendors as well as well-established vendors offering integrated CDP suites designed specifically for the B2C space. However, with its strong roadmap and vision, advanced Al-powered CDP capabilities, and professional digital services, Contactlab is poised to expand its market share in the global CDP market.
- From a product strategy and roadmap perspective, Contactlab
 is currently investing in R&D across areas including real time data
 availability, cloud-based services, user experience optimization, and
 1:1 multi-channel personalization engine.

CSG

URL: www.csgi.com

Founded in 1982 and headquartered in Greenwood Village, CO, CSG is a provider of customer engagement, revenue management and monetization, and payments solutions. The company specializes in providing solutions for business support, revenue management, digital transformation, customer experience, and more. With a focus on delivering personalized, predictive, and proactive customer interactions, the CSG Xponent platform is a comprehensive solution for driving CX activation. This platform is integrated with robust CX solutions, including journey analytics, journey orchestration, customer data platform, and experience design. CSG's CDP platform provides comprehensive capabilities, including data collection and ingestion, profile unification, segmentation, analytics, as well as BI and activation.

The platform collects and ingests data from multiple sources (such as data lakes, CRM, ERP, MDM, EDW and more) through out-of-the-box connectors. It supports S3, HDFS, SFTP for batch ingestion, and Kafka streams for real-time feed. The platform can also parse various file formats, including delimited compressed, parquet, and JSON. It provides an intuitive interface that allows users to configure file parsing rules and set update frequency, in addition to the strategy such as full refresh and incremental update. The platform supports data management through the process of data on-boarding, cleaning, mapping, and matching, helping organizations to visualize the data transformation.

The platform unifies the gathered data into coherent customer profiles by mapping deterministic ids and stitching data collected from various sources into coherent customer profiles. The customer's profile is continuously maintained with the CSG CDP platform and enriched based on the changing customer attributes. The platform offers a native Customer 360 functionality to enable users to access any individual profile with an intuitive workflow.

The platform's segmentation capability enables users to create customer segments by leveraging the customer's demographic, behavioral, transactional, and other such data. This capability allows users to add logical operators, conditions, and nested segments to set filter criteria for segments. Also, users can add or remove customers by applying default inclusion and exclusion lists as the default filter.

In addition, users can access the data within the CDP through its natively integrated BI tool. It provides users the flexibility to explore the individual tables or create reports as well as dashboards for analysis. The BI tool empowers analysts and data engineers to put in their best efforts in exploring data for insights, quality, or outliers. Organizations' internal teams can make informed decisions and basic analyses by sharing intuitive dashboards/reports. In addition, the platform supports different types of activations, including API-based, file drops, and writing to a Kafka topic. Users can activate customer data by setting up its frequency or when the segments are updated.

Analyst Perspective

Following is the analysis of CSG's capabilities in the global CDP market:

- CSG's Xponent comprised with a comprehensive, integrated suite of solutions, helps organizations drive desired business outcomes by enabling them to gain a unified and clean data view for every customer interaction. The comprehensive CDP capabilities help organizations have a data-driven approach to provide compelling and engaging customer experiences. The platform can scale in order to meet the dynamic enterprise requirements. The CSG product delivers a robust technology value proposition through its key technology differentiators, including data management functionality, segmentation and attribute builder, a complete, unified view of customer profiles, identity management, and activations across popular destinations.
- CSG's CDP serves primary personas, including CX users, analysts, and data scientists, by providing robust data management, 360-degree customer view, and real-time personalization support to address their needs. It empowers organizations to drive personalization at scale by targeting customers based on their unique profiles, activating with CX technologies, and leveraging segmentation and AI modeling capabilities. The company has the expertise to cater to client requirements pertaining to data science and analytics, segmentation, and activation, building strategy around acquisition and retention, and data management.
- From a geographical presence perspective, CSG has a major

presence in North America, followed by a fair presence in Europe and APAC. From an industry vertical perspective, the company has a major presence in the telecom sector, followed by BFSI and retail, and eCommerce.

- CSG may face growing competition from other pure-play CDP vendors offering comprehensive capabilities to cater to B2B and B2C segments across various industry verticals. However, with its robust growth strategy, comprehensive product portfolio, and proven record, CSG is poised to continue to expand its market share in the global CDP market.
- Regarding product strategy and roadmap, CSG plans to enhance its technology platform in key focus areas, including low code/no-code data transformation and probabilistic matching, privacy framework, integration platform, AI/ML, and out-of-the-box integration with journey orchestration to bundle stronger CXDP functionality.

Lytics

URL: www.lytics.com

Founded in 2012 and headquartered in Portland, Oregon, Lytics is a leading provider of a customer data platform (CDP) with expertise in data management, personalization, customer journeys, artificial intelligence, machine learning, and more. The company offers a SaaS-based real-time CDP that helps organizations create unified 360-degree customer profiles and deliver relevant experiences. The Lytics CDP provides comprehensive capabilities for data integration and unified customer profiles, decisioning and machine learning, audience management, content recommendation, journey orchestration, and automation.

The Lytics CDP connects and unifies a range of customer data, including first-party data, behavior, transaction, and engagement data across online and offline sources. Lytics offers over 150 prebuilt integrations and supports integration via open APIs, JS tag, pixel or URL click, and SFTP. In addition, the platform collects and normalizes both anonymous and known user profiles automatically to build unified customer profiles. It also performs dynamic identity resolution to resolve the user's multiple identities into a single unified profile. Lytics' proprietary Identity Graph technology supports flexible unification, join, standardization, definition, and cleansing capabilities.

The platform automatically builds nine machine learning engagement scores, including quantity, frequency, recency, momentum, intensity, and propensity. The platform leverages Lytics Content Affinity Engine and predictive modeling to discover and create intelligent audiences based on engagement level and affinity, allowing marketers to perform immediate targeting and execution. Additionally, with Segment Machine Learning, Lytics allows marketers to test similarities and dissimilarities of customers from the existing rich user-profile information.

The platform's audience management feature enables marketers to comprehensively create, edit, and manage audience segments. These segments are updated in real-time based on real-time customer behavior, motivation, and intent. The platform enables marketers to predict buyer behavior by using the prediction score. Marketers can also build intelligent audience segments based on factors such as customers that are most likely to convert, those that are at risk for churn, or ready for an upsell offer.

The platform leverages Lytics Intelligent Content Engine to deliver relevant, personalized content recommendations to the right individual through preferred marketing channels. The engine includes a crawler to index content, and natural language processing and data science modeling capabilities for personalized content recommendation. The platform also supports website personalization, enabling users to activate personalized modals or in-line messaging on their website in real time. Users can leverage the Pathfora SDK to provide deeper website personalization by tailoring the in-line elements of their webpage for different audiences.

Lytics' Goal Canvas capability enables marketers to visualize cross-channel customer journeys, coordinate campaign activation for each stage of the customer journey, and automate the interactions based on real-time engagement and signals. The capability provides marketers with an intuitive drag-and-drop interface that enables them to organize experiences for moving customers towards a specific marketing outcome. It also allows marketers to measure the impact of all experiences. Marketers can drill into each stage or experience to identify reach, clicks, conversions, and progress towards marketing goals.

Additionally, the Lytics platform offers different levels of automation to activate the right experiences to individuals at the appropriate channel, optimize delivery time based on machine learning-based prediction, and automate personalized content recommendations. The platform is also equipped with out-of-the-box customer-controlled, self-learning model creation capability for automating an entire journey. It possesses the ability to auto-optimize preferred customer channels for marketing, the time to deliver content as well as the type of content to be delivered as a part of a goal-based marketing journey.

Analyst Perspective

Following is the analysis of Lytics' capabilities in the global CDP market:

 The Lytics CDP platform offers a framework for brands to integrate data, transform it into intelligence, and leverage this intelligence to drive interactions and deliver personalized experiences at scale. The platform is proficient in catering to both B2B and B2C segments with its comprehensive capabilities and key technology differentiators including Lytics intelligent content and topic graph, content and topic affinity, content recommendations, real-time data science behavior, insights, visualize the customer journey, activate customer experiences, optimize delivery time, and measure success across journeys. It also supports various marketing use cases including customer acquisition, churn reduction, upsell/cross-sell opportunities, customer insights, behavior-driven emails, best customer lookalike, improving customer engagement and marketing efficiencies, and real-time personalization.

- Lytics' Al decision engine along with native machine-learning simulations, intelligence reports, real-time data readouts, look-alike modeling and more, helps organizations transform their customers' experience and achieve their digital marketing objectives. Users can leverage the machine learning capabilities to automate the next best experiences and perform journey-based marketing. The highly scalable Lytics platform is capable of automatically accommodating growing customers and their complex requirements. Lytics also incorporates native graph model technology to provide flexibility in adapting identity resolution, mapping, standardization, and segmentation for activation in any downstream channel at scale.
- From a geographical presence perspective, Lytics has a strong presence across North America. The company also has a customer base in European Union and the Asia Pacific. From an industry vertical perspective, the company has a presence across a wide range of industry verticals including media & entertainment, hospitality & travel, CPG, retail & e-commerce industries. Lytics offers a robust value proposition for both B2B and B2C use cases.
- Lytics may face competition from emerging CDP vendors that are strengthening their market penetration strategies and constantly focusing on targeting small to mid-market organizations along with large enterprises. However, the company, with its sophisticated technology platform, comprehensive functional capabilities, and strong customer value proposition, is well-positioned to expand its market share in the global CDP market.
- On product strategy and roadmap, Lytics is looking at extending its insights services to provide enhanced visibility into the user composition

of behavioral audiences and factors driving conversion within various campaigns. Additionally, the company is looking at offering a lighter version of the platform focusing on Lytics intelligence and insights. The lighter version is expected to improve market penetration into the SMB and mid-market customer segments.

Redpoint Global

URL: www.redpointglobal.com

Founded in 2006 and headquartered in Wellesley, Massachusetts, Redpoint Global is a provider of data management and customer engagement with specialization in cross-channel campaign management, ETL, data quality & data integration, marketing software, big data marketing solutions, customer data platform, customer experience, customer engagement and more. Redpoint Global's Customer Data Platform (CDP), called rgOne, enables organizations to deliver a tailored experience by leveraging a rich, unified, single source of data to drive desired business outcomes. The platform offers native-CDP capabilities, including data integration, customer profiles, identity resolution, data enrichment, segmentation, real-time personalization, operational control, and reporting.

The Redpoint Global platform offers an extensive library of pre-built 200+ connectors, including MarTech, AdTech, and more, to integrate data seamlessly. It offers an SDK that enables organizations to capture data from emerging technology using standard or custom-built connectors. Users can extract this data to create a real-time single customer view for omnichannel engagement.

The Redpoint Global CDP platform enables organizations to solve data quality issues at scale. It enables a cohesive, consistent, and clean Golden Record, which the users can leverage to deliver a seamless experience. Being data-agnostic, it applies data quality measures to any customer data from any source or system. The platform also supports a real-time personalization capability by leveraging the Golden Record to execute personalized campaigns across customer-facing channels, including websites, email, mobile, direct mail, call centers, and IoT/POS. The platform offers a native data parsing and normalization capability that enable organizations to standardize, correct, and certify customers' records and reduce costs linked with inadequate normalization practices. With this capability, organizations can address enterprise-grade data parsing and normalization challenges.

Redpoint Global's CDP includes highly configurable tools for data matching and merging enabling an accurate and actionable view of unified customer profiles from siloed data. This also help the users to optimize their campaign spend and deepen engagement. The platform also allows organizations to fully customize the merging and matching rules based on their business requirements.

The platform's identity resolution capability resolves identities of both known and anonymous visitors by using Redpoint's ID graph to link both online and offline customer data across various devices, systems, and sources. It offers 100+out-of-the-box matching functions and applies deterministic and probabilistic matching techniques for resolving identities. Users can map individual entities to households, companies, or groups and eliminates earlier associations in case of any changes. The platform enables marketers to leverage the unified profiles to build segmentation rules to uncover critical audience segments. With dynamic segments, customers are automatically included or excluded as and when the profiles are updated.

The platform's persistent key management capability helps organizations handle any difficulties raised while working with unique identifiers across siloed data sources. In addition, the platform can create an identifier for each customer record and attach it to the customer data to manage any complex identity. Users can accommodate any customer data, matching to life events through Redpoint's persistent keys. These persistent keys help users to create, update, merge, and split records whenever the information is modified.

The platform also supports a data enrichment capability that enables organizations to gain comprehensive customer insights for profile enrichment by connecting first-party data to external tools and technologies. It offers extract, transform and load (ETL) support for core data management. Users can leverage this capability to gather and integrate any data type, normalize this data to ensure uniformity, and release it for any application. The platform offers a library of controls for agile connectivity with a drag and drop environment that facilitates formatting and automation for quick and smooth data movement.

The platform offers built-in operational control and reporting capabilities that enable organizations to handle the development and execution of automated data flows. It enables users to access data across their organization's departments and teams. Additionally, organizations can track KPI's and metrics to gain actionable, data-driven insights regarding each campaign, audience segment, and customer interaction.

Analyst Perspective

Following is the analysis of Redpoint Global's capabilities in the global CDP market:

- Redpoint Global offers an innovative and robust CDP platform armed with analytics and machine learning capabilities to optimize customer journeys, leverage cross-sell opportunities, and increase retention as well as conversion. The platform enables organizations to identify the probability of purchase, conversion, and churn with ML-driven predictive segments. It allows customers to create the next best actions considering their preferences, needs, and actions and accordingly deliver the content at the right channel and time. Users can also deliver relevant product recommendations across digital channels, including website, email, mobile, in-store, or call centers. The platform empowers business users with machine learning models that can detect any anomaly prior to its occurrence.
- Redpoint Global's CDP provides agility with its no-code support, enabling organizations to ingest structured, semi-structured, or unstructured data and make it operational. The built-in real-time orchestration capability facilitates business users to create real-time journeys, optimize and execute digital campaigns, and leverage insights to make informed business decisions. The platform provides flexibility in catering to various use cases by offering data on demand across the enterprise. These use cases typically include omnichannel personalization, single customer view, digital advertising & acquisition, privacy & compliance, real-time interactions, data quality & integration, analytics & machine learning, customer data platform, and next best action.
- From a geographical presence perspective, Redpoint Global has a presence in North America, the Philippines, and the UK, with global sales coordination through large partners. From an industry vertical perspective, the company has a presence across retail & CPG, healthcare, financial services, travel & hospitality, media, and telecommunications.
- Redpoint Global may face competition from CDP platform vendors providing strong support for custom reports and data-driven analytics. The company may also face competition from vendors catering to large enterprise segments that are offering a robust pricing model. However, with its robust AI/ML capabilities, scalable and agile platform, and CX expertise, Redpoint Global is well-positioned to expand its market share in the global CDP market.

Salesforce

URL: www.salesforce.com

Founded in 1999 and headquartered in San Francisco, CA, United States, Salesforce is a provider of SaaS-based CRM software. Salesforce offers an integrated unified CRM platform that connects marketing, sales, commerce, service, and IT teams through Customer 360, which is a consolidation of all Salesforce's software solutions. With Customer 360, every team, including sales, service, marketing, and commerce teams, can gain a single, shared view of their customers on an integrated CRM platform powered by Al. This single source of truth enables employees to work together to build lasting, trusted relationships and deliver the intelligent, personalized experiences their customers expect. Salesforce offers Customer 360 Audiences - a customer data management platform that helps organizations drive personalization at scale. The platform offers comprehensive capabilities, including data aggregation, unified customer profile, segmentation, activation, and cross-channel insights.

The platform enables organizations to ingest customer data from various sources, including sales, service, marketing, commerce, and enterprise systems. It enables users to map and classify customer data into user-friendly model. Users can clean and prepare their data by using a library of data transformation functions. Also, they can harmonize data with an out-of-the-box standard cloud information model or extend it for customizing their own models.

Salesforce's Customer 360 Audience resolves known customer identities through a combination of email, phone number, address, device ID, customer supplied, or first and last name identifiers. Users can define rules for merging the data into a unified customer profile using advanced resolution capabilities that link data, such as fuzzy matching, providing a single source of truth. The drag-and-drop platform leverages its native, proprietary Einstein AI to help organizations create targeted audience segments—using first, second and third-party data from marketing, commerce, sales, or service. It provides an intuitive interface for users to manage all their segmentation and targeting initiatives.

The platform helps organizations activate customer data/profiles/segments across advertising, messaging, or engagement platforms, from marketing cloud to commerce cloud. Users can also activate segments to external systems using CSV files. The platform helps organizations deliver the right content to the right

customer on the right channel with customer profiles. It also enables users to understand their next best actions. Users can also manage their customer and data rights by using best-in-class privacy tools.

Moreover, the platform also offers an Al-driven cross-channel insights to optimize marketing initiatives and engage customers in a better way. The platform supports Tableau integration, enabling users to use audience data in Tableau to identify new insights. Users can classify their customers into behavioral groups through the calculated insights from CDP. In addition, users can also leverage their preferred visualization tool to build reports by using the CDP data.

Analyst Perspective

Following is the analysis of Salesforce capabilities in the global CDP market:

- Salesforce empowers organizations to deliver compelling customer experiences through a data-driven approach. The company helps organizations deliver a 1:1 customer experience across engagement channels through integrated data management and personalization capabilities. The platform's key technology differentiators include a single source of truth, scalable platform, comprehensive Al capabilities, and the ability to cater to both B2B and B2C requirements.
- Salesforce's CDP platform integrates with Einstein AI to aid organizations in optimizing the engagement KPIs by building smart customer segments and enhancing their activation initiatives. The platform caters to a variety of use cases spanning the customer lifecycle, including developing loyal customers, creating unified customer profiles, targeting based on in-store/ branch behaviors, measuring customer lifetime value, and building a universal suppression list.
- From a geographical presence perspective, Salesforce holds a strong presence in North America, Europe, and APAC. From an industry vertical perspective, the company focuses on communications, financial services, healthcare, retail, education, CPG, and government sectors.
- Salesforce may face growing competition from other pure-play CDP vendors offering comprehensive capabilities to cater to B2B and B2C

segments across various industry verticals. However, with its robust go-to-market strategy, and comprehensive functional capabilities, Salesforce is poised to expand its market share in the global CDP market.

SessionM

URL: www.sessionm.com

Founded in 2011 and headquartered in Boston, Massachusetts, United States, SessionM offers a customer data and engagement platform with specialized services in programmatic loyalty, omnichannel marketing automation, and identity management. SessionM's Customer Data Management platform enables organizations to ingest customer data to gain a single customer view and deliver unified experiences across preferred channels. The platform also allows brands to offer personalized experiences by leveraging customer data. The platform offers comprehensive capabilities, such as data integration, full view profiles, actionable data, dynamic segmentation, purchase propensity, enhanced analytics, customer scoring, and advanced data privacy controls.

The SessionM platform ingests data from disparate sources to empower downstream marketing systems and deliver business value to organizations. The platform cleanses and matches ingested data from various channels and systems to create a single view of the customer. It orchestrates data (including transactional and behavioral) from various systems such as mobile app/mobile ordering, e-commerce, CRM, POS systems, and more to create a single, unified, and actionable customer profile. The platform provides an always updated, single source of truth for individual customers that can be accessed across the organization. Additionally, the platform updates the profiles in real-time and makes them actionable /operational in various systems for customer engagement and analytics.

The SessionM CDP platform supports dynamic segmentation and micro-segmentation. It can dynamically add or remove customers from the segment based on their real-time data, including affinities, location, purchase history, lifetime value, and such others. The platform is equipped with a purchase propensity capability which provides organizations an understanding of the customer's propensity to purchase. Users can classify the customer's probability of purchase at individual SKU or product category level by using standard data models.

The platform's advanced analytics feature helps organizations drill down into individual audience KPIs and metrics and gain visibility into retention rates, lifetime value, churn rate, and various other critical metrics and trends. The platform offers a customer scoring feature that dynamically updates the customer score based

on the customer's probability to purchase or churn. Users can score customers considering key metrics like recency, frequency, spend, lifetime value, churn propensity, or tag specific products. This scoring helps users to build hypertargeted segments to deliver personalized offers, content, or messages.

The SessionM CDP platform also offers an advanced data privacy control feature that includes necessary tools for data compliance. The purpose-built platform can manage customer data pertaining to data privacy laws and regulations such as General Data Protection Regulation (GDPR) and more.

Analyst Perspective

Following is the analysis of SessionM's capabilities in the global CDP market:

- SessionM's robust CDP platform supports real-time orchestration, enabling organizations to deploy campaigns and build target audiences effectively. The company offers an industry-specific or use case-specific customized solution for its clients with a dedicated team of specialists to help them. The platform supports the collection and synthesis of data via multiple APIs and pre-built integrations and supports server-side and client-side transactions.
- The platform offers a strong customer value proposition by resolving issues regarding legacy technology and disparate customer data. It enables organizations to build unique, 360-degree profiles for each customer. The platform applies campaign rules consisting of behaviors and outcomes to drive engagement. Users can execute targeted, points-based promotions, including incentives, purchase challenges, and geo-targeted promotions. SessionM possesses expertise in catering to mid-market and large enterprises. The company serves various marketing use cases such as creating engaging experiences, on-premise communication to customers with personalized messaging, making fast data for fast action, and more.
- From a geographical presence perspective, SessionM has a strong presence across North America. The company holds a strong customer base across various verticals, including CPG, hospitality and travel, restaurant, and entertainment and sports.

SessionM may face competition from well-established CDP vendors
with a strong market presence across EMEA and APAC regions. The
company may also face a challenge from the vendors offering outof-the-box integrations and compelling service support. However,
with its robust functional capabilities, robust reporting capabilities,
and data-driven approach, SessionM is well-positioned to expand its
market share in the global CDP market.

Tealium

URL: www.tealium.com

Founded in 2008 and headquartered in San Diego, CA, Tealium is a provider of real-time customer data orchestration and enterprise tag management solutions. Tealium's Customer Data Hub comprises tag management, API hub, customer data platform (CDP), and data management solutions. Tealium's AudienceStream CDP offers real-time data assimilation, enrichment, and customer segmentation support. The CDP provides actionable customer data for marketers to create, manage, and deliver marketing campaign activities. The platform offers comprehensive capabilities, including data integration, unified customer profiles, identity resolution, orchestration and personalization, and data security and privacy.

Tealium's AudienceStream CDP integrates and standardizes data from online and offline sources (web, mobile applications, IoT, servers, kiosks, call center data, and point-of-sale information) to create unified customer profiles. It gathers client-side and server-side data and enables users to leverage event-level or customer-level data to drive engagement. The platform provides live connectors/integrations to various marketing technologies, including email, marketing automation, online advertising, and customer relationship management (CRM) systems. These live connectors share rich visitor data with the organizations' existing technologies to optimize engagement.

The platform includes a patented visitor stitching technology that can build unified, accurate, comprehensive, and actionable customer profiles to provide a single view of the customer. Tealium supports integration between its CDP (AudienceStream) and tag management (Tealium iQ) to provide a comprehensive customer view and allow digital marketers to harmonize audience data across all digital channels and touchpoints. Users can leverage this customer profile data to specify customers (high or low value), personalize content in real-time, gain engagement insights, or create audiences based on various attributes. AudienceStream's real-time segmentation feature enables marketers to define customer segments across the marketing channels. The platform provides an audience management capability that orchestrates audience data across teams, technologies, and customer touchpoints. The capability helps organizations to discover and identify the audiences, which can be used across the customer journey and in any integrated technology.

The AudienceStream CDP's visitor stitching technology supports cross-device visitor stitching to resolve customer identities. The patented technology stitches visitors, their behaviors, and their devices together based on unique profile IDs. Users can map a customer's journey across all their devices for a unified customer view and further design compelling omnichannel campaigns, and perform campaign planning and analysis. The platform allows marketers to enrich a visitor profile by defining new profile attributes, such as content affinity, lead scoring, and lifetime value.

Tealium's CDP platform integrates with organization-owned email, marketing automation, online advertising and social tools, and customer relationship management (CRM) platforms. This integration facilitates real-time action within the organization's existing marketing technologies and enables them to personalize every interaction by considering the audience's affinities or propensity to convert. Marketers can trigger actions and engage their customers based on real-time customer signals. They can also orchestrate their prevailing marketing programs and develop automated marketing actions using real-time customer behavior. In addition, the AudienceStream CDP is also equipped with action capping and prioritization features that allow marketers to choose whether delay or cap the frequency of customer actions. The CDP platform comprises a data connect feature that automates data integration workflows to access data from data warehouses, CRM systems, and cloud applications and provides flexibility to access critical data across the enterprise.

For data security and customer privacy, the Tealium CDP offers tools, product features, infrastructure, and practices to protect customer data and ensure a secure data foundation. Some of these tools/features include consent and privacy manager, encryption, restricted data flags, private cloud, data recovery, data ownership, geo-based management, and more. Tealium has obtained third-party security and privacy certifications, including HIPAA, ISO 27001 and 27018, Privacy Shield, and SSAE18 SOC 2 Type I & II.

The Tealium Insights capability allows users to leverage new dashboarding and reporting tools for visualizing data within the platform for ease and use and power recommendations and insights. Users can make industry and use-case-specific dashboards and report templates. They can also visualize and monitor data flows in real-time for visibility and QA.

Analyst Perspective

Following is the analysis of Tealium's capabilities in the global CDP market:

- Tealium offers an innovative and robust technology platform that addresses crucial business needs, including activation and orchestration, identity resolution, consent management, regulatory compliance, and leverages predictive machine learning models to drive informed decision making. Tealium's AudienceStream CDP combines with Tealium's Predict ML to deliver data-driven insights, predict customer behavior, and enable marketers to take actions across channels. Marketers can leverage machine learning insights to understand critical audience behavior and accordingly design customer experiences to achieve their marketing outcomes. The Predict ML also enables organizations to create and configure custom-tailored models and understand the type of customer data points imperative for these models to provide predictions. Tealium has expertise in catering to SMB, mid-market, and large enterprises. However, a majority of its client base belongs to the large enterprise segment. The platform's key technology differentiators include a flexible, real-time streaming platform, the ability to manage data across the entire lifecycle, and tag management and API hub systems.
- Tealium has expertise in catering to diverse marketing use cases across B2B and B2C segments, including initiating organizations' journey to data excellence, increasing email conversion rates, cost savings, boosting customer engagement and digital marketing ROI, optimizing targeting, website personalization, and more. The platform enables marketers to identify and target the ideal prospects and customers. It has the potential to cater to organizations' requirements regarding loyalty campaigns, abandoner campaigns, or plan budgets on prospects having the likelihood to purchase. The robust AI/ML support helps the platform make existing audiences smarter by supporting intelligent cart recovery, increasing engagement with high-value customers, and excluding poor targets.
- From a geographical presence perspective, Tealium has a strong presence in North America and Europe. The company also has a presence in APAC, MEA, and Latin America. From an industry vertical

perspective, the company has a presence across various sectors, including retail and eCommerce, BFSI, hospitality & travel, healthcare and pharmaceutical, media and publishing, sports and entertainment, and telecom.

- Tealium may face competition from CDP vendors having a significant market presence beyond North America. The company may also face competition from vendors with expertise in catering to the SMB and mid-market segment along with large enterprises. However, with its robust AI/ML capabilities, extensive partner ecosystem, comprehensive functional capabilities, and strong customer value proposition, Tealium is well-positioned to expand its market share in the global CDP market.
- On product strategy and roadmap, Tealium plans its technology enhancements in areas including insights and activation, identity and governance, data integration, and UX/UI and data workflow.

Treasure Data

URL: www.treasuredata.com

Founded in 2011 and headquartered in Mountain View, CA, Treasure Data is a provider of customer data platform (CDP) with specialization in data management, analytics, big data, business analytics, marketing analytics, customer experience, digital marketing, and more. Treasure Data offers an Enterprise Customer Data Platform (CDP) that facilitates brands to gather customer data across channels and leverage it to deepen engagement, increase brand loyalty and ROI. Treasure Data CDP capabilities include data integration, data unification, rich customer profiles, segmentation and personalization, customer journey orchestration, and analytics.

The platform integrates raw data from various online and offline data sources, including weblogs, mobile app logs, social data, POS, location data, CRM data, customer survey, e-commerce, user demographics, IoT devices and more. It also collects data from containers such as Docker and Kubernetes. The platform offers 170+ pre-built connectors to collect data and activate profiles for marketing campaigns. It provides Open APIs to access to the systems across the organizations quickly.

Treasure Data's CDP unifies first, second, and third-party customer data to create and enrich unified customer profiles. These profiles are refreshed with the data pipelines managed within the platform. The platform's Treasure Data Workflow enables the users to automate the processes related to adding new as well as relevant customer data. The platform also performs identity resolution and cleansing for customer profiles and activity data.

The platform enables organizations to build dynamic audience segments and leverage them for activation across customer journeys. Users can reuse the segments to refine customer targets. The platform helps marketers to personalize and deliver content, offers, and messages via display advertising, email communications, web personalization, purchase recommendations, and more. The platform's customer journey orchestration enables customer experience (CX) teams to plan the macro-level customer journey effectively. This empowers the teams to configure the journey stages and influence the customer touchpoints to shift them from one stage to another for purchase, membership, and more.

The Treasure Data CDP also offers built-in analytics, reporting, and predictive capabilities. The analytics capability delivers insights into the customer actions across their entire journey as well as the performance of the marketing initiatives. This enables the CX teams to orchestrate highly effective customer journeys. The platform offers a single view of prospects, customers, and their engagement, all combined with the reporting capabilities. With the reporting support, users can easily leverage the report and dashboard builder to understand customers' experience and marketing effectiveness. Users can share the campaign metrics (including robust visualization and reporting) with the teams to meet their marketing goals. Treasure Data also offers a predictive analytics capability that provides AI-enabled insights to anticipate the probability of purchase, conversion, churn, and more. It enables marketers to manage the predictive models without any involvement of experts and data scientists. Marketers can assess the model accuracy immediately using the built-in statistics. Additionally, marketers can leverage the predictive scores to understand the engagement across the customer's journey and provide personalized offers, promotions, recommendations, and more.

Analyst Perspective

Following is the analysis of Treasure Data's capabilities in the global CDP market:

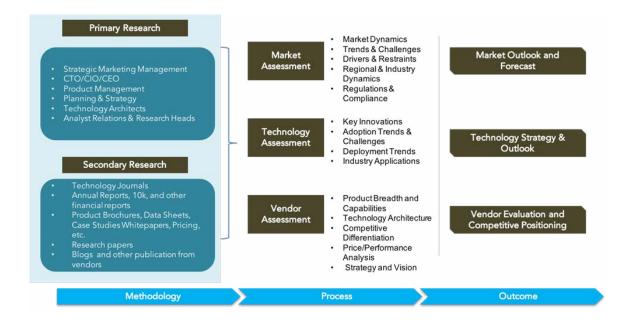
- Treasure Data offers a SaaS-based enterprise-grade software solution that is flexible, adaptable, extensible, and secure. The company's Enterprise CDP enables marketers to collect, unify, analyze, and activate rich customer data along each stage of the customer journey to optimize engagements at scale. The platform possesses expertise in catering to B2B and B2C segments (especially mid-market) and differentiates itself by providing robust data integration, activation, and predictive scoring capabilities.
- Treasure Data's CDP is armed with robust AI/ML capabilities, including data-driven multi-touch attribution, customer lifetime value prediction, keyword extraction, churn prediction, and more. The platform offers a real-time next best recommendation to uncover the next best channel, product, and time. The platform supports enterprise-grade security and privacy by offering advanced policy-based access control, integration with enterprise authentication services, flexible permission policies, multiple accounts for development and production, and such

others. It also offers pre-built data templates for managing privacy regulation compliance. The company serves various marketing use cases such as real-time personalization, omnichannel strategy, audience segmentation, campaign orchestration, KPI optimization, dynamic marketing budget allocation and targeting, data unification, analysis, and activation, improving advertising results, and more.

- From the geographical presence perspective, Treasure Data has a strong presence in North America, Asia and the European Union. From an industry vertical perspective, the company has a strong presence in the retail and CPG, automotive, financial services, insurance, and entertainment sectors.
- Treasure Data may face competition from CDP vendors offering innovative platforms equipped with no-code functionality and a breadth of reporting and dashboarding capabilities. However, with its strong customer support and business vision, and compelling Al/ ML capabilities, Treasure Data is well-positioned to expand its market share in the global CDP market.

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 rmehar@quadrant-solutions.com www.quadrant-solutions.com