Hype Cycle for Revenue and Sales Technology, 2023

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Initiatives: Digital Commerce and CRM Sales Technologies; Business Buyer Insights; Revenue Technology

Revenue and sales technologies continue to adapt to buyer demands for self-service and better buyer experience while improving sales outcomes given continuous uncertainty. IT leaders supporting sales technology must assess what new and maturing technologies bring to improve buyer experiences and empower sellers.

Analysis

What You Need to Know

Revenue and sales technologies must support organizations' goals, such as digital transformation as well as putting buyers and customer experience (CX) back at the center of the journey. These technologies must remove friction in business processes, propel growth and help leaders mitigate external influences that create unforeseen uncertainty. Revenue and sales technologies that help organizations grow and improve sales pipeline, visibility and revenue outcomes through improved CX and seller assistance are favored and can potentially mitigate risk.

Application leaders supporting sales should investigate emerging technologies on the left side (Innovation Trigger) of the Hype Cycle curve to increase opportunities to innovate and create competitive differentiation. Prioritize technologies with high impact that are more mature and include advanced intelligence and hyperautomation, such as AI and process mining technologies. Carefully investigate offerings where generative AI can be used to improve value messaging and transform the way work is accomplished against specific use cases within the business.

Technologies that are about to enter the Plateau of Productivity (right side of the Hype Cycle) are still innovative and provide competitive differentiation, but are mature enough to reduce any perceived technology risks for buyers. Look for a focus on orchestration, optimization and hyperautomation within these technologies.

Application leaders should evaluate technologies that will:

- Enable resilience and growth in the face of disruptions, such as technologies adept at supporting hybrid workplace selling models.

- Maximize employee value-add to processes and interactions by automating tasks and thus reducing friction caused by burdensome administrative tasks.

Rationalize the technology stack to evaluate removal of redundant or overlapping solutions. Before removing a technology, carefully consider the unique capabilities of each technology and if it is a compelling need for the business. When there are duplicative technologies that do the same thing, reevaluate the performance of each and whether or not they have provided expected ROI.

The Hype Cycle

Key investment drivers of the technologies featured in this Hype Cycle include:

- Advancing technology and responsible usage of generative AI

- Technology supporting ecosystems and composability

- The support of CX and hyperautomation allowing acceleration of results

- Insights to support sales and revenue process efficiency

- Support of the rep-assisted buyer experience

More mature technologies focus on:

- Hyperautomation

- Intelligence

New and innovative technologies are aiding improved CX through coordinative efforts to support digital and physical selling. Notable increases in technologies that support these shifts can be seen in new entrants such as:

- Generative AI

- Digital twin of a customer (DToC), to support modeling customer personas to test scenarios for better sales outcomes

- Process mining to aid in improving process optimization for CX

- Self-integrating applications to speed composability efforts

- Augmented reality to assist buyers in self-service

Rapid movement along the Hype Cycle is seen in technologies that are more mature and provide value in seller insights and actionability, such as:

- Voice-driven sales apps

- Customer success management (CSM) platforms

- Quota planning and optimization

■ Revenue intelligence

Figure 1: Hype Cycle for Revenue and Sales Technology, 2023

Hype Cycle for Revenue and Sales Technology, 2023
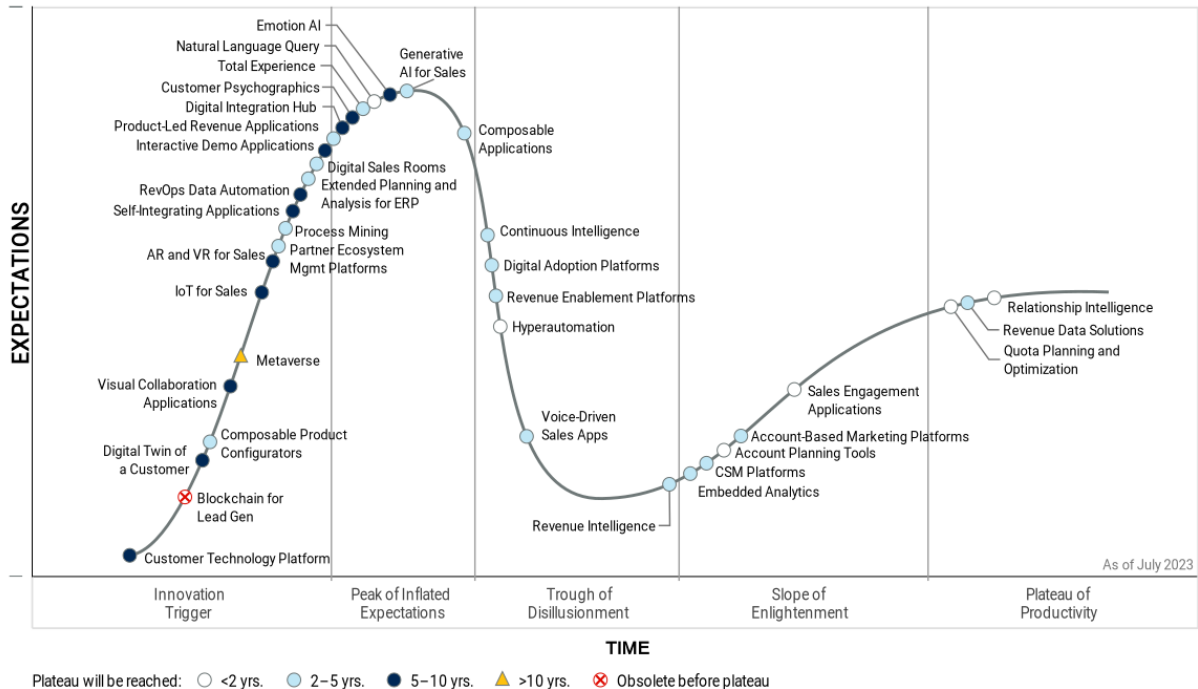
The Priority Matrix

As organizations support digital transformation, flexible work, putting buyers at the center of the journey and helping sellers work more efficiently, they must also focus on supporting those efforts with composability. Look to technologies supporting experience, flexible channels, compositions of ecosystems and ways to support the buyer journey to aid in composing the best technology stack to support the sales organization's objectives. Technologies such as digital sales rooms (DSRs), which support a dynamic buying process, allow the buyer and seller to collaborate both digitally and physically to meet the buyer's needs. The metaverse, while just emerging, has the potential to change the way buyers and sellers interact in the virtual world. Using total experience as a foundation to develop lasting relationships creates superior shared experiences — intertwining customer experience (CX), employee experience (EX), multiexperience (MX) and user experience (UX) disciplines.

Use high-impact technologies in the shorter term to improve sales outcomes. For example, digital adoption platforms (DAPs) help employees learn and adopt new technologies. Increased engagement improves sales efficiency and productivity, while supporting larger, organizationwide digital transformation. Quota planning and optimization and territory planning allow sales organizations to be nimble in modifying goals and rearranging territories to accommodate changes in market conditions. Revenue enablement platforms, revenue intelligence platforms and sales engagement applications all utilize conversation intelligence, but deploy it differently to either improve skills or increase the velocity of opportunities. Voice-driven sales apps provide increased automation of sales activities.

The infrastructure in place can determine the success of an application. Many applications tout "ease of use" to sellers and their managers, but are relying on the customer having a well-integrated data model. Focusing on technologies such as composable product configurators, partner ecosystem management platforms and digital integration hubs, for example, allows for a seamless exchange and availability of data at the right point of time to benefit sellers and their managers.

Gartner

Table 1: Priority Matrix for Revenue and Sales Technology, 2023

(Enlarged table in Appendix)

Benefit	Years to Mainstream Adoption			
↓	Less Than 2 Years ↓	2 - 5 Years ↓	5 - 10 Years ↓	More Than 10 Years ↓
Transformational	Hyperautomation	Continuous Intelligence Digital Sales Rooms Generative AI for Sales Total Experience	AR and VR for Sales Customer Technology Platform Digital Twin of a Customer Emotion AI IoT for Sales Self-Integrating Applications	Metaverse
High	Natural Language Query Quota Planning and Optimization Sales Engagement Applications	Account-Based Marketing Platforms Composable Applications Composable Product Configurators CSM Platforms Digital Adoption Platforms Embedded Analytics Extended Planning and Analysis for ERP Partner Ecosystem Management Platforms Process Mining Product-Led Revenue Applications Revenue Data Solutions Revenue Enablement Platforms Voice-Driven Sales Apps	Digital Integration Hub Interactive Demo Applications Visual Collaboration Applications	
Moderate	Account Planning Tools Relationship Intelligence	Revenue Intelligence	Customer Psychographics RevOps Data Automation	
Low				

Source: Gartner (July 2023)

Off the Hype Cycle

- Mobile sales productivity apps — Matured off the Hype Cycle

- Visual configuration — Matured off the Hype Cycle

- Knowledge graph for sales — Obsolete before plateau

On the Rise

Customer Technology Platform

Analysis By: Gene Alvarez, Andrew Gianni, Saul Brand, Mike Lowndes

Benefit Rating: Transformational

Market Penetration: 1% to 5% of target audience

Maturity: Embryonic

Definition:

The customer technology platform (CTP) is the integration of all customer-facing technology and applications into a platform. This platform aligns the customer's "outside in" view of the organization's customer experience with the "inside out" delivery of the organization's CX vision, strategy and technology. This platform enables an organization to support a holistic and complete view of the customer experience that benefits both the customer and the organization.

Why This Is Important

The customer technology platform is created by using business capabilities and technology reference models. These models will enable organizations to:

- Build a bridge from their CX CORE objectives to the delivery of their CRM strategy.

- Determine which systems need to work with each other to support the delivery of the organization's CX and CRM strategy in order to create positive customer sentiment.

- Determine how to make improvements to their CRM systems in order to move the organization toward a CTP platform.

Business Impact

Digitalization of the customer experience has exposed process gaps and disconnected customer-facing processes to customers. This is due to CRM applications that were implemented solely to automate individual processes. Application leaders need to address these gaps by viewing CRM applications in the context of CX-centric application strategy that goes beyond CRM. Using a CTP approach to CRM applications can resolve these customer-facing gaps and lead to improved customer experiences.

Drivers

- Delivery of positive customer experience as a part of digital transformation is a key differentiator for any organization.

- Digital transformation of customer-facing processes has exposed disconnected CRM applications, leaving the customer to be the coordinator of their experience across an organization's points of interaction (POIs). Examples of POIs are call centers, chatbots, websites, mobile applications, stores and branches.

- Organizations seeking to scale their customer experience capabilities are using more customer-facing technologies and applications. These organizations want to provide a relevant and integrated customer experience that is intelligently coordinated across all POIs.

- Organizations seeking to provide integrated experiences such as "campaign to contract" know they need to integrate applications (such as campaign management, lead management, salesforce automation and configure, price and quote) to enable intelligent coordinated experiences across all POIs.

Obstacles

- Major investments in CRM applications that are already live and operational in organizations are making it hard to integrate CRM applications into great customer experiences.

- It can be difficult to determine how to integrate CRM applications with the organization's entire IT portfolio.

- Investment in strategic vendor relationships has made the integration of many CRM applications a requirement that vendors must support. However, organizations may not be able to wait until then, due to a need to improve their customer experiences today.

- Customer dissatisfaction or frustration can come from organizational inertia. Customers are exposed to new ways of doing things from competitors or organizations in other industries, and they view the organization as behind in helping customers with their "job to be done." This organizational inertia can come from a variety of sources, such as a mindset that change is a risk rather than a tool that can be used to improve the customer's experience.

User Recommendations

- Use Gartner's CX CORE approach to first build the organization's business capability model. This model will determine what business capabilities are needed to support the integration of an organization's business model and its operating model.

- Avoid misalignment of CRM applications and technology and the organization's business model (for example, using self-check-out in a luxury store environment). This approach will ensure that the organization's CRM applications and technology are properly aligned with its CX objectives.

- Use an architecture that includes business capability and technical reference models to identify which key CRM applications and other technology needs to be intelligently coordinated within the CTP to deliver the right customer experience.

- Use an architecture that includes business capability and technical reference models to determine what needs to be changed when the organization faces a customer experience disruption in its market from competitors.

- Use a CX-CORE-driven approach to design customer experiences. Couple this with using a CTP architectural approach to ensure that all CRM applications and technology are aligned to the organization's CX objectives.

Gartner Recommended Reading

Enable Great Customer Experiences Using Gartner's Customer Experience CORE Model

Drive Your Customer Experience With a CTP Reference Architecture Model

Improve CX With a Customer Technology Platform Reference Architecture Model

Video: How to Build Your Customer Technology Model

Quick Answer: How to Get Started With the CTP Reference Architecture Model for CX CORE

Blockchain for Lead Generation

Analysis By: Adnan Zijadic

Benefit Rating: Transformational

Market Penetration: Less than 1% of target audience

Maturity: Obsolete

Definition:

Blockchain for lead generation (BLG) delivers the ability to source leads and share information using a decentralized platform in a peer-to-peer network. It relies on crowdsourcing data collection methods while monetizing and controlling data sharing and protecting privacy. Leads can be sourced via tokens on the blockchain exchange to the highest bidder using smart contract processes and automation.

Why This Is Important

BLG has very few vendors and implementations. The technology offers a potential alternative to typical lead and contact generation methods, such as data intelligence solutions (DIS) for sales. BLG offers a single version of the truth, supported by immutable data and audit trails, with no single entity being in control. This leads to a transparent and trustworthy bidding process for information and/or leads that can be bought with tokens.

Business Impact

■ BLG allows organizations to access data with transparency into the original data source.

■ Monetizing data via tokenization and marketplaces potentially opens new revenue streams.

■ BLG allows for configurable access rights to specific data attributes to ensure global, regional and vertical industry regulatory compliance.

■ The need for a "middle man" is decreased due to reducing costs allocated to data brokers, and investments made into customer data management and master data management platforms.

Drivers

■ Sourcing of third-party data that has proven unreliable will increasingly become a problem in the coming years, thereby offering an alternative peer-to-peer network for obtaining data directly from the source.

■ Increasing use of blockchain networks in financial services will open up alternative markets, such as lead generation, while being able to monetize data in the process.

■ Privacy regulations will shift control from entities to owners of data as the GDPR and similar regulations become more of a staple in society.

Obstacles

- The immaturity of the technology today, and very few use cases and implementations have caused the market to dissipate. It will need blockchain technologies to become more commonplace in the enterprise for use cases in lead generation to evolve.

- The technology cannot interoperate with the existing mainstream technologies used for blockchain and within sales technologies not based on blockchain mechanisms.

User Recommendations

- Learn about the potential use cases of the technology by understanding the mechanisms of blockchain technology.

- Experiment judiciously, as there are very few implementations in the market.

Sample Vendors

Datafund; LeadCoin

Digital Twin of a Customer

Analysis By: Melissa Hilbert, Michelle DeClue

Benefit Rating: Transformational

Market Penetration: 1% to 5% of target audience

Maturity: Embryonic

Definition:

A digital twin of a customer (DToC) is a dynamic virtual mirror representation of a customer that can be used to simulate and to emulate and anticipate behavior. Customers can be individuals, enterprise customer, personas, groups of people or machines.

Why This Is Important

DToCs help organizations of all sizes better understand their customers and anticipate their behavior. They increase efficiency and provide a personalized, empathetic service to customers, many of whose buying habits have changed during periods of disruption and change.

A DToC can be used to modify and enhance the customer experience (CX) and support new digitalization efforts, products, services and opportunities. It can be an engine of transformation and disruption.

Business Impact

Today, digital twins enable organizations to anticipate how a physical product will perform or need to be maintained in different conditions. Organizations can now use DToCs to simulate how a customer will react, given a specific set of ecosystem parameters, conditions, and control or input signals. DToCs help organizations selling products or services provide customers with better experiences, which results in increased revenue and lasting customer relationships.

Drivers

DToCs will help organizations drive revenue by:

- Gaining critical insights into customers

- Increasing revenue by enabling new ways to serve or capture customers, as well as by facilitating new data-driven business models

- Predicting and simulating behaviors with a view to making products, services, promotions and business campaigns more successful and reducing unnecessary costs of failure

- Improving customer engagement, customer retention, customer lifetime value and company growth

- Reducing churn, product failure and engagement abandonment

DToCs will help customers:

- Reduce friction in interactions with the supplier organization across their journey

- Increase positive outcomes, creating better value

- Engage in curated experiences and concierge-like experiences specifically tailored to drive value for them

- Protect privacy with the ability to change what personal data is collected and how organizations use it

Obstacles

- Privacy and cyber risk concerns may lengthen the time it takes DToCs to mature, and increase legal and regulatory risk.

- Organizations need competency in machine learning algorithms and some staff with data science skills to build or manage DToCs.

- Internal bias and concern exists about a DToC's ability to drive revenue or reduce costs. A strategy based on use cases of how to create value will be needed.

- The technology behind digital twins has focused on organizations and products. A customer focus is emerging, and lack of clear KPIs and other success measures limits the potential use of DToCs.

- Organizations need to establish trust with customers for customers to agree to share information. Customers will need transparency about what data is collected, how it will be used and the privacy and data controls that will be applied. For B2B, they need to know the benefits such as providing a more personalized experience, more relevant products or services, convenience and exclusive offers.

User Recommendations

- Align your activities with customers' privacy and cybersecurity concerns based on the availability of customer assets and establish a trust center to house these documents and expectations.

- Identify use cases for which DToCs could help deliver a better CX and for which suitable data is available by examining customer journeys and failure points.

- Define clearly KPIs and specific objectives that can be measured to validate improved business outcomes such as CX, demand forecastability or agility of responsiveness.

- Run a pilot, whether you build or buy a DToC, and compare results against a persona or C360 over a statistically significant period using significant data. Ensure your business and operating models are ready to support the endeavor.

- Encourage customers to share their data with you. Define benefits they can expect from a DToC, agree to the level of control they will have over their data including canceling the digital twin. Provide clear visibility into how their data will be used.

Sample Vendors

Absolutdata; Arrayworks; Fetch.ai; Infogain; Nstream; Salesforce; Tata Consultancy Services (TCS)

Gartner Recommended Reading

A Digital Twin of a Customer Predicts the Best Customer Experience

Quick Answer: Privacy Basics for a Digital Twin of a Customer

Innovation Insight: Demystifying Digital Twin of a Customer for B2B Sales

Quick Answer: Is a Digital Twin of a Customer the Future of a 360-Degree View of the Customer?

Supply Chain Executive Report: Drive Growth and Elevate Experiences With Digital Twin of the Customer

Composable Product Configurators

Analysis By: Mark Lewis

Benefit Rating: High

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition:

A product configurator supports the definition and ordering of complex products with customer-selectable options and features; rules that govern the choices available; and one or more dynamic, intuitive end-user experiences for selecting those options and features. A composable product configurator must be available for stand-alone purchase without other components of a quoting/ordering solution.

Why This Is Important

Composable product configurators enable vendors to increase total sales and margins by increasing the proportion of sales performed via the self-service channel. They ensure consistency across all sales channels.

Business Impact

Deploying a composable product configurator improves win rates and average order values, reduces the cost of samples and order rework, and enables selling through all channels. Gartner expects composable product configuration to become the dominant approach for selling complex goods and services via all sales channels over the next five years. These products will be offered by both traditional configure, price and quote (CPQ) players that have unbundled their technology, and new entrants that create a modular product from the outset.

Drivers

- B2B buyers and sellers want to conduct more business through the self-service digital commerce channel because it is more convenient for buyers and less expensive for sellers. To increase the volume and value of business conducted online, it is necessary to support selling more complex goods and services.

- Benefits of product configuration include: increased customer satisfaction and margin by shifting sales from assisted channels to the self-service channel; increased average order value by suggesting the best options and add-ons; improved win rates by producing a proposal more quickly; lower rework costs; lower return rates; and improved customer satisfaction by eliminating miscommunication between the customer and the vendor.

- 3D visual configuration reduces the cost of building samples.

- Virtual photography reduces the cost of creating high-quality 2D product images for online and offline catalogs.

- Composable product configurators reduce the time to train a sales representative or reseller on the details of products and offers.

- Composable product configurators reduce the number of questions and inquiries from dealers.

Obstacles

- Most CPQ applications are monolithic and do not support plugging in an external, composable configurator.

- Most digital commerce platforms do not support product configuration natively. Customization is often required to integrate a composable product configurator.

- Most configurators were created for assisted sales channels. Unassisted channels require greater attention to simplicity and discoverability of the UI. Select a tool that supports pixel-perfect layout of the configuration UIs, rich media to guide the user and skinning to make the UI blend seamlessly into the self-service website.

- 3D visual configuration/virtual photography requires an organization to invest in creating 3D visual assets to represent its product portfolio. These can be based on engineering computer-aided design (CAD) drawings, but must be simplified to improve end-user response times and augmented to capture materials, colors and textures.

User Recommendations

- Purchase product configuration software that supports all sales channels.

- Implement product configuration software with a customer-first mindset. This involves simplifying product offerings and making the configuration of those offerings intuitive for a naive self-service user. You can expose additional capabilities to trained sales people, who will also appreciate a discoverable, intuitive user experience.

- Deploy 3D visualization whenever the final look or spatial geometry of the product is important (e.g., an automobile or a sofa).

Sample Vendors

3D Cloud by Marxent; 3D Source; Artifi Labs; CDS Visual; Epicor CPQ; Expivi; Logik.io; London Dynamics; ShapeDiver; Threekit

Gartner Recommended Reading

Market Guide for Composable Product Configurators

Visual Collaboration Applications

Analysis By: Keith Jones

Benefit Rating: High

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition:

Visual collaboration applications offer a set of features designed to enable collaborative creativity in a real-time, cloud-based workspace. These applications go beyond the virtual whiteboard with feature sets and templates allowing sellers to facilitate live sessions with buyers, run account planning sessions, generate ideas, evaluate sales processes and co-design artifacts internally with their colleagues and externally with buyers.

Why This Is Important

Visual collaboration applications are a point of mainstream use in the digital workplace. Visual collaboration offers a compelling medium for progressive sales teams to find new ways of interacting with their peers and buyers throughout the course of their day-to-day workflow. Sales teams are increasingly likely to see this medium used across their organization for both internal collaboration and customer engagements.

Business Impact

Visual collaboration applications offer sales teams another venue to work cross-functionally with their peers, leaders and other teams. The use of these applications offer sellers a means of adapting to newer buyer preferences in a digital environment. It happens by enabling buyers to actively contribute to a digital canvas through the sales cycle allowing for faster deal cycles and positive contributions to seller effectiveness and overall sales productivity.

Drivers

- **Changes in buyer behavior**: As buyers report desires to work with sellers at their preferred points in the buyer journey and not throughout the entire sales cycle, visual collaboration applications create space for both synchronous and asynchronous collaboration between buyer and seller. This allows buyers to have a more digital experience and can result in greater confidence in deals.

- **Accelerate sales cycles**: As "do more with less or the same" becomes common vernacular in sales, sellers are in need of new means that can drive sales cycles forward at a faster velocity. Visual collaboration applications provide a way for sellers to work collaboratively with their buyers throughout their buying journey thus speeding up the sales cycle.

- **Fast implementation with economical use of resources**: Visual collaboration tools require little to no technical configuration to be deployed and can be quickly leveraged by digitally focused sales teams. These quicker deployments can lead to expedited experimentation by sales and shorter paths to seeing a return on investment.

- **Minimal support required**: The digital canvas or whiteboard offered by visual collaboration applications is often intuitive and easy to use. Many of the vendors in this space have intentionally designed their interfaces to be friendly and approachable. Due to this, there is a lower threshold to be cleared in terms of sellers understanding how to use these applications on a daily basis.

- **Generational momentum:** Sellers and buyers alike that fall into the generational buckets of late millennials and Gen Z are known to build brand relationships through co-creation and two-way communication. Visual collaboration offers a means for deeper understanding between buyers and sellers by outlining ideas and issues in a way where the interconnections are visible that can't be replicated through verbal communication alone.

Obstacles

- **Lack of digital dexterity:** Visual collaboration is a key component of digital transformation. Sales teams that have not shifted to largely digital environments will struggle to adopt these tools. Organizations must address any lack of digital dexterity before seeking out transformation with visual collaboration.

- **New skills required:** Maximizing visual collaboration tools requires new skills such as meeting facilitation and a working understanding of design thinking. Sellers who do not have these skills will struggle to fully adopt visual collaboration applications.

- **A new way of selling for some but not all:** The value of visual collaboration will largely only apply to teams navigating complex multiweek B2B sales cycles. Active collaboration with buyers in a visual collaboration application requires sellers to embrace an organic motion leaving behind scripts and rehearsed presentations as the primary means of driving a sale forward that is best fit for specific sales teams.

User Recommendations

- **Educate sellers through internal activities:** While use cases for sales with visual collaboration are still emerging these applications are becoming mainstream in digital workplaces. Sales teams looking for value with visual collaboration should look to internal use cases before expecting sellers to use these tools to actively collaborate with buyers.

- **Promote collaboration earnestly:** Collaboration can be useful for bridging gaps, perceived and authentic alike, in seller knowledge and allow for organic information transfer across the organization.

- **Unlock cross-functional potential:** Sellers often have to partner with various functions to see a deal through to completion. Visual collaboration offers a central venue for cross-functional work.

- **Create templates for repeatable use:** Explore the potential for visual collaboration as a means of sales to practice and execute new and existing sales methodologies. Templates offer a repeatable medium for guided selling.

Sample Vendors

Conceptboard; Figma; Lucid Software; Miro; Mural

Gartner Recommended Reading

Market Guide for Visual Collaboration Applications

Metaverse

Analysis By: Marty Resnick, Matt Cain, Tuong Nguyen

Benefit Rating: Transformational

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition:

Gartner defines a metaverse as a collective virtual 3D shared space, created by the convergence of virtually enhanced physical and digital reality. A metaverse is persistent, providing enhanced immersive experiences. Gartner expects that a complete metaverse will be device-independent, and will not be owned by a single vendor: It will have a virtual economy of itself, possibly enabled by digital currencies and non-fungible tokens (NFTs).

Why This Is Important

A metaverse is the next level of interaction in the virtual and physical worlds. It will allow people to replicate or enhance their physical activities. This could happen either by transporting or extending physical activities to a virtual world or by transforming the physical one. Although the goal of a metaverse is to combine many of these activities, there are currently many emerging metaverses with limited functionality.

Business Impact

Enterprises can expand and enhance their current businesses in unprecedented ways, opening up innovative opportunities. The following are examples of opportunities that metaverse offers to enterprises:

- Spatial computing (e.g., real-time shopping recommendations)

- Gaming (e.g., collaborative "serious games" for training)

- Digital humans (e.g., customer service representatives)

- Virtual spaces (e.g., live virtual events)

- Shared experiences (e.g., immersive meetings)

- Tokenized assets (e.g., NFTs)

Drivers

There are three drivers for the metaverse:

- **Transport:** The ability to "go and immerse oneself" in a virtual world. That world may be a 3D simulation and/or in virtual reality.

- **Transform:** Bringing digital to the physical world. This allows the user to have access to real-time information, collaboration and experiences in the physical world.

- **Transact:** The economic foundation of the metaverse through the use of cryptocurrency, NFTs and blockchain.

Some of the main activities for the metaverse that will require one or more of these drivers are:

- **Collaboration:** Encouraging collaboration and participation from a diverse group of stakeholders, wherever they may be located.

- **Engagement:** Employees and customers are often disengaged. The metaverse facilitates a feeling of presence ("being there") as if the participants were in-person, turning their focus to the task at hand with less distraction.

- **Connectedness:** Metaverse enables us to connect in a more immersive way with shops, work environments, schools and communities of interest — regardless of where or if they exist in the physical world.

Ultimately, people desire to enhance and/or augment their lives in digital and physical realities.

Obstacles

- The adoption of metaverse technologies is nascent and fragmented. Furthermore, this is a time of learning, exploring and preparing for a metaverse with limited implementation. The financial and reputational risks of early investments are not fully known, and caution is advised.

- Current manifestations of metaverses are siloed, app-based, noninteroperable experiences that do not satisfy the decentralized and interoperable vision of the metaverse. This current, walled-garden approach also strongly limits users' control of experiences.

- While technology plays a key role in achieving a mature metaverse, another challenge involves establishing user-centric guidelines for ethics and governance covering different aspects of the metaverse. This must include topics like privacy, data sovereignty, acceptable terms of use, accountability, identity and legal protections.

User Recommendations

- Task a specialized innovation team and/or vendors to look for opportunities where metaverse technologies could optimize digital business, or create new products and services.

- Identify metaverse-inspired opportunities by evaluating current high-value use cases vis-a-vis your product or service (internally and externally). Focus on ways the metaverse can enhance an experience and can accomplish engagements the physical world may find impossible.

- Be careful when investing in a specific metaverse, as it is still too early to determine which investments will be viable in the long term.

- Remember that the metaverse is an evolutionary stage. Similar to the shift from the original web to Web 2.0 and to Web3, it does not indicate a formal change in the nature of the web, or in this case, digital interactions and digitization in general, but describes a general change that will happen over time.

Sample Vendors

Animoca Brands (The Sandbox); Decentraland; Linden Lab; Meta; Microsoft; NVIDIA; Roblox

Gartner Recommended Reading

Emerging Tech: Top Enabling Technologies for Metaverse

Top Strategic Technology Trends for 2023: Metaverse

Building a Digital Future: The Metaverse

Infographic: Impact Map of the Metaverse

Emerging Tech Impact Radar — The Metaverse

IoT for Sales

Analysis By: Varun Agarwal, Adnan Zijadic

Benefit Rating: Transformational

Market Penetration: Less than 1% of target audience

Maturity: Embryonic

Definition:

The Internet of Things (IoT) is the network of physical objects that contain embedded technology to communicate and sense or interact with their internal states or the external environment. In sales processes, the IoT includes technology that performs buying functions on behalf of customers, such as ordering technology embedded in consumer devices and B2B applications, or virtual agents that perform actions on behalf of sellers.

Why This Is Important

Application leaders supporting sales should put IoT-enabled capabilities for machine customers on their roadmaps. By 2030, 61% of CEOs believe demand from machine customers will be significant. IoT technology will allow buyers to procure goods and services more effortlessly. Sellers familiar with hybrid working arrangements will be able to interact with IoT devices to augment data capture, activity synchronization, and perform SFA-specific tasks using voice via virtual assistant technologies.

Business Impact

The IoT devices will interact with the digital storefront of the brand and complete the purchase on behalf of the customer with almost zero effort. IoT sales interactions will become a new sales channel for less complex purchase journeys, and application leaders will need to modify their strategy to cater these machine customers. IoT devices will also be increasingly used to facilitate seller interaction with technology to improve usability, user adoption and overall seller experience.

Drivers

- CEOs and senior business executives expect 21% or more of their revenue to come from machine customers by 2030, indicating a market shift twice as fast as the arrival of e-commerce (see How the Emergence of Machine Customers Will Impact Your Supply Chain).

- Customers increasingly expect suppliers to deliver an effortless, frictionless customer experience.

- The current economic situation and the constant need for improving efficiency of selling the product and service have led to direct selling in digital channels.

- Since there is an increased digital dexterity of users and customers who prefer to interact with IoT devices and channels, this will have long-term implications for the level of investment made into these approaches.

Obstacles

- IoT-enabled selling and selling to IoT devices are still emerging technologies. IoT is not a single market. Instead, technology providers leverage a portfolio of IoT technologies to support vertical-specific business outcomes for customers.

- The impact of IoT-based selling will not be evenly distributed; it will vary by vertical industry, geography and business model. Businesses involved in highly routine transactions (such as financial trading, energy contracts, cleaning services, printer ink and other consumables) will be impacted first and have been the earliest adopters of IoT.

- Industries that have more complex, long-cycle sales processes, or that sell complex products, will be less likely to adopt full IoT selling, but those would use IoT for specific processes or part of the processes.

- There is a lack of skill sets needed to sell the product to machines. Sellers need to closely watch the data signal of purchases and these purchases would be purely data-driven.

User Recommendations

- Make IoT-enabled selling part of your roadmap if you need a competitive differentiator or need to reduce the cost of maintaining sales channels. Procuring organizations will expect their providers to use digital channels efficiently, in the interest of reducing their costs and having a frictionless buying experience.

- Investigate broader CRM and sales technology vendors who have connectors or are tightly integrated with IoT development platforms for supporting virtual assistants. These will have the potential to improve usability, adoption and overall seller satisfaction.

- Aim at redesigning your sales processes where IoT transactional data becomes a new signal that drives sales cycles initiated by human or agent "handlers." You will be responsible for analyzing IoT data streams.

- Consider integrating with connected devices like virtual assistants, smartwatches and smart speakers to improve the customer and seller experience and processes.

Sample Vendors

Amazon Web Services (AWS); Apple iOS; Google; Microsoft Azure; Oracle; Pegasystems; Zoho

Gartner Recommended Reading

Why Machine Customers May Be Better Than Human Customers

How the Emergence of Machine Customers Will Impact Your Supply Chain

Infographic: A Day in Your Life in a World of Machine Customers

AR and VR for Sales

Analysis By: Adnan Zijadic

Benefit Rating: Transformational

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition:

Augmented reality (AR) is the real-time use of information in the form of text, graphics, audio and other virtual enhancements integrated with real-world objects. Virtual reality (VR) provides a computer-generated 3D environment that surrounds the user and responds to an individual's actions in a natural way. Both technologies can be enabled through head-mounted displays for multiple participants. AR can also include mobile devices or projected graphic overlays to simulate real-world elements.

Why This Is Important

We expect sales organizations to be one of the early adopters of augmented and virtual reality technologies, once the technology enters mainstream maturity. This can offset and complement the on-site selling and physical product demonstrations that sellers and engineers perform.

Business Impact

This technology is predominantly suited for organizations that use field sales to support product demonstrations or want to enable a more immersive selling experience similar to an on-site visit. It is typically seen in industries such as retail sales, manufacturing, medical equipment sales, automotive, jewelry, real estate and transportation equipment.

Drivers

- With hybrid selling (both on-site and digital) becoming a de facto selling model, organizations need to support hybrid selling environments.

- Some organizations — such as B2C insurance sales or B2C home improvement services — that have limited experience selling via telephone and remote meetings need a visual experience/visualization technique to complement or extend their current capabilities.

- Industries where on-site demonstrations of physical products are critical to sales revenue generation are exploring solutions that can replicate a similar selling environment.

- Multiexperience selling, whereby buyers designate channels for executing purchase decisions, will warrant changes to traditional selling models. The hype surrounding the metaverse will also increase proliferation of VR experiences.

- AR and VR solution providers that cater to specific segments, applications or verticals are becoming more enterprise-friendly.

Obstacles

- Lack of scalability within the enterprise

- Lack of a clear and broad value proposition, as most solutions are very narrow in the value they bring

- Lack of sales-related content that can be repurposed for AR/VR-specific use cases

- High cost and single purpose use of devices meant to support an immersive experience, typically seen in VR head-mounted displays

User Recommendations

End users should:

- Comprehend use cases of AR and VR individually, and how each can be applied to deliver business value.

- Turn to AR solutions where on-site product demonstrations are essential to your business.

- Pilot VR solutions that allow for experiences to occur in the same digital environment, if you're interested in replicating face-to-face selling.

Vendors should:

- Designate innovation budget toward AR and VR applications within CRM.

- Partner with and/or acquire best-of-breed AR/VR solutions that were not normally designed to support sales use cases, but have the readiness to shift to address such use cases.

- Turn toward AR/VR use cases that can be used without head-mounted devices, as these devices can be cost-prohibitive for prospects and customers.

Sample Vendors

Kaon Interactive; Microsoft; Touchcast; WorldViz

Gartner Recommended Reading

[Emerging Tech: Venture Capital Growth Insights for Head-Mounted Display Technologies](#)

[Emerging Technologies: Find Success With Head-Mounted Displays Despite Modest Market Growth Expectations](#)

Partner Ecosystem Management Platforms

Analysis By: Ilona Hansen, Guy Wood

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Emerging

Definition:

Partner ecosystem management platforms support an open network of partners, peers and manufacturers to drive revenue by offering richer, better integrated solutions. These virtual platforms integrate existing partner relationship management technologies, supporting distribution and sharing of data and content among partners. They ease multiway communication in co-selling, co-marketing and reselling for vendors and partners in the indirect sales channel.

Why This Is Important

Partner ecosystem management platforms change the traditional indirect sales market, which commonly relies on partner portal functionalities. It enables all stakeholders to open up data sources for collaboration and exchange with multiple parties within the ecosystem with the necessary security applied — across one virtual environment. It is seeing higher demand, as it provides alternatives to PRMs and is not limited to the use case of improved collaboration with an organization's resellers.

Business Impact

Partner ecosystem management platforms allow vendors and partners to enable a new level of collaborative decision making and execution efficiency. Users can interact with any type of content and present it on one application across all stakeholders. These platforms enable working with each party's data in one core application based on the common virtual platform. They also support indirect selling, co-selling models and alliance management strategies.

Drivers

- During the next three to five years, new capabilities being added to the partner ecosystem management platform will allow additional business activities to be performed, such as real-time insights and comprehensive business analytics.

- Some vendors in this space provide additional capabilities such as business planning support, marketing distribution funds (MDFs) management, marketing functionalities and partner learning features.

- The use cases of partner ecosystem management platforms are expanding far beyond the indirect sales or resell use cases by also allowing for co-selling, co-marketing, referral management and promotions of the community.

Obstacles

■ Partner ecosystem management platforms provide the infrastructure for collaboration in the first place, while partner relationship management (PRM) apps are managing tasks, mostly operated at a 1:1 level. Organizations wanting to collaborate on more resell opportunities with their partners should use a combination of partner ecosystem management platforms and PRM investments.

■ Capabilities for performing business activities like real-time insights and comprehensive business analytics are not currently available. These capabilities are expected to be added as partner ecosystem management platforms develop further during the next three to five years.

User Recommendations

■ Assess partner ecosystem management platforms for their ability to support sales activities between providers and sales partners, especially by making it easy to share the wealth of unstructured and structured data available, without custom coding and complex data models.

■ Compose an indirect technology stack by integrating existing PRM app investments into the partner ecosystem management platform.

Sample Vendors

360insights; ChannelXperts; Crossbeam; Impartner; Mindmatrix; PartnerStack; Pronto; Vartopia; WorkSpan

Gartner Recommended Reading

Market Guide for Partner Relationship Management Applications

Tool: Partner Relationship Management Vendor Evaluator

Emerging Tech: Strengthen Your Marketplace Through Proactive Partner Identification and Recruiting

Top Tech Provider Trend for 2023: Co-innovation Ecosystems

Research Connections: How Ecosystem Community Sites Can Help Buyers Map Solutions to Targeted Outcomes

Process Mining

Analysis By: Marc Kerremans

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

Process mining tools are designed to discover, monitor and improve business operations and processes by extracting knowledge from events captured from systems, applications and devices, in order to deliver visibility, understanding and insights. Process mining includes automated process discovery, conformance checking, social network/organizational mining; automated construction of simulation models, model extension, model repair, case prediction, and history-based recommendations.

Why This Is Important

Process mining provides visibility, analysis and understanding about business operations by providing near-real-time information to all end users about how they are currently performing, whether their processes are compliant, and what could be improved. If process mining tracks clients and their interactions, and their touchpoints with the organization as the main object rather than an order, invoice or request, then this can be seen as customer journey mining. These customer interactions are subsequently connected to internal operations.

Business Impact

Process mining provides a deeper understanding of previous customer contacts and underlying processes in order to enhance current and future interactions by understanding and aligning the customer's intent and the objective of the business. Showing which process improvements are necessary to meet and exceed customer expectations, process mining helps organizations in addressing how they can actively impact customer experience and customer retention through internal operational improvements.

Drivers

- **Digital business:** In this era of digital business, business and sales leaders need a way to reflect on how new technological capabilities can provide value to the business and, ultimately, to the customer. Process mining can show how and where to activate these capabilities to create business value. Aligning and adapting these processes with client interactions is imperative to achieve targeted business outcomes.

- **Artificial intelligence (AI):** With the use of AI and advanced machine learning algorithms, data acquires meaning, and new and powerful insights can be derived from it. A powerful example of this data science in action, process mining shows how algorithms can be used as a mechanism to capture knowledge and insight in a packaged form that can be simply reused in a consistent fashion.

- **Task automation (RPA):** Process mining can complement RPA perfectly by assessing the processes to which tasks belong, and identifying "hot areas" in the organization, where a lot of effort is wasted in repetitive tasks. This results in long-term sustainable business value and averts the shortcomings of a short-term perspective focused on large, one-off cost savings.

- **Hyperautomation:** Not only is process mining a fundamental part in creating visibility and understanding before you automate. It also visualizes how different islands of automation are connected, and how continuously implemented and connected automation can be improved through its monitoring capabilities.

- **Business operations resilience:** Business operations resilience is the ability to alter operations in the face of changing business conditions based on a seek-model-adapt model. The techniques underlying process mining provide a new and enhanced way to encompass the sense and model capabilities. Based on available day-to-day operational data, the advanced process mining algorithms provide an accurate model of the ways of work in a format that can be understood by anyone in the organization.

Obstacles

Obstacles that have kept process mining from a faster adoption can be classified into two main categories: Lack of awareness and misunderstandings.

Lack of awareness:

- After being considered for years as a purely academic technique, the collaboration of emerging process mining vendors with well-known enterprise applications, such as SAP, have heavily promoted process mining and shaped the process mining market.

- Recently process mining has moved into areas other than process discovery, such as customer interactions and social networks. It has even spread into areas such as Internet of Things (IoT), manufacturing and logistics distribution networks, supply chains, which have demonstrated sustainable value-creating capabilities of process mining.

Misunderstandings:

- Process mining needs application log files.

- Our organization is not mature enough.

- It is all about IT.

- Process mining itself improves processes

- Employees are monitored.

- Our organization has many manual activities.

- Our organization doesn't have the data.

- Our organization already has process maps.

- It is hard to justify the investment.

User Recommendations

- Improve visibility and understanding of the actual performance of business operations, by investing in process mining. Actual quantitative data is delivered in a context that not only reveals information about a process, but connects this data to other constituents in a value chain, such as data about clients.

- Create awareness and inspire business and operational colleagues by introducing small, short-term pilots. Start a pilot on activities where the data is easily available. This starter project will already deliver value and will provide insights in where the next iteration needs more detailed data.

- Explore use cases that go beyond traditional mining use cases by targeting business operations and interactions with external parties such as customers. This can be seen as customer journey mining.

Sample Vendors

ABBYY; Appian; Apromore; BusinessOptix; Celonis; IBM; Microsoft; QPR Software; SAP Signavio; Software AG

Gartner Recommended Reading

Magic Quadrant for Process Mining Tools

Critical Capabilities for Process Mining Tools

Business Case for Implementing Process Mining

Self-Integrating Applications

Analysis By: Keith Guttridge

Benefit Rating: Transformational

Market Penetration: Less than 1% of target audience

Maturity: Embryonic

Definition:

Self-integrating applications will use a combination of automated service discovery, metadata extraction and mapping, automated process definition, and automated dependency mapping to enable applications and services to integrate themselves into an existing application portfolio with minimal human interaction.

Why This Is Important

Integrating new applications and services into an application portfolio is complex and expensive. Gartner research shows that up to 65% of the cost of implementing a new ERP or CRM system is attributable to integration. The technology for enabling applications to self-integrate exists in pockets, but no vendor has yet combined all the elements successfully. As applications develop the ability to discover and connect to each other, the amount of basic integration work will dramatically reduce.

Business Impact

Self-integrating applications can:

- Improve agility, as the time to onboard applications and services is massively shortened.

- Cut costs by up to 65% when onboarding new applications and services.

- Reduce vendor lock-in, as platform migration becomes simpler.

- Improve the ability to focus on differentiation and transformational initiatives, as the "keeping-the-lights-on" burden is dramatically reduced.

Drivers

- Cloud hyperscalers provide features such as service discovery, metadata extraction, intelligent document processing and natural language processing.

- Automation or integration vendors provide features such as intelligent data mapping, metadata extraction, next-best-action recommendations, process discovery and automated decision making.

- SaaS vendors provide features such as process automation, packaged integration processes, portfolio discovery and platform composability.

- In the new era, intelligent application portfolio management is placed on top of augmented integration platforms in order to properly address the challenge.

- Generative AI simplifies the build process to create integration processes.

Obstacles

- Embedded integration features within SaaS are good enough to enable organizations to get started quickly, thus stalling investment in improving self-integration capabilities.

- Generally, organizations are not well aware of the availability of augmented integration technologies for enabling self-integrating applications. Many organizations still view integration as a complex issue requiring specialist tools.

- There is not a clear market leader that is looking to push this technology forward as the major application vendors look to protect their customer bases.

- Complex scenarios across multiple datasets and service interfaces are too challenging for the current technology. Organizations place too much trust in the solution to do the right thing. Ownership and visibility of the integrations might become contentions within the organizations.

User Recommendations

Software engineering leaders responsible for integration should:

- Ask your major application vendors about the interoperability of applications within their portfolios. This is the area where self-integrating applications are most likely to emerge first.

- Investigate integration vendors that have augmented artificial intelligence features to automate the process of onboarding applications and services into a portfolio.

- Manage your expectations for ease of integration. Self-integrating applications will provide just enough integration with the rest of the application portfolio to enable a new application to work efficiently.

- Keep track of governance capabilities. Who can authorize access? Has the appropriate observability been established? Is everything fully audited? Does something need to change? An organization's integration landscape is an ever-evolving environment, and each integration has a life cycle that needs to be maintained.

Sample Vendors

Boomi; IBM; Microsoft; Oracle; Salesforce; SAP; SnapLogic; Tray.io; Workato

RevOps Data Automation

Analysis By: Steve Rietberg, Dan Gottlieb

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Emerging

Definition:

Revenue operations (RevOps) data automation solutions enable data integration across systems, make data shareable by a wider range of applications and workflows, and increase both the productivity and capacity of business technologists. These solutions are designed to improve a RevOps organization's ability to execute a common end-to-end revenue process with interconnected cross-functional workflows.

Why This Is Important

RevOps teams are responsible for supporting a broad set of GTM functions, each with complex workflows and disparate systems. These teams need tools to help orchestrate the execution of myriad roles to deliver a seamless customer experience. RevOps data automation solutions are specifically designed for data and workflows within the commercial motion. These purpose-built citizen automation technologies are designed to be used by nontechnical resources, giving RevOps teams more control.

Business Impact

RevOps data automation solutions provide benefits to the following roles:

- RevOps leaders can administer business rules impacting many systems with workflow automation, thus decreasing latency between strategic decisions and frontline execution.

- IT application owners can accelerate change management without sacrificing commercial data quality and integrity.

- Chief data and analytics officers responsible for data cleansing and enrichment benefit from automated data synchronization features.

Drivers

- **Scarcity of and competition for technical and analytical skills on the RevOps team** — RevOps leaders find it increasingly difficult to acquire talent with requisite technical and analytical skills as digital transformation expectations grow. In response, RevOps leaders seek out vendor solutions that offer low-code and no-code interfaces that can be administered using existing team skills.

- **Adoption of a unified commercial strategy** — RevOps analysts support a wide variety of interconnected business workflows. These workflows often span multiple formerly siloed functional teams and roles. RevOps leaders are responsible for orchestrating their activities to provide a seamless customer experience.

- **New wave of revenue technology capabilities** — Organizations are realizing that world-class customer experience cannot be achieved with people and process alone, and CSOs' appetite for tech spending has grown. Technology and data solutions play an integral part in aligning execution to support a unified commercial strategy and end-to-end revenue process.

- **Complexity of revenue technology (RevTech) stacks and growing volumes of commercial data** — RevOps analysts are increasingly responsible for performing complex data automation work across multiple applications with speed, agility and accuracy. The manual work needed to synchronize data across disparate applications takes time and focus away from value-added work to support revenue workflows.

Obstacles

- **Uncertainty** — RevOps data automation is still a nascent market, with no commonly accepted definition of required capabilities. Vendor selection is typically driven by the need to solve a single challenge rather than enabling a set of commercial use cases. Customers looking for a more holistic solution for RevOps data automation may feel reluctant to invest.

- **Interoperability** — The market lacks a surplus of vendors that offer multiple platform integrations. Many vendors only integrate with select SFA platforms, MAPs and customer service platforms, limiting their utility to RevOps leaders supporting multiple commercial functions.

- **Support for varying customer sizes and industries** — Larger enterprises that sell to a broad range of verticals and segments may find some vendor offerings too narrow for their needs. RevOps data automation solutions often develop from niche applications catering to specific industries or smaller organizations that are rapidly developing their RevTech stacks.

User Recommendations

- Democratize access to purpose-built citizen automation technologies to improve the capabilities and capacity of RevOps headcount.

- Develop and automate self-service workflows by collaborating with business owners and IT to drive efficiency in the end-to-end revenue process.

- Investigate technology that provides business technologists with an intuitive user interface to perform complex data automation across disparate applications that increase RevOps' speed, agility and precision.

Sample Vendors

Fullcast; Openprise; Sonar; Syncari

Gartner Recommended Reading

Cool Vendors in RevOps Data Automation

Innovation Insight for the Transformation to Revenue Operations

Market Guide for Revenue Data Solutions

Extended Planning and Analysis for ERP

Analysis By: David Penny, Greg Leiter

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

Extended planning and analysis (xP&A) is a platform-centric enterprise planning strategy that extends financial planning and analysis (FP&A) use cases beyond finance. xP&A platforms extend multidiscipline planning capabilities to all types of users to collaboratively work on shared models as an integral part of their operations enabled by a cohesive, composable and data-harmonized vendor platform.

Why This Is Important

Organizations adopting an xP&A approach can leverage the same composite architecture platform for multiple planning use cases beyond finance, such as, but not limited to, workforce planning, sales and operations planning (S&OP) and market campaign planning. The initial base of xP&A platforms has evolved by improving performance, collaboration, workflow management, analytics, governance and ease of use.

Business Impact

Planning and forecasting is an elemental process in any organization and historically has been focused mostly on financial planning. xP&A offers an approach to allow planning activities across nearly all functions in an enterprise using a single platform that provides for rapid changes to forecasts and plans, not only for financial planning but also for operational plans. This allows enterprise decision makers to have a comprehensive view of plans and forecasts to facilitate decision making.

Drivers

- Economic disruption, uncertainty and fast-changing market conditions increase the need for more continuous planning. The recent pandemic exposed many enterprises' lack of strong planning and forecasting processes.

- Migration to cloud-based ERP solutions is now accelerating as the overall market for cloud ERP last year now surpasses on-premises solutions. Customers are more likely to choose a "better together" approach with xP&A solutions from the same ERP vendor due to tight integration with ERP solutions and the ability to move data bidirectionally between the planning solutions and core ERP.

- Best-of-breed xP&A vendors have more recently dominated the market. With their newer cloud-based solutions, ERP vendors are now able to rapidly release new functionality which has allowed them to rival best-of-breed vendors and provide a compelling argument to operate within the same vendor ecosystem.

- Use of artificial intelligence (AI) and machine learning (ML) as enabling technologies allows for predictive forecasting opportunities that improve the cadence at which forecasts are performed as well as their accuracy.

Obstacles

- xP&A is an approach to consolidating enterprise planning solutions that may not be a good substitute for all planning processes versus best-of-breed solutions.

- Business culture and data integration pose significant challenges for xP&A. xP&A requires a higher maturity of planning governance and processes that many organizations may not have.

- Today's xP&A solutions work best with ERP from the same vendor with varying degrees of seamless operation.

- Some organizations in a multi-ERP environment may want a third-party solution that is disconnected from a specific ERP, to meet the xP&A needs of several ERP instances.

User Recommendations

- Exploit xP&A capabilities within an ERP vendor's product portfolio where these could provide superior integration for data and user interface.

- Consider the ERP vendor's xP&A solution as part of the future roadmap — if an enterprise ERP strategy is to move to a cloud ERP solution in the future — despite already having an xP&A tool from another vendor.

- Favor a best-of-breed xP&A approach if you have a multivendor/multi-ERP environment, because you are likely to be unable to use the integration features found in a single core financials and FP&A approach.

Sample Vendors

Oracle; SAP; Workday

Gartner Recommended Reading

Quick Answer: Differentiating xP&A From IBP When Aligning Enterprise Plans

Quick Answer: 5 Steps to Ensure Readiness for Integrating Financial and Sales Planning With xP&A

How Can Application Leaders Prepare for xP&A?

Future of Finance Extends FP&A to Include Operational Planning

Market Guide for Cloud Extended Planning and Analysis Solutions

Digital Sales Rooms

Analysis By: Varun Agarwal, Melissa Hilbert

Benefit Rating: Transformational

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

Digital sales rooms (DSRs) are a persistent microsite privately formed for a supplier and buying group to collaborate digitally throughout the customer journey. Due to virtual selling, DSRs streamline how a buying group interacts with a supplier for better CX. Key capabilities of DSRs include internal/external collaboration, bidirectional content sharing, embedded video conferencing, buyer engagement analytics, sentiment and emotion analysis, and links to digital commerce platforms.

Why This Is Important

Hybrid work is a permanent shift that heavily affects complex B2B buying and selling processes. To mitigate the surge in daily activity buyers face, DSRs provide a primary interface for synchronous and asynchronous digital interactions. DSRs support initial sales and customer retention by turning into a collaborative platform. Suppliers and buying groups continue to work together on DSRs to achieve better customer experience and lifetime value.

Business Impact

Organizations with B2B selling models often tend to lose a lot of information among multiple communication channels. Missing information results in substandard decisions. DSRs provide the following inherent advantages:

- Improve visibility into the buyer stakeholders' engagement with materials.

- Accelerate pipeline conversion rates at key stages in a buying process.

- Improve forecast accuracy with improved insight into buyer engagement.

- Improve win rates with tailored and focused buyer-centric collaboration.

Drivers

- Buyers increasingly prefer to engage digitally, and they want control to choose how and when they interact with suppliers.

- DSRs provide a secure way to share and collaborate digitally and provide continued value after the sales.

- DSRs provide a natural reduction in noise experienced by a buyer through consolidating the number of digital channels a buyer needs to use to interact with a supplier.

- B2B organizations that have moved to, or are just beginning to, make moves toward virtual selling require a scalable DSR solution.

Obstacles

- The market is in its early stages and only a few vendors offer full DSR capabilities.

- DSRs might not be required for transactional or short-cycle sales processes.

- Evidence of complex contract negotiations within a DSR is yet to be evidenced.

- Tighter budgets will require DRSs to prove revenue growth which may be difficult if the DSR does not have full capabilities.

User Recommendations

- Evaluate the DSRs functionalities offered by best-of-breed solutions, and those offered by revenue enablement and sales force automation platform vendors.

- Prioritize the following capabilities depending on your organization's needs: bidirectional content sharing between buyer and seller; embedded or native online video conferencing and recording; buyer engagement analytics for interactions within the DSR; conversational intelligence for sellers and buyers; conversational transcripts for online meetings; emotion analysis to support context; buyer and seller collaboration and personalization using a persistent microsite; e-signature capabilities for signing agreements and contracts; complex contract negotiation via integration with systems such as configure, price and quote; embedded or integrated digital commerce platform; automated CRM logging of activity and analysis.

- Create a business methodology with DSRs to support your B2B customers throughout their life cycle.

Sample Vendors

Allego; Dealhub.io; GetAccept; JourneyDXP; Omedym; Oracle; Pitcher AG; Seismic; Showpad

Gartner Recommended Reading

Use Digital Sales Rooms to Improve the Digital Buying Experience

Market Guide for Sales Enablement Platforms

Interactive Demo Applications

Analysis By: David Yockelson, Jeff Chamberlain

Benefit Rating: High

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition:

Interactive demonstration applications enable business users to easily create and customize interactive product demonstrations. Created via several distinct methods, they are substitutes for live product demonstrations and production-caliber product experiences. They allow demos to be used as content and sources of intent data for marketing and sales use cases.

Why This Is Important

Interactive demonstration applications disrupt the traditional sales demo creation and delivery process. They provide a product experience to prospective buyers without the complexities of the actual product or sensitive data and integration requirements. The products can also replace legions of videos often embedded in websites and/or stored in YouTube channels that can be costly and time consuming to replace when products are updated while providing only limited value in buyer engagement analytics.

Business Impact

Interactive demo applications offer the following benefits:

- Demos can be quickly and easily created and customized across use cases or roles.

- Sales can save time previously spent creating customized demo environments.

- Marketers can use interactive demos in campaigns and websites, capturing intent analytics and identifying account stakeholders.

- Channel leaders can enhance demo consistency and enablement for partners.

- Product managers can showcase new or unreleased features or capabilities.

Drivers

Numerous changes to technology buying participants, behaviors, and processes, coupled with changes to tech provider go-to-market approaches over the last several years, set the stage for interactive demo technologies:

- Technology democratization, driven by the growth in SaaS and cloud-based products as well as the influx of younger, tech-savvy buyers, made it easier for more people in an organization to sample and purchase software products.

- The pandemic years eliminated nearly all travel, forcing buyers and sellers to work together predominantly online, increasing the propensity of buyers to research providers and solutions on their own well before speaking to sellers.

- Both buyers and their users are increasingly tech-savvy and expect better experiences than they typically find on websites.

- The popularity of the product-led growth (PLG) strategy as a go-to-market (GTM) model has placed emphasis on offering prospects a firsthand product experience (versus a sales-led process) to generate and progress qualified sales opportunities.

- As sales cycle times have slowed, tech providers desire ways to reduce friction in the technology buying process.

- Rather than rely on expensive and scarce internal resources to create/deliver demos within buying or upsell/cross-sell processes, tech providers want to demonstrate differentiated capabilities in a self-serve fashion.

Obstacles

- Numerous vendors have emerged in this space, and many have only been in the market for two to three years, resulting in rapid changes to products and the market landscape.

- There are multiple approaches to demo creation and delivery within the vendors' products that align with different use cases, making it imperative for buyers to define their needs clearly.

- The vendors themselves struggle to differentiate their solutions effectively from each other.

- Ownership of the capability within an organization may also take different paths depending upon the importance or visibility of the use case(s) to be implemented.

User Recommendations

- Address business and technical requirements for greatest value use cases by investing in interactive demo applications to automate demo creation (presales/sales) and drive MQLs (marketing) and/or precursors to free product offers.

- Evaluate interactive demo applications by aligning the use case fit with the range of criteria related to the screen or application capture process, customization, integration, analytics, and buyer experience.

- Optimize demand generation campaigns, marketing nurture flows, and website content — and reduce creation time and demo risk for sales — by offering interactive demonstrations as both a form of content and a product experience.

- Provide "near product experiences" that generate data from their usage by substituting or augmenting PLG-related free offers for more complex products with interactive demonstrations.

Sample Vendors

Arcade Software; Consensus; Demoboost; Demostack; Lancey Software; Reprise; ScreenSpace; Storylane; Tourial; Walnut

Gartner Recommended Reading

Quick Answer: When Should a Prospect Receive a Product Demonstration?

Predicts 2023: Focus on Existing Customers and PLG to Drive Growth and Overcome Headwinds

Market Guide for Interactive Demonstration Applications

Tech CEOs Must Align Demos to Buying Activity Streams to Maximize Sales Effectiveness

Establishing a Product Demonstration Strategy as a Tech CEO

At the Peak

Product-Led Revenue Applications

Analysis By: David Yockelson

Benefit Rating: High

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition:

Product-led revenue applications provide built-in integrations from usage and engagement data sources, to marketing automation and sales engagement destinations. Furthermore, they provide a dedicated user experience to identify product-qualified leads (PQLs), and create marketing and sales workflows.

Why This Is Important

Product-led growth (PLG) initiatives require the capture, scoring and operationalizing of application usage and engagement data, to identify PQLs and drive appropriate actions. Product-led revenue applications are designed for marketing and sales/sales operations users to simplify, speed, and scale PLG sales motions. They replace the complex data and integration work necessary to collect and apply product usage data, within CRM and salesforce automation applications.

Business Impact

Product-led revenue applications aid PLG initiatives by:

- Operationalizing product usage and user engagement data, without the need for custom-made file transfers and translations, data transformations, and one-off integrations.

- Enabling nontechnical users in sales and marketing to define or identify product-qualified leads and accounts (PQLs and PQAs).

- Creating automated workflows to drive offers or actions, through packaged integrations with marketing automation and/or sales engagement applications.

Drivers

- Product-led revenue applications support SaaS-related PLG go-to-market models by addressing numerous technical gaps and challenges. These result from the need to acquire and rapidly process usage and user engagement data.

- Product-led revenue applications help capture, manage, analyze and act on the user engagement and application usage data that drives PQLs and PQAs, and the resulting actions at scale.

- CRM and salesforce automation applications cannot accommodate PLG-related leads or opportunities based on users and usage data directly.

- Marketing automation platforms struggle to adequately address nonpaid (such as free trial or freemium) users, making them difficult to use in many PLG motions.

- Tools that can capture and segment usage data (such as digital adoption, product analytics or customer success management platforms) do not typically score usage behaviors appropriately to determine PQLs or operationalize the resulting data for marketing/sales actions.

- Custom data engineering and integration work to accomplish these elements can result in constructs that are inflexible, and require data engineers to change.

- Marketers and sellers need a tailored environment to identify, test and delineate PQLs/PQAs, integrate with account insights and other intent data, and create automated or human sales-assisted actions or workflows.

Obstacles

- Emerging B2B SaaS companies who have data-engineered custom solutions to address usage data will need to be "sold" on the benefits of product-led revenue applications. Established companies who are newer to PLG models and have larger technology stacks, may present integration challenges.

- While these applications may replace certain elements of the considerable marketing and sales tech stacks, they may still be additive to CRM platforms as systems of record.

- With some exceptions, technology startups with no technical debt and sparse resources are the leading prospects and customers for these applications today. This means it will take time to gain traction, but economic disruption could be an impediment.

- Many of the vendors in this market have recently released initial applications; some are in the midst of positioning pivots as well. New functionality could be driven by specific early customer requirements.

User Recommendations

- Determine the appropriate marketing and sales actions that will be necessary to drive user adoption, onboarding, PQLs or PQAs that signal user value, and conversions. These depend upon your target audiences and product complexity.

- Examine product-led revenue applications to reduce the custom development, data transformation and integration required to drive sales activities from user/usage information. Explore a range of new vendors in this space to understand the variety of approaches and capabilities inherent in the early stage of this market.

- Favor product-led revenue applications that can blend intent signals between marketing-qualified lead/sales-qualified lead (MQL/SQL) sources and PQLs, to address both bottom-up and top-down sales motions.

- Focus on vendors that help to segment audiences, enable the creation of a variety of plays/workflows, and incorporate AI and machine learning to help identify PQLs/PQAs and other patterns.

Sample Vendors

Calixa; Census; Correlated; Endgame; Falkon; HeadsUp; Inflection.io; Pocus; Toplyne; Variance

Gartner Recommended Reading

Technologies That Drive Product-Led Growth

3 Actions to Drive Sales Effectiveness in a Product-Led Growth Model

Understanding the Key Elements of a Product-Led Growth Lead Progression

Product-Led Growth Requires Product Qualified Leads: Here's How to Create Them

Customer Psychographics

Analysis By: David Pidsley

Benefit Rating: Moderate

Market Penetration: 1% to 5% of target audience

Maturity: Adolescent

Definition:

Customer psychographics classifies users according to their attitudes, communication style or decision-making style, rather than their specific actions, requirements, profitability or satisfaction. Users are matched to predefined styles, or personality preferences, based on directly captured data (e.g., social media, user-generated images and video, audio calls) or on data derived from analysis of behaviors (e.g., purchasing products with a consistent set of attributes).

Why This Is Important

Differentiated experiences hinge on segmentation, including demographics and psychographics. With machine learning and behavioral sciences, automatic psychological profiling is more feasible and accurate. Psychographics allows for deeper personalization, enabling organizations to better understand customer motivations, foster loyalty and identify overlooked market segments with untapped opportunities. Ethically investing in technology and methods that harness psychographics can lead to significant business advantages.

Business Impact

Customer psychographics aims to understand the drivers behind customer behavior. Thus, advances in this area could potentially benefit a range of business functions, including customer analytics, sales, marketing, and product planning and development. Industries where customer psychographics could have the greatest impact include retail; healthcare and life; banking and insurance; and media and advertising.

Drivers

- Natural language processing (NLP) and multistructured analysis are enabling marketing organizations to personalize their target market audiences and messages. These techniques combine innovations such as computer vision, machine learning and deep neural networks.

- Superhuman capabilities in voice-to-text transcription and natural language understanding have enabled service centers to reduce handling time — whether that be average handling time or average talk time. Service centers also use psychographics to increase first-contact resolution rates by routing the customer to a support agent with the best-suited personality.

- Sales environments are using employee psychographics to align salespeople with customers or prospects, resulting in increased sales conversion rates.

- By 2026, AI-enabled workstyle analytics will be essential for delivering a modern digital employee experience. Workstyle analytics derives insights from employees' digital footprints and data. These insights help organizations improve personal and team effectiveness, application and device proficiency, and process performance within the constraints of responsible data usage. Over the long term, psychographics can be used inside the firewall for digital experience improvements.

- HR management teams have long used traditional psychographics to recruit based on traits. New techniques around behaviors may be applied to marketing for talent, conducting gender bias analysis and supporting culture change in digital transformation communications.

- Interest in applying emotion AI is increasing. Emotion AI uses computer algorithms to analyze short-term and transient emotions, such as facial expressions, tone of voice, and other physical and behavioral cues. Emotion AI is distinct from, but complementary to, data about the long-term and durable personality preferences of customers.

Obstacles

- Privacy and ethics challenges surround psychological profiling, with some considering it intrusive or improper, especially when applied to consumers, recruitment prospects or protected individuals like minors.

- AI regulations are echoing employment discrimination laws, signaling increased oversight of nonhuman behavior.

- High-profile bias cases risk undermining confidence in solution robustness, which is constrained by unrepresentative data.

- Customer psychographics' applicability to B2B relationships is less established, as individual traits may not represent enterprise preferences.

- The business value of personalization, particularly in marketing, remains debated. Arguments center on how effective it is to vary the brand's voice for individuals, rather than for larger cohorts.

- Use cases and domains are diversifying, leading to disparate quality solutions.

- The Myers-Briggs Type Indicator has faced validity criticisms. However, some automated solutions now adopt models like "the big five personality traits," garnering wider academic endorsement.

User Recommendations

- Use psychographics to gain insight and empathy as to what motivates customer behavior. Use it in ways that allow you to build trust, which is vital to relationships and better engagement.

- Apply psychographic segmentation when a customer's product or service requirements are not clear, but there is an opportunity to build trust through emotional engagement.

- Apply psychographics when the motivations are more relevant to the nature of the relationship than the actions themselves. For example, do people buy an expensive watch as a social signal or because they view it as a prudent investment?

- Define your approach to customer psychographics based on context. For example, communication-style analysis may be helpful in a call center, while insight into attitudes about risk or convenience are relevant to product recommendations.

- Explore the ethics and legal implications (and business opportunities) of using psychographics. Let those guide development and deployment decisions.

Sample Vendors

CaliberMind; Crystal; Dynamic Yield; Intelligent Voice; MATTR; Neosperience; NICE; Receptiviti

Gartner Recommended Reading

Building a Neurocentric Organization Is the Next Gamechanger

Innovation Insight: Workstyle Analytics

Technology Opportunity Prism: Emotion AI Technologies

Leverage Customer Experience Analytics to Uncover New Growth Opportunities for Your Products

Emerging Technologies and Trends Impact Radar: Customer Analytics for Customer Experience

Digital Integration Hub

Analysis By: Ilona Hansen, Guy Wood

Benefit Rating: High

Market Penetration: 1% to 5% of target audience

Maturity: Early mainstream

Definition:

Digital integration hubs for sales provide low-latency, high-throughput API-/event-based data access by aggregating and replicating multiple system-of-record (SOR) sources. Sales force automation (SFA), sales enablement and other tools access a data management layer that synchronizes with the SOR via event-driven patterns. Application leaders should assess it because it enables scalable, 24/7 data access, reduces workloads on the SOR and improves business agility.

Why This Is Important

Enterprises looking to transform to digitized sales processes can achieve momentum using digital integration hubs (DIHs). They handle masses of data generated from digitized customer interactions. DIHs provide additional services (for example, custom analytics or search) or can be analyzed in real time to detect "business moments." They overcome the severe performance, scalability and availability issues that traditional integration architectures face.

Business Impact

A digital integration hub for sales:

- Provides sales teams with rich and responsive access to customer data, orders, inventory, catalog, pricing, etc. of massive data sources.

- Reduces the cost of running SOR or limits the fees paid to SaaS providers for API consumption.

- Helps enable 24/7 operations enhancing customer experience through self-service, digital commerce and loyalty.

Drivers

- Interest in DIH for sales is fast growing in organizations that want to offload the SOR to reduce their operational costs, optimize expansive upgrades or reduce the API-limit fees paid to SaaS providers needed to support the high workload generated by digital applications front-ending the SOR themselves.

- Interest is also growing in organizations that want to improve employee and customer satisfaction by delivering a more responsive and data-rich user experience.

- Interest is also growing in organizations that want to accelerate the transition to composable business, digital and API economy by implementing a comprehensive set of APIs and events.

- DIHs are operational in the banking, insurance, retail, energy and utilities, higher education, transportation, hospitality, and telecom industries. However, other industries (for example, government and healthcare) are also showing interest in this architecture.

- Large and midsize organizations with limited skills are attracted by vendors addressing the opportunity by repackaging their technology portfolios in digital integration hubs for sales-oriented value propositions. Vendors are also coming to market with packaged DIHs for sales-enabled API platforms, at times focused on specific use cases.

- DIH improves business agility and favors composability because revenue technology applications can be changed quickly, harnessing market opportunities by launching at speed and incrementally.

- DIH maintains an up-to-date picture of fast-changing data used for analytics-based services, notification services and data integration.

- A DIH for sales is an increasingly popular option because it is able to fix data issues while delivering additional benefits.

Obstacles

Current DIH for sales implementation is limited to large and midsize organizations with financial resources due to technical complexity stemming from:

- Dealing with an architecture that is not well-known in the industry implies a scarcity of know-how, experience and skills leading to high costs.

- Assembling and managing the varied complexities of DIHs for sales is very complex. Such as API gateways, application platforms, integration platforms, event brokers, data management and metadata management tools.

- Keeping the data management layer in sync with the systems of record is challenging.

- Addressing the data governance issues derived from the creation of yet another copy or data structure out of the SOR data is cumbersome.

User Recommendations

- Adopt a digital integration hub for sales to provide a responsive and rich omnichannel experience for large audiences (hundreds of thousands of customer data points or more). It reduces the cost associated with sustaining the API-generated workload hitting the systems of record.

- Enable API "pull" and even "push" services to access data scattered across multiple back-end systems. And consider decoupling the API services from the systems of record to enable composable business applications unlocking access to new sales technology opportunities.

- Maintain an up-to-date "single source of truth" for fast-changing data, which can be used to provide additional services (for example, custom analytics or search) or can be analyzed in real-time to detect "business moments."

- Embed DIH for sales initiatives into the overall data hub strategy for governance and integration to avoid ending up with yet another data silo.

Sample Vendors

Cinchy; Fincons Group; IBM; Informatica; Mia-Platform; Microsoft; Oracle; SAP; SESAMm; Software AG

Gartner Recommended Reading

Essential Patterns for Data-, Event- and Application-Centric Integration and Composition

Enable Digital Platforms to Unleash the Potential of Digital Ecosystems

Market Share Analysis: Integration Platform as a Service, Worldwide, 2021

Integration Teams for the Digital Era Must Support Multiple Delivery Models

Total Experience

Analysis By: Michelle DeClue, Jason Wong

Benefit Rating: Transformational

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition:

Total experience (TX) is a strategy that creates superior shared experiences by intertwining four disciplines: customer experience (CX), employee experience (EX), multiexperience (MX) and user experience (UX). The goal is to drive greater customer and employee confidence, satisfaction, loyalty and advocacy using digital and nondigital techniques.

Why This Is Important

The march toward mobile, virtual and distributed customer and employee interactions has accelerated, making a compelling case for TX adoption. TX is about using technology and interactions to enhance, empower and embolden both customers and employees. Executive leaders must evaluate the intersections between these experiences and increase both customer and employee confidence and lifetime value. It's about how these experiences make the customer and employee *feel about themselves and the decisions they have to make.*

Business Impact

TX is designed to retain and cultivate greater **customer and employee lifetime value,** a calculation based on the longevity of the relationship and the value they bring to the organization. Losing profitable customers can harm the financial position of an organization. Employee lifetime value also has financial repercussions:

- Loss of institutional knowledge and productivity when an employee leaves.

- Impact to existing team members in terms of morale and load management.

- Cost of recruiting, onboarding and training new talent with no guarantee of productivity.

Drivers

- Technology advancements allow greater opportunities to connect across multiple platforms with multiple ways of engagement (voice, gestures, immersion, etc.).

- Edge devices with cloud-based applications have proliferated across multiple organizations and in consumer electronics and vehicles, providing more opportunity to connect and understand employees, customers and the technology data points at a higher level.

- Employees can facilitate better CX through digital solutions, such as giving a discount or promo code, adding additional time to due dates and deadlines, unlocking exclusive content, or providing next best actions.

- Initial investments can be scaled to add external ecosystem partners to increase the long-term value.

- AI can be applied to see how other similar customer issues were resolved and offer the solution to rectify a customer's issue. Machine learning can recognize where gaps are and either refine the process or notify a developer to address the issue. Recurring patterns or orders can be used to identify how to improve products and services, such as with personalized products or most-requested additional services for a venue.

Obstacles

- **Concept**: The TX concept in the early stages of permeating into organizational roadmaps for joining CX and EX initiatives. Some organizations may feel like they've already been doing some aspects of TX. While they may have focused on each of the four disciplines of TX separately, many have not interlinked or aggregated them from a holistic perspective of the multiparty experiences to have seamless and frictionless UX.

- **Ownership**: Ownership over digital employee experience is also unclear in many organizations. Expanding the aperture to the more expansive TX can have knock on improvement effects to EX, which then yields a better CX — not only digitally, but within employee-to-customer interactions.

- **Inertia**: Organizations making it through the disruptions of the last couple of years without drastic changes to the CX may be inclined not to adopt a new TX strategy.

- **Technology:** Even as organizations transform digitally, they still struggle to modernize digital experiences. This prevents them from achieving richer MX customer and employee journeys across multiple devices with multiple touchpoints and modalities.

User Recommendations

- Form a TX fusion team that crosses activity silos by engaging with CX, EX, UX and MX leaders or centers of excellence across your organization. Use intersecting performance plans (such as OKRs), to incentivize interteam cooperation.

- Start small by applying total experience to a single customer or employee journey, to be built upon further in the future. Engage with business stakeholders and product managers by conducting workshops to determine how TX strategy can transform their roles and make the organization more agile.

- Identify critical gaps in customer and employee interactions by encouraging project teams to also consider how to leverage MX and UX initiatives to improve those experience gaps.

- Use TX strategy to determine future-state business capabilities, which, in turn, will drive targeted business outcomes. This should include customer and employee journey mapping.

- Apply TX to close the strategy to execution gap by finding important business opportunities that have been held back by their siloed CX, EX, UX or MX efforts.

Sample Vendors

Deloitte; Qualtrics; Salesforce; ServiceNow; TechSee; Valtech; Zoom

Gartner Recommended Reading

Achieve Best-in-Class CX Wins Through Total Experience

Quick Answer: How Do I Get Started With Total Experience?

Tool: Total Experience Scoping Guide

Case Study: Connect Customer and Employee Journeys to Deliver Superior Experiences (the LEGO Group)

Natural Language Query

Analysis By: David Pidsley, Rita Sallam

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Early mainstream

Definition:

Natural language query (NLQ) allows business users to query information using business terms typed into a search box or chatbot, or via voice. Vendors' techniques differ in analytical complexity of queries, data volumes and types supported. These keyword searches translate terms into natural language questions using natural language processing technologies and LLM like ChatGPT. Some support querying structured data, and others enable semantic search of multistructured information.

Why This Is Important

■ Business users need to make faster data-driven decisions and get context-enriched analysis that includes reasoning about location and time-sensitive situations.

■ Despite significant advances in the usability of the point-and-click visual-based analytics, business intelligence (ABI) platforms and other knowledge bases, traditional access paradigms are still too hard for most business users.

■ Flattening the learning curve for ABI platform users enables adoption by the remaining two-thirds of employees in organizations that do not use them.

Business Impact

NLQ drives adoption by nontechnical users, offering the ability to ask questions to gain insights, overcoming resistance to visual-based self-service analytics interfaces. NLQ is an increasingly important interface for analytic content development and consumption in data-driven decision making accessible to those unfamiliar with SQL. For data pipelines to enable multistructured analytics across a spectrum of structured data and unstructured content, NLQ can unify a multiexperience user interface.

Drivers

- Foundation models like BERT, large language models (LLMs) and ChatGPT see NLQ repositioned at the Peak of Inflated Expectations and a high benefit rating with less than 2 year time to plateau.

- Generative AI hype is accelerating NLQ capabilities with advanced text analytics and deep learning as catalysts of natural language technologies, including natural language generation (NLG) and NLQ. They enable two-way communication between the human questioner and the machine-generated answer based on the data.

- Demand for generative D&A is substantial with the substantial increase in entrants in 2023. Established ABI platform vendors responded to ChatGPT by improving support for and innovations in NLQ, which is a well-established critical capability of the platforms. Adoption continues to grow as NLQ awareness, availability and solution capabilities improve.

- Orchestration of the entire analytics workflow will increasingly become NLQ-driven and used to manage the analytics and application development activities.

- Augmented analytics capabilities make the analytics consumer of tomorrow a power user by today's standards. Most analytics consumers enter the data story workflow when viewing content that has been created from prepared components and existing data visualizations. Their interaction is typically followed by NLQ or conversational analytics.

- NLQ is becoming central to personalized, consumer-oriented user experiences that combine augmented analytics or automated insights into automated data stories, scenario analysis and conversational analytics. Analytics collaboration enables NLQ engines to learn from team-usage preferences.

- Increasingly mobile workforces using handheld devices and voice interfaces need NLQ to interpret geospatial questions and immediately deliver location-based answers and business insights as a best-fit map visualization. Geospatial analytics and algorithm advances enable NLQ to deliver geospatial reasoning of distance, route calculations and analytics about entities near, farther than or within a certain proximity or boundary, based on business-defined regions or geocoded reference data.

Obstacles

- Limitations in real-time type ahead search-bar suggestions can frustrate users, reduce usefulness and hinder adoption. Some users may not understand the implicit structure of underlying data, rendering queries uninterpretable by the NLQ parser.

- Unindexed datasets often hinder bringing search into an ABI platform. The effort/costs to map/model wide data are high, although generative AI is enabling NLQ of unstructured data to expand the scope and enable multistructured analytics.

- A substantial variety exists in the analytical complexity of queries, NLQ reasoning, support for suggestions for the next questions to ask, NLG to explain findings and support for large data volumes, structured and formats.

- Poor support of spoken languages beyond English, limited domain and industry ontologies, difficulty in configuration, and the need to be predefined in advance means optimizing NLQ implementations often requires customizing the platform and curating synonyms.

- Consistency is lacking for where users can ask questions across platforms and where implementations embed NLQ into the decision making or business process.

User Recommendations

- Help users adopt NLQ for decision making and orchestrating workflows.

- Promote NLQ-specific data literacy training for augmented consumers, business analysts and analytics developers.

- Assess the NLQ roadmaps of vendors and augmented analytics startups.

- Prioritize vendors based on how and what a platform learns (from activate metadata for personalization) via a proof of concept with real data and users.

- Evaluate how NLQ fits into analytics solution architectures. Involve IT in evaluation, data preparation and deployment of ABI platforms.

- Support multiple use cases with multiexperience UIs including evaluating enterprise conversational AI platforms.

- Invest in design thinking on dialogue flows and in competencies to connect conversational analytics to the ecosystem of APIs; for example, ABI platforms and insight engines that enable semantic search and analyzing results sets of wide data with multistructured analytics.

Sample Vendors

ConverSight; iGenius; Pyramid Analytics; Qlik; Tellius; ThoughtSpot

Gartner Recommended Reading

Magic Quadrant for Analytics and Business Intelligence Platforms

Is Your Business Intelligence Enabling Intelligent Business?

Quick Answer: What Are the Short-Term and Midterm Implications of ChatGPT for Data and Analytics?

Magic Quadrant for Insight Engines

Magic Quadrant for Enterprise Conversational AI Platforms

Emotion AI

Analysis By: Annette Zimmermann

Benefit Rating: Transformational

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition:

Emotion artificial intelligence (AI) technologies (also called affective computing) use AI techniques to analyze the emotional state of a user (via computer vision, audio/voice input, sensors and/or software logic). Emotion AI can initiate responses by performing specific, personalized actions to fit the mood of the customer.

Why This Is Important

Emotion AI is considered transformational as it turns human behavioral attributes into data that will have a large impact on human-machine interface (HMI). Machines will become more "humanized" as they can detect sentiments in many different contexts. Furthermore, applying deep learning to computer vision or audio-based systems to analyze emotions in real time has spawned new use cases for customer experience enhancements, employee wellness and many other areas.

Business Impact

Contact centers use voice analysis and natural language processing (NLP)-based algorithms to detect emotions in voice conversations, in personal chat conversations and chatbots. Computer vision (CV)-based emotion AI has already been used for more than a decade in market research with neuromarketing platforms that test users' reactions toward products. In addition, we see the technology expanding to other verticals and use cases, i.e., healthcare (diagnostic), sales enablement and employee wellness.

Drivers

The increasing number of use cases we have identified indicates an increase in commercialization as emotion AI finds applicability in new domains:

- One of the drivers for detecting emotions/states is the need for a system to act more sympathetically. For instance, it creates anthropomorphic qualities for personal assistant robots (PARs) and virtual beings, making them appear more "human." This "emotional capability" is an important element in enhancing the communication and interaction between users and a PAR.

- This can be an empathic avatar or an emotion-detection-enabled chatbot. A person's daily behavior, communication and decisions are based on emotions — our nonverbal responses in a one-to-one communication are an inseparable element from our dialogues and need to be considered in the human-machine interface (HMI) concept.

- Combinatorial technology solutions such as computer-vision-based and audio analytics, or language-based and computer vision, enable customer experience enhancements.

- Strongest adoption is currently happening in the context of contact centers where voice-based emotion analysis supports multiple use cases such as real-time analysis on voice conversations, emotion detection in chat conversations, emotional chatbots and more.

- Market research and neuromarketing tools are continuously leveraging emotion detection in various user scenarios including focus groups and product testing. Vendors have been extending their offerings toward remote/online interviews during 2020 — due to the pandemic.

- In the creation of virtual beings in customer service or other consumer-facing scenarios, emotional responses are a critical element.

- As the metaverse unfolds, virtual beings will play an important role as business models evolve and the entire ecosystem of this new digital world emerges.

Obstacles

- Privacy concerns are the main obstacle to rapid adoption in the enterprise. This is especially a concern in real-life situations (vs. lab/research environments) for both consumer-facing (e.g., monitoring emotions in a retail environment via cameras) and employee-facing situations. Research environments like product testing have the advantage that the emotion AI is used for this specific purpose and the user (product tester) is fully aware that their emotions are being captured to improve usability or other features.

- Bias: When using facial expression analysis, models are likely to be retrained in different geographies to get the system to detect the different nuances present due to different cultural backgrounds.

- Variation across modalities. Certain emotions can be better detected with one technology mode than with another. For instance, "irony" can be detected using voice-based analysis while this is close to impossible to detect with facial expression analysis.

User Recommendations

- Review vendors' capabilities and reference cases carefully. As the market is currently very immature, most vendors are focused on two or three use cases in two or three industries. At the same time, identifying and processing human emotion is currently a gray area, especially in the EU. The EU Commission has started an initiative to review the ethical aspects of AI technologies, and emotion AI will certainly be part of this debate.

- Enhance your customer analytics and behavioral profiling by applying emotion AI technologies bringing your customer experience strategy to the next level.

- Be use-case-driven. The use case will determine the emotion AI technology to be used and vendor selection.

- Appoint responsibility for data privacy in your organization — a chief data privacy officer or equivalent.

- Work with your vendor on change management in order to avoid user backlash due to sensitive data being collected.

Sample Vendors

Behavioral Signals; Cogito; DAVI; Intelligent Voice; kama.ai; MorphCast; Soul Machines; Superceed; Symanto; Uniphore

Gartner Recommended Reading

Competitive Landscape: Emotion AI Technologies

Emerging Tech: Computer Vision, Voice Analysis and CGI Evolve Into Emotionally Intelligent Virtual Beings

Tool: Vendor Identification for Natural Language Technologies

Generative AI for Sales

Analysis By: Dan Gottlieb, Adnan Zijadic, Melissa Hilbert

Benefit Rating: Transformational

Market Penetration: 5% to 20% of target audience

Maturity: Emerging

Definition:

Generative AI technologies can generate new derived versions of content, strategies, designs and methods by learning from large repositories of original source content. Generative AI has profound business impacts, including on content discovery, creation, authenticity and regulations; automation of human work; and customer and employee experiences. For sales, generative AI can produce novel content in the form of emails, customer content, meeting summaries, training content and role plays.

Why This Is Important

Generative AI is a disruptive technology for the dynamic and people-driven function of B2B sales, making daily sales activities more efficient. The sudden availability of generative AI technologies from new and existing sales tech vendors is spurring a tidal wave of experimentation among B2B sales organizations. The technology can transform daily selling activities (value messaging content, gathering intelligence) and operations (training and certifying sellers, sales pipeline narratives, etc).

Business Impact

Sales tech vendors will offer stand-alone products or augment their existing products with generative AI capabilities in the next 12 months, introducing conversational methods for completing creative, administrative and analytical tasks. For example, sellers will generate cohesive value narratives for each customer more quickly. Sales enablement and operations teams will redirect resources to other creative tasks. Most employees will require upskilling to take advantage of the technology.

Drivers

- The hype around generative AI is accelerated by the mass availability of foundation models, also called transformers, available through services like ChatGPT and Google's Bard.

- Large-language-model platforms democratize how vendors can develop sales-specific use cases using narrower large language models so that organizations can train the AI on a tightly guarded subset, such as CRM, email and call data.

- On average, sellers spend 23.8 hours (or 52%) of their week creating messaging, according to the Gartner 2023 Seller Time Spend Assessment; text-based content generation is the most popularly adopted use case for generative AI technology.

- Sales has a lot of unstructured data, which can be time- and resource-consuming to work with. Generative AI can help sellers easily analyze and provide insights to unstructured data at pace without the requirement of large and costly data analytics teams.

- Workplace technologies such as Google Workspace and Microsoft Office 365 are adding generative AI capabilities across mainstream workplace technologies.

- Sales and RevTech vendors across many categories are augmenting existing capabilities with generative AI, such as sales force automation, sales engagement, revenue enablement platforms, revenue data and revenue intelligence.

- More than 30 generative RevTech vendors have emerged in the last two years, built primarily to help sales organizations deploy generative AI in sales messaging, training and analytics use cases.

Obstacles

- The rapidly growing hype may create a gap between perceived expectations of use cases and value drivers for applying generative AI versus actual reality, inhibiting adoption of generative AI for sellers.

- The text generated is sometimes inaccurate. Therefore, it must be monitored and curated. Moreover, data in the large language models may be drawn from many data sources — including Reddit, Wikipedia and Twitter — which could propagate inherent biases and potentially toxic or harmful content.

- Sales enablement teams may struggle to train frontline sellers with the skills to use a conversational interface responsibly and deftly, and ground generative AI in company-specific knowledge bases, which are necessary to integrate the tech into daily workflows.

- Generative AI research may be hindered by regulations. Governments are currently soliciting input on AI safety measures, potentially slowing down the path for vendors to innovate.

User Recommendations

- Prioritize value messaging, content creation and analytics use cases where you can rely on purchased capabilities or partner with vendors.

- Experiment strategically with a go-to-market fusion team to simultaneously develop generative AI operations competency and test the impact of generative AI on selling activities, such as value messaging.

- Resource "generative AI literacy" education to teach responsibility, trust and security; these are necessary for the safe use of generative AI.

- Partner with Gartner to develop a shortlist of generative AI revenue technology vendors. Pay attention to any associated costs based on a consumption metric and the level of control (for ethical, security and legal implications) enabled by the vendor for the end user.

- Prioritize any vendors that promote responsible deployment of models by publishing usage guidelines, enforcing those guidelines, documenting known vulnerabilities and weaknesses, and proactively disclosing harmful behavior and misuse scenarios.

Sample Vendors

Gong; HubSpot; Lavender; LeadIQ; Microsoft; Outreach; Regie; Salesforce; Salesloft; SecondNature

Gartner Recommended Reading

[Quick Answer: What Should Chief Sales Officers Know and Do About ChatGPT?](#)

[Innovation Insight: Generative Value Messaging Empowers B2B Sales With Words That Win](#)

[Market Guide for Sales Engagement Applications](#)

Composable Applications

Analysis By: Yefim Natis, Anne Thomas, Paul Vincent

Benefit Rating: High

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition:

Composable applications are built, in part or in whole, as flexible assemblies (compositions) of software components that represent well-defined business capabilities, packaged for programmatic access. The business-centric modularity of composable applications empowers democratized access to technology and business innovation. Composable applications support faster, safe and efficient digital business innovation. Advanced use of composable applications allows cross-application compositions.

Why This Is Important

Composable applications help support resilience, adaptability and growth of business in the context of increasingly frequent challenges, disruptions and opportunities. They support fast-paced business change while protecting the integrity of the outcomes, and bridge application software and business operations by using coarse-grained business-centric software modularity. Organizations that use composable applications maintain customer loyalty by better tracking their changing needs.

Business Impact

The more composable applications there are in the organization's portfolio, the better the organization is prepared to support changing business requirements through digital innovation. In return, greater confidence in the agility of applications promotes faster business thinking. The improved agility of business technology strengthens the ability of an organization to maintain and grow its business, a high value in the modern context of fast innovation, frequent challenges and opportunities.

Drivers

- In the continuously changing business context, demand for business adaptability directs organizations toward technology architecture that supports fast, safe and efficient application change.

- The demand for active participation of business decision makers in the design of their digital experiences promotes the adoption of technology models that are accessible and useful to business experts in addition to, and in cooperation with, technical professionals.

- The need to reduce the costs of redundancy in software capabilities across applications and business units drives organizations to reusable business modularity and from there to composability.

- The increasing number of vendors offering API-centric SaaS (also known as API products or "headless" SaaS) builds up a portfolio of available business-centric packaged application components — promoting their use as building blocks of composable business applications.

- The emerging architecture of micro front ends and superapps advances the principles of composability to the multifunctional user experience, promoting broader adoption of composability in application design.

- Fast-growing competence in mainstream organizations for the management of broad collections of APIs and event streams creates a technology foundation for safe operation of a composable business technology environment.

- The emerging business model of industry cloud, promotes the architecture of modularity and composition inside and across vertical use cases.

Obstacles

- Limited experience of composable thinking and planning in most software engineering organizations complicates composable design efforts and transition plans.

- Limited practice of business-IT collaboration for application design delays the effective composable design that depends on the complementary expert talents in multidisciplinary fusion teams.

- Most legacy applications can participate in composition via their APIs and/or event streams, but their architecture provides only minimal autonomy, delaying the full positive effect of composable architecture.

- Limited development and platform tools dedicated to composable application architecture limit the early success to advanced design teams capable of adapting precursor technologies to new objectives.

- Insufficient mapping of architectural thinking and models between business and technology planners makes digital representation of business functionality less prepared to track real-world business change.

User Recommendations

- Promote modular thinking as the means to great flexibility in business and software innovation.

- Champion API-first business software design, whether or not the application is also packaging the traditional UI capabilities.

- Build competence in API and event stream management as the precursor to managing composable business software modularity.

- Prioritize the formation of business-IT fusion teams to support faster and more effective adaptive change of business applications.

- Use low-code/no-code technologies to facilitate design collaboration of business and technology experts in fusion teams.

- Build an investment case for composability by highlighting how aging digital assets endanger the future success of the business by forming barriers to innovation, competition and customer satisfaction at the pace of market change.

- Gradually modernize (or replace) existing applications toward an architecture of business-centric modularity.

Sample Vendors

Elastic Path Software; Mambu; Novulo; Olympe; Spryker Systems

Gartner Recommended Reading

Becoming Composable: A Gartner Trend Insight Report

Quick Answer: Who's Who in the Life Cycle of Composable Applications?

Case Study: Composable Platform Strategy to Drive Business Agility (Nike)

Predicts 2023: Composable Applications Accelerate Business Innovation

Use Gartner's Reference Model to Deliver Intelligent Composable Business Applications

Continuous Intelligence

Analysis By: Pieter den Hamer

Benefit Rating: Transformational

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

Continuous intelligence (CI) is a design pattern in which real-time analytics are integrated into business operations to process current and contextual data and prescribe actions in response to events. It provides decision automation, augmentation or support. CI leverages multiple technologies such as augmented analytics, event stream processing, optimization, business rule management and machine learning.

Why This Is Important

CI plays a major role in digital business transformation and optimization projects. A key benefit is improved situational awareness and a common operating picture across business functions by providing real-time dashboards, alerts and next-best-action recommendations. Equally important is the capability to trigger automated responses by sending signals to machines or initiating business processes in cases where the decision on what to do can be automated.

Business Impact

The current hype is focused on holistic, integrated CI solutions that share real-time information from myriad sources with various departments and applications to support multiple business functions. This is a further evolution of many existing but more local CI point solutions for specific applications. Examples of more integrated CI include real-time 360-degree views of customers, supply chain networks and "enterprise nervous systems" in airlines, railroads and other transportation operations.

Drivers

- **CI systems leverage real-time and contextual data to support, augment or automate decisions** for customer interaction, manufacturing, fraud detection, supply chain management or other areas. CI is also used for real-time (re)scheduling and optimization; for example, to allocate resources in the most efficient manner possible.

- **CI goes beyond real-time descriptive, diagnostic and predictive analytics by supplying prescriptive information about the best available action in the current context.** It applies to situations in which real-time data from the last few seconds or minutes significantly improves business decisions. It is not relevant where equally good decisions can be made with data that is hours, days, weeks or older.

- **The hardware and software technologies for holistic, integrated CI are available and affordable.** These include inexpensive sensors, publish-and-subscribe messaging systems, such as Apache Kafka, event stream processing platforms and augmented analytics. CI may also leverage decision management tools, machine learning, business process automation platforms, IoT platforms or other development, middleware and analytics products.

- **The growing complexity, and the desired scalability, speed and automation of decision making fuel the adoption of decision intelligence.** This discipline includes the explicit modeling of decisions as a foundation to understand, assess and, where needed, reengineer decisions. It also encompasses the combination of connected insights, contextual analytics and CI.

- With increasing dynamics and disruptions in business, companies need to be more adaptive and resilient. **CI enables constant monitoring for threats and opportunities, including suggested or automated responses to those events.** To further improve this, adaptive machine learning combined with CI paves the way for what ultimately may become autonomous, constantly adapting and self-learning processes and organizations.

Obstacles

- **CI can be very challenging in terms of the full integration of real-time analytics with business processes** and their supporting applications, which, as a result, need to be redesigned. This requires close collaboration between disciplines such as data and analytics, IT application teams and business process designers.

- **Holistic, integral CI is applied at a cross-functional enterprise or ecosystem level,** resulting in a more complete situational awareness and more optimal decisions. However, to achieve this, resistance to change and a silo-oriented culture need to be overcome.

- **Many companies lack the skills necessary to develop custom-built solutions for CI.** These skills include streaming data processing and time-series data analysis, which are significantly different from processing and analyzing data "at rest."

- **Real-time integration of multiple data sources leaves little room for dealing with semantic differences or data quality issues,** implying the need for mature data management practices.

User Recommendations

- **Involve and work with business managers and subject-matter experts** as early as possible in the requirements-gathering and implementation processes, because when CI is implemented, it fundamentally affects the design of business processes.

- **Choose CI offerings in multidisciplinary collaboration among business domain experts, change managers, architects and developers.** Subscribe to SaaS offerings or acquire packaged applications or devices that provide internal continuous intelligence as a point solution to reduce the effort of achieving CI. However, more integral, cross-functional CI will still entail custom design and integration with multiple applications.

- **Hire outside service providers or train your staff on the new disciplines** if your enterprise wants to build its own solutions and does not already have staff expertise in messaging, stream analytics, machine learning and decision management disciplines.

Sample Vendors

Datapred; IBM; Nstream; Quantexa; Radicalbit; SAS; Spindox; TIBCO Software; TransVoyant; Workato

Gartner Recommended Reading

5 Essential Practices for Real-Time Analytics

How to Use Real-Time Analytics When Building an Enterprise Nervous System

Market Guide for Event Stream Processing

What Comes After Digital Business? Exploring the Era of Autonomous Business

Digital Adoption Platforms

Analysis By: Melissa Hilbert

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

A digital adoption platform (DAP) overlays applications (e.g., CRM, HCM, ERP, legacy and external) with in-application guided learning, simulations, nudging and analytics to drive adoption and engagement. DAPs improve adoption and usage supporting organizations' digital transformation objectives. They provide consistent user experiences that help users complete work efficiently. A DAP also offers analytics driving actionable insights to improve experience and streamlines work, improving ROI.

Why This Is Important

DAPs improve user productivity and efficiency, reducing digital friction and increasing user engagement and employee retention. Key employee use cases appear in sales, HR, ERP and digital workplace, but this technology applies to all functional areas in an organization. For external use cases where your company sells software, consider embedding a DAP to improve customer experience and loyalty. Use cases include onboarding, technology adoption and use, change management and process efficiency.

Business Impact

DAPs provide high value for organizations looking to improve adoption of applications for employees and customer experience. The ROI of DAP can be measured by:

- Reducing employee onboarding and training costs

- Speeding new-hire time to productivity

- Eliminating change management related training

- Reducing support tickets

- Improving user engagement, proficiency and efficiency

- Minimal setup and low administrative overhead

- Usage analytics and insights enabling continuous improvement

- Improved CSAT scores

Drivers

Digital adoption platforms are relevant for any organization in any vertical. The most prominent application employee use cases to date include where sales force automation (SFA), HR, ERP, procurement or digital workplace solutions are used.

- The solutions in the market have evolved to include platform capabilities, such as the use of partner ecosystems.

- The need for cross-application guidance and analytics is critical to digital transformation and improved employee experience.

- DAPs also address the need for multiple device types such as mobile, desktop, hybrid, web and on-premises hosted applications.

- Additionally, they are relevant for organizations selling software where user adoption and usage are critical to customer value realization, renewals and expansion.

- DAPs drive actionable insights to improve the user experience and maximize ROI from application investments.

Organizations should seek this technology if they are facing the following challenges:

- There is poor adoption of existing applications or high churn or growth of employees.

- Tasks are complex within an application.

- Tasks are performed infrequently but have high organizational impact.

- Business processes are changing frequently and knowledge management is difficult.

- An application changes frequently.

- Customers' end users using your software have low engagement where adoption is closely correlated to renewal or growth.

Obstacles

- On-premises applications behind firewalls are more difficult for some vendors to connect to and will be more costly to deploy while also losing some analytics.

- Mobile application support is weak from many vendors; some do not offer it at all.

- Language translation for content varies greatly among vendors.

- Some vendors utilize a per-application (including varying pricing for application complexity) and per-user pricing model, which can increase costs when deploying at the functional or enterprise level.

- Some vendors do not support cross-application guidance and analytics.

- Governance and new DAP roles for guidance, content creation and maintenance are required, as well as a partnership between product, customer success and IT teams.

User Recommendations

- Create a plan by functional area to incorporate DAP by prioritizing high-impact applications such as CRM, ERP, HCM or client-facing applications across the entire tech stack or product portfolio.

- Evaluate all applications for an employee's work hub by documenting all applications used to get work done by an employee.

- Ensure analytics are deep at both a macro (aggregate) and a micro (workflow) level and can cross applications for a single workflow.

- Investigate multilanguage capabilities for application and content support.

- Design a governance plan by including new DAP roles or reallocation of learning and development (L&D) or subject matter expert (SME) roles to support content and a rollout across the organization.

Sample Vendors

AppLearn; Apty; Knowmore; myMeta; Pendo; SAP; tts; Userlane; WalkMe; Whatfix

Gartner Recommended Reading

Market Guide for Digital Adoption Platforms

Toolkit: Job Descriptions for the Digital Workplace

Tool: Guide to Selecting Digital Adoption Platform Vendors

Create an Enablement Continuum to Advance Digital Skills Outside of IT

Revenue Enablement Platforms

Analysis By: Melissa Hilbert, Elizabeth Beard, Doug Bushée

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

Revenue enablement platforms unite sales and customer-facing enablement and revenue functions. They encompass revenue-generating roles including customer success, marketing and presales. The platforms have capabilities for digital content, training and coaching. They integrate with sales force automation (SFA) or marketing automation platforms, feature buyer engagement analysis, and measure and build role skills and competencies improving commercial execution.

Why This Is Important

Revenue enablement must be nimble in adapting to all revenue-generating roles and selling situations. Most solutions offer a full native platform for content, training and coaching. They provide machine learning recommendations to help customer-facing selling or revenue-generating roles improve engagement with buyers. Organizations must enable sellers as well as customer success, presales and marketing roles to improve sales outcomes while enabling buyers to self-serve.

Business Impact

Enabling revenue-generating roles to impact sales outcomes with holistic enablement of content, training and coaching will benefit from:

- Buyer engagement analytics and next-best action

- Advanced content search

- Video and call analysis with sentiment, emotion AI, and topic modeling

- Integration with applications (e.g., videoconferencing, guided selling, sales engagement, forecast management, and sales force and marketing automation platforms)

- Digital sales rooms (DSRs)

Drivers

- High growth and adoption by sellers leads to better buyer-seller engagement, and therefore better chances of achieving desired sales outcomes.

- Agile ability to sell in digital and traditional channels by providing consistent and clear messaging to customers to aid them in their buying journeys.

- Overlapping capabilities with sales engagement and revenue intelligence platforms continue to evolve or merge with revenue enablement platforms.

- Adoption of revenue enablement platforms improves revenue-generating roles' (i.e., sales, presales, marketing and customer success) performance, skills and engagement with buyers, improving sales outcomes and building trust especially at moments of uncertainty.

- DSRs are being used to enable collaboration between buyers and sellers or partners throughout the customer life cycle by means of online meetings, collaboration tools, buyer engagement analytics, conversational analytics, negotiation features and links to CPQ and digital commerce. This enables selling organizations to develop multiple stakeholder penetration and alignment.

Obstacles

- Sales force automation (SFA) systems do not offer strong customer engagement capabilities, but are increasing capabilities that overlap with those of revenue enablement platforms.

- Augmented reality and virtual reality are not widely supported by revenue enablement platforms.

- Evidence of support for new mediums like webinars and livestreams has yet to emerge.

- Adaptive learning is not a strong capability of these platforms but is beginning to emerge.

- For platforms offering DSRs, ensure that the proper GDPR requirements are kept for contact privacy and preferences.

- Organizations need to examine their willingness to "enable enablement teams." There is a cultural shift to using technology and the use of content such as video, coaching and conversational intelligence.

User Recommendations

- Evaluate revenue enablement platforms for revenue-generating roles by investigating specific needs by role, even if sellers are your primary focus and even if the needs overlap or the revenue enablement platform conflicts with some features of existing technology investments. These platforms enable rapid improvements to the effectiveness of sales execution.

- Evaluate the depth and breadth of machine learning for skill scoring and prescriptive recommendations by investigating deeper into how the platform's machine learning operates.

- Investigate solutions that include DSRs to broaden the audience to include customers to support virtual and hybrid buying and selling. Examine their ability to provide collaboration within persistent personalized microsites that enable a buyer to purchase seller-free if they want to do so.

- Examine the administrative UI of solutions carefully by exploring common use cases and the effort required to determine support and maintenance of the platform.

Sample Vendors

Allego; Appinium; Bigtincan; Highspot; Mediafly; Mindtickle; Pitcher; SalesHood; Seismic; Showpad

Gartner Recommended Reading

Market Guide for Revenue Enablement Platforms

Toolkit: RFP for Revenue Enablement Platforms

Revenue Enablement Is a Maturity Evolution

Sales Enablement Benchmark Report 2022

The Gartner Sales Podcast: Enablement's Evolution From Sales Enablement to Revenue Enablement, With Melissa Hilbert

Hyperautomation

Analysis By: Frances Karamouzis, Keith Guttridge, Laurie Shotton, Saikat Ray

Benefit Rating: Transformational

Market Penetration: More than 50% of target audience

Maturity: Mature mainstream

Definition:

Business-driven hyperautomation is a disciplined approach that organizations use to rapidly identify, vet, and automate as many business and IT processes as possible. Hyperautomation involves the orchestrated use of multiple technologies, tools or platforms to achieve business results. These include, but are not limited to, AI, machine learning, event-driven software architecture, robotic process automation (RPA), iPaaS, packaged software and process/task automation tools.

Why This Is Important

The primary reason that hyperautomation is critical is the unrelenting demand for accelerated growth through business model innovation or disruption, coupled with the underlying foundation of operational excellence across processes and functions. This is important as organizations continue to focus on business outcomes such as higher quality, more resilient processes, and higher usage due to employee- and customer-centric experiences, among others.

Business Impact

The most important business impacts are aligned to business outcomes such as cost optimization, growth, business agility or innovation. Hyperautomation initiatives are fluid enough to align to one or all of these outcomes. Examples of results may be better (higher quality, more resilient) business or IT processes, speed (time to market, cycle time reduction and quicker adoption) or intelligent (data-driven) decision making at scale.

Drivers

- The biggest driver of hyperautomation is funding from business units (as opposed to the IT budget). These business units continue to hire and fund initiatives driven by fusion teams and business technologists.

- The continued unabated spending on hyperautomation initiatives is forecast to exceed $1 trillion in 2023. This includes spending on products (software, platforms and tools) coupled with services spending on consulting, system integration and managed services.

- Additionally, there have been five successive years of capital investment of $1 billion or more in vendors that can be attributed to the various technology categories that enable hyperautomation initiatives.

- The increased investment has fueled the growth of offerings with expanded breadth and depth within the vast vendor landscape (both organic growth and through acquisitions).

Obstacles

- **Lack of measurement of quantifiable value:** Only a few organizations (estimated at less than 20%) have mastered the measurement of hyperautomation initiatives.

- **Lack of planning for total cost of ownership (TCO) or governance:** The explosion of funded hyperautomation initiatives, coupled with the need for speed, often leaves unaddressed the all-important planning for post-production-managed operations and governance structures.

- **"Siloed" approach:** The ubiquity of hyperautomation has led to an incredible volume and velocity of adoption across functions. Unfortunately, the concurrent nature across business functions has been executed via "siloed" or diffuse purchases of technology tools, solutions and platforms.

- **Technology confusion and overspend:** There is no single vendor or technology that will enable hyperautomation initiatives. Highly fragmented and overlapping technology markets have resulted in complex architectures, overspending and lack of enterprise orchestration.

User Recommendations

- Define shared ownership and metrics. Focus on regular intervals for measurement and updates. The leading organizations in the world ensure this involves finance to facilitate public reporting of success.

- Maximize the likelihood of successful hyperautomation initiatives by architecting and planning multiple concurrent initiatives. Demand holistic mapping of collective initiatives, rather than siloes within specific functions.

- Recognize that the technology is not trivial as there is no single vendor or technology that will enable hyperautomation initiative. Focus on modularity and discoverability in the design. Take an API-first approach.

- Ensure appropriate investment in vendor management and risk competencies due to the volume of services and technologies involved.

- Establish and curate an adaptive governance structure with the goal of managing risk, and driving operational resiliency and agility while optimizing TCO.

Sample Vendors

Automation Anywhere; Boomi; Celonis; Microsoft; OutSystems; SnapLogic

Gartner Recommended Reading

The Gartner 2023 Predictions: Hyperautomation (Inclusive of AI, RPA & Low Code)

The Executive Guide to Maximizing Hyperautomation

Future of Work Trends: Hyperautomation Growth Initiatives Delivered by High-Performance Fusion Teams

Voice-Driven Sales Apps

Analysis By: Ilona Hansen

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

Voice-driven sales apps feature conversational UI design principles and AI speech recognition technology for improving sales data retrieval and executing discrete selling motions. Sales functions supported by this technology include note capturing, creating new contact records, entering a new appointment on a calendar and changing the disposition of an opportunity in a sales pipeline.

Why This Is Important

This market matured further in the past year due to the adoption of sales force automation tools, including voice-driven sales apps. The technology is increasingly recognized for improving sales productivity and is transforming traditional business models across various industries into more modern, digital businesses. Based on multichannel complexities and growing customer needs for CX, Gartner predicts an earlier maturity point than was previously predicted.

Business Impact

Voice-driven sales apps improve sales productivity mainly by:

- Offering a high level of usability. It allows sellers to just talk to the app while visiting customers, instead of typing in the mobile- and browser-based sales apps.

- Advanced functions that allow users to execute multiple actions and steps using natural language techniques.

- Natural language querying, where voice commands are used to retrieve specific reports or answers to open-ended questions.

Drivers

- Voice-driven sales apps are relevant to both field-based and office-based personnel due to the quality of the advanced functions. Sales personnel can take advantage of options such as natural language querying by using voice commands to retrieve specific reports or answers to open-ended questions.

- The rise of GenAI is reflected in most vendors' products. It allows sellers to ask for forecast insights, pipeline assessments and further. The results are presented to the seller through dashboards, but also in full plain text.

- Adoption of this category is accelerating because the pandemic has required field-based sellers to become virtual sellers. This technology category will likely reach the Plateau of Productivity within five years, however it could be impacted by developments in the sales force automation (SFA) and mobile sales productivity applications.

- Voice-driven sales applications have the likelihood to become the preferred user interface, and commensurate in functionality and capabilities as that of keyboard-based functions.

Obstacles

- Speech-to-text engines are still not 100% accurate and, in fact, some may render only about 70% of communication correctly for activities involving relatively well-defined vocabularies.

- These systems primarily come in the English language, which requires checking the language availability frequently.Vendors' capabilities are often white labeled from other vendors.

- Basic functionality is limited to only a few predefined sets of skills, such as updating opportunities, entering call activities or capturing notes for the notes field of the SFA system.

User Recommendations

- Pilot of this technology should be done by application leaders supporting sales with significant investments in mobile field sales forces.

- Prioritize this functionality based upon the time-saving efficiencies offered for both voice-driven data entry and data retrieval.

- Test whether the accuracy of the proposed systems in capturing details is sufficient to enable field sales to easily use these systems without errors.

- Use these systems to reduce manual data entry or manual data retrieval to help replace inefficient user interface patterns such as manual pick lists and manual data entry forms.

Sample Vendors

ConverSight; Microsoft; Nuance Communications; Oracle; Tact.ai Technologies; Zoho

Revenue Intelligence

Analysis By: Steve Rietberg, Dan Gottlieb, Adnan Zijadic

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Early mainstream

Definition:

Revenue intelligence platforms enhance the activity management, deal insights and pipeline analytics offered by sales force automation (SFA) platforms. Predominantly used by B2B sales organizations, revenue intelligence platforms facilitate the capture of sales interactions and coach sellers to quickly anticipate buyers' needs. They use AI/ML technology to amplify the value of commercial data, accelerate sales cycles, and provide better visibility and insights on pipeline performance.

Why This Is Important

As buyers increasingly opt for digital channels, sales organizations seek to extract maximum information and insight from every customer interaction. Revenue intelligence platforms enable sales organizations to capture a depth of detail on seller interactions while providing insights needed to understand deal risk and drive progression. The resulting AI-driven insights drive guided selling, deal coaching and forecast accuracy.

Business Impact

Revenue intelligence platforms will have the greatest impact on B2B sales, where sales cycles tend to be longer and more complex, and have more interactions (both human and digital) between buyer and supplier. IT leaders, application leaders and heads of sales and sales operations will be interested in the benefits that revenue intelligence offers their organizations. Leaders of marketing and customer service will also have use cases where this technology may be applied.

Drivers

- **Digital buying behavior** — B2B buyers often prefer to use digital channels when interacting with suppliers. This shift away from human interaction creates an information gap in suppliers' pipeline visibility, since buyer interactions have traditionally served as the primary source of assessing deal progress. As a result, sales organizations must maximize the insights captured from their remaining buyer interactions and must infer buyer sentiment from an increasing number of digital interactions.

- **Increasing volumes of data** — Revenue intelligence platforms can acquire voice-of-the-customer data at scale, structure it for analysis using AI and make nuanced but valuable recommendations for next best actions.

- **Automated capture of seller activity data** — Simplifying or automating the capture of seller activity data has become a critical capability across many emerging sales technologies.

- **High seller burden** — Revenue intelligence platforms relieve sellers from the daily minutiae of prioritizing accounts and planning next steps by serving up a consolidated worklist of their most important upcoming activities.

- **Increasing user trust in maturing AI technology** — The AI-based features offered by many revenue intelligence vendors — including conversation intelligence, generative AI, guided selling and predictive analytics for sales forecasting — have matured and are beginning to achieve mainstream adoption.

Obstacles

- **Incompatible data models** — Many vendors are not yet equipped to support data behind additional business models beyond that of SaaS subscriptions.

- **Solution complexity** — Customers strive to minimize the number of tools and applications their sellers need to access as they engage with customers. Revenue intelligence platforms offer a range of implementation options; some require sellers to access the vendor's application, while others offer varying degrees of integration with SFA data and UI.

- **Data security requirements** — Revenue intelligence platforms require account, opportunity and activity data to be shared outside the customer's sales force automation platform, which may conflict with internal data security policies.

- **Uncertainty** — Some prospective customers are reluctant to invest in a third-party revenue intelligence solution, believing that their SFA vendor will soon offer comparable features.

User Recommendations

- Fully assess existing solutions from your SFA vendor to determine whether incremental investment in a third-party revenue intelligence platform is warranted.

- Focus on the most impactful potential benefits by prioritizing vendors with deep activity intelligence capabilities, such as exposing the context of buyer and seller activity.

- Prioritize the seller experience when evaluating revenue intelligence platforms. Look for solutions that will maximize sellers time by serving up alerts and prioritizing actions based on AI analysis.

- Assess revenue intelligence platform administration. The decision between two platforms may hinge on vendor-led configuration adjustments that can decrease customer agility and stunt innovation or customer-driven self-service options tailored to the sales organization's specific needs.

Sample Vendors

Aviso; BoostUp; Clari; Gong; Mediafly; Outreach; Revenue Grid; Revenue.io; Salesloft

Gartner Recommended Reading

Market Guide for Revenue Intelligence Platforms

CSOs: Reduce Sales Cycles and Improve Customer Engagement Using AI

Climbing the Slope

CSM Platforms

Analysis By: Michael Maziarka

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition:

Customer success management (CSM) platforms automate postsales client engagement processes that are common to companies with recurring and subscription-based revenue models. Initially deployed primarily to stem churn, these solutions are now implemented to proactively manage customer retention, adoption, and upsell/cross-sell objectives. Capabilities include success plans, product adoption monitoring, alerts, playbooks, customer health scores, and customer outreach and feedback.

Why This Is Important

In existence for over a decade, CSM technology was initially deployed primarily to reduce churn in high-value B2B SaaS accounts. CSM platforms are now implemented to proactively manage and scale customer engagement, adoption, retention and expansion objectives across all customer segments. With traction, historically, in the technology (SaaS, hardware, services), telco, and device sectors, CSM platforms are now moving into other industries, such as manufacturing, media and financial services.

Business Impact

CSM platforms are highly beneficial for companies that need to improve and automate postsale processes and engagement, including onboarding, adoption and renewals. CSM is now also serving as a foundation for upsell and cross-sell. This means extending the reach of the CSM platform — or at least the data and insights — more heavily into marketing and sales. Integration with account-based marketing (ABM) platforms will help with these goals.

Drivers

- Penetration within the tech sector continues to build — across all types of products and services, and not just cloud applications. As CSM practices grow across products and support a larger number of clients, a technology solution becomes necessary to drive consistency of execution at scale.

- It is not uncommon for large companies to have pockets of CSM implementations at a product or product-line level within designated regions. Though this effectively guides customers on their journey with a specific product, it may not provide a consistent experience when other products are utilized or when the product is used in different regions across the world. When that is a goal, customer success must become an enterprisewide mindset and discipline.

- As CSM practices mature, they typically extend beyond solely delivering a high-touch model to strategic accounts to encompass the use of digital and utilize a high degree of automation to reach all customer segments.

- From an inquiry perspective, and in reviewing referenced customers from the providers, we are starting to see CSM platform adoption expand into other industries, including manufacturing, media, medical devices, financial services and transportation. In many of these cases, there remains some type of "digital product" for the focus of the CSM initiative, and most are still B2B.

- There is a growing interest from the service sector (even without a digital product offering), with a goal of renewable and managed services, expansion, project extensions or variations (upsell/cross-sell).

Obstacles

- Early implementers of CSM platforms want to shorten onboarding but are also uncertain about how to define the customer journey and best practices for engagement and selecting the health signals that are the best indicators for retention and/or expansion. Though platform providers have honed packaging and service models, there remains pressure to speed time to value.

- The question of whether the solution should instead be built on existing CRM or data warehouses is prevalent, especially in larger organizations.

- To use CSM for expansion, connectivity with marketing and sales data and solutions is needed. Some providers have added features for cross-sell or upsell opportunities, but this remains a prime use case for integration with ABM.

- Companies that have direct and indirect sales channels want to leverage CSM across both, but implementing CSM through partners is more challenging due to the minimal visibility afforded into accounts.

User Recommendations

- Evaluate solutions based on their ability to integrate with your customer data sources (including product usage data), ease of defining customer journey playbooks, and the capability to provide actionable insights through customer health scores and dashboards. Determine how users beyond the CSM team will access and interact with workflows and data.

- Explore buy-versus-build options by evaluating your tech stack and comparing to CSM platforms. Assess both initial implementation and the effort to regularly modify as your practice evolves.

- For larger deployments, begin with a pilot and use a "crawl, walk, run" approach, and initially focus on life cycle stages (e.g., onboarding) that provide the most value to customers.

- For companies with large product portfolios or global operations, or that sell through indirect channels, define how your CSM solution will be deployed across these teams, especially if expansion through cross-selling is a goal.

Sample Vendors

Catalyst; ChurnZero; ClientSuccess; Custify; Freshworks; Gainsight; Planhat; SmartKarrot; Totango; Vitally

Gartner Recommended Reading

Market Guide for Customer Success Management Platforms

Use These 4 Pillars to Build a Sustainable Customer Success Foundation

Build a Customer Success Management Program to Retain and Grow Client Revenue

Undertake Customer Journey Mapping as a Foundation for Customer Success

Scale Customer Success Management Through 'Tech Touch'

Embedded Analytics

Analysis By: Kevin Quinn, Julian Sun

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition:

Embedded analytics are delivered within a user's natural workflow, without the need to toggle to another application. The embedded analytics market definition is changing as the availability of low-/no-code interfaces increases, drawing on the services originally exposed via APIs to support embedding. Next-generation embedded analytics capabilities include embedding predictive analytics, prescriptive recommendations (next best action), automated insights and natural language virtual agents.

Why This Is Important

Embedded analytics enables nondevelopers to compose stand-alone composable analytic applications. More platforms are now offering automated insights like key driver analysis, outlier/anomaly detection, clustering and forecasting as capabilities are evolving. These capabilities enable citizen developers to extend the reach and connectedness of how analytics and business intelligence (ABI) platforms are used. They may enter the embedded space from adjacent markets as headless services to enhance decision support and augmentation.

Business Impact

Embedding analytics and data science functionalities (predictive and prescriptive analytics) within websites or business applications via APIs reduce change management and increase analytics adoption close to decision points. The new landscape for embedded analytics will include vendors from adjacent markets (e.g., DSAI, low-code application platforms and CAIDS).

Drivers

- **A trend toward composable architectures**: Composable architectures based on containers and microservices have enabled organizations to more easily assemble a best-of-breed environment out of preexisting components. Additionally, low-code application development platforms are enabling citizen developers to "compose" their applications through an assembling experience (e.g., Microsoft Power Apps for Power BI and Viz Lightning for Tableau).

- **AI and market convergence**: Traditional embedded analytics products have come from the ABI market; however, embedded analytics can originate in data science and AI platforms, which can employ (machine learning) ML to offer automated key drivers, make predictions, and prescribe the next best action. To fight back, ABI vendors have been adding AutoML capabilities by building or acquiring companies that offer it. Case in point: Both Tableau and Qlik offer AutoML.

- **Intelligent applications with embedded AI delivered as managed services:** Organizations want to be smart, efficient and innovative AI companies but after experimentation with AI and ML, they have found the tremendous complexities in operationalizing and scaling AI. Instead, they are finding myriad intelligent applications with embedded advanced analytics that are delivered as managed services.

- **Consumerization of analytics and ChatGPT:** Many vendors in the ABI space have shifted focus from enabling business analysts to empowering business consumers to ask and answer questions. Technologies like ChatGPT from OpenAI have demonstrated that nontechnical people can have intelligent conversations with AI bots trained on historical data. In business, these conversations can be about analytics like key drivers, outliers and anomalies even recommendations for the next best action.

Obstacles

- ABI vendors and embedded analytics vendors have shifted focus away from building reports and dashboards to providing functionality for generating predictive and prescriptive analytics leveraging AI and ML. The challenge is that AI and ML technologies are the domain of data science and AI platforms as well as many open-source tools. This has put the two markets on a collision course. End-user organizations have a choice of embedding advanced analytics via either offering.

- Besides huge open-source libraries of prebuilt components for R and Python, there are libraries of open-source D3 charts that offer the potential for internal development teams to build their solutions at a much lower cost.

- Users have the perception that embedding analytics is hard and it requires IT (e.g., API's SDKs, JavaScript, etc.). This perception will need to be overcome, and this will be the role of new no-code platforms.

User Recommendations

- Build upon existing D&A investments by evaluating the embedded analytics capabilities offered by your enterprise standard ABI and DSML platforms. Explore vendors that have specialized in embedded analytics, particularly when deploying large user-scale experiences and/or to stakeholders outside your organization.

- Plan for growth in the number of citizen developers and business technologists using low-/no-code capabilities to extend how they use self-service analytics by providing training in foundational software development practices.

- Scan the market for intelligent applications and managed services — as an alternative to developing analytics to embed in your applications — that provide advanced analytics, including predictions, recommendations and embedded chatbots/virtual assistants that can act as an analytics advisor.

Sample Vendors

GoodData; Google; Infor; Microsoft; MicroStrategy; Oracle; Salesforce; Sisense; Syncfusion; ThoughtSpot

Gartner Recommended Reading

Market Guide for Embedded Analytics

Magic Quadrant for Analytics and Business Intelligence Platforms

Account Planning Tools

Analysis By: Robert Blaisdell

Benefit Rating: Moderate

Market Penetration: 20% to 50% of target audience

Maturity: Mature mainstream

Definition:

Account planning tools (APTs) unite customer stakeholders — sales teams, service teams and marketing — around a common action plan for meeting revenue, service and relationship objectives of specific accounts. APTs automate work commonly performed manually, providing action plans, playbooks, dashboards, relationship maps and workflows.

Why This Is Important

APTs help B2B sales organizations impact revenue growth and improve customer retention throughout the customer life cycle. APTs improve account management precision by synthesizing information to provide a consistent account management approach and holistic performance analysis. This technology category will likely reach the Plateau of Productivity within two years, but it could be impacted by developments in sales force automation (SFA) and artificial intelligence.

Business Impact

APTs offer process efficiencies for a modest investment when compared with the effort that it would take to build custom account planning processes in a CRM/SFA system. Users of these tools cite improvement in sales execution, increased shared customer visibility, and high relevance to go-to-market initiatives. Prospects for these tools can attain rapid time to value if they already have a manual tool or established process in place for consistent account management and planning.

Drivers

- Providers that rely on sales to large, multisubsidiary accounts rely on APTs to develop consistent go-to-market processes. Additionally, companies with recurring revenue models require tools that standardize and coordinate their account-level sales and customer retention processes.

- Companies that require better coordination across the customer-facing roles on account selling teams commonly implement tools with strong account management functions, including action plans, stakeholder heat maps and account status tracking.

Obstacles

- The creation of up-to-date and actionable account plans is a perennial problem in many sales organizations due to three challenges: immature planning processes, nonstandardized templates, and a lack of specialized account planning functionality in most CRMs/SFAs,

- The pace of adoption is hampered by a "good enough" philosophy and tight timelines because APT systems have a cost associated with the initial investment and ongoing support that is often being completed by less expensive or manually created tools.

- APT systems require operational overhead, both in terms of initial setup and ongoing maintenance. Gartner has spoken with clients using these systems that failed to achieve ROI because the sales organization did not maintain the account plans, or failed to make it central to its account management processes.

User Recommendations

- Support initial adoption and ongoing utilization of the account planning tool via training, resources and embedded enablement.

- Integrate the APT into your CRM/SFA system (if not native) in order to have data and activities, such as opportunity updates, directly feed the account planning tool.

- Aggregate account data from various systems and sources to provide a holistic rating of a customer's current status and likelihood of continuing their relationship.

- Capture and analyze individual customer and/or overall account engagement through various interactive channels such as email, website and seller interaction.

Sample Vendors

DemandFarm; Kapta; Korn Ferry; Prolifiq; Squivr; Upland Altify; Valkre Solutions

Gartner Recommended Reading

Market Guide for Account Planning Tools

Treat Sales Tech Implementation Like a Product to Improve Adoption

CSOs: Reduce Sales Cycles and Improve Customer Engagement Using AI

Account-Based Marketing Platforms

Analysis By: Ray Pun, Julian Poulter, Christy Ferguson, Jenifer Silverstein, Jeff Goldberg

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition:

Account-based marketing (ABM) platforms are software that enables B2B marketing and sales teams to run ABM programs at scale, including account selection, planning, engagement and reporting. Platforms enable the creation of target account lists by unifying first- and third-party data. In addition, platforms may engage audiences by activating channels such as display advertising, social advertising, email and sales engagement, using a mix of native capabilities and integrations.

Why This Is Important

As B2B companies scale and optimize their ABM programs, ABM platforms become increasingly necessary. The data and predictive modeling capabilities improve account selection, while campaign orchestration and activation across channels can broaden reach and engagement. Account-level reporting saves time and improves visibility, and sales alerts/intelligence increase sales alignment. Although ABM capabilities exist elsewhere, few ABM programs operate at scale without an ABM platform.

Business Impact

ABM has quickly become a key go-to-market model for many B2B companies, starting with the tech sector, and expanding to other industries, including business services, manufacturing and financial services. The adoption of ABM to reach net new and existing customers at scale has continued to grow rapidly. This is partly because ABM platforms can provide account insights that enable better decision making, improve engagement across accounts and demonstrate ABM ROI more easily.

Drivers

- Gartner client interest for ABM programs and technology to scale these efforts remains high. According to the 2023 Gartner Technology Marketing Benchmarks Survey, 63% of all technology marketers with $100 million or more in annual revenue have a marketing budget dedicated to ABM technologies. When successful, ABM programs deliver significant lift across key marketing and sales metrics including pipeline value.

- In 2021 and into 2022, ABM vendors invested (and continue to invest) heavily in capabilities for integrations, intent data, campaign orchestration and activation across channels, improved reporting and sales insights, AI-driven modeling, visualization, and user experience. The new functionality (through both acquisition and organic development) has improved customer success and increased buy-in and adoption from users outside of marketing, such as SDRs and account executives. As a result, Gartner estimates the ABM software market grew at 30% during 2022 due to strong growth from existing vendors and the entrance of new platforms. In addition, Gartner forecasts a CAGR of 24.5% until 2026.

- The entrance of new vendors and the increased functionality from many platforms have provided more viable choices in the ABM platform market. Marketers can use platforms with a comprehensive set of capabilities for native engagement channels, or vendors that support a "best of breed" approach by integrating with adjacent tools in the martech stack.

- The average ABM platform customer retention rate reported by vendors in this category is below the technology industry target of 90%. Gartner observes a fair amount of switching from vendor to vendor during subscription renewal periods. This is expected for a market category that is on the Slope of Enlightenment and the growing maturity of buyers who make purchase decisions based on past experience with ABM platform providers. But the market continues to remain on track for a steady progression through the Hype Cycle.

Obstacles

■ Geographic adoption remains heavily tilted toward companies headquartered in North America and Western Europe. ABM platform vendors continue to invest in GTM programs that are tailored for specific regions and countries. However, most platforms only offer a user experience in English.

■ The top vertical industry for ABM platform adoption is technology providers. To boost adoption outside of this market segment, some vendors have tailored GTM programs for specific industries such as financial services and manufacturing.

■ Poor alignment between sales and marketing teams such as the lack of account plans and shared KPIs can hinder adoption.

■ The ultimate size of the market and the time to plateau remain dependent on adoption across more geographies and vertical industries beyond high tech. In addition, the expected convergence between ABM platforms and B2B marketing automation is dependent on the pace of product innovation and merger and acquisition activity in 2023 and beyond.

User Recommendations

■ Ensure that business leaders are aligned and fully committed to the ABM program including use cases, program objectives and metrics. This helps in preparing an operating model to implement and use the ABM platform and increases the odds of success.

■ Use proofs of concept to evaluate and validate the vendor's intent data quality, and how the capability addresses the specific markets and buying teams that you target across vertical and geographic segments.

■ Request product roadmaps and martech stack integration details from vendors during the selection process, as the platforms are rapidly evolving.

■ Ask vendors to explain how their audience targeting is or will be affected by the deprecation of third-party cookies in web browsers as well as regional and local privacy regulations.

Sample Vendors

6sense; Demandbase; Dun & Bradstreet; Madison Logic; RollWorks; Terminus; Triblio; ZoomInfo

Gartner Recommended Reading

Magic Quadrant for Account-Based Marketing Platforms

Critical Capabilities for Account-Based Marketing Platforms

Tech Marketing Benchmarks Survey 2022: Account-Based Marketing Insights

Use ABM Platforms to Improve Program Performance

Research Roundup: Account-Based Marketing

Sales Engagement Applications

Analysis By: Ilona Hansen, Dan Gottlieb

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Adolescent

Definition:

Sales engagement applications help sales teams streamline daily digital seller workflow tasks, guide seller decision making with AI/ML and provide a seller-centric user experience for SFA/CRM. Sales leaders overwhelmingly name enhancing sales engagement — the interactions between sellers and buyers — as their top priority. It helps sales organizations, mainly outbound-dedicated resources (top to midfunnel), to move prospects through the sales pipeline with greater efficiency and effectiveness.

Why This Is Important

Sales engagement applications (SEAs) have emerged to serve as the primary system of action and user interface for daily B2B seller activities. SEAs optimize seller productivity with multichannel engagement, workflow execution and artificial intelligence (AI)/automation into a single interface. Buyers need sellers to exceed expectations at every interaction on their preferred — and increasingly digital — channels. SEAs streamline how sellers orchestrate sales activities and deal workflows.

Business Impact

SEAs optimize seller productivity by combining four key capabilities into a single interface:

- Multichannel engagement (e.g., email, voice, SMS, video, social media)

- Workflow automation

- Time-saving AI/automation

- Improved data capture and employee experience

Sales engagement applications impact each metric comprising sales velocity: increase the number of deals in a seller's pipeline and the size and win-rate of those deals, and reduce the amount of time it takes to close them.

Drivers

- The technology is a new front end for sales force automation (SFA)/CRM. Sellers rely on it to streamline guidance into whom to engage and when, and what messaging to use, while capturing sales activities back into SFA/CRM.

- SEA recordings and analytics of engagements let the AI, the seller and the first-line manager review customer engagements to identify and practice improvements, stepping up customer interaction performance across the team.

- The SEA market is transitioning from systems used by a few business development sellers to systems of action for the entire customer-facing team, prescribing engagement tactics and iterating on messaging.

- Demand for higher seller activity, expanded volume and greater sales process efficiency has increased. To help companies grow, sellers face increased pressure to drive positive interactions with buyers, and sales leaders need deeper pipelines and deal visibility to support seller interactions. SEAs can automate repeatable processes through the insights they gather, saving sellers time by streamlining manual work required to engage buyers and close business, and systematizing best practices to achieve scale.

Obstacles

- The embedded AI functionalities in sales engagement applications overlap with the emerging market for sales enablement, revenue intelligence, and even RevOps and SFA.

- The SEA market is largely fragmented, as industrial specialization remains a viable opportunity for emerging and growing SEA vendors.

- More CRM providers are offering similar capabilities.

User Recommendations

- **Prioritize and maintain vendors that support high SEA governance standards.** Prioritize compliance with the CAN-SPAM Act and data privacy policies by ensuring correct syncing of opt-in and opt-out data. Prevent unnecessary distractions for sellers through effective use of visibility filters.

- **Create and maintain an SEA content and workflow strategy.** Centralize content creation, workflow design and moderation to avoid confusion when looking at content performance analytics. Undertake regular audits of all content types to determine which messaging needs revisiting or replacing.

- **Establish cross-functional, collaborative SEA management roles.** Share ownership of the tool across key stakeholders including marketing, sales operations, sales enablement, sales managers and IT.

- **Find the right fit.** Evaluate functionality offered natively in a CRM/SFA suite before making a decision to invest in a sales engagement application.

Sample Vendors

Conquer; Groove; Gryphon.ai; Koncert; Mixmax; Outreach; Reply; Revenue.io; Salesloft; Vymo

Gartner Recommended Reading

Market Guide for Sales Engagement Applications

Innovation Insight: Revenue Technologies to Improve SFA/CRM Activity Data Capture

Increase Buyer Engagement by Deploying 3 Prospecting Fundamentals

Quick Answer: How Do I Structure a Clear SDR Compensation Plan?

Quota Planning and Optimization

Analysis By: Melissa Hilbert

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition:

Quota planning and optimization includes the workflow and collaboration required to set accurate sales quotas. Solutions use both a top-down and a bottom-up approach, with multiple advanced mathematical methods, for spreading quotas across the sales organization. It can also use algorithmic methods to set optimal quotas. Quota planning ideally integrates with incentive compensation, territory planning, and financial planning and analysis applications.

Why This Is Important

Organizations seeking to align the quota-setting process to sales execution, or to alter existing quotas due to unforeseen or changing circumstances, will find value in these solutions. Data-driven quota planning will yield more predictable results in achievement of sales goals.

Business Impact

Quota planning connects revenue budgets and sales quotas, improving operational efficiency and execution effectiveness. It can help sales organizations with over 50 payees to:

- Automate planning scenarios for more accurate, fair and achievable sales quota setting.

- Create and compare quota models and present optimal scenarios.

- Use auditable collaboration for creating and maintaining quota models and outputs.

- Save time and money by reducing execution times.

- Reduce human error by using advanced technologies to spread quotas.

Drivers

- Provides greater performance visibility to sales in real time

- Creates engaging and motivating complete planning for sellers by combining quota, territory and incentive compensation plan efforts together

- Connects to other planning areas such as financial planning and analysis, providing a key linkage to xP&A and creating better business planning and collaboration

- Improves speed to execution by optimizing quotas through statistical means

- Offers the ability to adjust quotas frequently through data-driven models

- Establishes fair, achievable quotas that engage sellers more directly with reward mechanisms in their incentive compensation plans and that accurately reflect the commercial opportunity of a territory for more predictable spending and budget stability

Obstacles

- Manual efforts, in spreadsheets, are still employed despite the benefits of automation.

- Many solutions still offer simplistic top-down-only quota planning, which doesn't provide optimal planning, and a bottom-up-only approach comes with the risk that the quota will not sum to the forecast. Both top-down and bottom-up methods need to be part of the solution, but this is not always the case.

- Scenario comparison is sometimes limited and involves manual effort.

- Some solutions limit the amount of data that can be used for planning or limit the processing speed, which restricts the amount of data that can be processed quickly for scenario planning. Significant staging and prework are required in most cases to get data in a form that can be consumed by the tool.

User Recommendations

- Weigh native functionality offered by vendors more heavily, because it will be easier to adopt.

- Purchase as a stand-alone application, as long as there are open API data integration capabilities to connect to either incentive compensation management or the larger sales performance management suite.

- Ensure that selected tools provide deep workflow and collaboration capabilities that are auditable to ensure your specific quota approvals workflow and collaboration work are accommodated.

Sample Vendors

Anaplan; Board International; NICE; Oracle; SAP; Varicent

Gartner Recommended Reading

Market Guide for Sales Performance Management

Quick Answer: 5 Steps to Ensure Readiness for Integrating Financial and Sales Planning With xP&A

Revenue Data Solutions

Analysis By: Alyssa Cruz, Sandhya Mahadevan

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition:

Revenue data solutions (RDS) provide proprietary, third-party and AI/ML-driven customer data to go-to-market teams. They make this data accessible as a stand-alone offering and/or through a SaaS product for integration into various technologies across the revenue tech stack. Data-driven GTM teams rely on RDS' actionable context and guidance to prioritize and engage buyers. RDS solutions are used across functions to facilitate scoring, targeting, planning, business analytics and data management.

Why This Is Important

Buying groups continue to grow in size and rely more on digital channels for their needs. As a result, revenue data solutions help go-to-market (GTM) teams identify and target the right individuals and companies by facilitating the acquisition, combination, refinement and application of buyer data. Sales leaders are able to use insights into buyer behavior and engagement to improve prioritization strategies, thus streamlining workflows and increasing productivity at scale.

Business Impact

The entire revenue organization (marketing, sales, customer success and support) can benefit from the workflow integration, data and insights generated through RDS. Commercial teams are able to use first- and third-party company and contact data, and their related intent signals, to build targeting strategies and automate data enrichment. They can also use features such as market intelligence to focus segmentation strategies on markets showing the largest growth capability.

Drivers

- The ability to target buying group decision makers and prioritize outreach toward accounts showing propensity to buy requires access to buying intent data as guidance. This makes RDS an essential source of insight for how to best engage with markets in an increasingly complex digital environment.

- Revenue organizations need relevant data and insights to develop and inform growth strategies in a market plagued by potential economic downturn factors as well as through perennial market uncertainties and headwinds.

- Organizations shifting from intuition-driven to data-driven decision making require clean data to build accurate and actionable AI modeling and insights that improve productivity of the commercial organization.

- Mergers and acquisitions have been increasing in frequency, requiring sales organizations to merge sales systems and customer data with the help of RDS.

- More revenue organizations are adopting the RevOps model, which requires customer data to be managed as a communal asset. Revenue data solutions continue to support this goal by providing holistic customer insights.

- The revenue data market has matured significantly as a result of increased data availability through first-party data collection and third-party partnerships. Moreover, the increased use of AI-driven augmentation and cleansing across the market has improved the utility and adoption of RDS within sales organizations.

Obstacles

■ Many prominent vendors in the RDS market are expanding into adjacent markets like revenue intelligence and account-based marketing. This trend is expected to continue, leading to data acuity and differentiation challenges.

■ The collection of first-party data is becoming increasingly challenging due to privacy regulations and generational habits. As a result, customers of RDS across the board struggle with data quality.

■ Some vendors in the RDS market provide a wide breadth of data and are more suited for general research and data discovery whereas other vendors offer highly specialized depth of data. This has necessitated layering of multiple data vendors to cover sales organization's use cases.

User Recommendations

■ Rationalize what data is most critical to support your identified business outcomes. Explore integration options beyond CRM/SFA that enable a workflow connection that improves actionability and digestibility.

■ Evaluate vendors' data collection methods to understand their ability to support use cases and whether layering solutions will provide superior insight to the organization.

■ Leverage multiple viewpoints of the revenue organization to assess vendor transparency around data collection and quality. Ensure that vendor data sourcing innovation roadmaps align with enterprise data privacy requirements.

■ Develop strategies to minimize data silos across the commercial organization, creating impact on shared business outcomes that build end-to-end customer targeting and impact.

Sample Vendors

Bombora; Clearbit; Demandbase; Dun & Bradstreet; HG Insights; LinkedIn; TechTarget; Zoominfo Technologies

Gartner Recommended Reading

Market Guide for Revenue Data Solutions

Introduction to AI for Sales

Relationship Intelligence

Analysis By: Varun Agarwal

Benefit Rating: Moderate

Market Penetration: More than 50% of target audience

Maturity: Mature mainstream

Definition:

Relationship intelligence is a function of sales that allows selling teams to leverage their network connections for warm introductions and/or referrals. It enables sales teams to identify the best connections that will help them find or reach potential prospects or decision makers. Relationship intelligence tools also give you the strength of the connection between the prospect and your contacts to help you decide on who could be the better introducer or referrer.

Why This Is Important

Given the increasing size of buying teams in complex sales situations and with the majority of communication happening online, relationship intelligence is helping shorten sales cycles through the ability to identify and connect with key stakeholders quickly. Relationship intelligence tools help in instilling trust for new sales in cases where there is no strong relationship established yet between the seller and the buyer.

Business Impact

Relationship intelligence can have a high impact for organizations looking to unlock new accounts, identify key stakeholders and forge a fast rapport through warm introductions and/or referrals. Using existing connections, it helps increase trust and consequently likelihood to purchase, which ultimately results in shorter sales cycles.

Drivers

■ Increasing engagement with complex buying groups requires sellers to identify multiple contacts and decision makers within an account.

■ Achieving short sales cycles in a hypercompetitive digital world requires warm introductions and referrals to help accelerate the buying process.

■ Organizations' growing focus on digital communication and social media interactions to help sellers in planning their campaigns is driving the need for relationship intelligence.

Obstacles

■ Some applications either don't offer the strength of a relationship or rely on a single data source for relationship intelligence, leading to a limited relationship view and inhibiting effective use of these tools.

■ Sales force automation (SFA) vendors are rolling out capabilities of their own, making it hard for best-of-breed vendors to get noticed.

■ With increasing market consolidation of revenue data solution providers and account-based marketing (ABM) platforms, data intelligence capabilities (including relationship intelligence) are increasingly becoming a part of ABM platforms either through acquisitions or partnerships.

User Recommendations

■ Examine how different vendors assess connection strength to evaluate which vendor fits your organizational needs. Some solutions use email and other communication to build a relationship graph, while others only use an invite to connect on social media as a source of connection.

■ Understand your relationship intelligence needs to choose between enterprise resource management (ERM) and social media aggregators. ERM finds relevant connections from within your organization to a target prospect, while social media aggregators find relevant connections from individuals' social media connections.

■ Investigate relationship intelligence solutions provided by SFA platforms or revenue data solutions, versus those provided by LinkedIn, as often they can be complementary solutions due to LinkedIn's proprietary network effect.

Sample Vendors

Affinity; Introhive; LinkedIn; Referral-AI

Appendixes

See the previous Hype Cycle: Hype Cycle for CRM Sales Technology, 2022

Hype Cycle Phases, Benefit Ratings and Maturity Levels

Table 2: Hype Cycle Phases

(Enlarged table in Appendix)

Phase ↓	Definition ↓
Innovation Trigger	A breakthrough, public demonstration, product launch or other event generates significant media and industry interest.
Peak of Inflated Expectations	During this phase of overenthusiasm and unrealistic projections, a flurry of well-publicized activity by technology leaders results in some successes, but more failures, as the innovation is pushed to its limits. The only enterprises making money are conference organizers and content publishers.
Trough of Disillusionment	Because the innovation does not live up to its overinflated expectations, it rapidly becomes unfashionable. Media interest wanes, except for a few cautionary tales.
Slope of Enlightenment	Focused experimentation and solid hard work by an increasingly diverse range of organizations lead to a true understanding of the innovation's applicability, risks and benefits. Commercial off-the-shelf methodologies and tools ease the development process.
Plateau of Productivity	The real-world benefits of the innovation are demonstrated and accepted. Tools and methodologies are increasingly stable as they enter their second and third generations. Growing numbers of organizations feel comfortable with the reduced level of risk; the rapid growth phase of adoption begins. Approximately 20% of the technology's target audience has adopted or is adopting the technology as it enters this phase.
Years to Mainstream Adoption	The time required for the innovation to reach the Plateau of Productivity.

Source: Gartner (July 2023)

Table 3: Benefit Ratings

Benefit Rating ↓	Definition ↓
Transformational	Enables new ways of doing business across industries that will result in major shifts in industry dynamics
High	Enables new ways of performing horizontal or vertical processes that will result in significantly increased revenue or cost savings for an enterprise
Moderate	Provides incremental improvements to established processes that will result in increased revenue or cost savings for an enterprise
Low	Slightly improves processes (e.g., improved user experience) that will be difficult to translate into increased revenue or cost savings

Source: Gartner (July 2023)

Table 4: Maturity Levels

(Enlarged table in Appendix)

Maturity Levels ↓	Status ↓	Products/Vendors ↓
Embryonic	In labs	None
Emerging	Commercialization by vendors Pilots and deployments by industry leaders	First generation High price Much customization
Adolescent	Maturing technology capabilities and process understanding Uptake beyond early adopters	Second generation Less customization
Early mainstream	Proven technology Vendors, technology and adoption rapidly evolving	Third generation More out-of-box methodologies
Mature mainstream	Robust technology Not much evolution in vendors or technology	Several dominant vendors
Legacy	Not appropriate for new developments Cost of migration constrains replacement	Maintenance revenue focus
Obsolete	Rarely used	Used/resale market only

Source: Gartner (July 2023)

Document Revision History

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Hype Cycle for CRM Sales, 2016 - 5 July 2016

Hype Cycle for CRM Sales, 2015 - 13 July 2015

Hype Cycle for CRM Sales, 2014 - 16 July 2014

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Table 1: Priority Matrix for Revenue and Sales Technology, 2023

Benefit	Years to Mainstream Adoption			
↓	Less Than 2 Years ↓	2 - 5 Years ↓	5 - 10 Years ↓	More Than 10 Years ↓
Transformational	Hyperautomation	Continuous Intelligence Digital Sales Rooms Generative AI for Sales Total Experience	AR and VR for Sales Customer Technology Platform Digital Twin of a Customer Emotion AI IoT for Sales Self-Integrating Applications	Metaverse

Benefit	Years to Mainstream Adoption			
↓	Less Than 2 Years ↓	2 - 5 Years ↓	5 - 10 Years ↓	More Than 10 Years ↓
High	Natural Language Query Quota Planning and Optimization Sales Engagement Applications	Account-Based Marketing Platforms Composable Applications Composable Product Configurators CSM Platforms Digital Adoption Platforms Embedded Analytics Extended Planning and Analysis for ERP Partner Ecosystem Management Platforms Process Mining Product-Led Revenue Applications Revenue Data Solutions Revenue Enablement Platforms Voice-Driven Sales Apps	Digital Integration Hub Interactive Demo Applications Visual Collaboration Applications	
Moderate	Account Planning Tools Relationship Intelligence	Revenue Intelligence	Customer Psychographics RevOps Data Automation	
Low				

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