Hype Cycle for Procurement and Sourcing Solutions, 2023

Published 19 July 2023 - ID G00790919 - 85 min read

By Analyst(s): Kaitlynn Sommers, Micky Keck, Lynne Phelan, Naveen Mahendra, Cian Curtin, Chaithanya Paradarami

Initiatives: Procurement and Strategic Sourcing Applications; Procurement Functional Enablement; Sourcing and Procurement; Supply Chain Technology Strategy and Selection

Procurement organizations can use emerging technology to deliver automation, efficiency and better collaboration with suppliers and stakeholders. Procurement technology leaders should use this Hype Cycle to understand the maturity, adoption and benefit of sourcing and procurement technologies.

Analysis

What You Need to Know

Procure-to-pay and source-to-pay suites continue to progress toward mainstream adoption while new technologies emerge to innovate alongside or replace legacy mainstream solutions. Three main themes have developed across these emerging technologies:

- **Hyperautomation** — AI, machine learning, and robotic process automation technologies used to improve automation and efficiency
- **Data and analytics** — More advanced analysis capabilities, which typically also leverage AI and machine learning, to predict and prescribe actions that help organizations make better spend and supplier decisions
- **Supplier collaboration** — Technologies with tailored capabilities to improve working with suppliers toward organizational goals such as ESG, risk mitigation and supply chain resiliency

Vendors are delivering differentiation by accelerating automation, increasing visibility and reducing risk through hyperautomation and data analysis technologies. Meanwhile fragmentation abounds across supplier collaboration. S2P suites often lack the depth needed across to support the specialization and depth in key areas like supplier risk management, supplier discovery, supplier diversity, and supplier sustainability.

Procurement technology leaders can use this Hype Cycle to understand these emerging technologies and weigh their maturity, benefits and value drivers, and potential risk against more established solutions when prioritizing investments.

The Hype Cycle

As core sourcing and procurement technologies like procure-to-pay (P2P) and contract life cycle management (CLM) mature to mainstream adoption, organizations are advancing their digital transformation strategy through emerging technology innovations. Driving forces such as the economic volatility, supply chain disruption and talent scarcity put pressure on procurement to deliver more automation, efficiency and resiliency in their processes.

The biggest shifts in this market include the following:

- **Emergence of generative AI for procurement.** Recent availability of public chatbots, such as ChatGPT, have quickly accelerated the hype around generative AI and its potential to substantially improve both automation and efficiency. While the hype is high, tangible solutions that leverage generative AI technology are just emerging in sourcing and procurement as organizations consider benefit, impact and risk.

- **Widespread adoption of supplier sustainability solutions.** In the past 24 months, sustainable procurement has grown in importance for 83% of procurement leaders responding to the 2023 Gartner Sustainable Procurement Pulse Survey. [1] As organizations increase their commitment to sustainability goals and regulatory requirements continue to grow, companies are seeking to scale programs by implementing supplier sustainability applications.

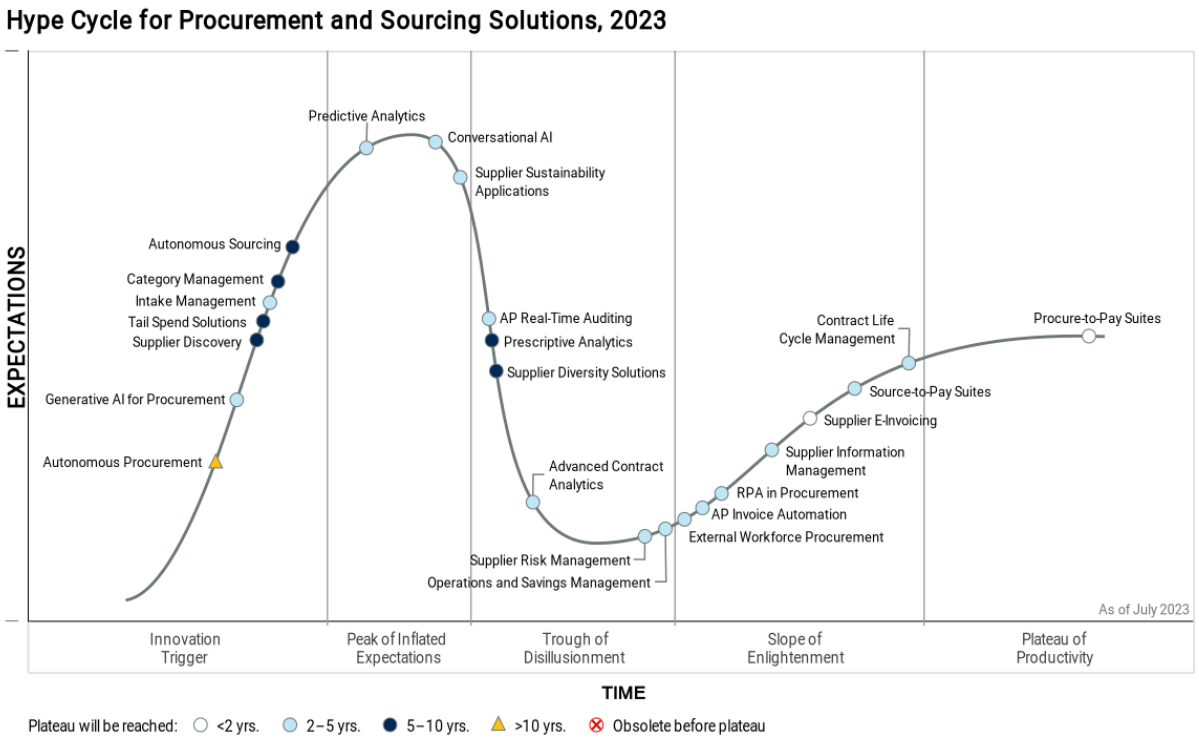
- **Evolution of savings management to include operations management.** Organizations continue to seek technology and workflow solutions that validate their savings goals, but recently solutions in this space are expanding their scope to include management of operational capabilities. As organizations face talent shortages, budget constraints and cognitive overload, they are seeking ways to optimize and balance the procurement workload.

- **Increased adoption of supplier diversity technology.** As organizations expand their commitment and goals for supplier diversity technology, capabilities have become more widely available and adopted by organizations seeking to discover new diverse suppliers and increase their percentage of diverse spend.

- **Supplier risk management solutions** continue to persist as a focal point for investment from procurement leaders and supplier chain leaders alike. In an effort to more proactively manage and mitigate risk and build resiliency in the supply base we see these tools and others like **supplier discovery solutions** gain adoption while their capabilities mature.

- **Procure-to-pay approaches mainstream adoption.** P2P suites are widely adopted across organizations of varying sizes, geographies and industries. The vendors supporting these capabilities offer comprehensive and competitive solutions and mostly differentiate on emerging technologies at this stage of maturity. Given the consistency in core capabilities, Gartner views the grounds of differentiation within source-to-pay suites in more strategic modules such as analytics, e-sourcing, and risk management. A trend toward a single **source-to-pay suite** has also increased in prevalence over the last two to three years.

Figure 1: Hype Cycle for Procurement and Sourcing Solutions, 2023



The Priority Matrix

This Hype Cycle includes a variety of solutions that differ in terms of adoption, maturity and benefit. Organizations looking for operational advantages need to balance investments that offer short-term incremental improvements with those that offer high and even transformational benefits in the longer term. This Hype Cycle includes multiple high-impact technologies that are increasing in maturity, which are great for organizations looking to avoid risk. However, developing proficiency in a transformational technology earlier in its life cycle could deliver long-term operational advantages.

Table 1: Priority Matrix for Procurement and Sourcing Solutions, 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		Generative AI for Procurement		Autonomous Procurement
High	Procure-to-Pay Suites Supplier E-Invoicing	AP Invoice Automation Contract Life Cycle Management Predictive Analytics Supplier Risk Management	Autonomous Sourcing Prescriptive Analytics Supplier Discovery	
Moderate		Advanced Contract Analytics AP Real-Time Auditing Conversational AI External Workforce Procurement Intake Management Operations and Savings Management RPA in Procurement Source-to-Pay Suites Supplier Information Management Supplier Sustainability Applications	Category Management Supplier Diversity Solutions Tail Spend Solutions	
Low				

Source: Gartner (July 2023)

Off the Hype Cycle

- **Smart contracts:** While this technology continues to mature, interest from sourcing and procurement organizations is limited. Most organizations are still working through their digitization of contracts and enabling better contract workflows and analysis.
- **Freelancer management solutions:** While this technology continues to mature, the need to connect directly with talent and incorporate freelancers into a talent strategy is most often led by human resources. It is no longer covered within the sourcing and procurement space.

On the Rise

Autonomous Procurement

Analysis By: Micky Keck

Benefit Rating: Transformational

Market Penetration: Less than 1% of target audience

Maturity: Embryonic

Definition:

Autonomous procurement uses artificial intelligence bots with robotic-process-automation-like capabilities. These bots work with large pools of data to fully automate the procurement process for one or more categories of spending.

Why This Is Important

Autonomous procurement is the ultimate state procurement ordering efficiency. Automating the entire process of determining what to buy, selecting a source of supply and creating a purchase order would free organizations to reassign resources to more-valuable work. Professionals would focus on only the highest value, unpredictable and most complex spend categories, with AI and automation handling everything else.

Business Impact

Autonomous procurement offers a high return on investment and compliance with organization policies and goals due to its potential to completely reshape how procurement is executed. Autonomous procurement will free organizations to redeploy resources to higher-value activities. The combination of reduced labor costs, reductions in noncompliant spending and error reduction will bring immediate savings to the bottom line.

Drivers

- Advances in AI automation: Areas such as source of supply discovery, understanding of product substitutions and pattern recognition of spend across the organization are rapidly improving in accuracy, increasing the scope of spend that can be addressed.

- Expansion of capabilities: Automation and enhancement of surrounding processes, such as sourcing and intake, are adding layers of intelligence in the prebuy phase of the procurement process. This automation can address tasks that might typically happen after the order is placed, such as approvals or competitive bids to meet policy.
- The need for policy and contract compliance: An autonomous procurement solution will always follow procurement policies and buy only from optimal suppliers. Buying from preferred suppliers diverts more spending to negotiated contracts, thus increasing the value those contracts provide.
- Cost savings and operational efficiencies: Order volumes can be aggregated across the business, allowing for consolidated ordering to reduce shipping and processing fees. Inbound deliveries can be coordinated to reduce peaks or ensure capacity is available at receiving docks and warehouses. Improved timing of deliveries may also reduce the need for storage space or avoid productivity loss due to an organization running out of a key item and enable the just-in-time model to be more widely utilized.
- Multitenant SaaS solutions with large pools of cross-customer data: These solutions have access to the large datasets that would be required to enable autonomous procurement. Multitenant SaaS solutions are not new, but the willingness of customers to allow vendors to tap into this data is a new trend overall.
- Generative AI: Large language model AI by itself does not enable the entire autonomous procurement use case but it can be a factor in closing gaps by understanding demand signals and improving context understanding.

Obstacles

- Autonomous procurement is poorly suited to infrequent purchases or purchases of items that change rapidly. In both these scenarios, it would be very difficult to collect a deep-enough pool of data to train an AI decision engine.
- AI's poor track record of dealing with highly variable environments is a major reason for skepticism about autonomous procurement. AI is very good at finding patterns, but very limited when it comes to predicting previously unseen events. Eventually, more data and experience should overcome this shortcoming.

- Autonomous procurement requires large amounts of historical transaction data and clean supporting master data. Additionally, the AI requires a significant amount of human training in the early stages, as the fit and function of purchased items can be highly subjective.
- Disjointed or disconnected multitechnology ecosystem means that automation across the full procurement process is nearly impossible.

User Recommendations

- Watch out for advances in AI automation tools as procure-to-pay (P2P) applications start incorporating early versions. The success or failure of early versions will provide valuable data on the impact of the technology and the pace of advancement. P2P suite vendors are developing this technology as first movers. However, given the technology's immaturity, new point solution providers with expertise in AI are likely to appear as alternatives.
- Assess the potential impact of automation by analyzing spend data to understand the number of one-time buys, in comparison with repeat spend. Organizations with high levels of repeat spend are more suitable for automation.
- Prepare your organization by cataloging viable data sources and promote readiness by storing new data sources to feed an autonomous procurement engine.
- Check the roadmap of your existing procurement technology vendors. They may be looking for early testers or co-development partners.

Sample Vendors

Aerchain; Arkestro; Coupa; GEP; JAGGAER; SAP; SourceDay; Xeeva; Zycus

Gartner Recommended Reading

Top Technology Trends in Procurement

Generative AI for Procurement

Analysis By: Naveen Mahendra

Benefit Rating: Transformational

Market Penetration: Less than 1% of target audience

Maturity: Embryonic

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. It can accelerate tasks, documents and workflows in sourcing and procurement, while integrating various tasks into cohesive procurement applications.

Why This Is Important

Fast-moving advances in large language models (LLMs) that are driving the generative AI evolution have the potential to democratize how procurement professionals work with information and complete tasks. Generative AI can produce novel content (including text, images, video, audio, structures), synthetic data, workflows and models of physical objects. Its use is applicable across a wide spectrum of use cases within the procurement and sourcing space, enabling improved scalability and productivity.

Business Impact

Chat-based generative AI assistants within applications will target time-consuming, friction-prone and repetitive tasks like knowledge discovery, summarization and contextualization, workflow, and execution in the procurement and sourcing context. With these tools at their disposal, procurement professionals can improve efficiency to focus on higher-value tasks such as strategic decision making and supplier management.

Drivers

- LLMs and development frameworks (e.g., generative pretrained transformer [GPT], which can train on raw data, generally with unsupervised learning) are advancing at an increased rate, based on demand and investment acceleration.
- The range of use cases for generative AI is widening. One common pattern to procurement is text to text. Knowledge discovery, summarization and contextualization are useful in communication applications across the enterprise (e.g., text analysis of supplier contracts and invoices).
- Text to process/workflow is also a common use case. Recent research and offerings are tackling the capability for users to use text and natural language to generate workflows or instruct autonomous generative agents that tie generative tasks together in cohesive applications. A relevant use case is automating contract management workflow from drafting, negotiation, review and signature.
- Consumers are integrating generative capabilities into their professional lives to improve efficiency and productivity. This includes using the technology to generate quick reports, schedule meetings, and perform other tasks within various enterprise applications and workflows.

Obstacles

- Security, privacy, and IP protection concerns due to the lack of regulation and oversight in the evolving field of generative AI raises issues of trust and security for potential buyers.
- Real-time data quality and accessibility challenges, arising from data across disparate systems and formats in procurement, are leading to difficulties in analyzing and effectively generating accurate synthetic-data insights using generative AI models.
- Integration challenges with existing procurement systems and processes are requiring complex and time-consuming implementation of generative AI solutions.
- Change management issues, including job security concerns, skepticism about AI-generated insights, and a general lack of understanding about how generative AI can be applied to procurement, are resulting in resistance to the shift toward AI-driven sourcing and procurement processes.

User Recommendations

- Plan and build expectations around using enterprise-ready generative applications that address the privacy, security and IP protection needs of the enterprise.
- Evaluate and invest in data management tools that enable real-world data standardization and integration across procurement and other enterprise systems. This includes document tagging with metadata.
- Evaluate current or alternative technology vendors for generative AI capabilities. Prioritize those applications that can plug into business processes and offer modular specialization to accelerate the refinement and adoption of generative AI capabilities in specific procurement processes. Make considerations for both existing and future needs, such as contract management and supplier risk assessment.
- Challenge knowledge workers to engage in new learning curves and improve or redesign procurement and sourcing processes based on data analysis and the automation of repetitive tasks.

Sample Vendors

Adobe; Amazon; Anthropic; Character.AI; Google; Hugging Face; IBM; Jasper; Microsoft; OpenAI

Gartner Recommended Reading

Innovation Insight for Generative AI

ChatGPT Research Highlights

Quick Answer: What CSCOs Should Know About ChatGPT's Capabilities and Pitfalls

Supplier Discovery

Analysis By: Cian Curtin, Chaithanya Paradarami

Benefit Rating: High

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition:

Supplier discovery solutions help organizations find, vet and include new sources of supply for goods and services into their sourcing processes. These solutions maintain a database of supplier information, and sometimes use AI and graph technologies to match sourcing specifications to potential suppliers to provide a more competitive supplier portfolio.

Why This Is Important

Supplier discovery solutions help organizations identify new sources of supply. In the midst of supply chain disruption, capacity constraints, cost optimization initiatives and innovation goals, procurement teams must be able to quickly find and qualify alternative sources of supply. These solutions build supply chain resiliency; increase market competition; and deliver risk mitigation, diversity, and cost savings, while reducing the effort to identify and qualify new suppliers.

Business Impact

Supplier discovery solutions can replace the manual channels used to find new suppliers. They provide validated supplier information, and can suggest suppliers that are qualified on organization-specific parameters for a certain category. By allowing procurement to find and qualify suitable suppliers efficiently, the technology ensures that the organization's supply base is more resilient and agile, and that incumbent suppliers remain cost-competitive while maintaining acceptable performance levels.

Drivers

- The large-scale disruption and shortages impacting global markets over the last few years have increased the need for highly qualified alternative sources of supply.
- Supplier discovery solutions can advance an organization's supplier diversity and sustainability goals, two priorities influencing procurement organizations.
- Some supplier risk management vendors are exploring ways to support discovery as a component of risk management — a key investment area for procurement organizations.
- There is a lot of white space in supplier discovery, meaning there is opportunity for the existing sourcing and procurement vendors, and new entrants to develop capabilities in this space. More options for customers will accelerate adoption.
- Finding qualified suppliers can be a very time-intensive process that short-staffed procurement and sourcing departments cannot support.

Obstacles

- Supplier discovery requires vendors with a multitenant solution architecture and commercial agreements that allow for the sharing of basic, noncompetitive information (if not publicly available).
- Supplier qualification processes vary by organization, making it difficult for a solution to match and suggest suppliers beyond basic information. Lengthy qualification processes and a lack of automation limit the value of a supplier discovery solution.
- There is no single, centralized database of global suppliers. The market is fragmented, and the number of suppliers, types of suppliers and data enrichment vary.
- High-quality supplier profiles are difficult to compile. Thus, discovery solutions will require supplier participation to build comprehensive datasets.

User Recommendations

- Complement current manual supplier discovery channels (employee reference, web search) with a more robust, automated option.
- Work with your current source-to-pay vendors to determine if they are prioritizing supplier discovery in the roadmap or partnering with a supplier discovery solution. If they are, vet this option first.
- Explore AI and graph technology solutions to create an independent supplier discovery process that sits outside other systems.

Sample Vendors

apexanalytix; Arkestro; Coupa; Fairmarkit; Globality; Graphite Systems; SAP; Scoutbee; Soleadify; TealBook

Gartner Recommended Reading

Quick Answer: Use Technology Options to Enhance a Supplier Discovery Process

How to Navigate the Fragmented Supplier Management Solutions Market

Market Guide for Supplier Risk Management Solutions

Category Management

Analysis By: Kaitlynn Sommers

Benefit Rating: Moderate

Market Penetration: Less than 1% of target audience

Maturity: Emerging

Definition:

Category management solutions allow category managers to create and monitor execution against their short- to long-term spend strategy. This includes creating category-specific opportunity assessments, conducting supplier competitive analysis, setting up measurable objectives and tracking a set of sourcing activities to meet the goals.

Why This Is Important

Organizations rely on category strategies to manage their strategic spend. To create a strategy, category managers collect and analyze category intelligence (spend analytics, market data and enterprise priorities) in order to prioritize projects which will create and deliver long-term enterprise value. Pulling information into a single place to create planned objectives and subsequently track execution against these strategies can significantly improve speed, agility and stakeholder relations.

Business Impact

These solutions digitize the creation and storage of category intelligence, strategies and project management plans. Automating the ingestion of data from internal and external sources improves visibility and strengthens their position to create and prioritize action plans. Without the right tools in place, information complexity overwhelms category managers and limits what they can accomplish and the speed with which they can react to changing market dynamics.

Drivers

- Extended periods of disruption and rapid procurement transformation have increased the complexity of procurement's operating environment, highlighting the need for better category management and the weakness of manual solutions. Manual tools leave category managers without a full picture of the impact category-specific decisions may have on the organization's supply chain.
- Economic volatility increases the pressure on sourcing teams to deliver value. Cost savings may be difficult to come by, so it is crucial for category managers to evaluate resiliency, cost avoidance and risk across categories to minimize negative impact.
- Increased focus on supplier enablement is a critical component of a best-in-class category strategy. Procurement organizations are prioritizing sustainability, diversity and risk in their supplier decisions but to be most effective, considerations and execution must be embedded and coordinated through category strategies and action plans.
- Category managers can use these tools to help communicate the overarching objective and actionable plan to the broader stakeholder community. As the plan progresses, the tools can also help provide a fact-based measure of procurement's positive impact on the organizations. This not only includes savings but also reduces risk and promotes supplier innovation metrics.
- Solutions in this space are poised for increased demand as organizations diligently work to improve digital maturity. Category management is a key priority, and as the processes and governance of managing spend mature, these tools will gain higher value.
- Category management has been the top priority for procurement organizations for over two years, driving demand in the market space for new solutions to digitize strategy development.

Obstacles

- Most procurement organizations are still largely struggling with data. Much of the data needed to create an effective category strategy is internal and if not accessible, limits the ability to inform opportunity assessments and long-range planning. Adoption will remain limited until the internal constraints are resolved.
- Inflation coupled with extended periods of economic uncertainty has shifted procurement's ability to negotiate cost savings across their strategic categories. This reemphasizes event-driven sourcing to achieve savings or cost avoidance wherever possible, challenging more strategic category planning.
- Adoption of these solutions is limited by the current state of category management processes at most companies. This is especially true for indirect spend categories. As these category management teams mature from a process, governance and organization perspective, adoption of these prepackaged software tools will grow simultaneously.

User Recommendations

- Assess the maturity of the category management team, process and governance around category strategy. Without the right level of commitment to building out strategic category management from an organization and process perspective, software tools will add little value.
- Design simplicity into category management activities like opportunity assessments or supplier SWOT analysis. As momentum and maturity grow, invest in a solution to streamline and scale the process.
- Review the category management capabilities of your existing vendors. Consider entering into co-development arrangements if a long-term commitment with a provider is in place. If this isn't the case, explore solutions from other providers.

Sample Vendors

akirolabs; Beroe; Cirtuo; GEP; Ivalua; JAGGAER; SAP; Spend Headquarters (SpendHQ)

Gartner Recommended Reading

Category Management Roadshow Deck

Ignition Guide to Implementing Category Management

Business Case for Implementing Category Management

Tool: Procurement Leader's Category Strategy Review Checklist

Intake Management

Analysis By: Naveen Mahendra

Benefit Rating: Moderate

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition:

Intake management solutions provide a single contact point for the rest of the organization to request procurement support from. Requests are routed to either the correct endpoint application or person to be fulfilled. Intake management solutions also have the ability to track request status, so that requesters and procurement know the standing and disposition of any request.

Why This Is Important

Procurement is on a never-ending quest to simplify how they work with the rest of the business. Early engagement with procurement on new and renewed spend opportunities allows them to be more effective at driving savings and compliance. Intake management solutions allow procurement to provide end users with a single point of engagement and tracking for all procurement-related activities.

Business Impact

Intake management tools:

- Improve process compliance and streamline stakeholder experience by funneling all requests into a single location.
- Expedite request process by leveraging conversational platforms to understand intent.
- Enable autonomous assignment of requests by using algorithms to route them to the correct person or system for execution.

- Provide full tracking and reporting on activities requested by the business and the user.
- Require little to no end-user training.

Drivers

- Procurement leadership requires new tools to have visibility and effectively manage their team's workload and project pipeline.
- The explosion of sourcing and procurement technologies alone makes it very difficult for end users to know where they should put in a request. Many organizations also have duplicate technologies (e.g., multiple e-sourcing solutions) to address very specific use cases. Even single suite source-to-pay solutions force requests to go through a variety of siloed workflows, rather than a single request point.
- There have been no obvious systems for fielding requests, such as policy questions, or those that could be served by multiple systems. Email has been the default option but it leads to incomplete request data that is easily lost and is extremely difficult to track.
- Stakeholder self-service is growing as a means for end users to get their requests fulfilled faster and without heavy involvement from procurement. To do this effectively, they need easy access to the right tools and still operate within procurement policies.
- Procurement leaders disappointed with lengthy, expensive procure-to-pay (P2P) deployments are piloting intake management tools as a simplified alternative to automate buying workflows.
- Source-to-pay and contract-life-cycle-management vendors are adding intake management modules to their solution offerings. While this increases the competition for stand-alone intake management providers, it will drive more widespread adoption from organizations that may purchase this alongside a broader solution offering.

Obstacles

- Tight procurement budgets will focus on tactical systems that support getting work done over intake management systems.
- The business case for intake management solutions will include more soft-cost saving and estimates, which will make getting budget approval more challenging.
- Buying organizations that have decentralized procurement functions will find lower value in intake management tools, as procurement is already embedded throughout the organization. Additionally, decentralized procurement organizations may find that setup and maintenance is a high burden if there is limited standardization of process and tools.

User Recommendations

- Avoid duplicating capabilities by assessing if existing procurement or IT software already provide a flexible workflow functionality.
- Simplify the user experience by using intake management tools to improve user engagement. The more sourcing and procurement solutions you have in your infrastructure, the more value an intake management tool can bring.
- Assess how collaborative your current procurement staff is with the business. If procurement always engages too late to support new spend opportunities, then intake management tools can address that problem.
- Use outside-the-box thinking as intake management tools can replace the need for expensive P2P, project management or supplier collaboration tools to some degree.

Sample Vendors

Focal Point; Graphite Connect; Levelpath; Opstream; ORO; Raindrop; ServiceNow; SpendHQ (Per Angusta); Tonkean; Zip

Gartner Recommended Reading

Drive Strategic Success Through Business-Driven Legal Intake and Triage

Tool: Customizable Contract Intake Form Template

Seven Steps to Creating a Best-in-Class Contracts Intake Form

Tail Spend Solutions

Analysis By: Lynne Phelan

Benefit Rating: Moderate

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition:

Tail spend procurement solutions help process and fulfill spend on noncritical goods and services, which are supplied by vendors that are not actively managed by procurement. This spend is not usually significant or frequent enough to manage through traditional sourcing and procurement processes.

Why This Is Important

Most procurement organizations only strategically manage part of their spend, prioritizing high-volume and spend categories.This leaves what is referred to as the “tail” of an organization’s spend unmanaged. Tail spend is costly and time-consuming to manage. When poorly executed, tail spend can result in excessive cost and risk for relatively low-value spend. Emerging tail spend solutions provide end users the ability to make decisions for nominal purchases without having to involve procurement.

Business Impact

Tail spend procurement solutions can unlock additional savings for the procurement organization, without adding more resources. Actively managing tail spend improves spend visibility and coverage, operational efficiency, and purchasing controls. End users can still make one-time purchases to do their jobs without adding to procurement’s workload. Integrating tail spend procurement solutions into procurement technology organizations drives purchasing policy compliance and reduces risks.

Drivers

- The current global inflationary environment is forcing procurement to look for savings in spend areas they would not traditionally attempt to control.
- Gaining control over spot purchases, which account for at least 15% of total spend, is the last frontier in expanding procurement's spend influence.
- As digital transformations progress, procurement teams have more options for enabling controlled, self-service buying channels to chip away at the organizations' unmanaged purchases.
- Tail spend solutions can often integrate into existing procurement applications, increasing an organization's ability to track a greater percentage of its spend in a single location, rather than adding yet another stand-alone tool.

Obstacles

- Although tail spend is usually a lower percentage of overall spend, it can involve many single transactions across many suppliers. Visibility to this spend is one of the greater challenges procurement faces, making it cost-prohibitive to manage.
- The often random nature of tail spend prevents effective preplanning for directing spend to desired vendors.
- The low overall value of tail spend makes building a positive business case for technology challenging.
- Purchasing cards often are a simple way to deal with the many challenges of tail spend, thus reducing the need for technology.
- The market for tail spend solutions is nascent and fragmented. It can include a marketplace, quick sourcing functionality, vendor recommendation solutions and spend analytics.
- Many solutions, such as marketplaces, are only applicable in limited parts of the world.

User Recommendations

- Compare the capabilities and suitability of each solution based on your spend categories. Solutions are emerging, and capabilities vary. Some solutions are better-suited for managing certain spend categories, whereas others have a broader appeal.
- Convert tail spend to influenced spend through the use of e-catalogs, buying desks and spot-buy solutions.
- Adopt a multifaceted approach that combines technology and labor arbitrage to keep operating costs down, while tapping into the efficiency gains. A single tail spend technology will not solve the entire problem.
- Explore the partner ecosystem of your procure-to-pay vendor for tail spend procurement solutions.
- Use caution when building the business case for a tail spend solution. Ensure that the opportunity for savings and for the consolidation of spend justifies an additional technology investment.
- Consider the maturity of your buying organization, as tail spend solutions are ultimately a low priority for many immature buying organizations.

Sample Vendors

Amazon Business; Candex; Fairmarkit; GEP; Mercateo; Simfoni; Teampay

Gartner Recommended Reading

Quick Answer: Top 8 Solutions for Managing Tail Spend

Infographic: IT Tail Spend: Why It Matters Now

Toolkit: 5 Steps to Develop an IT Tail Spend Strategy

Consider Value and Master Data Management Maturity When Picking a Tail Spend Solution

Autonomous Sourcing

Analysis By: Kaitlynn Sommers

Benefit Rating: High

Market Penetration: Less than 1% of target audience

Maturity: Emerging

Definition:

Autonomous sourcing solutions use AI and advanced technologies to streamline and automate the sourcing process and facilitate decision support for awarding spend to suppliers. Capabilities vary but can include automated event creation, lot/line structuring, dynamic event timing, automated supplier feedback, response scoring, analysis and award.

Why This Is Important

Autonomous sourcing solutions reduce the cycle time to execute sourcing events and increase capacity without adding to staff. Automating the creation, execution, negotiation and award decisions of routine spend allows staff to focus resources on more strategic negotiations and category management. Automated events can increase objectivity and help organizations deliver against goals beyond just savings (i.e., environmental, social and governance [ESG]). It can also help provide complex partial award scenarios.

Business Impact

Autonomous sourcing increases procurement organizations' speed and agility. Higher levels of automation will improve the efficiency and effectiveness of the sourcing process and free staff from working on non-value-added tasks. It also has the potential to optimize the supply base and recommend supplier awards based on project specifications, internal and external constraints, and market conditions. Surfacing these insights will support procurement's strategic role in advising stakeholders.

Drivers

- Extended periods of inflation and economic uncertainty increase pressure for procurement organizations to deliver value when cost savings isn't easily achieved. Autonomous sourcing solutions make the process more efficient, increasing the capacity to take on new spend projects and introduce new suppliers to the competitive landscape.
- Autonomous sourcing includes leveraging data to improve decision support. Automated analysis of bid results including internal and external data results in better, more informed spend decisions.
- Autonomous sourcing features machine learning (ML) and natural language processing (NLP) to achieve higher levels of event automation over traditional e-sourcing, freeing up sourcing teams to focus on more value-add activities such as supplier relationship management.
- Solutions providing recommended buying patterns such as when to buy, what to buy, and who to buy from, learn from the actual buying decisions made in comparison to the recommendation. As these recommendations are refined, they can be fully automated and trusted to make sound decisions for the organization.
- Complex scenario analysis and what-if award analysis done manually are tedious and require an advanced analytical skill set. Autonomous sourcing reduces the manual work and can allow buyers to skill up in alternative competencies such as negotiation tactics.

Obstacles

- Autonomous sourcing is beginning to mature, but task automation capabilities are more widely available than decision support.
- Successful use of these solutions requires the end user to provide solutions with data, context and parameters. Accessing and managing cleansed and classified data to train AI models is often scarce or unavailable preventing more rapid maturity.
- Direct spend categories often have better internal data available (demand forecasts, material plans and historical part data) and external commodity data to accelerate automation, than indirect spend categories. This means category automation varies by vendor and early market solutions often specialize in specific spend types.
- Qualifying new suppliers to participate in automated events can be challenging as each organization has a different threshold for how they qualify new sources of supply. This must be worked out in implementation if your autonomous sourcing solution includes a supplier discovery capability.

User Recommendations

- Assess your current process and data maturity. Autonomous sourcing applications rely on mature processes and historical data to build their models. Don’t try to deploy an autonomous sourcing application without this foundation.
- Evaluate autonomous sourcing functionality as an efficiency improvement; however, don’t rely on it to fully automate processes at this time.
- Improve overall e-sourcing adoption by using autonomous sourcing to provide more assistance for buyers. However, early adopters should monitor event automation and decision support to ensure quality recommendations are being made before allowing full automation.
- Conduct a risk-benefit analysis before investing in autonomous sourcing. Proceed if your organization can take advantage of the benefits of these solutions at their current maturity.
- Embrace a composable approach. Autonomous sourcing is mostly enabled by stand-alone vendors, requiring a third-party investment and integration into your existing procurement solutions.

Sample Vendors

Arkestro; Datapred; Fairmarkit; Globality; Keelvar; LevaData; Zycus

Gartner Recommended Reading

Market Guide for E-Sourcing Applications

At the Peak

Predictive Analytics

Analysis By: Lynne Phelan, Chaithanya Paradarami

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

Predictive analytics is a form of advanced analytics that examines data or content to answer the question, “what will happen?” or, more precisely, “what is likely to happen?” Predictive analytics is characterized by techniques such as regression analysis, cluster analysis, multivariate statistics, pattern matching, predictive modeling and forecasting.

Why This Is Important

By anticipating future trends, predictive analytics allows procurement organizations to make informed decisions when responding to evolving business requirements. Predictive analytics allow business users to focus on execution, rather than manually mine data. Today, there are many successful examples of the use of predictive analytics, spanning demand forecasting, supplier risk monitoring, price variances and spend category opportunity assessment.

Business Impact

Predictive analytics help identify and provide an understanding of likely future outcomes to enable improved decision making and threat/opportunity identification. As a result, organizations can be proactive rather than reactive (for example, using demand prediction for things like optimal inventory, fraud detection and dynamic pricing). Interest and investment continue to grow both in new use cases and more traditional applications of predictive analytics.

Drivers

- Predictive analytics adoption is increasing continuously due to the advanced modeling techniques on offer.
- Early adopters have proven and refined use cases with clear value.

- Client interactions with Gartner experts for “predictive analytics” continue to trend upward.
- Procurement organizations that have heavily relied on human domain experience are now looking to rely on data and analytics to understand trends and anticipate future environments.
- A procurement talent shortage, alongside a looming financial crisis, is driving the need for automating processes such as demand forecasting or supplier risk predictions.
- Predictive analytics has traditionally targeted problems in the strategic and tactical time horizon such as long-range forecasting or demand planning. Now, with more advanced techniques, predictive analytics can be deployed in real time or the near-real-time horizon, in areas such as dynamic pricing, product quality testing, risk management and demand sensing.

Obstacles

- Poor data quality presents obstacles. As with other advanced analytics techniques, the timeliness and accuracy of the input data will determine the accuracy and usefulness of the output of predictive analytics.
- There is a lack of maturity around analytics to drive further adoption of predictive analytics. Many organizations are still focused on answering “what has happened?” without a forward-looking focus on “what might happen?” and “what can we do about it?”
- There can be a lack of technical talent to help build and maintain predictive analytics models.
- There is a lack of transparency around how more complex predictive models work, making it difficult for stakeholders to trust the results.
- A lack of understanding and trust in predictive scoring and forecasting solutions is hindering organizations’ ability to support human decision making.

User Recommendations

- Determine whether your analytics capabilities will be delivered by the procurement platform, an external analytics platform or a combination of both.

- Create proof-of-concept areas of focus. Target areas that benefit from improved plan and forecast accuracy.
- Use stakeholder centricity as the key anchor point for all kinds of decision making, and concentrate on building analytics models that have the maximum impact in meeting those objectives versus traditional procurement performance metrics such as savings and cycle times.
- Evaluate the availability and relevance of third-party data to enhance and improve statistical results. Many of the packaged predictive forecasting tools lack external data ingestion.
- Identify and integrate multiple data sources to have a single source of truth that works as the foundation for your predictive analytics models.

Sample Vendors

Coupa; Orpheus; RapidRatings; Sievo; Simfoni; Suplari; Xeeva

Gartner Recommended Reading

Infographic: AI Use-Case Prism for Sourcing and Procurement

Combine Predictive and Prescriptive Analytics for Better Decision Making

Conversational AI

Analysis By: Naveen Mahendra

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

Conversational artificial intelligence (AI) platforms for procurement use natural language interfaces such as voice and text chat, including messaging platforms, to enable people (and machines) to discover and purchase goods and services via a dialogue with a machine.

Why This Is Important

Conversational AI enables users to interact with technology using spoken or written natural language. Virtual assistants and chatbots can guide business users through the requisitioning process, recommend the best options, gather data and help suppliers with common queries. As this technology continues to evolve, it is expected to merge with generative AI-based solutions, which will offer even more advanced and efficient procurement capabilities.

Business Impact

Conversational AI will provide productivity benefits across the entire source-to-settle process. User training costs will go down significantly as users just answer questions on what they need versus entering in data. Procurement application users who are not in a position to interact with a traditional user interface will have access to procurement processes via voice and/or chat.

Drivers

- Conversational AI has the potential to transform the way users interact with technology by allowing easy voice- or text-based requests, eliminating the need for complex menus and input methods. Examples include chatbots for suppliers to answer common questions and guided-buying virtual assistants for procurement.
- The utilization of conversational AI in the sourcing phase can assist in supplier discovery and evaluation, and provide insights into supplier performance.
- Improved guided buying is the most common use case in development by procure-to-pay (P2P) suite vendors.
- Other important drivers include simplifying contract creation and data analysis, saving time and reducing the need for training.
- Conversational platform makes it easy for a user to navigate through the buying process without needing to understand policy or process and yet achieving compliance.

Obstacles

- Conversational AI technology has come a long way and is now able to handle linear or lightly branching conversations with ease.
- While conversational AI is still in its early stages of adoption in procurement, its ability to handle more complex interactions and languages means it will become increasingly relied upon.
- Benefits of conversational AI can be realized only if it can seamlessly integrate with existing workflows and systems, which can be a challenge.

User Recommendations

- Evaluate and proceed with caution to start with small pilots as Conversational AI in sourcing and procurement gains traction.
- Prioritize and evaluate sourcing and procurement vendors with conversational platform capabilities, as well as other emerging technologies like generative AI, for risk-tolerant organizations.
- Include conversational platform capabilities in the overall evaluation for risk-averse organizations, without overemphasizing the value because change management issues could completely derail any project.
- Monitor the progress of generative AI solutions and their potential to replace or enhance conversational AI in procurement. Stay updated on emerging technologies and be ready to adjust procurement strategies accordingly.

Sample Vendors

Amelia; BotCore; BotSupply; Chyme; Google, IBM; Microsoft; SAP Ariba; Zycus

Gartner Recommended Reading

Cool Vendors in Conversational and Natural Language Technology

Best Practices for Localizing Your Chatbot Initiative

Selecting Conversational AI Solutions for Chatbot and Virtual Assistant Initiatives

Emerging Technologies: Research Roundup for NLP and Conversational UI

Emerging Technologies: Tech Innovators in Conversational AI and Virtual Assistants

Supplier Sustainability Applications

Analysis By: Miguel Cossio

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

Supplier sustainability applications help companies collect and assess suppliers' environmental, social and governance (ESG) performance. These applications use self-assessments covering multiple ESG issues, which allow organizations to measure how well suppliers meet sustainable procurement requirements.

Why This Is Important

A fast-evolving regulatory landscape, increased customer expectations and heightened awareness on a broad set of ESG topics are placing increased pressure on companies to report how suppliers meet sustainability requirements. Supplier sustainability applications enable companies to simplify and scale the data collection process from their supply base using self-assessments to assess supplier performance and identify areas of improvement.

Business Impact

Nearly all organizations will benefit from a supplier sustainability application. Stakeholder expectations and regulatory changes will continue to evolve and force organizations to scale sustainable procurement initiatives. By deploying a supplier sustainability application, companies can prove that the right level of due diligence is being exercised to ensure supplier adherence to multiple ESG topics and proactively manage reputational risks.

Drivers

- Changing regulatory landscape across geographies, covering a broad range of topics such as modern slavery, climate change and water stewardship.
- Customers increasingly request evidence that organizations are performing the due diligence needed to identify and resolve sustainability risks in their supply chains.
- Companies looking to drive growth by including sustainable practices and products in their value proposition for competitive advantage.
- According to the 2022 Gartner/SPP Sustainable Procurement Pulse Survey, 79% of organizations are committed or somewhat committed to achieving their sustainability goals. To enable their strategy, 45% of respondents are planning to use survey-based digital tools in the next two years.

Obstacles

- Poor supplier experience driven by survey fatigue and lack of improvement insights can limit supplier adoption of a sustainability application.
- There is an inherent tension between vendors offering standardized assessments that can drive supplier adoption versus fully customizable ones that can adapt to specific company needs.
- The technology landscape for applications that can enable sustainability outcomes is extremely fragmented, with vendors having varying capabilities and different focus areas. As a company's sustainable procurement ambition grows, several applications might be needed.
- Sourcing groups often find supplier sustainability initiatives hard to enforce and sustain. Some initiatives are perceived to be overheads that do not deliver direct value to their organization.
- Other challenges include a lack of executive sponsorship, too many suppliers to manage effectively and difficulty in justifying the business case.

User Recommendations

- Self-assess the need to invest in a supplier sustainability application by looking at the scope of your sustainable procurement program. In some cases, existing procurement applications will offer basic capabilities that can support your strategy in the short term without the need of investing in a purpose-built supplier sustainability application.
- Create a shortlist of vendors based on the ESG issues you want to address, the application capabilities needed, and the need to go beyond Tier 1 suppliers or collect product-level data. Less mature organizations should prioritize vendors that can provide materiality guidance and offer data validation capabilities.
- Increase the rate of supplier adoption by selecting applications that emphasize a positive supplier experience and enable suppliers to reuse data across multiple customers, therefore reducing the reporting burden on the suppliers.

Sample Vendors

Achilles; EcoVadis; ImpactBuying; IntegrityNext; NQC; SupplyShift; Transparency-One; Worldfavor

Gartner Recommended Reading

Market Guide for Supplier Sustainability Applications

Quick Answer: How to Select a Supplier Sustainability Application

Quick Answer: How Can Technology Be Used to Support a Sustainable Procurement Program?

Sliding into the Trough

AP Real-Time Auditing

Analysis By: Micky Keck

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

Accounts payable (AP) real-time auditing tools detect fraud, errors, overbillings and other issues that cause organizations to pay invoices and expenses erroneously. These tools can be a stand-alone product or embedded as part of a more extensive solution that facilitates the AP process.

Why This Is Important

AP real-time auditing solutions allow organizations to validate whether a payable is accurate and genuine, without the need for manual review. Companies deploying these solutions find that they typically pay for themselves within the first year of use. Cash is difficult to get back once it is paid out, and in the case of fraud, may be impossible.

Business Impact

AP real-time auditing has the most direct impact on the finance, treasury and compliance parts of the organization, and primary benefits include:

- Improved enforcement of complex spend policies due to automated transaction review (as compared to manual spot-checking)
- Increased visibility to purchasing policy noncompliance
- Reduction in workload related to clawback of duplicate payments
- Reduced need for manual review of every payment
- Increased contract compliance

Drivers

- The embedding of the technology in larger solutions, such as procure-to-pay, AP invoice automation (APIA), expense management and payment applications, provides wider availability.
- The advancement of machine learning used in these solutions has made AP real-time auditing much more scalable and accurate, and is the primary reason for success.
- Tighter focus on cash preservation during higher business risk periods, such as what companies are currently experiencing with economic uncertainty and supply chain disruptions.
- The base technology to perform AP real-time auditing is not complex, making it relatively easy for new vendors to enter the space. This is confirmed by more procure-to-pay, spend analytics, payment, expense and invoice automation vendors adding the capability to their existing products.

Obstacles

- Organizations handling invoice-to-pay processes across many systems will have to opt for point solutions versus embedded solutions for full audit coverage.
- Complex invoices, such as freight and other variable cost spend, are only covered by specialty solutions.
- Limited language coverage outside of English reduces the solution's effectiveness for larger companies, although this is improving as solutions add multilingual AI to their products.
- Purchase order (PO)-based invoice auditing is still a maturing technology for solution providers that are coming from the expense space.

User Recommendations

- Build a cross-functional team including finance, procurement and internal audit to assess the potential ROI, as the best-fit solution will vary for every organization.
- Evaluate the mix of PO-based versus non-PO-based spend in your organization. APIA solutions with real-time auditing are ideal for monitoring PO-based spend. Expense- or payment-focused solutions have higher success with non-PO spend.

- Take into account the effect of cash outflow that has no supporting transactional documents. Auditing done at the time of payment is often the only option in such cases.
- Gauge the complexity of your organization's compliance policies that control expense spend to find the most appropriate solution. Expense-focused solutions will provide higher levels of enforcement for complex policies.
- Evaluate if all cash disbursements fall under your current solution's scope. Review noncompliant spend data captured by the real-time audit solution to determine if noncompliance is reducing over time.

Sample Vendors

apexanalytix; AppZen; Bedrock; FISCAL Technologies; FlexTecs; Glantus; Medius; MindBridge; OpenEnvoy; Oversight

Gartner Recommended Reading

Infographic: AI Use-Case Prism for Sourcing and Procurement

Quick Answer: How Do You Reduce Fraud in the Accounts Payable Process?

Technology Opportunity Prism: AI in Procurement and Sourcing Software

Prescriptive Analytics

Analysis By: Lynne Phelan, Chaithanya Paradarami

Benefit Rating: High

Market Penetration: More than 50% of target audience

Maturity: Early mainstream

Definition:

Prescriptive analytics is a set of capabilities that specify a preferred course of action and, at times, take automated actions to meet a predefined objective. The most common types of prescriptive analytics are optimization methods, a combination of predictive analytics and rules, heuristics, and decision analysis methods. Prescriptive analytics differs from descriptive, diagnostic and predictive analytics in that the technology explores multiple outcomes and provides a recommended action.

Why This Is Important

Prescriptive analytics is critical to making data-driven, fact-based decisions. It generates actionable recommendations using statistical and mathematical techniques, taking into account procurement data, spend and relevant constraints, conditions, and costs. Through prescriptive analytics, an organization can develop strategies to meet its objectives by balancing trade-offs among conflicting goals.

Business Impact

Prescriptive techniques support:

- Strategic, tactical and operational decisions to forecast, reduce risk, maximize profits, minimize costs or more efficiently allocate scarce or competing resources.
- Recommendations for a course of action that best manages the trade-offs among conflicting constraints and goals.
- Simulation of multiple scenarios, patterns and comparison of recommended courses of action.
- Strategic and tactical time horizons, as well as real-time or near-real-time decision making.

Drivers

- Maturing and expanding data science initiatives, easier-to-use tools, better algorithms, more cost-effective and cloud-based computing power, and a substantial increase in available data.
- Improvement in analytics solutions, data quality, skills and broader use of predictive analytics.
- The post-COVID-19 reset, with a focus on optimization and other advanced techniques, and an emphasis on prioritizing actionable, proactive insight — as opposed to the more traditional reactive reporting.

Obstacles

- Despite the availability of data, there is a lack of consumable data.
- There is insufficient expertise for how and where to apply prescriptive techniques.
- The lack of formal operationalization methods and best practices sees the results of prescriptive analytics implementations vary.
- Analytics maturity is hindering adoption of prescriptive analytics. Many organizations have still not moved beyond asking: “What has happened?” They lack a forward-looking view focused on “what might happen?” and “what can we do about it?”
- Even established use cases can fall victim to common data science challenges such as data quality, bias and talent shortages.
- Although it is a necessary competence, prescriptive analytics does not automatically result in better decision making. Process change is also required to incorporate new analytics approaches.

User Recommendations

- Identify a business problem or decision, which involves complicated trade-offs to be made, multiple considerations, constraints and objectives.
- Consolidate, cleanse and enrich data by building relations with external data sources.
- Identify successful examples of where prescriptive analytics is being used today and look to expand/extend those initiatives.
- Evaluate the breadth of prescriptive analytics’ approaches and decision models available, and determine which best cater to the nature of your specific business problems and skills.
- Gain buy-in and willingness from stakeholders — ranging from senior executives to frontline workers carrying out the recommended actions — to rely on analytics recommendations.
- Analyze packaged applications (for example source-to-pay [S2P] suites) to determine which provide specific vertical or functional solutions, and which providers have the necessary skills.

Sample Vendors

Coupa; GEP; JAGGAER; Keelvar; LevaData; Orpheus; Sievo; Zycus

Gartner Recommended Reading

Predicts 2023: Analytics, BI and Data Science Composability and Consolidation

Use Advanced Analytics to Make Better Procurement Decisions

Combine Predictive and Prescriptive Analytics for Better Decision Making

Supplier Diversity Solutions

Analysis By: Kaitlynn Sommers

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

Supplier diversity solutions help organizations establish, grow, track and measure supplier diversity initiatives. Common capabilities include data enrichment, supplier registration/data collection, supplier discovery, spend analysis and economic impact reporting.

Why This Is Important

Interest in establishing and growing supplier diversity programs remains high despite economic uncertainty as organizations face pressure from the C-suite, employees and customers to make more conscious business decisions. Tracking, maturing and scaling a diversity program is difficult without the right technology to support growth and enablement across the source-to-pay (S2P) process.

Business Impact

Diversity and inclusion are becoming key components of business operations on a global scale. To support these initiatives, organizations are establishing and growing supplier diversity programs. The programs aim to support historically underserved communities by providing visibility to and encouraging doing business with diverse suppliers. Supplier diversity solutions enable scalability and provide a method of validating metrics and diversity data for organizations as their programs mature.

Drivers

- Supplier diversity is a high-visibility initiative and is not only supported by procurement teams but also often by high-level executives, including the C-suite.
- Customers are continually looking to organizations that are prioritizing ESG initiatives when making their spending decisions.
- Some organizations with more mature diversity programs are driving cost savings and negotiating tax breaks through reporting on their diversity spend and economic impact.
- While diversity programs are prevalent and well-defined in the U.S., there is a demand for global program support. Technology providers are exploring ways to define and enable programs on a more global scale and are leveraging tactics such as relying on existing third-party certifying entities as well as creating their own certification process.
- S2P suite and supplier management vendors have increased their prioritization of supplier diversity capabilities. While some are partnering, others are providing native capabilities and driving the adoption of supplier diversity through the S2P process.

Obstacles

- Organizations are split in their program maturity. Some have had diversity programs for years, while others are still in the early stages of maturity. Those embarking on new initiatives need proper processes to support programs before building a business case to invest in supporting technology.
- Data is the single biggest key to a successful supplier diversity program. It serves as the foundation of a program upon which it can evolve and mature. Organizations will have trouble quantifying their current state and growth against key goals without data enrichment to validate diversity status. Maintaining current data is a challenge.
- In the U.S., supplier diversity is well-defined and qualified by many certifying bodies. Solutions are better equipped to support programs in this region and often struggle to support diversity initiatives globally.

User Recommendations

- Follow Gartner's recommendation for investing in different capabilities to support supplier diversity as your program matures. At early maturity, consider data enrichment and spend tracking; at midmaturity, supplier discovery and supplier registration; and at advanced maturity, economic impact reporting and supplier development.
- Explore the market of solution providers based on your specific requirements. All vendors in this market offer different capabilities and support different use cases. Only a few offer comprehensive technology and services. You may need multiple tools.
- Evaluate expansion to a more global scale as your program matures.
- Provide diversity, equity and inclusion (DEI) initiative support for the suppliers with which your organization spends the most.
- Target outcome-oriented metrics by moving away from solely measuring diverse spend to also include what outcomes the program is looking to achieve.

Sample Vendors

AdaptOne; Coupa Software; Dun & Bradstreet; Proximo; Supplier.io; Scoutbee; Simfoni; SupplierGATEWAY; TealBook; VIVA

Gartner Recommended Reading

Quick Answer: How Can Technology Support a Supplier Diversity Program?

Drive Supplier Diversity Program Success by Addressing These Four Emerging Trends

Video: Coca-Cola — Building a Global Supplier Diversity Program

Retain to Grow: Getting More From Your Supplier Diversity Programs

Communicate Supplier Diversity Value Using Gartner's Input to Outcome Metrics Framework

Advanced Contract Analytics

Analysis By: Kaitlynn Sommers

Benefit Rating: Moderate

Market Penetration: 20% to 50% of target audience

Maturity: Adolescent

Definition:

Advanced contract analytics solutions use natural language processing combined with artificial intelligence to uncover (and sometimes recommend) action in response to business performance insights. These insights are generated through the analysis of structured and unstructured data pertaining to contractual terms and conditions.

Why This Is Important

Advanced contract analytics solutions help organizations gain visibility into their signed contracts, drive efficiency in the contract review and risk assessment processes, and provide opportunities for continuous improvement. These solutions are positioned to improve contract processes across the legal, procurement and sales domains.

Business Impact

These solutions serve multiple use cases including contract visibility, contract review and risk analysis. They also support advanced reporting and continuous improvement. Many organizations have been successful in expediting their presignature contract process and improving postsignature, audit and regulatory compliance. Impact spans multiple departments involved in contracting processes within an organization and can support scalability efforts without adding additional headcount.

Drivers

- Legal departments wanting to scale their support services to the organizations without hiring additional resources can use these solutions to improve efficiency.
- The “new normal” of constant but changing business disruption has accelerated organizations’ urgency to understand what their contracts contain and their obligations to third parties and to better manage their contract risk going forward. As a result, solutions are seeing rapid innovation and becoming more applicable to a broader audience.
- Regulatory changes across industries, such as banking and finance, are increasing the need for organizations to document contract risk assessments. Organizations can also use this technology to quickly react to changes in regulations and make updates to affected contracts.
- Cross-functional use cases for contract analytics solutions are growing. Business stakeholders need quick access to contract documents and can benefit from risk analysis when managing third-party relationships. Joint ownership of these solutions increases ROI and the likelihood of business case approval.
- Leading contract life cycle management (CLM) vendors are rapidly investing in contract analytics as the next competitive field and organizations that are mature in their CLM processes are seeking this advanced capability.
- Generative AI will facilitate faster adoption of some use cases such as automated contract review and contract analysis by quickly delivering contract clause language and helping business users better understand contract terms.

Obstacles

- The cost for these solutions is generally high. Often, the pricing model scales with the number of documents needing review — meaning those that have the greatest need for the solution also incur the greatest cost. This limits the pace of marketwide adoption unless the use cases and ROI are very clear.
- While these solutions are maturing and have become more reliable, some use cases require a deep understanding of an organization's definition of risk, templates and term acceptance. This means time and manual intervention before the tools learn enough to act as a lawyer in your organization.
- The market is highly fragmented. Most solutions enter the market serving a single use case. This is also true for CLM vendors expanding into advanced contract analytics, focusing on one use case before others. Organizations may need more than one solution to address all of their requirements.

User Recommendations

- Define your requirements, use cases and desired business outcomes first.
- Survey the market for solutions suitable for addressing your use cases. The market is highly fragmented and terminology can be interchanged and confused, so be clear about the business outcomes you want to support and create a suitable shortlist of vendors based on these use cases.
- Allow that you may need more than one vendor to support multiple use cases. You may include your CLM vendor, but these vendors vary significantly in the use cases they support as well.
- Run pilots to assess the benefit and reliability of contract analytics to reduce contract review time, increase visibility and manage contract risk.
- Review new features and expanded use cases regularly to determine if your chosen solution can contribute further to enterprise goals. As these solutions mature, there may be opportunities for broader enterprise use.

Sample Vendors

BlackBoiler; Cognitiv+; DiliTrust; Knowable; Lawgeex; LegalSifter; LexCheck; Litera; Luminance Technologies; Pramata

Gartner Recommended Reading

3 Questions to Answer Before Shortlisting CLM Vendors

Market Guide for Advanced Contract Analytics

Supplier Risk Management

Analysis By: Cian Curtin

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Adolescent

Definition:

Supplier risk management enables buyers to manage risk events that can impact their supply chain and initiate risk response plans. It includes risk event monitoring and mapping; financial; capacity; compliance; environmental, social and governance (ESG); corporate social responsibility (CSR); cyber risk; and performance management.

Why This Is Important

The increasing and constantly evolving nature of supply chain disruptions means that chief supply chain officers (CSCOs) and chief procurement officers (CPOs) need to be more proactive in their risk management approach. The 2021 Gartner Supply Chain Risk and Resilience Survey revealed that 79% of large organizations are prioritizing resilience and risk management in the next two years.

Business Impact

Early insights about events that could disrupt the supply chain help buyers to implement response plans and mitigate supply chain disruption. Leading indicators of supply disruptions and embedding such information into supply chain applications improve resilience and agility. Timely and efficient notice of other holistic risks such as financial, weather, cyber and geopolitical events that are likely to impact suppliers can provide competitive advantage, augmenting resilience and agility.

Drivers

- The market for supplier risk management solutions has seen a resurgence due to the ongoing impact of supply chain disruptions.
- Traditionally, risk management solutions have either been used to evaluate past events or built to monitor events in real time. Embedded AI/machine learning (ML) and graph technology give solution providers the ability to offer customers more refined financial risk scores, better impact modeling, and the beginnings of predictive and prescriptive analytics.
- With increasing maturity of the market and enabling technologies, supplier risk management applications will be able to extract and enrich unstructured data using emerging technologies, such as ML and graph technology.

Obstacles

- This is a high growth and fragmented market that consists of many different software applications that offer insights about various risk terrains and use cases.
- Building a business case strictly on ROI remains difficult, as putting a value in advance on managed risk is impossible.
- Many companies are convinced that a technology vendor and solution will provide the complete answer to their risk management challenges. However, those that lead with technology most often suffer from inflated expectations and unmet risk management needs.
- There are organizations that are looking to manage supplier risk through multiple tiers of their supplier network. Gaining visibility of the sub-Tier-1 suppliers is a capability in higher maturity supplier risk management solutions.

User Recommendations

- Design and build a solid process framework and a set of metrics, before evaluating a technology supplier risk management vendor.
- Evaluate the relevance and criticality of each information source to supply chain processes, and create a dependency matrix to quickly convert relevant events to actions that impact specific processes.
- Include input from other functions, including IT and sustainability, in supplier risk management initiatives.
- Survey your current landscape for applications that may provide a role in supplier risk management.
- Evaluate prospective software vendors based on the deployment of applications in similar organizations, the maturity of underpinning technologies, and geographic coverage.
- Evaluate data quality and trustworthiness for each monitoring source on an annual basis. Some data sources provide less than optimal data — an issue that may not be obvious from the start.

Sample Vendors

Aravo; apexanalytix; Coupa; Dun & Bradstreet; Everstream Analytics; Exiger; Interos; Ivalua; Resilinc; SAP

Gartner Recommended Reading

Market Guide for Supplier Risk Management Solutions

Manage Supplier Risk by Improving Supplier Visibility With Technology

How to Navigate the Fragmented Supplier Management Solutions Market

Ignition Guide to Supplier Risk Management

Operations and Savings Management

Analysis By: Micky Keck

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

Operations and savings management solutions help organizations manage, track and report projects across the procurement organization. This typically focuses on savings initiatives from sourcing and other cost-reduction activities, however, can include other policy and process improvement work. They include workflow capabilities for approval, project status tracking, and analytics. More advanced solutions track savings capture rates after the contract signing and component cost drivers.

Why This Is Important

Generating quantifiable cost savings is the lifeblood of most procurement organizations and one of the key metrics used to determine their performance. Spreadsheets are still the most common tool, however, vendors in multiple functional spaces are stepping up to provide low-effort, integrated savings tracking and management. The additional demands of nonprice goals such as ESG have forced organizations to track an expanded scope of work outside of savings to validate procurement's performance.

Business Impact

The difference between negotiated savings and savings reaching the bottom line is often significant if not properly tracked. Additionally, meeting ESG goals can be just as important as costs. Tracking tools can increase financial outlook accuracy, transparency and consistency in calculations which promotes objective individual job performance metrics. Properly calculated savings and reliable forecasting will vastly increase the credibility and strategic impact of the procurement department.

Drivers

- The heavy adoption of contract life cycle management solutions providing improved contracted pricing data.
- Spend analytic tools integrating category management and savings identification processes as an extension of their standard analytics offering.
- Improved sourcing automation solutions that allow procurement to drive savings in new commodities where coverage was previously not possible.
- Community data provided by SaaS solutions that allow for savings benchmarking and estimating.
- Macro business disruptions that have forced companies to invest in technology to reduce their bottom-line costs.
- The desire for distributed organizations to have a central location to track projects and their impact on staff workload and manage savings targets.
- ESG goals are driving noncost related projects that require the same level of tracking and reporting.

Obstacles

- Buyers' ability to obtain a budget to invest in yet another tool. The potential ROI is not as high as other procurement technology.
- Organizations track, calculate and report savings differently, which makes building a market-viable product difficult for vendors.
- Procurement teams commonly lack access to clean sourcing and procurement data.
- Buyers seek tools in which the output can flow into financial planning processes to reduce manual touchpoints with the finance department. However, most tools in this space are still not able to fully integrate with financial systems.

User Recommendations

- Involve the finance department in savings management initiatives to develop common savings definitions and establish credibility.
- Engage internal line of business stakeholders to update and monitor savings initiatives, thereby improving acceptance. Users should not focus solely on year-over-year savings. Cost avoidances, such as reduced or avoided cost increases and lower costs for new or one-off purchases, are equally important to track.
- Involve specialist providers if your organization has a spend of more than $200 million that you currently track via spreadsheets, or if you have no savings tracking functionality in existing tools.
- Determine if the vendor offers a savings tracking solution or has one on its product roadmap — recommended for organizations using spend analysis or e-sourcing solutions. Investigate the full functionality to ensure that it is not just a project management tool that supports the entering of savings information.

Sample Vendors

Focal Point; JAGGAER; Provalido; Raindrop; Sievo; Simfoni; SpendHQ; Zycus

Gartner Recommended Reading

Infographic: AI Use-Case Prism for Sourcing and Procurement

Climbing the Slope

AP Invoice Automation

Analysis By: Micky Keck

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition:

Accounts payable invoice automation (APIA) tools automate the capture, validation and processing of invoices. These solutions attempt to automatically match invoices to purchase orders (POs), goods receipts, contracts and other documents, or automatically code those invoices that do not have a PO. The expanded scope of APIA includes advanced capabilities, such as n-way matching, fraud detection, regulatory compliance and payments.

Why This Is Important

APIA technology is not new, but machine learning (ML) technologies, increasing government invoicing regulations and workforce expectations have changed the scope of customer expectations. Customer use cases have evolved well beyond simple document digitization and approval, forcing organizations to upgrade to solutions that solve modern problems. Government digital invoice legislation will force the technology to evolve as e-invoicing becomes mandatory in more countries.

Business Impact

APIA solutions can significantly reduce the effort and cost required to receive and approve invoices for payment. Additional benefits include improved legal compliance, reduced supplier invoice inquiries, faster invoice dispute processes, improved cash management visibility and fraudulent payment reduction. Consistent on-time payments to suppliers can improve suppliers willingness to accept better payment terms and pricing.

Drivers

- The increasingly successful application of ML technologies for capture, matching, coding, real-time auditing and validation processes are driving enhanced automation levels.

- Government e-invoice regulations are removing the problem of dealing with paper as part of the process, while also driving the need for solutions that comply with those regulations.
- Widely distributed organizations with manual accounts payable (AP) processes are increasingly adopting modern cloud-based, work-from-anywhere solutions.
- Customers looking to take advantage of supply chain finance solutions find APIA solutions as an easy way to acquire that capability.
- The APIA capabilities that traditional financial and ERP solutions provide are typically focused on how to account for an invoice and not on streamlining the end-to-end process.
- Invoice documents contain critical data that is used in analytics across the supplier-facing side of the business. These analytics can result in improved contract terms with suppliers that lower the overall cost of doing business.

Obstacles

- Optical character recognition (OCR) capture technology but still does not provide high-enough accuracy rates to achieve full automation for paper- or image-based invoices.
- Line-level account coding for expense or non-PO-based invoices is still difficult to get consistently correct.
- ML-infused solutions may require extensive startup training before they become fully useful.
- Changing government regulations around legal invoices make it difficult for vendors to create a global compliant solution.
- APIA solutions from different vendors are generally not interoperable, so suppliers submitting invoices often stick with email to reduce complexity on their side. Standard bodies and vendors are working to address this pain point, but a universal solution is still a distant goal.

User Recommendations

- Invest in APIA as part of a larger AP, or even a procurement process transformation strategy, which includes invoice capture through payment. APIA solutions often come with a range of extended capabilities beyond invoice automation, such as e-invoicing, payment and AP audit.

- Work with your vendor to understand their roadmap for artificial intelligence matching, analytics and legal compliance if your current solution does not have these capabilities. If there are no near-term plans for these capabilities, consider an alternative vendor strategy.
- Evaluate vendors on their range of capabilities, including invoice digitization, matching or account coding, exception handling and analytics capabilities.
- Work with the treasury to develop cash management programs that allow the organization to take advantage of early pay discounts. These discounts will be much more attainable with a reduced invoice processing cycle time.

Sample Vendors

Basware; DataServ; Esker; Medius; OpenEnvoy; Serrala; SoftCo; Tipalti; Vic.ai; Yokoy

External Workforce Procurement

Analysis By: Kaitlynn Sommers

Benefit Rating: Moderate

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition:

External workforce procurement solutions support the sourcing, automation and governance of contingent worker hiring and services-procurement based on statement of work (SOW). Core functionalities include requisition and SOW life cycle management, CV/resume comparison, rate comparison and negotiation, rate cards or service catalogs, onboarding/offboarding, task tracking, supplier “self-receipt,” and burn-rate tracking.

Why This Is Important

External workforce procurement solutions enable enterprise leaders to gain access to a skilled external workforce, automate hiring, improve compliance, optimize sourcing, and mitigate risks of contingent workforce (CW) and SOW-based services projects. These solutions are becoming increasingly important to ensure business continuity despite disruptions due to the COVID-19 pandemic, shortages of skilled workforce, economic uncertainty and increasing acceptance of remote working.

Business Impact

External workforce procurement solutions provide:

- Improved rate comparison, task tracking and cost reporting
- Better visibility of labor rates, time and materials charges, and milestone payments
- Simplifying onboarding and offboarding workflows
- Tighter spending controls to eliminate duplicate charges and overpayments
- Ability to leverage multiple talent channels, including staffing suppliers, and public and private talent pools
- Identification and mitigation of potential risks for SOW-based projects

Drivers

- Times of economic uncertainty increases the utilization of external workforce solutions as use of contingent resources increases workforce flexibility.
- Higher compliance, optimization of sourcing and automation of SOW life cycle management are the key growth drivers for the nascent SOW-based services market.
- Talent shortages put pressure on organizations to look beyond hiring for full-time roles to fill open positions and skill gaps with contingent workers.
- Reducing the cost of managing contingent workforce while improving the process efficiency and experience of business users is a priority for organizations, enabled by adopting external workforce procurement solutions. Manual management of these programs is slow and cumbersome.
- The solution options for managing external workforce procurement are expanding. While vendor management system (VMS) vendors support the most comprehensive functionality, procure-to-pay (P2P) suite vendors, HR applications vendors and freelancer management solution vendors are also adding functionality. As vendors begin to offer extended capabilities to increase the business impact, the adoption of external workforce management solutions will increase.
- Leading emerging technology themes, such as AI and automation, advanced analytics, and direct sourcing, will improve the efficiency and adoption of external workforce management solutions.

Obstacles

- Many organizations outsource the managed services related to contingent labor programs. In many cases, the managed service provider (MSP) may provide technology or proprietary processes for managing the program, which limits the adoption of stand-alone technology.
- Contingent labor and services spend varies for many organizations. Those with limited services spend are less likely to prioritize an investment in external workforce management solutions over alternative sourcing and procurement solutions that address higher volume spend categories.
- Traditional supplier-funded models are aging as the market slowly makes a shift from transactional pricing to subscription-based pricing. This can make it more challenging to sell the business case for a technology investment.
- Limited capabilities of current services management software applications do not fulfill the expectations of sourcing leaders. Vendors tend to focus on basic use cases, thereby reducing the business impact of such applications.

User Recommendations

- Evaluate the benefits of external workforce management solutions by analyzing your spend data and determining the size of your service program spend. Gartner typically recommends that organizations with $25 million in contingent labor and/or services spend generally have a solid business case for investing in a solution.
- Assess your existing application portfolio to determine whether you can extend the capabilities of an existing vendor to manage your external workforce. Carefully review the capabilities to ensure they fully meet the necessary requirements.
- Ensure that the fee structures are fair and reasonable for the buying organization and its suppliers as some solution vendors require suppliers to pay fees.

Sample Vendors

Beeline; Coupa Software; Magnit; SAP; Simplify Workforce; VectorVMS; Workday (VNDLY)

Gartner Recommended Reading

Magic Quadrant for Procure-to-Pay Suites

Critical Capabilities for Procure-to-Pay Suites

RPA in Procurement

Analysis By: Chaithanya Paradarami

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Early mainstream

Definition:

Robotic process automation (RPA) technology uses scripts to guide automation to replicate the user interface (UI) that a human would use to conduct procurement tasks on structured data. These scripts integrate applications via the UI and are orchestrated via a controller dashboard, which automates routine, repetitive, rule-based, and predictable procurement tasks using structured digital data.

Why This Is Important

RPA is not a panacea, but it can be a quick way to reduce manual work. RPA can execute scripted tasks around the clock faster, with fewer errors and at less cost than manual execution, provided the tasks are routine, repetitive, rule-based, and predictable. RPA can be offered as a stand-alone technology or as an integrated part of a broader procurement solution.

Business Impact

For outsourced tasks that are heavily labor-based, such as invoice data cleansing and supplier master data enrichment, RPA could decrease the number of full-time equivalents (FTEs) required. RPA could also help increase quality and reduce overall process costs. Potential savings will depend on how much automation already exists in an organization's legacy IT applications.

Drivers

- There is a continued adoption from enterprises and governments to digitize manual tasks and processes. RPA helps enterprises to kickstart their hyperautomation journey.
- RPA helps improve workers' experience to avoid repetitive and tedious work, which leads to employees focusing on other tasks that require more strategic decisions or creative work.
- Macroeconomic volatility has forced institutions to forego some spending and refocus their budgets on technological solutions that provide a quick ROI.
- Procurement technology leaders are hindered by the complexity and cost of making legacy system updates. As a result, procurement organizations resort to manual processes and workarounds, which lead to added costs and more processing errors. RPA can be used in these instances to automate these processes, with little assistance from IT, which increases speed and quality, and reduces costs.

Obstacles

- RPA needs structured data, and its value is limited to algorithmic tasks for which rules and variants can be easily defined.
- RPA is positioned in the market as a business tool, when the reality of deployment requires not just business knowledge, but also IT skills.
- Siloed purchasing of RPA is causing a rise in shadow IT and technology duplication. This may lead to increased organizational cost and greater scrutiny of future RPA investment, if intended objectives are not achieved.
- Organizations that fail to see through the hype run the risk of adopting RPA without considering more practical, time-tested alternatives. They could also underestimate the effort required to support ongoing governance and maintenance of scripts. The risk here is that RPA ends up costing more than it saves.
- RPA is one of the less capable hyperautomation tools, so it should not be your only consideration.

User Recommendations

- Avoid using RPA to solve efficiency gaps between modules within a single SaaS-based source-to-pay suite. If the source-to-pay vendor addresses the gaps, the RPA work is quickly rendered obsolete.
- Start RPA projects by automating simple, repeatable, rule-based processes to deliver quick wins, before scaling up to other, relatively complex processes. For example, start with procurement activities that involve simple processes, such as opening emails and attachments from suppliers, or copying and pasting data from supplier invoices. Then, move on to more complex tasks, such as reviewing contract terms, creating tail spend purchase orders and maintaining vendor/supplier master data.
- Create a centralized and vetted RPA sandbox that allows business stakeholders to experiment. Be sure to establish a set of RPA guidelines for the business to follow, but be careful not to slow things down.

Sample Vendors

Automation Anywhere; Infosys; Kofax; NICE; Nintex (Kryon); Pegasystems; SS&C Blue Prism; UiPath; WorkFusion

Gartner Recommended Reading

Beyond RPA: Build Your Hyperautomation Technology Portfolio

Secure Robotic Process Automation Initiatives With These 4 Essentials

Supplier Information Management

Analysis By: Cian Curtin

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Early mainstream

Definition:

Supplier information management (SIM) solutions support the collection, organization and maintenance of supplier information. This is achieved through supplier self-service data entry, data enrichment and validation, and internal workflows.

Why This Is Important

Supplier information management solutions provide support for supplier qualification and onboarding for buying organizations, often incorporating a supplier portal. SIM systems belong to the broader category of supplier management software that also support risk management, performance management and related activities. SIM tools support other procurement solutions, serving as the single source of truth for supplier information.

Business Impact

A SIM solution that collects, organizes and maintains information by delegating this responsibility to the suppliers themselves, significantly reduces the workload of procurement. Other benefits include better synchronized supplier master data across disparate applications; faster supplier communication, especially when mass communication is required; improved spend reporting; more accurate and holistic risk management analytics; enhanced supplier compliance; and reduction in failed and incorrect payments.

Drivers

- Organizations are heavily focused on better management of risk. Therefore, increasing complex supplier onboarding and data requirements are driving technology investment.
- The automation of key supplier master data such as banking information, diversity certifications and sustainability data is used to create a digital supplier entity.
- Emerging solutions are using machine learning (ML) and robotic process automation (RPA) to standardize supplier data.
- In the long term, we expect SIM solutions to be absorbed into broader procure-to-pay or source-to-pay suites, or to integrate additional capabilities to breach into other functional supplier management software areas, such as risk management, governance and sourcing. Niche vendors with extended service offerings will act as content providers for the broader platforms.

Obstacles

- SIM has become one of the foundational pieces of source-to-settle (S2S) suites. However, most S2S SIM offerings are mostly housing the information, but not generating information or executing any significant operations or analytics.
- Full-featured SIM applications are still fairly rare. However, procure-to-pay suite vendors and risk management vendors continue to build on their offering.
- SIM functionality and corresponding use cases can be partially supported by the vendor master data of an ERP system, or even sometimes in a product life cycle management (PLM) system.
- SIM applications continue to slowly climb the Slope of Enlightenment, as the lack of options prevents a quicker rise.
- Limited dedicated supplier information management providers are left on the market, as they have expanded their offerings since the competition from suite vendors has increased. This makes determining which system to use, what data to store and where to store it, a troublesome master data management issue.

User Recommendations

- Engage suppliers in data maintenance activities by making them contractually accountable for data quality terms in new and renewed supplier contracts, with penalties for nonperformance.
- Leverage SIM solutions to enable suppliers to submit and manage their own information, while also building in validations and controls.
- Coordinate SIM and supplier master data management activities, as the two activities are closely linked.
- Evaluate S2S SIM functionality, as this typically captures enough supplier data to support S2S processes, but does not support collecting data needed for other internal systems. This means that buying organizations should carefully consider if SIM applications, which are offered as elements of broader procurement suites, will meet their needs.
- Make e-sourcing events more efficient by leveraging SIM data, and creating cross-functional dashboards and workspaces related to specific vendors.

Sample Vendors

apexanalytix; Coupa; Graphite Systems; HICX Solutions; Ivalua; JAGGAER; Scoutbee; TealBook; Trust Your Supplier

Gartner Recommended Reading

How to Navigate the Fragmented Supplier Management Solutions Market

Build a Supplier Portal to Improve Supplier Management

Supplier E-Invoicing

Analysis By: Balaji Abbabatulla, Alexandre Oddos

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition:

Supplier e-invoicing software automates the processes required to receive, validate and archive B2B invoices electronically. Continuous compliance to evolving regulations regarding template, content, storage and connectivity to government infrastructure across multiple countries is the key differentiator in this fragmented market.

Why This Is Important

Compliance to evolving e-invoicing regulations that are being mandated by an increasing number of governments continues to be the primary reason underpinning the importance of e-invoicing software. Beyond such compliance, procurement and sourcing leaders could use e-invoicing as the justification for a business case to initiate incremental digitization and automation of end-to-end source-to-pay processes.

Business Impact

Supplier e-invoicing solutions enables procurement technology leaders to:

- Ensure compliance to mandatory government requirements.
- Create a single invoice submission channel for all suppliers.
- Remove the need to extract data from invoices through optical character recognition.

- Prepare invoice data for subsequent processing.
- Avoid discrepancies in value-added tax (VAT) recognition by ensuring consistent tax classification.
- Demonstrate the business impact of digitization and automation of procurement workflows.

Drivers

Drivers for procurement technology leaders include the following:

- Compliance to an increasing number of government regulations mandating e-invoicing.
- Improving sustainability credentials of the organization by prioritizing electronic invoices.
- Digitizing paper-based, invoice receipt and archival processes.
- Automation of manual tax code verification and validation.
- Reduction in time and manual effort in the accounts payable (AP) process.

Obstacles

Procurement technology leaders that are responsible for supplier e-invoicing face obstacles; for example:

- Monitoring often changing — and continuously evolving — government regulations.
- Integration with government e-invoicing infrastructure either directly (or through partners) in every country of operation covered by mandates.
- Reluctance of suppliers to migrate from their traditional processes to an e-invoicing process.
- Difficulty in following up with infrequent suppliers to ensure receipt of electronic invoices.
- Lack of an e-invoice for some categories of spend, such as travel expenses.
- Differentiating the value proposition of various providers including that of large, incumbent providers.

User Recommendations

- Create a cross-functional compliance team that includes procurement, finance and risk officers to analyze the impact of the evolving e-invoicing regulatory regimes on your business.
- Prioritize countries based on strategic business importance, high-invoice-volume countries and complexity of regulatory requirements, if you need international supplier e-invoicing.
- Engage with strategic customers and suppliers about their e-invoicing readiness. Chances are that, at least for a portion of your business partners, e-invoicing is common practice already.
- Start evaluating supplier e-invoicing software now, regardless of your company's size. It is only a matter of time before supplier e-invoicing becomes a mandatory regulatory requirement.
- Be prepared to use a mix of global supplier e-invoicing compliance platforms and specialized providers that have certified solutions for specific countries — as some countries require local partnerships.

Sample Vendors

Basware; Coupa Software; EDICOM; Esker; GEP; JAGGAER; SAP; Sovos; Pagero; Tradeshift

Gartner Recommended Reading

Strategic Planning: Assessing the Risk and Value of Procurement Applications

Competitive Landscape: Supplier E-Invoicing Software, 2020

Supply Chain Brief: July 2024 E-Invoicing Mandate in France: What Chief Procurement Officers Must Know

Source-to-Pay Suites

Analysis By: Naveen Mahendra

Benefit Rating: Moderate

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition:

A source-to-pay (S2P) suite is an integrated set of applications that supports procurement and sourcing activities. Standard base modules include e-sourcing, spend analysis, contract life cycle management, supplier information, risk and performance management, and procure-to-pay (P2P).

Why This Is Important

S2P suites are sought after by buyers to manage a wide breadth of sourcing and procurement processes in a single vendor suite. These suites promise integrated modules to address both strategic and operational processes that help organizations manage spend and suppliers. Implementing an S2P suite can increase the visibility, control and compliance of an organization, apart from boosting the efficiency and effectiveness of a procurement team.

Business Impact

S2P suites offer an integrated platform with a unified data model, analytics, an unvarying user experience, and reduced duplicate data input. The potential for end-to-end visibility and traceability from sourcing to payment allows for tighter business controls and policy compliance. Increased cost savings can be realized with the utilization of spend analysis and e-sourcing, as procurement professionals spend more time actioning insights provided by an S2P tool.

Drivers

- Interest in S2P suites has increased as companies face a high degree of global uncertainty compounded by limited talent availability. Seeking a single vendor to digitize their processes can minimize administrative oversight, while improving process centralization.
- Enterprises managing procurement processes through ERP look to S2P applications for the specialized features and functionalities, ease of integration with other internal and external systems, and user-friendly interface and experience.
- Organizations prefer S2P suites due to integration complexities, reduced data duplication, common user interface (UI)/user experience (UX), simplified vendor management and lower total costs.
- S2P suites continue to move toward mainstream adoption, as customers now have a more informed and realistic idea of the pros and cons to consider. While large enterprises made up the bulk of early adopters for S2P suites, midmarket organizations are accelerating their technology investments. Gartner expects more significant growth in this market segment over the next two to five years.
- Midmarket organizations are more likely to select a S2P suite due to limited resources for managing multiple vendors and a lower level of process maturity likely to be met by a suite vendor.
- S2P suites allow stakeholders to manage their more strategic purchasing requirements in the same tool that covers the basic sourcing needs for a more cohesive experience across users.

Obstacles

- While most leading strategic sourcing and P2P application vendors have built their offerings to support the full S2P process, there are always trade-offs to consider. For example, finding a single suite capable of effectively managing direct and indirect spend together is still difficult.
- Modules that often don't meet functional depth are commonly deployed as specialty solutions, which include solutions for supplier risk management, contract life cycle management, external workforce procurement and payments. Organizations often select these to complement a suite.
- Emerging technology use cases are better supported through third-party applications than in the suite environment. S2P vendors are inundated with customer enhancement requests, and must balance product updates and innovation with their R&D budget.
- Some of the vendors that completed their S2P suite through product acquisition have a lot of work to do before the solution can really be considered a truly integrated S2P suite.

User Recommendations

- Document and prioritize your requirements for an S2P suite. This will help shortlist vendors and determine if a suite or an ecosystem approach best suits your needs. Organizations with use cases that have limited cross-over to other functional areas and require little specialized functionality will benefit most from a single S2P suite.
- Vet S2P vendors' portfolio by profiling product maturity and client counts for each module. Many vendors have uneven suites.
- Test integration between modules. Some vendors have assembled suites through acquisition, and integration isn't always as complete as buyers expect.
- Evaluate strategic sourcing applications and P2P suites individually. Do not compromise on functionality to get a full S2P suite, unless you can gain significant value from it.
- Assess, as a midsize company, whether you are likely to get greater benefits from S2P suites. They can be a good-enough improvement on the procurement modules offered by your ERP vendors.

Sample Vendors

Coupa; ebidtopay; Esker; GEP; Ivalua; JAGGAER; Mercado Eletronico; Oracle; SAP; Zycus

Gartner Recommended Reading

Magic Quadrant for Procure-to-Pay Suites

Critical Capabilities for Procure-to-Pay Suites

2023 Strategic Roadmap for Source-to-Pay Technology

Contract Life Cycle Management

Analysis By: Lynne Phelan

Benefit Rating: High

Market Penetration: More than 50% of target audience

Maturity: Mature mainstream

Definition:

Contract life cycle management (CLM) solutions are used to proactively manage contracts from the initiation stage through the award, compliance and renewal stages. In this context, a contract is any agreement or contractual document containing rights and obligations that affect an organization now or in the future (e.g., a nondisclosure agreement).

Why This Is Important

It is critical to have visibility into legal documents and obligations with third parties. Interest in CLM remains high, as organizations seek to digitize their processes, manage compliance, minimize risk and eliminate inefficiencies related to contracting. Contract execution management has also become a high priority for organizations.

Business Impact

CLM appeals to companies of all sizes in all industries and geographies. Implementing it can lead to significant improvements in revenue management, cost savings and efficiency. Understanding and automating CLM can also reduce an organization's liability, risk and increase its compliance with legal requirements. Without a CLM solution in place, stakeholders commonly have to spend significant time extracting, managing, and reporting terms and pricing arrangements.

Drivers

- Implementing a CLM solution can lead to significant improvements in internal and external process efficiency, especially when contract clauses need to be reviewed by different departments within the organization.
- Digitizing and automating CLM can reduce an organization's liability and increase its compliance with legal requirements.
- CLM solutions provide a centralized repository and administrative alerts to avoid lost contracts, unexpected expirations and a lack of visibility. This can help legal teams and contract stakeholders manage third-party relationships more effectively.
- Digital workflows can provide increased governance over what is signed, when and by whom, and the protection of knowing that the correct contract terms are live. Such processes also provide deeper insights across all contractual agreements by analyzing content, conditions and risk.
- Innovative CLM solutions are offering AI-based capabilities that improve contract review, assessment and reporting to minimize contract risk.
- Standardized and custom reports allow CLM users to monitor aspects like cycle times, obligations, compliance and metadata management in a configurable dashboard.

Obstacles

- CLM adoption levels vary widely. The mixed adoption levels are often a result of lower-maturity contracting processes, rather than limitations of the technology itself.
- Mature CLM requires strong cross-functional collaboration between commonly siloed departments within an organization. Each department has its own priorities, and it can be difficult to meet the needs of all parties simultaneously to gain enterprise adoption.
- The prominent trend for CLM buyers is a single enterprise source of truth. However, this is a significant undertaking and cannot be underestimated. Additionally, most solutions that claim to support enterprisewide contracting requirements lack the breadth of partners and integrations to make this a reality.
- Emerging AI use cases in contracting further attract CLM buyers, but the capabilities are highly fragmented across the market, leading to lower realized value and uncertainty around whether the investment in AI is justified.

User Recommendations

- Evaluate CLM solutions from strategic sourcing suite vendors when seeking a buy-side contract management solution and look for CLM solutions that integrate with CRM or CPQ (configure, price and quote) suites when seeking a sell-side (customer) contract management tool.
- Evaluate CLM solutions that integrate with enterprise legal management suites when a solution for the legal department is a priority.
- Evaluate (often existing) content services platform (CSP) solutions when a solution to simplify organization contracts and track expirations is needed.
- Review vendors' coverage across both presignature and postsignature capabilities.
- Assess the potential use cases for AI as CLM vendors have a heavy focus on building out AI within their tools.
- Analyze CLM vendors' growth and financial viability. The market is crowded, and consolidation is inevitable. Contact Gartner if the CLM solution you are using or considering is acquired.

Sample Vendors

Agiloft; Conga; ContractPodAi; DocuSign; Evisort; Icertis; IntelAgree; Ironclad; Malbek; SirionLabs

Gartner Recommended Reading

Magic Quadrant for Contract Life Cycle Management

Critical Capabilities for Contract Life Cycle Management

3 Questions to Answer Before Shortlisting CLM Vendors

Toolkit: RFP for Contract Life Cycle Management

Entering the Plateau

Procure-to-Pay Suites

Analysis By: Lynne Phelan

Benefit Rating: High

Market Penetration: More than 50% of target audience

Maturity: Mature mainstream

Definition:

Procure-to-pay (P2P) suites are integrated solutions that automate workflows to request, procure, receive, and pay for goods and services across an enterprise. Core P2P suite functionality includes e-purchasing and accounts payable invoice automation (APIA). Extended P2P functionality includes supplier registration, employee expenses, services and contingent labor procurement, inventory management, budget management, and payments.

Why This Is Important

P2P suites optimize the purchasing process, resulting in improved buying experiences, process compliance, financial controls and ultimately, cost savings. They support hyperautomation strategies that free up resources to be spent on more-strategic activities for the organization.

Business Impact

P2P solutions increase the effectiveness of procurement and accounts payables processes across an enterprise. These solutions deliver strong return on investment by enforcing compliance with sourcing agreements, approval workflows and financial policies. Automating the procurement, approval and payables processes brings many operational efficiencies. Some of these efficiencies include superior cash management, reduced manual touchpoints in the process, reduced compliance risk and fraud.

Drivers

- P2P is often bought in conjunction with other strategic sourcing modules, such as spend analytics, supplier management, CLM and e-sourcing. These upstream processes have increased importance during times of uncertainty and risk.

- P2P suites are increasingly incorporating AI and robotic process automation technologies that significantly reduce the manual touchpoints. Metrics, such as cycle time, will be improved making the processes smarter and faster.
- P2P suites are bridging the gap into the supply chain. Purchase order (PO) confirmations and shipping notices are providing better order visibility to requisitioners.
- Built-in benchmarking and proactive visibility to key P2P process metrics allow for real-time workflow improvements.
- P2P suites improve PO quality, reducing supplier fulfillment errors and increasing invoice match rates.
- Standardization of procurement across a varied financial system landscape can increase process compliance and reduce errors.
- Priority is placed on digitizing manual, paper-based payable processes.
- P2P suites improve cash management, which is an increasing focus for organizations.
- Expanding coverage of spend under management by category and type (indirect versus direct) allows for better control of cost and policy compliance.
- Organizations with remote workforces that don't have access to traditional computers will benefit from mobile and voice-controlled UI advances.

Obstacles

- Despite the documented benefits of automating P2P, many companies still struggle with justifying the cost of P2P solutions and building a strong business case.
- Deep, industry-specific requirements may not be an out-of-the-box capability in general-purpose P2P suites.
- Supplier adoption is critical to the successful implementation of a P2P suite. Many companies experience portal fatigue, where suppliers resist using P2P systems due to the fact they already have numerous customer systems that require connectivity.
- Vendors in the P2P space don't provide equal support for direct and indirect spend, meaning organizations typically cannot cover all spend in one P2P tool. Direct spend support varies significantly by vendor.

- Although vendors focus on providing more intuitive UI and user experience (UX), users still face some challenges in adopting the tool and may resort to easier workarounds resulting in noncompliance and mismanaged spend.

User Recommendations

- Evaluate supplier-facing costs, functionality and UX with the same rigor as buyer-side features. Vendors with larger supplier networks may simplify supplier adoption.
- Review potential P2P provider's ability to comply with local tax and invoice regulations.
- Review potential P2P providers' integration capabilities with your core financial management applications and stand-alone technologies.
- Include industry-specific P2P solutions in the evaluation process if your organization is in the healthcare, hospitality, or oil, gas and public sectors.
- Evaluate the partner ecosystems of the P2P suites to enhance functionality beyond the core functionality.
- Examine the capabilities of a P2P based on your use cases as functionality continues to evolve; all company external spend is now a reasonable goal with some vendors.
- Investigate how mobile capabilities can improve stakeholders' use of the P2P solution, as tablet and smartphone usage continues to grow in business operations.

Sample Vendors

Basware; Coupa; GEP; Ivalua; JAGGAER; Oracle; SAP; Zycus

Gartner Recommended Reading

Magic Quadrant for Procure-to-Pay Suites

Critical Capabilities for Procure-to-Pay Suites

4 Steps to Choose Your Best-Fit Procure-to-Pay Solution

Manufacturing Context: Magic Quadrant for Procure-to-Pay Suites

Appendixes

See the previous Hype Cycle: Hype Cycle for Procurement and Sourcing Solutions, 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 (for example, 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)

Evidence

[1] **2023 Gartner Sustainable Procurement Pulse Survey.** This survey was conducted to assess the state of sustainable procurement today and identify initiatives that can make a difference and drive positive impact. The research was conducted online from 11 March through 26 May 2023. In total, 104 respondents were interviewed across North America (n = 19), Europe (n = 68), Latin America (n = 1), the Middle East and Africa (n = 1), and APAC (n = 15). Qualifying organizations reported enterprisewide annual revenue for the most recent fiscal year of at least $250 million. Qualified participants were employed full-time, had personally led, co-led, or played a role in a sustainable procurement initiative in the past two years, and were in manager roles or above. Disclaimer: Results of this study do not represent global findings or the market as a whole but reflect the sentiment of the respondents and companies surveyed. Gartner and the Sustainable Procurement Pledge (SPP) may distribute this report via their controlled-access websites for sole use by their respective memberships. The report is for internal use only and may not be further distributed.

Document Revision History

Hype Cycle for Procurement and Sourcing Solutions, 2022 - 1 August 2022

Hype Cycle for Procurement and Sourcing Solutions, 2021 - 10 August 2021

Hype Cycle for Procurement and Sourcing Solutions, 2020 - 31 July 2020

Hype Cycle for Procurement and Sourcing Solutions, 2019 - 7 August 2019

Hype Cycle for Procurement and Sourcing Solutions, 2018 - 18 July 2018

Hype Cycle for Procurement and Sourcing Solutions, 2017 - 24 July 2017

Hype Cycle for Procurement and Sourcing Solutions, 2016 - 2 August 2016

Hype Cycle for Procurement and Sourcing Solutions, 2015 - 3 August 2015

Hype Cycle for Procurement and Sourcing Solutions, 2014 - 29 July 2014

Hype Cycle for Procurement, 2013 - 31 July 2013

Recommended by the Authors

Some documents may not be available as part of your current Gartner subscription.

Understanding Gartner's Hype Cycles

Tool: Create Your Own Hype Cycle With Gartner's Hype Cycle Builder

Procurement and Strategic Sourcing Applications Primer for 2023

2023 Strategic Roadmap for Source-to-Pay Technology

Magic Quadrant for Contract Life Cycle Management

Magic Quadrant for Procure-to-Pay Suites

Ignition Guide to Creating a Digital Strategy for Procurement

Market Guide for Supplier Risk Management Solutions

Market Guide for Supplier Sustainability Applications

Table 1: Priority Matrix for Procurement and Sourcing Solutions, 2023

Benefit ↓	*Years to Mainstream Adoption*			
	Less Than 2 Years ↓	***2 - 5 Years*** ↓	***5 - 10 Years*** ↓	***More Than 10 Years*** ↓
Transformational		Generative AI for Procurement		Autonomous Procurement
High	Procure-to-Pay Suites Supplier E-Invoicing	AP Invoice Automation Contract Life Cycle Management Predictive Analytics Supplier Risk Management	Autonomous Sourcing Prescriptive Analytics Supplier Discovery	

Benefit ↓	*Years to Mainstream Adoption*			
	Less Than 2 Years ↓	***2 - 5 Years*** ↓	***5 - 10 Years*** ↓	***More Than 10 Years*** ↓
Moderate		Advanced Contract Analytics AP Real-Time Auditing Conversational AI External Workforce Procurement Intake Management Operations and Savings Management RPA in Procurement Source-to-Pay Suites Supplier Information Management Supplier Sustainability Applications	Category Management Supplier Diversity Solutions Tail Spend Solutions	
Low				

Source: Gartner (July 2023)

Table 2: Hype Cycle Phases

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.

Phase ↓	Definition ↓

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 (for example, improved user experience) that will be difficult to translate into increased revenue or cost savings

Source: Gartner (July 2023)

Table 4: Maturity Levels

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)