Gartner.

Hype Cycle for Procurement and Sourcing Solutions, 2020

Published: 31 July 2020 **ID:** G00450429

Analyst(s): Micky Keck, Patrick Connaughton, Kaitlynn Sommers

Application leaders modernizing their organization's procurement and sourcing processes can use this Hype Cycle to understand the maturity and benefits of a range of available technologies. It will also help them justify and prioritize investments in operational and strategic solutions.

Table of Contents

List of Tables

List of Figures

Strategic Planning Assumption

By 2025, organizations will reduce their source-to-pay process costs by 25% through the use of AI-infused tools.

Analysis

What You Need to Know

Global events such as COVID-19 are forcing organizations to rethink how they work with internal and external stakeholders. Sourcing and procurement applications are well-positioned to make the vision of working from anywhere and with anyone into a reality. This Hype Cycle identifies technologies that will help address both today's and tomorrow's procurement and sourcing challenges.

Innovations continue to deliver strategic and operational process improvements across the sourcing and procurement spectrum. Application leaders who support procurement need to expand their thinking about what cross-functional groups and processes are impacted by modern solutions. Increasing integration with financial, HR and legal processes is forcing organizations to take a wider view on automation and collaboration across functional areas.

Artificial intelligence (AI) technology continues to mature and add value across the procurement solution market. Use cases such as autonomous procurement, AI-based e-sourcing, accounts payable (AP) real-time auditing and conversational platforms in sourcing and procurement are starting to deliver results, rather than just attract hype.

The Hype Cycle

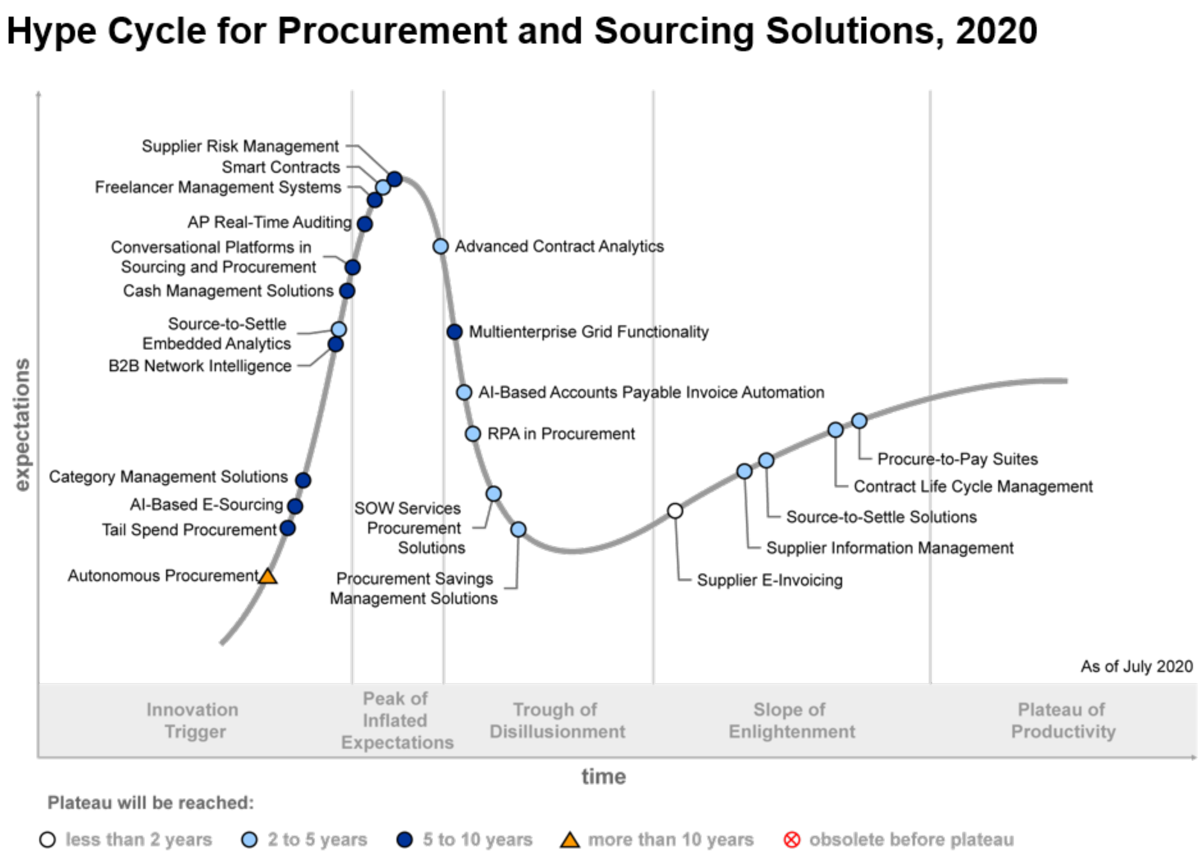
The procurement and sourcing solution market is fast-moving and expanding. It includes e-sourcing, contracting, supplier management and procurement, as well as adjacent functions such as contingent labor, AP automation and payments. Organizations looking to reduce cost, increase sourcing and procurement compliance, improve operational effectiveness, and reduce risk will find a wide variety of solutions.

Here are some recent trends in the procurement and sourcing solution market:

- **AI and analytics are popular topics in procurement,** with different types of analytics finding places on the Hype Cycle. Vendors are incorporating machine learning and virtual assistants, with success in targeted use cases. Proofs of concept that incorporate AI-assisted and automated sourcing are in early testing.
- **Buying organizations' interest in tightly integrated, digitized procurement solutions is driving feature consolidation.** Both procure-to-pay (P2P) suites and source-to-settle (S2S) solutions are climbing the Slope of Enlightenment toward the Plateau of Productivity. Embedded analytics continue to mature in S2S solutions and are getting nearer to providing a comprehensive view of procurement performance.
- **The intersection with finance is growing** as support for invoice, expense and payment solutions rapidly matures. This includes payments, cash balance forecasting, third-party supply chain financing, and improved error and fraud detection. These capabilities are described in the profiles of cash management solutions, AP real-time auditing and AI-based AP invoice automation.

- **HR process integration continues to mature.** Organizations have more options to blend their human capital spend with tradition business spend. This tighter integration makes it easier to procure services and manage complex projects that require internal and external staffing.
- **Increased demands for comprehensive legal document management.** Contracting processes, controls and analytics are in high demand. Technologies to support these demands are spread across the Hype Cycle as AI use cases continue to evolve.

Figure 1. Hype Cycle for Procurement and Sourcing Solutions, 2020



Source: Gartner
ID: 450429

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 closing in on the Plateau of Productivity, 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 advantage.

We identify three innovations as transformational:

- Autonomous procurement
- B2B network intelligence
- Smart contracts

Autonomous procurement has the potential to change how procurement operates by providing much higher levels of automation and spend control. It is, however, the least mature technology and faces a challenging path to the Plateau of Productivity.

B2B network intelligence lowers costs for an entire community of buyers, sellers and partners. The networkwide visibility also reduces operational risk, while improving tactical and strategic decision making.

Smart contracts have the potential to impact procurement tremendously by enabling better information management, increasing trust and automating contractual compliance. However, they are still at an early stage, and the technology is not secure enough to use for more than simple and confined activities.

Figure 2. Priority Matrix for Procurement and Sourcing Solutions, 2020

Priority Matrix for Procurement and Sourcing Solutions, 2020

benefit	years to mainstream adoption			
	less than two years	two to five years	five to 10 years	more than 10 years
transformational		Smart Contracts	B2B Network Intelligence	Autonomous Procurement
high		AI-Based Accounts Payable Invoice Automation Contract Life Cycle Management Procure-to-Pay Suites Source-to-Settle Embedded Analytics	Cash Management Solutions Conversational Platforms in Sourcing and Procurement Multienterprise Grid Functionality Supplier Risk Management	
moderate	Supplier E-Invoicing	Advanced Contract Analytics Procurement Savings Management Solutions RPA in Procurement Source-to-Settle Solutions SOW Services Procurement Solutions Supplier Information Management	AI-Based E-Sourcing AP Real-Time Auditing Category Management Solutions Freelancer Management Systems Tail Spend Procurement	
low				

As of July 2020

Source: Gartner
ID: 450429

Off the Hype Cycle

Five entries have been renamed, two removed and two combined from the 2019 edition of this Hype Cycle:

- Cognitive sourcing has been renamed AI-based e-sourcing.
- E-invoicing has been renamed supplier e-invoicing.
- Dynamic discounting solutions has been renamed and expanded into cash management solutions.
- Supplier risk monitoring has been renamed supplier risk management.

- Service governance solutions has been combined with SOW services management solutions and renamed as SOW services procurement solutions to better represent how the market has evolved.
- Blockchain for procurement and mobile procurement applications have both been removed as they are better covered as features of a larger solution, rather than as stand-alone solutions.

On the Rise

Autonomous Procurement

Analysis By: Micky Keck

Definition: Autonomous procurement uses artificial intelligence (AI) bots, with robotic process automation (RPA)-like capabilities, working from large pools of data to fully automate the procurement process for one or more categories of spend.

Position and Adoption Speed Justification: Truly autonomous procurement is just starting to emerge as a viable concept for organizations with modern procure-to-pay (P2P) suites and procurement processes in place. P2P suites and AI have evolved to the point where predicting and suggesting purchase orders for frequent, low-value indirect spend is possible.

Rapid developments in AI should make a basic version — a limited version that addresses a narrow subset of spend — of autonomous procurement possible soon. The full vision is still more than 10 years away. The fact that buying goods or services is only sometimes routine and predictable is the major challenge that needs solving.

A big challenge is that autonomous procurement requires large amounts of historical transaction data and clean supporting master data. The AI will require a significant amount of human training in the early stages, as the fit and function of a purchased item can be highly subjective.

User Advice: Viewing autonomous procurement as the ultimate end state in procurement efficiency is not an overstatement. Removing the burden of buying from all but a core group of professionals would free organizations to deploy resources on more valuable work. Purchasing would focus on only the highest value, unique and most complex spends, while AI handles everything else.

Application leaders focused on procurement must:

- Monitor advances in AI automation tools as 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 actively developing this technology as first movers. However, given the immaturity of this technology, new point solution providers with expertise in AI are likely to appear as alternatives.
- Assess the potential impact of automation by working with procurement to understand the amount of one-time buys in comparison with repeat spend. Organizations with high levels of repeat spend would be 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.

Business Impact: The potential benefit of autonomous procurement is clear. Eliminating people from the procurement process would reduce cost, rogue spend, fraud, errors, and a host of other problems. Gartner views autonomous procurement as a transformational technology with a high return on investment, due to the potential to completely reshape how procurement is executed. In much the same way that robotics revolutionized the factory floor, autonomous procurement will free organizations to redeploy resources to higher-value activities. The combination of reduced labor cost for autonomous purchases, reduction in uncontrolled spend, and reduction in errors will bring immediate savings to the bottom line.

AI's poor track record in dealing with highly variable environments is a major reason for skepticism when it comes to autonomous procurement. AI is very good at finding patterns, but is very limited when it comes to predicting previously unseen event occurrence. Eventually, data and experience will overcome this issue.

Benefit Rating: Transformational

Market Penetration: Less than 1% of target audience

Maturity: Embryonic

Sample Vendors: Coupa; GEP; Ivalua; JAGGAER; SAP Ariba; Zycus

Recommended Reading: "Innovation Insight for Autonomous Procurement: Reality Is Keeping the AI Robots From Taking Over"

"2019 Strategic Roadmap for P2P: Catching the Next Wave of Technology Innovation"

"Predicts 2020: Sourcing and Procurement Application Technology Disruptions"

"Predicts 2020: AI and the Future of Work"

Tail Spend Procurement

Analysis By: Kaitlynn Sommers

Definition: Tail spend procurement solutions are software applications that capture, process and fulfill spend on noncritical goods and services supplied by vendors who are not directly managed by the procurement team. Typically, this spend is too insignificant or infrequent to manage through traditional sourcing channels. These solutions can include a marketplace, quick sourcing functionality, vendor recommendations, and spend analytics.

Position and Adoption Speed Justification: Most procurement organizations are strategically managing only the portion of their spend, prioritizing high volume and spend categories. This leaves what is commonly referred to as the "tail" (typically up to about 20%) of an organization's spend unmanaged. While tail spend is usually a lower percentage of overall spend, it can be many single transactions across many suppliers. Visibility to this spend is one of the greater challenges procurement faces, making it historically cost prohibitive to manage well. However, 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 procurement solutions are starting to emerge, targeted at giving end users the ability to make spend decisions for nominal purchases without having to involve procurement. These solutions can include a marketplace, quick sourcing functionality, vendor recommendations, and spend analytics. They can often integrate into existing procurement applications to provide better visibility and reporting on tail spend purchases. Tail spend procurement will move at a moderate pace through the Hype Cycle as digital transformations expand beyond strategic spend management and organization look for a better way to manage this spend.

User Advice: Application leaders responsible for sourcing and procurement should:

- Analyze and estimate the amount of tail spend the organization has. If the tail is significant, work toward defining the subcategories of spend and seek a solution to help digitize and automate the purchasing process.
- Compare the capabilities and suitability to each solution based on your spend categories. Solutions are emerging and capabilities vary. Some solutions are better suited for managing certain spend categories, while others have a broader appeal.
- Explore the partner ecosystem of your procure-to-pay vendor for a tail spend procurement solution.
- Use caution when building the business case for a tail spend solution. Ensure that the opportunity for savings and consolidation of spend justifies an additional technology investment.

Business Impact: Tail spend procurement solutions can unlock additional savings for the procurement organization. Actively managing tail spend increases spend visibility and coverage, operational efficiency and improves purchasing controls. End users can still make one time purchases they require to do their jobs without adding to procurement's workload. Integrating tail spend procurement solutions into existing procurement technology organizations to drive purchasing policy compliance and reduce risk. These improvements are obtained by identifying off contract spend and consolidating the supply base where it makes sense.

Benefit Rating: Moderate

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Sample Vendors: Alibaba Cloud; Amazon Business; AppDirect; Coupa; Eezee.sg; Fairmarkit; GEP; Simfoni; Teampay; Vroozi

Recommended Reading: "Predicts 2020: Sourcing and Procurement Application Technology Disruptions"

“IT Market Clock for Procurement and Strategic Sourcing Applications, 2020”

“Vendor Rating: Amazon”

AI-Based E-Sourcing

Analysis By: Kaitlynn Sommers

Definition: AI-based e-sourcing is a next-generation e-sourcing application that adds AI capabilities to increase event automation and provide embedded decision support.

Position and Adoption Speed Justification: The hype around AI-based e-sourcing is building as new vendors enter the market and existing e-sourcing vendors add AI-based capabilities to their sourcing applications. AI-based sourcing features machine learning and natural language processing to achieve higher levels of automation over traditional e-sourcing.

There are two primary use cases for AI-based sourcing: event management and decision support. Examples of event management include automating event creation, structuring lists of items into optimal lots, automating start, stop, pause based on responses and automating feedback to suppliers. Examples of decision support include automated sourcing optimization and surfacing award recommendations. Another example is using advanced analytics to identify savings opportunities by breaking down cost structures and identifying the best time of year and day to run a sourcing event.

AI-based sourcing is nascent because the underlying AI technologies are immature, and there is a lack of accurate datasets to train the solutions. However, progress is accelerating as vendors allocate significant R&D resources to develop the advanced AI capabilities needed to deliver on promised functionality. Automated event management is likely to progress quicker than decision support, because the vendors cannot compensate for the lack of available organizational data to improve automated decision support. Overall, AI-based sourcing will move through the Hype Cycle at a moderate pace with five to 10 years before reaching mainstream maturity.

User Advice: AI-based sourcing applications require mature e-sourcing processes and easy access to historical e-sourcing event data. Don’t try to deploy an AI-based sourcing application without this foundation. Consider AI-based sourcing functionality as an efficiency improvement, but don’t rely on it to fully automate processes at this time. AI-based e-sourcing may help improve adoption of e-sourcing by providing more assistance for buyers. However, early adopters should monitor event automation and decision support to ensure accuracy. Successful use of these solutions still requires the end user to provide the solution with the right data, context and parameters. Such implementation requires people who understand how to deploy AI-based sourcing across multiple iterations to increase adoption incrementally which could require hiring external resources. Before investing in AI-based sourcing, conduct a risk-benefit analysis and consider your sourcing process maturity. Proceed if your organization is ready and can take advantage of on the benefits of these solutions at their current maturity.

Business Impact: AI-based sourcing increases the procurement organizations speed and agility. Higher levels of automation in event management will improve both the efficiency and effectiveness of the sourcing process. It will also free up sourcing staff from carrying out manual tasks that though digitized with a standard e-sourcing solution, are still not fully automated. This will allow them to focus on more granular and strategic activities such as supplier collaboration and innovation, driving the value that procurement brings to the organization.

AI-based sourcing also has the potential to help optimize the supply base and recommend ideal supplier awards based on project specifications, internal and external constraints, and market conditions. Surfacing these insights will help support procurements strategic role in advising stakeholders in the organization.

Benefit Rating: Moderate

Market Penetration: Less than 1% of target audience

Maturity: Embryonic

Sample Vendors: Coupa; GEP; Ivalua; JAGGAER; Keelvar; LevaData; SAP Ariba; Zycus

Recommended Reading: "Predicts 2020: The Emergence of IT Sourcing and Procurement as a Digital Transformation Catalyst"

"Market Guide for E-Sourcing Applications"

Category Management Solutions

Analysis By: Patrick Connaughton

Definition: Category management solutions are designed to allow category managers to create and monitor their midterm to long-term sourcing 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.

Position and Adoption Speed Justification: These solutions are in the very early stages of innovation. Only a few vendors currently offer an application specifically aimed at providing a central dashboard for category managers to work with. Existing spend analysis tools offer some category management capabilities, but these only report on spend after the fact vs. actively managing the overarching sourcing strategy. Spend analysis tools can be a precursor to broader category management solutions though and a few vendors now sell both.

Although these solutions are still emerging, it is not the technology maturity that limits adoption. It is limited by the current state of category management processes at most companies. This is especially true for indirect spend categories. Sourcing teams have limited bandwidth and focus first on creating a strategy for the areas with the highest spend. There are many opportunities for savings in other categories but without the right tools in place, sourcing teams are unable to actively manage them. They just do not have the resources and bandwidth to create a meaningful strategy beyond simply putting something back out to bid.

For adoption to become widespread, organizations must evolve from event-driven and tactical sourcing to more strategic category management. In the past, this has required dedicated and experienced category managers for each of the major spend areas. With the right tools and more accessible market intelligence, fewer category managers can manage a wider range of 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 Advice: Start by assessing the maturity of the current sourcing team. Use Gartner's Category Management Maturity Model to determine if the team is focused on just day-to-day tactical sourcing or more holistic category management. Without the right level of commitment to building out strategic category management from an organization and process perspective, software tools will add little value. Also, given the immaturity of the tools, we do not advise just rolling out a solution in hopes of it being a catalyst for change. This approach will not work since the software tools do not have proven best practices and common sourcing methodologies embedded in them.

New category management teams should first create simple templates for activities like opportunity assessments or supplier SWOT analysis in existing tools like Excel. As maturity grows, the template is refined and the charter becomes clear; then invest in category management applications to streamline and scale the process.

Well-established category management teams should start by reviewing what their strategic sourcing suite vendor has to offer. Then, cautiously enter into co-development arrangements where a long-term commitment to working with that provider is in place.

Business Impact: Global category management solutions can help to formalize the process of creating a category opportunity assessment. These assessments draw from external market intelligence and internal spend details to create a category-level view. From there, category managers can decide which areas to prioritize based on the potential opportunity relative to the category complexity, risk and strategic nature. Then, develop a set of specific activities to achieve the goal. For example:

- Putting a category out to bid.
- Running a spend analysis project to find ways to consolidate the supply base.
- Conducting a price benchmarking project.
- Scheduling a supplier quarterly business review.
- Renegotiating a contract.

Category managers can also 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. Gartner's overall assessment of category management tools' benefits is moderate because of the generally immature state of indirect spend management in sourcing organizations. As the processes and governance of managing indirect spend mature, these tools will gain higher value.

Benefit Rating: Moderate

Market Penetration: Less than 1% of target audience

Maturity: Embryonic

Sample Vendors: Beroe; Cirtuo; GEP; Ivalua; JAGGAER; SpendHQ

Recommended Reading: "Category Strategy Builder 2.0"

"Category Management Roadshow Deck"

"Maximize Category Strategy Effectiveness With Three Key Elements"

B2B Network Intelligence

Analysis By: Kaitlynn Sommers

Definition: B2B network intelligence is a class of analytics obtained from multienterprise networks that process tens of millions of digital transactions between trading partners. These analytics offer macrolevel insights such as identification of suppliers with increasing or declining sales, and of buying organizations that award contracts only to incumbent suppliers. B2B network intelligence can extend to pricing trends for specific spending categories.

Position and Adoption Speed Justification: B2B network intelligence continues to slowly climb toward the Peak of Inflated Expectations. Procurement and supplier network vendors are experimenting with B2B network intelligence. Most vendors are still developing their buyer/supplier communities and starting to collect data. They do not want to inhibit growth by exposing data or without a critical mass of data; critical mass is necessary for insights to be reliable.

Few networks have gained enough traction for vendors to "farm" their data in order to provide insights to buyers and sellers. Early-stage insights include metrics like cycle time benchmarks, pricing benchmarks and supplier recommendations. Buyers and sellers alike see tremendous value in these insights. Increased success in gleaning insights from this data also improves the potential for it to add value to external stakeholders such as investors, regulators and governments.

B2B network intelligence has the potential to open up a significant new stream of income for vendors. As networks mature and the volume of traffic increases, monetizing these insights will become a critical revenue stream for vendors.

User Advice: Application leaders responsible for sourcing and procurement solutions should:

- Protect their organization's data and reputation by requiring contract language that allows only aggregated, anonymous use of their data by any hub or network vendor.
- Evaluate sharing their organization's data when value — such as reduced or eliminated fees — may be given in exchange, as in the consumer/social market.

- Work with business leaders to identify B2B network intelligence that may be of interest to their organization and ask their network vendors to supply it. If vendors aren't planning to provide B2B network intelligence, consider alternatives.
- Prioritize B2B network intelligence during the evaluation of new procurement and supplier networks.

Business Impact: B2B network intelligence has the potential to be transformational for the B2B market by providing visibility into data and information that is currently unavailable or invisible to stakeholders. Buyers can gain access to detailed insights related to pricing, supplier behavior, process metrics and industry trends, driving better sourcing and procurement decisions. Sourcing and procurement leaders can use such insights to improve supplier enrichment by enabling timely interventions that improve supplier performance. They can also use this information to improve supplier diversity and reduce supplier risk. Likewise, suppliers will benefit from B2B network intelligence with better visibility to buyer behavior which can impact their pricing and engagement strategies. B2B network intelligence has the potential to drastically influence the way buyers and suppliers engage in the future.

Benefit Rating: Transformational

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Sample Vendors: Basware; Beroe; Coupa; LevaData; PowerAdvocate; PRO Unlimited; SAP Ariba; SAP Fieldglass; Upwork

Recommended Reading: "Macro Trends Affecting the Multienterprise Supply Chain Business Network Market: Provider and Solution Evolutions"

"Magic Quadrant for Multienterprise Supply Chain Business Networks"

"Hype Cycle for Multienterprise Solutions, 2019"

Source-to-Settle Embedded Analytics

Analysis By: Patrick Connaughton

Definition: Source-to-settle embedded analytics is a capability where analysis occurs within a suite workflow and doesn't require switching to another application to gather needed information. Embedded analytics capabilities are easy to use and almost invisible to the user. Early embedded analytics efforts were narrowly defined around specific processes like sourcing, CLM, P2P and supplier risk management. However, Gartner is seeing the emergence of holistic embedded analytics solutions that span the entire source-to-settle process.

Position and Adoption Speed Justification: Some level of basic analytics has always been available from strategic sourcing and P2P vendors. However, more flexible and comprehensive embedded analytics capabilities for diagnostic and predictive — even prescriptive — analytics are emerging in these solutions, along with a major focus on the future product roadmaps. This type of end-to-end, source-to-settle embedded analytics is still emerging with limited adoption. This is in part due to the relative newness of end-to-end suites themselves. The seamless availability of analytics as a built-in decision-making capability can mean that business users may not even recognize that they are "doing analytics." This is particularly likely when users are deploying this capability in support of operational decision making. During the next two to five years, embedded analytics built into source-to-settle applications will move from a differentiating capability to a standard feature. Differentiation will come from the sophistication of the advanced analytics and machine learning capabilities.

User Advice: Sourcing and procurement application leaders can best support the business by selecting sourcing and procurement applications with embedded analytics. Embedded analytics may be particularly suitable in support of business decisions that are repetitive and structured. Also, consider embedded analytics where a particularly rapid time to value is required or where your line-of-business teams need more decision support.

Embedded analytics will also be a part of organizations' strategies to help employees understand and improve their personal and team performance in the context of source-to-settle processes. Workplace metrics, measures and targets are vital parts of shaping expectations around individual employee and team behaviors.

Business Impact: The impact to sourcing and procurement teams will be high, with modern solutions characterized by real-time operational metrics to quickly identify bottlenecks and take action. Examples of these include requisition-to-PO cycle times (efficiency metrics) and stakeholder satisfaction scores, sourcing cycle times, or number of events conducted (effectiveness metrics). End users will also be able to compare key benchmarks like average cycle times against those of other (anonymized) companies.

Personalized self-service tools and dashboards will be available for the business to perform its own analysis and visualization. For example, consider a requisitioner making a purchase against a specific contract. Imagine that, at the point of ordering, the requisitioner clearly sees negotiated pricing, volume discounts, delivery cost, quality ratings and satisfaction scores. The requisitioner can then take all factors into account when comparing the potential purchase against what is available from other sources. Eventually, embedded analytics like this will extend to predictive and prescriptive analytics to optimize purchases based on real-time market intelligence like price, availability and supplier risk scores.

Benefit Rating: High

Market Penetration: Less than 1% of target audience

Maturity: Emerging

Sample Vendors: Basware; Coupa; GEP; Ivalua; JAGGAER; SAP Ariba; Zycus

Recommended Reading: "Predicts 2020: Sourcing and Procurement Application Technology Disruptions"

“Tech CEOs: Increase Your Competitive Advantage With the Right Embedded Analytics Platform Provider”

“Adopt Analytics Platforms to Support Evolving Supply Chain Needs”

Cash Management Solutions

Analysis By: Micky Keck

Definition: Cash management solutions allow companies to effectively manage their cash positions and make payments to suppliers. These solutions can include dynamic discounting, supply chain financing, supplier early payment programs and direct payments. Cash management solutions provide cash flexibility to buyers and suppliers using vendor, buyer, or third-party financial institution financing options.

Position and Adoption Speed Justification: Gartner has replaced dynamic discounting with cash management solutions as procure-to-pay, invoice automation, and stand-alone payment solutions vendors have greatly increased their capabilities. Due to this change, cash management solutions debut rising toward the Peak of Inflated Expectations. While the technology brings needed cash flexibility to buyers and their suppliers, adoption is still far from being widespread.

Cash management solutions face challenges to adoption on multiple fronts. First, enterprises struggle to process invoices quickly enough to allow buyers or suppliers to take advantage of flexible payment options. Second, most enterprises run payments out of an ERP or financial system that restricts the value cash management solutions bring to execution of payments. Third, most solutions have limited access to external financing and banks, which limits access to capital and raises costs.

Large infusions of capital and new market entrants are aggressively working to solve these problems in almost every market segment.

User Advice: Application leaders in charge of procurement or finance should work with the business to define the business case and blockers to success. The greatest opportunity for a successful implementation of a cash management solution occurs when:

- Procurement, finance and treasury align on the scope and intended goals of the solution
- The discount rate for early payment is greater than the cost of buyer capital
- Suppliers have a desire to take more control of their cash and are willing to explore options for payments
- Cash flexibility and visibility are not solved by existing payment processes
- Invoice automation tools and processes are in place to enable cash management options

Solutions in this space vary widely in the scope of financial options they can offer. Procure-to-pay and invoice automation solutions typically support dynamic discounting and supplier early payment financing, but some extend to payments and p-cards. Stand-alone payment and treasury management solutions typically provide a more extensive set of payment, workflow, cross-border and cash visibility tools.

Investment in the cash management space is enormous. Technologies such as real-time payments, blockchain, and financial marketplaces are rapidly expanding the solutions available to buyers. Gartner expects that this investment and the number of companies working on solutions will rapidly mature the market. Mergers and partnerships will heavily influence the speed with which vendors can bring new capabilities online, so vendor evaluations will go stale quickly.

Business Impact: Cash management solutions primarily impact the financial and treasury parts of the organization. However, improved cash management will have knock-on effects throughout the organization with better deployment of more flexible and visible cash positions. Procurement will have an improved negotiating position with suppliers as real-time adjustable payment terms make the contracted terms less important.

Many companies have implemented cash management solutions to derisk and accelerate ERP migrations with reduced risk to the business. A modern payment infrastructure can improve separation of duties controls and reduce the amount of people with access to the company's bank accounts.

Benefit Rating: High

Market Penetration: 1% to 5% of target audience

Maturity: Adolescent

Sample Vendors: C2FO; Corcentric; Coupa; Kyriba; Pagero; Paygevity; SAP Ariba; Taulia; Tipalti; Tradeshift

Recommended Reading: "Magic Quadrant for Procure-to-Pay Suites"

"Make APIA Part of Procure-to-Pay to Maximize Procurement Efficiencies"

"Success With AP Invoice Automation Requires More Than Paper to Digital"

Conversational Platforms in Sourcing and Procurement

Analysis By: Patrick Connaughton

Definition: Conversational platforms enable users to interact with technology using spoken or written natural language. What distinguishes them are their input mechanism (for example, text or voice), their underlying capability focus, and their delivery model (purpose-built for a particular task or general-purpose for the enterprise). Examples of conversational platforms in sourcing and procurement applications include chatbots for suppliers to answer common questions and guided-buying virtual assistants for procurement.

Position and Adoption Speed Justification: Conversational platforms have the potential to transform the way users interact with technology. Instead of using a mouse and keyboard to navigate complex pull-down menus, picklists and widgets, a user can simply type or speak a request. The platform response may combine many separate actions into one. The use of voice-enabled technology is not new. For example, companies have used voice-enabled applications in warehouses for more than 20 years. What is new is the sophistication of the engines powering the conversational systems and their spread into other areas — including sourcing and procurement.

Despite the great promise and widespread adoption in personal use cases, the technology is still in the early stages of development in business scenarios. But as the technology continues to include more context, handle more complex interactions and support new languages, people will increasingly rely on these platforms. Improved guided buying is the most common use case in development by procure-to-pay (P2P) suite vendors. This form of conversational platform makes it easy for a user to move through the buying process without needing to understand policy or process. Guided-buying assistants will continue to gain capabilities over time as their rollout continues.

User Advice: Currently, conversational platforms in sourcing and procurement are nascent. Companies should proceed with caution in the near term, creating pilots or projects that engage a smaller number of users to work out the kinks. Like other forms of AI, conversational platforms often need training, which can take several months.

Risk-tolerant organizations should prioritize and evaluate sourcing and procurement vendors on their conversational platform capabilities, in addition to other AI and emerging technologies. Risk-averse organizations should include conversational platform capabilities in their overall evaluation, without overemphasizing the value because change management issues could completely derail any project.

Application leaders responsible for procurement and sourcing applications should:

- Trial conversational solutions internally, by first applying the technology to a limited use case (employee self-service, for example) to assess if a further rollout is warranted.
- Work with IT to determine if embedded capabilities in a sourcing and procurement application are more appropriate compared to a companywide conversational platform standard.

Business Impact: Conversational platforms will provide cost savings and productivity benefits to companies across the entire source-to-settle landscape. User training costs will go down significantly as the platform handles rules and process understanding while users just answer questions on what they need. Users who normally would not be able to interact with a traditional user interface will have access to procurement processes via voice. The combination will enable high total benefits for businesses, even though any single improvement might be low.

Additional use cases:

- Streamlining the creation of simple, high-volume contract documents
- Simplifying data analysis, requiring less training while providing faster insights
- Reducing the time and effort required to hire and track contingent labor

Benefit Rating: High

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Sample Vendors: Basware; Coupa; GEP; JAGGAER; Medius (Wax Digital); Oracle; SAP Ariba; Vroozi

Recommended Reading: "Innovation Insight for Autonomous Procurement: Reality Is Keeping the AI Robots From Taking Over"

"Predicts 2020: Sourcing and Procurement Application Technology Disruptions"

"Market Guide for Conversational Platforms"

At the Peak

AP Real-Time Auditing

Analysis By: Micky Keck

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 come as a stand-alone product or embedded as part of a more extensive solution that facilitates the AP process. Finance employs real-time audit tools across the AP process, including expense and invoice processing and payments.

Position and Adoption Speed Justification: AP real-time auditing is new to the Hype Cycle in 2020 and is rising toward the Peak of Inflated Expectations. Evolving from a niche solution primarily focused on travel expenses, real-time auditing can now address almost all spend that runs through AP.

The advancement of AI has made real-time auditing much more viable and accurate, thus the increase in attention from potential users and the positioning close to the peak of hype. However, this reliance on AI has its downsides as well. English is the primary target for these tools, with other languages receiving limited support. The AI will also need historical training data, so accuracy will improve over time. When these issues are addressed, we'll see AP real-time auditing progress to mainstream adoption.

Vendors are applying real-time auditing in different parts of the AP process, increasing the speed of innovation. For example, purchase-order-based invoice auditing has less coverage in audit-specific tools, although AP invoice automation solutions are working to fill the gap. Comparatively, payment-based solutions can offer complete coverage across all spend types, but have fewer details in the transaction for analysis.

User Advice: Application leaders supporting procure-to-pay processes should work with finance, procurement and internal audit to assess the potential ROI for their organization. The best-fit solution will vary based on the following factors:

- The mix of PO-based vs. non-PO-based spend — 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.
- Amount of cash outflow that has no supporting transactional documents — auditing done at the time of payment is the only option.
- The complexity of compliance policies that control expense spend — expense-focused solutions will provide higher levels of enforcement for complex policies.

Many vendors also provide historical review services that audit past spend. These services are optional, but often have a positive ROI while also providing data for training the audit engine.

Organizations that already employ a form of real-time auditing should evaluate if all cash disbursements fall under its scope. Organizations should review noncompliant spend data captured by the real-time audit solution to determine if noncompliance is reducing over time.

Organizations that employ a manual audit process should map out how those processes would change when supplemented with a real-time solution. A real-time solution may not cover all legal requirements that replace a manual audit process, but it will provide extended coverage.

Business Impact: Real-time AP auditing has a moderate benefit rating overall; however, highly complex organizations may realize a higher value. Higher complexity provides more openings for out of compliance or fraudulent spend, as well as more manual effort to maintain compliance. Real-time AP auditing has the most direct impact on the finance, treasury and compliance parts of the organization. Complex spend policies are much easier to enforce when all transactions are automatically reviewed compared to manual spot checking.

Primary benefits include:

- Increased accounts payable efficiency through flagging of problem invoices.
- Increased visibility to purchasing policy noncompliance.
- Accounts payable will see a reduction in workload related to clawback of duplicate payments.
- Streamlined approval workflows reduce manager or budget owner work as real-time auditing will identify and block out of policy spend automatically.

Language limitations are a key consideration, non-English organizations will find fewer options until the solutions mature.

Benefit Rating: Moderate

Market Penetration: 1% to 5% of target audience

Maturity: Adolescent

Sample Vendors: apexanalytix; AppZen; AvidXchange; Chrome River; Kyriba; Medius; Oversight

Recommended Reading: “Success With AP Invoice Automation Requires More Than Paper to Digital”

“Advanced Accounts Payable Whitepaper”

“Tips for When to Use RPA in Sourcing and Procurement”

“How to Improve Employee Expense Management”

“3 Steps to Creating an E-Invoicing Vendor Shortlist”

Freelancer Management Systems

Analysis By: Kaitlynn Sommers

Definition: A freelancer management system (FMS) is a platform that enables direct communication between hiring managers and freelance workers. An FMS generally provides algorithmic job matching, worker classification, workflow automation, payment processing and performance feedback.

Position and Adoption Speed Justification: The market for FMSs is emerging and has high growth potential. FMSs enable organizations to locate, negotiate with, and collaborate directly with nonemployee professionals to fulfill short- and long-term resource requirements. FMSs often focus on specific skills or types of workers, ranging from unskilled labor to highly specialized professionals. FMSs typically maintain public talent pools, but some also support private talent pools.

Organizations are experimenting with how to incorporate freelancers into their talent strategy, but most are still working out how to use FMSs in conjunction with existing vendor management systems (VMS). In many cases, there is not yet a formal strategy for engaging with an FMS vendor.

Human capital management, VMS and procure-to-pay vendors are introducing direct sourcing capabilities, which could accelerate adoption of FMSs. The economic impact of COVID-19 may also accelerate adoption of FMS as organizations seek new ways to get work done in times of financial uncertainty. Hiring and working with freelancers is done remotely through FMSs and can be executed on a project basis with less financial impact and risk than hiring a full-time employee. On the other hand, the potential for changes in legislation and for worker misclassification presents a challenge to swift adoption. As a result, FMSs will progress at a moderate pace along the Hype Cycle as awareness of them broadens, their benefits are proven and desire for them grows.

User Advice: Application leaders responsible for services procurement initiatives should work with HR, procurement and legal teams to develop a contingent workforce strategy. This strategy should include examining the benefits and risks of using freelancers and an FMS. Assess when and where the organization may be using freelancers today. Gartner often initial engagements at a hiring manager or department level before a formal strategy is created.

Organizations that spend significant sums annually on nonemployee labor should evaluate FMSs as a means of streamlining and improving existing collaboration with freelancers. Small and midsize companies may also want to review them as means of consolidating the use of freelancers and other independent workers. If your organization is using a VMS today, explore the direct sourcing capabilities and integrations with FMSs.

Before engaging with an FMS, evaluate the talent quality and breadth of skills available, based on the organization's needs outlined in the contingent-workforce strategy. A key differentiator of each FMS is the quality and type of freelancers engaged.

Business Impact: Freelancer management systems offer organizational improvement in three main areas:

- **Access to talent:** Organizations can access public talent pools and search for freelancers available globally based on skill set. Alternatively, organizations can develop private talent pools filled with alumni, retirees, "silver medalists" (second-place job candidates) and known freelancers.
- **Operational efficiency:** Engaging directly with freelancers eliminates a layer of the traditional sourcing process. Algorithmic job matching identifies qualified candidates. Hiring managers can view freelancers' profiles, credentials and work history. Onboarding is quick, and managers and freelancers can communicate and collaborate in real time. Once a manager accepts a work product or deliverable, the system executes payment using various options, including escrow funds.
- **Compliance:** Built-in compliance tools ensure that workers are properly classified and the completion of any required background checks and drug tests. FMSs also track the receipt of all required tax and employment documentation.

Despite the positive impact of FMSs, we give them an overall benefit rating of only moderate. These solutions address only a segment of the overall nonemployee labor market and tend to support significantly less spending than VMSs. However, we expect FMSs to continue to grow in popularity and spending throughput over time as organizations increase their use of nonemployee labor.

Benefit Rating: Moderate

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Sample Vendors: Catalant Technologies; Comet; Expert360; Field Nation; Fiverr; Kalo; Shortlist; Toptal; Upwork; WorkMarket

Recommended Reading: "Market Guide for Services Procurement Solutions"

"Learn How the Future of Work Is Transforming Employee Experience Globally"

"Predicts 2019: Sourcing and Procurement Application Vendors Embrace APIs and the Ecosystem Approach"

Smart Contracts

Analysis By: Martin Reynolds; Avivah Litan; Adrian Leow

Definition: A smart contract is a type of blockchain record that contains externally written code, and controls blockchain-based digital assets. When triggered by a specified blockchain write event, a smart contract immutably executes its code and may result in another blockchain event.

Smart contracts are neither smart nor contracts, and can only read from, and write to, the blockchain. All off-chain interactions with smart contracts must be handled by agents that map between off-chain assets and on-chain digital assets.

Position and Adoption Speed Justification: Smart contracts are well-developed for on-chain actions. For example, many cryptocurrencies are funded using an Ethereum smart contract style defined as ERC-20. These cryptocurrencies have not been hacked, despite the considerable financial gains to be made.

However, coupling a smart contract to business actions remains a challenge. This coupling works through external agents (for example, blockchain oracles) that write blockchain records to trigger a smart contract, and then read a blockchain record written by the smart contract to execute a business action.

Creating these external agents is just as challenging as creating a blockchain. This challenge arises because a corrupted agent could pervert an input to the smart contact by writing a modified record, or ignore an output record from a smart contract. Therefore, these external agents need redundancy and trust mechanisms that complement the blockchain system.

Blockchain's consensus mechanism is currently the only mechanism that supports functional smart contracts.

User Advice: Smart contracts can automate business transactions, executing transactions under mutually agreed terms embodied in the code. This approach eliminates human delays and costs, and potentially allows companies to execute far more transactions. This increased capacity comes at minimal incremental cost, thereby increasing efficiency, reducing operating costs, and opening new business models. Smart contracts, for example, can allow competitors to collaborate over shared resources without compromising their independence.

Application leaders looking at developing a strategy to deploy smart contracts should:

- Ensure that smart contract implementations are properly covered by legal agreements, such that unexpected or undesirable results are reversible outside of the blockchain.
- Identify use cases that can derive significant benefit from the contract automation processes promised by smart contracts and associated oracles. Such use cases will deliver some combination of, for example, accelerated business processes; reduced transaction costs; asset sharing with competitors; or new business models.

- Research the emerging platforms, technology, tools and frameworks to determine the level of resources needed for smart contract development.
- Identify integration points with existing processes to determine their impact on core industry and ecosystem value propositions. Assess the implications for your information management architecture, legal compliance policies, payment systems, customer service and other core business processes.
- Develop policies and processes to create reliable smart contract code and ensure that you have the tools to monitor its correct execution.

Business Impact: Smart contracts will develop in different forms and with differing levels of impact. Many will simply replace existing transactional tracking mechanisms and execution systems such as used in blockchain-based supply chain management use cases. As such, smart contracts will be impactful. However, only when truly secure and proven smart contracts and related off-chain interaction systems develop will smart contracts have the potential to transform commercial relationships through granular obligation recognition and secure value transference.

The future vision of smart contracts includes a potential replacement for simple or complex legal documents and transactions, and integration with AI systems. However, there are many obstacles to be overcome, such as organizational readiness, integration with systems of record, unanticipated "follow on" smart contracts, perceived lack of enforceability, potential evidentiary gaps, regulatory compliance, which may take many years to resolve.

Benefit Rating: Transformational

Market Penetration: Less than 1% of target audience

Maturity: Embryonic

Sample Vendors: Augur; Ethereum Foundation; Gnosis; Hyperledger; Monax; Provable Technologies; R3

Recommended Reading: "Managing the Risks of Enterprise Blockchain Smart Contracts"

"Predicts 2020: Blockchain Technology"

"Guidance for Blockchain Solution Adoption"

Supplier Risk Management

Analysis By: Balaji Abbabatulla

Definition: Supplier risk management enables buyers to track events that can impact their supply chain and initiate risk mitigation plans. Such events include supplier financial performance, geopolitical risks, news sentiments, judicial/court filings and regulatory compliance.

Position and Adoption Speed Justification: Supplier risk management moves closer to the Peak of Inflated Expectations due to the increasing relevance of this innovation profile to the current uncertainties in the business environment. Awareness of critical supplier events enables buyers to reduce the impact of these events on their business, thereby improving supply chain resilience. This is a nascent and fragmented market that consists of many different software applications that offer insights about various aspects of risk. Artificial intelligence technologies such as machine learning enable supplier risk management applications to align information to the criticality and relevance to specific buying organizations. With increasing maturity of the market and enabling technologies, supplier risk management applications will be able to extract and enrich data using machine learning. These applications will also be able to convert information to actionable insights and embed such insights into broader procurement suites, thereby increasing adoption.

User Advice: Application leaders responsible for procurement initiatives should:

- Evaluate prospective software vendors based on the deployment of applications in similar organizations, maturity of underpinning technologies and geographic coverage.
- 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.
- 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.

Business Impact: Recent uncertainties caused by the COVID-19 pandemic have highlighted the importance of regularly monitoring critical supplier events. Early insights about events that could disrupt the production schedule of suppliers help buyers to implement contingency plans and avoid supply chain disruption. Therefore, early detection of supplier risk and embedding such information into supply chain applications improve supply chain resilience. Timely and efficient notice of financial, weather, political and social events that are likely to impact suppliers can provide competitive advantage and agility. Supplier risk management applications are increasingly using information about critical events to drive downstream actions to deliver competitive advantage to their customers.

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Sample Vendors: Coupa; Dun & Bradstreet; EcoVadis; Elementum; Google; IBM; LexisNexis Risk Solutions; riskmethods; Resilinc; Thomson Reuters

Recommended Reading: “How to Navigate the Fragmented Supplier Management Solutions Market”

“Ignition Guide to Supplier Risk Management”

Advanced Contract Analytics

Analysis By: Patrick Connaughton

Definition: Advanced contract analytics solutions use natural language processing combined with AI to uncover (and sometimes, recommend) an 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.

Position and Adoption Speed Justification: Gartner estimates that contract analytics solutions have penetrated less than 5% of their target audience.

Adoption is the strongest in legal services, where post-M&A contract review and standardization was the initial use case for software vendors in this market. However, the appeal of these solutions is broadening outside of legal organizations. Cross-functional use cases for contract analytics solutions include contract review and comparison, contract compliance reporting, contract risk scoring, and contract financials reporting.

Like all things related to AI right now, there is a tremendous amount of hype surrounding this space. That being said, organizations are generally well-educated at this stage regarding AI capabilities in contract analytics. As a result, advanced contract analytics has just passed the Peak of Inflated Expectations and begun its decent into the trough. However, these solutions are seeing rapid innovation and becoming more applicable to a broader audience. As a result, we see advanced contract analytics moving relatively quickly through the trough and into the plateau over the next two to five years. Another factor leading to this acceleration is that end-to-end CLM vendors are rapidly investing in contract analytics as the next capability “battleground,” and organizations mature in their CLM processes are seeking this advanced capability.

User Advice: Before investing in a contract analytics solution, it is essential to assess the technology used for contract life cycle management (CLM). This will determine whether you should be considering a shortlist of vendors with both CLM capabilities and contract analytics, or specialist contract analytics vendors. For example, if an organization does most of the contract generation, then it needs solid drafting from template capabilities in a CLM tool. Alternatively, if the company mostly brings in third-party paper, then advanced analytics will be more important.

Advanced contract analytics solutions are still emerging so a pilot phase is critical. Run pilots to assess the benefit and reliability of contract analytics to reduce contract review time, increase visibility and manage contract risk. Be aware that advanced contract analytics can expose poor processes. You must be willing to take stock of your current processes and plan for improvements where necessary. As these solutions mature, there may be opportunities for broader enterprise use. Review new features and expanded use cases regularly to determine if the solution can contribute to broader enterprise goals.

Business Impact: Although advanced contract analytics solutions can lack maturity, there are definitely benefits attainable through their use. Legal organizations have already been successful in leveraging these solutions to expedite their contract review processes as reviewing contracts is a time-consuming process for any large enterprise or legal organization. There are multiple contract types with variable clauses, contracts on third-party paper, and standard contracts (such as nondisclosure agreements) that have accepted alternate clauses. The legal staff may take hours — or even days — to review unfamiliar and sometimes unfavorable contract clauses, terms and obligations. This is especially true for organizations evaluating a high volume of third-party contracts.

Additionally, data extraction and risk management capabilities can help build a competitive advantage for organizations focused on contract risk control. For procurement contracts, these solutions can help to extract key performance measures as an input into establishing a supplier performance monitoring program. Advanced contract analytics solutions help organizations to resolve the unknowns, improve their contract clause insight, reduce bottlenecks and manage contract risk.

Benefit Rating: Moderate

Market Penetration: 1% to 5% of target audience

Maturity: Adolescent

Sample Vendors: Brightleaf Solutions; Conga; ContractPodAi; DocuSign; Icertis; Kira Systems; LawGeex; LegalSifter; LinkSquares

Recommended Reading: "Innovation Insight for Advanced Contract Analytics"

"Magic Quadrant for Contract Life Cycle Management"

"Quickly Create a CLM Shortlist With These 3 Steps"

"Critical Capabilities for Contract Life Cycle Management"

Sliding Into the Trough

Multienterprise Grid Functionality

Analysis By: Micky Keck

Definition: Multienterprise grid functionality is a feature of third-party-owned business process networks (BPNs). Specifically, it is the unique set of capabilities that emerge when all BPN customers agree to share specific common content in a many-to-many fashion. Buyers, suppliers and partners collaborate on content such as logistics, transportation and procurement data. The BPN owner adopts a single data model or provides data-mapping services (multienterprise MDM) to create a grid.

Position and Adoption Speed Justification: Multienterprise grid functionality continues to slide into the Trough of Disillusionment even as smaller vendors invest in the infrastructure needed to deliver interconnected B2B networks. Buyers and sellers are attracted to the openness of interconnected networks, but major procurement and sourcing vendors are limited to their large private networks.

The grids promote the vision of business partners working collaboratively by using standardized information and processes to synchronize the operational processes. Suppliers can upload common master data, certifications, and product and other information, which is then available on a permission basis to applicable buyers.

Multienterprise supply chain business networks (MESCBNs) show the value that network participants can extract through community benchmark services. Logistics grids provide benchmarks and operational statuses through the use of big data shared by network members. Only through the participation of organizations across the entirety of the supply chain is this operational visibility possible.

User Advice: Buying Organizations: When choosing and implementing a procurement or supply chain solution that requires suppliers to interact online with you, consider the advantages of multienterprise grid functionality. Application leaders responsible for procurement or supply chain applications should evaluate each option to determine:

- Whether it allows your suppliers and service providers to upload common content once.
- Whether it provides access to an existing community.
- Whether the solution provider will provide ongoing business and technical support for your suppliers and service providers, and at what cost.

Suppliers: Educate your buyer customers about the high costs of private portals and dominant partner networks that lack multienterprise grid functionality. Buyers need to understand the cost impact of building and maintaining a private hub or portal.

Buyers and Suppliers: When evaluating the ROI on an investment in a multienterprise solution, consider the availability and value of the community data. Additionally, place an emphasis on advanced analytical and benchmarking capabilities that result in very low-cost operational improvements.

Business Impact: Gartner rates the benefit of multienterprise grids as high when they reach full maturity. The improvement in data quality and cross-enterprise visibility will drive efficiency gains and improve business analytics and predictions. Data management professionals looking to improve data validation is a common use case. Examples include:

- Firmographic information (such as tax identifiers, plant locations, executive names, financial data, certifications and contact information) for use in supplier registration, evaluation and risk assessment.
- Catalog content and product specifications for use in procure-to-pay (P2P) solutions.
- Logistics and transportation insights along multiple modes and providers as the basis for benchmarking and optimization.
- Invoice and payment collaboration to reduce time and uncertainty to cash flows.

Procurement and supply chain groups looking for pricing and benchmarking data can benefit from networks that publish community transaction data. Information such as cycle times, pricing/rate cards, and lead times are commonly available datasets.

Benefit Rating: High

Market Penetration: 1% to 5% of target audience

Maturity: Adolescent

Sample Vendors: Basware; Dun & Bradstreet; E2open; HICX; Infor Nexus; LexisNexis Risk Solutions; SupplyOn; Tradeshift; Transporeon

Recommended Reading: "Magic Quadrant for Multienterprise Supply Chain Business Networks"

"Supply Chain Operational Visibility Vendor Guide"

"Supply Chain Brief: The CSCO Perspective on Supply Chain Business Networks"

"Success With AP Invoice Automation Requires More Than Paper to Digital"

AI-Based Accounts Payable Invoice Automation

Analysis By: Kaitlynn Sommers

Definition: AI-based accounts payable invoice automation (APIA) tools use machine learning to process invoices once they have been captured electronically. These solutions attempt to automatically match invoices to purchase orders (PO), contracts, or automatically code those invoices that would not have a PO. When POs cannot be matched or coded, workflows route the invoice to the correct person for matching/coding.

Position and Adoption Speed Justification: AI-based APIA solutions are a new generation of invoice automation tools quickly becoming more prevalent in the market. Vendors are investing in machine learning to improve invoice and PO matching, coding accuracy, and exception workflows. This enables organizations to move beyond invoice digitization and automate more complex matching scenarios and contextualized workflows for quicker exception approval.

The goal state for APIA solutions is to minimize the amount of exceptions identified by automatically running through mismatch scenarios until a match is found. This leaves only minimal human interaction needed to process invoices for payment, reducing late payments and even creating opportunities for early payment discounts. Some vendors are incorporating real-time analytics and risk controls that further extend the value of these solutions. This can help prioritize, recommend, and automate invoices for early payment discounts when programs are in place.

AI-based APIA solutions are climbing toward the Peak of Inflated Expectations. AI and machine learning are providing workflow improvements to early adopters, but accuracy and automation will improve as the underlying technology matures. Organizations seek APIA capabilities both from point solution vendors and procure-to-pay (P2P) suite vendors. AI-based APIA solutions will move at a moderate pace through the Hype Cycle as end user adoption increases across both technology segments.

User Advice: Plans to invest in AI-based APIA solutions should be developed as part of a larger AP process strategy, which includes invoice capture through payment. APIA solutions often come with a range of functionality beyond invoice automation, such as e-invoicing, payment, and AP audit. Organizations should make sure that the solution they buy fits in with their existing technology infrastructure, so functionality is not duplicated. If your current solution does not AI matching, smart workflows and analytics, work with your vendor to understand their roadmap for these capabilities. If there are no near-term plans for these capabilities, consider an alternative vendor strategy. Evaluate vendors on the range of capabilities from invoice digitization, matching scenarios, exception handling, and analytics capabilities. Continuous process improvement depends on good visibility of data for root cause analysis as to why invoices need manual intervention.

Organizations currently using AI-based APIA solutions should work with users and suppliers to eliminate the root causes of mismatches that require manual intervention. Application leaders responsible for these solutions should also work with the treasury department 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.

Business Impact: AI-based APIA solutions can significantly reduce the effort and time required to get an invoice approved for payment. Reduction in manual effort for invoice digitization, matching, and exception approval can result in substantial cost reduction for invoicing processing. Benefits include a lower cost per invoice, head count reduction, and early payment discounts from suppliers. Organizations can take advantage of early payment discounts or implement dynamic discounting programs with the reduction of invoice processing cycle time.

Even higher ROI can be driven by solutions that also integrate real-time AP auditing functionality. The flagging of potentially fraudulent, duplicate, or erroneous invoices for review reduces risk and the likelihood that a business will need to attempt to retrieve cash paid out incorrectly. Improved operational control of cash flows is also possible.

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Sample Vendors: AvidXchange; Basware; Comarch; Corcentric; Esker; Medius; MineralTree; Shelby Group

Recommended Reading: “Success With AP Invoice Automation Requires More Than Paper to Digital”

“Magic Quadrant for Procure-to-Pay Suites”

“IT Market Clock for Procurement and Strategic Sourcing Applications, 2020”

RPA in Procurement

Analysis By: Patrick Connaughton

Definition: Robotic process automation (RPA) is a combination of user interface recognition technologies and workflow execution. It can mimic the mouse clicks and keystrokes of a human using a screen and keyboard to drive applications and execute system-based work. Simply put, RPA is a software program that can complete routine, computer-based tasks currently conducted by humans. Once set up, it can repeat that task when triggered, and do it faster, with fewer errors and at less cost.

Position and Adoption Speed Justification: Today, there is a tremendous amount of hype around RPA, for procurement and sourcing as well as other process areas like finance and HR. This hype is prompting unrealistic expectations about its potential uses and benefits. Further complicating things is the fact that business stakeholders want to move quickly, often bypassing IT entirely to address application issues. Organizations that fail to see through the hype run the risk of adopting RPA without considering more practical, time-tested alternatives. They could also potentially 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. The hype combined with the risk and availability of alternative solutions has this rapidly sliding into the Trough of Disillusionment.

User Advice: Application leaders tasked with modernizing sourcing and procurement applications should:

- Avoid using RPA to solve efficiency gaps between modules within a single SaaS-based source to settle suite like SAP Ariba and Coupa. For a legacy, on-premises solution that is not being actively enhanced, RPA may make sense but not for a frequently updated SaaS solution. The risk of using RPA here is that the vendor soon addresses the gaps, making the work quickly 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 with multiple, simple processes, such as opening emails and attachments and 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. Make sure to establish a set of RPA guidelines for the business to follow, but be careful not to slow things down. Once the roles and responsibilities are clear, application leaders should not be afraid to let the business experiment with different scripts to automate their jobs.

Business Impact: If organizations have been outsourcing tasks that are heavily labor-based like invoice data cleansing or supplier master data enrichment, then RPA could decrease the number of people required for the same set of tasks. RPA can also help to increase quality and reduce overall process costs. Potential savings will depend on how much automation already exists in your organization's legacy IT applications.

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Sample Vendors: Automation Anywhere; Blue Prism; Infosys; Kofax; Kryon; NICE; Pegasystems; Softomotive; UiPath

Recommended Reading: "Tips for When to Use RPA in Sourcing and Procurement"

"Magic Quadrant for Robotic Process Automation Software"

"When and Where to Use Robotic Process Automation in Finance and Accounting"

SOW Services Procurement Solutions

Analysis By: Kaitlynn Sommers

Definition: Statement of work (SOW) services procurement solutions support the sourcing, automation and governance of service agreements based on deliverables, milestones, or time and materials. Core functionalities include SOW creation, rate comparison and negotiation, rate cards or service catalogs, task tracking, supplier "self-receipt" and burn-rate tracking.

Position and Adoption Speed Justification: SOW services procurement solutions are sometimes sold stand-alone, but most often as part of a broader set of capabilities. The vendors with broader capabilities include:

- **VMS vendors:** These vendors' tools are used to manage contingent workforce (nonemployee) resources. Most of these providers have added SOW services procurement capabilities, enabling buying organizations to manage all nonemployee resources within a common tool. Most vendors have separate modules for managing contingent workforce (CW) and SOW spend.
- **P2P suite vendors:** These vendors' integrated solutions have automated workflows to request, procure, receive and pay for goods and services across an enterprise. Many vendors have added SOW services procurement capabilities. Maturity of these capabilities varies by vendor and will continue to increase over time.
- **Freelancer management system (FMS) vendors:** These vendors' tools offer organizations a way to source and manage their independent contractor and freelancer workforce. FMSs are relatively new to the market. Some vendors have added SOW services procurement capabilities.

SOW services procurement solutions continue to gain adoption as buying organizations seek to improve efficiency, minimize risk and manage costs for work performed under SOWs. Common SOW services categories include auditing, business consulting, legal services, IT services, creative and print services, engineering services and outsourced services. SOW-based services can often be the largest workstream for organizations with more than 10,000 employees or in certain industries like banking and finance.

SOW services procurement solutions continue moving deeper into the Trough of Disillusionment, but many organizations struggle to differentiate and quantify service spending. Often unsure whether to classify it as SOW or contingent labor makes the business case for investing in SOW services procurement solutions challenging and slows adoption. Supplier adoption has also historically been a limiting factor for these solutions. A supplier funded model is common and not feasible for substantial SOW-based projects.

As buying organizations place greater focus on managing third-party resources, the need for a SOW services procurement solution will increase. This will advance the technology at a moderate pace, reaching mainstream status in approximately five years.

User Advice: Application leaders responsible for procurement and sourcing in organizations should evaluate the benefits of SOW services procurement solutions. Start by analyzing your spend data and determining the size of your service program spend. Assess your existing application portfolio to determine if you can extend the capabilities of an existing vendor to manage SOW-based spend. Buying organizations should carefully review these capabilities to ensure they fully meet the necessary requirements.

Organizations should vet solutions with a representative sample of their SOW services suppliers to validate fit. Some solution vendors require suppliers to pay fees. Ensure the fee structures are fair and reasonable for the buying organization and its suppliers.

Business Impact: SOW services procurement solutions offer many positive benefits, including:

- Improved cost reporting and status tracking for SOW services.
- Better visibility of labor rates, time and materials charges, and milestone payments for SOW services.
- Compliance tracking of charges and reimbursed expenses to ensure charges match the fee structure outlined in the SOW and all reimbursable fees meet organizational policies.
- Tighter spending controls to eliminate duplicate charges and overpayments.

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Sample Vendors: Beeline; Coupa; GEP; Ivalua; PRO Unlimited; SAP Fieldglass; SimplifyVMS; Upwork; VNDLY

Recommended Reading: “Magic Quadrant for Procure-to-Pay Suites”

“Critical Capabilities for Procure-to-Pay Suites”

“Market Guide for Services Procurement Solutions”

Procurement Savings Management Solutions

Analysis By: Micky Keck

Definition: Procurement savings management solutions help organizations manage, track and report savings from sourcing and other cost reduction activities. They can include workflow capabilities for approval or handing off savings to lines of business (LOBs) and reporting. The more advanced solutions track savings capture rate after the contract signing and cost drivers such as: volumes, order patterns and vendor mix.

Position and Adoption Speed Justification: Procurement savings management solutions continue to slide into the Trough of Disillusionment as organizations struggle to define and measure savings. Organizations struggle with issues such as:

- Failure to track savings to the bottom line
- Inability to explain the differences between negotiated and realized savings
- Lack of data to isolate costs and cost drivers
- Poor fit and usability of off-the-shelf solutions

Most strategic sourcing suite vendors are adding savings management to their solutions; however, these mainly focus on savings negotiated within the e-sourcing module. This narrow view is a problem, as cost savings often occur outside of the normal sourcing process.

On a positive note, we are seeing an increasing number of vendors offering savings tracking as a separate module, or part of spend analytics. We therefore expect continuing evolution as more vendors enter the space and existing vendors continue to innovate on their solutions.

User Advice: Organizations should involve the finance department in their savings management initiatives to develop common savings definitions and establish credibility. Engage internal LOB stakeholders to update and monitor savings initiatives, and thereby improve 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.

Organizations currently using spend analysis or e-sourcing solutions should determine if their vendor offers a savings tracking solution or has one on its product roadmap. Investigate the full functionality to ensure that it is not just a project management tool that supports the entering of savings information. Solutions should allow for tracking ad hoc savings projects.

Organizations with a spend of more than $200 million that currently track via spreadsheets, or have no savings tracking functionality in existing tools, should look at specialist providers. Investigate vendor-supported integrations to core procurement systems when selecting a specialist. Source-to-pay suite providers are another option, as many provide this functionality as an add-on module.

Business Impact: The difference between negotiated savings and savings reaching the bottom line — lost savings — is often significant. Especially where multiple procurement teams are involved. Lost savings are due to a lack of visibility as to when price reductions should occur and what actions are needed to lock in those reductions. The use of savings tracking tools can increase financial outlook accuracy, and promote objective individual job performance metrics.

Properly calculated savings and reliable forecasting will vastly increase the credibility and strategic impact of the procurement department.

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Sample Vendors: GEP; Ivalua; JAGGAER; Orpheus; Per Angusta; Provalido; Scout RFP; Sievo; SpendHQ; Zycus

Recommended Reading: "Win Big by Starting With High-Value, Low-Risk Procurement Applications"

Climbing the Slope

Supplier E-Invoicing

Analysis By: Balaji Abbabatulla

Definition: Supplier e-invoicing is the set of business processes required to receive, validate and archive B2B invoices from suppliers in an electronic format. Supplier e-invoicing requires cross-functional knowledge spanning business, accounting, regulations and IT. Supplier e-invoicing processes involve a lot of complexity, especially when invoices are received from suppliers in multiple countries.

Position and Adoption Speed Justification: Adoption of supplier e-invoicing continues to increase as more organizations start using e-invoicing and usage increases in organizations with existing e-invoicing applications. Some of the key factors driving such increased adoption include:

- Improved maturity of software application and enabling technologies
- The increasing number of governments that are mandating e-invoicing
- Maturing digital transformation programs

Increasing adoption will lead supplier e-invoicing to the Plateau of Productivity in less than two years. However, this position on the Hype Cycle represents a worldwide average, which might vary considerably from country to country. For example, in some countries, supplier e-invoicing might still sit before the Peak of Inflated Expectations when a new government mandate is expected to be introduced soon. While these factors encourage the growth of e-invoicing, traditional challenges continue to slow down the pace of such adoption. Such challenges include the complexity of complying with varying and evolving sets of government regulations and the continuous investment required to train and onboard new suppliers. These constraints restrict the innovation from evolving faster.

User Advice: Start evaluating supplier e-invoicing project opportunities now, regardless of your company's size or financial shape. It's only a matter of time before supplier e-invoicing becomes a mandatory requirement, either by regulation or as an accepted practice of your trading partners. This is true wherever you are, whether you are a buyer or a seller, or whether you simply take part in a more complex B2B process. Chances are that, at least for a portion of your business partners, supplier e-invoicing is common practice already, making supplier e-invoicing more and more mandatory for you, if you want to stay in that trading community.

Acknowledge the complexity of deploying supplier e-invoicing software. Don't overestimate the immediate cost savings from supplier e-invoicing in your business case. Never underestimate the consequences of regulations' diversity across countries. Potential problems are in the details. Multicountry supplier e-invoicing projects can take years to implement. Proceed with a succession of projects, and go down the path of least resistance first (e.g., the countries where regulations are simpler). Turn as many transactions as you can, as quickly as you can, into an electronic form. Measure the perceived value carefully (typically by unit cost of processing of an invoice).

If you need international supplier e-invoicing, focus on high invoice volume countries first and shortlist software vendors who are have certified solutions for these countries. Some countries (e.g., Brazil in South America) might require a particularly complex solution. Some countries (e.g., Russia) might need a local operator to achieve compliance. The diversity of supplier e-invoicing regulations across countries is very high. Because regulations change often, solutions deployed over the cloud are generally preferable. You should favorably consider providers that actively monitor the legislation in the countries you do business in — so being compliant (and staying compliant, as regulations change) becomes their problem, not yours.

Business Impact: Supplier e-invoicing has traditionally delivered cost savings due to the digitization of paper invoice receipt and validation processes. However, the supplier e-invoicing market is beginning to offer much more value beyond digitization of paper invoice. The ROI of supplier e-invoicing software can increase significantly by using additional insights, such as duplicate payments or fraudulent invoices, to eliminate wasteful expenses. Furthermore, vendors are beginning to support adjacent processes, such as payment execution or working capital optimization, by providing early actionable insights to optimize such processes. Some vendors are investing in developing in-depth compliance suites that cover multiple countries and geographic regions. Such vendors are also collaborating with governments in helping them define and roll out supplier e-invoicing regulations. Creating a partnership with such vendors will help expand the value derived from supplier e-invoicing to multiple global locations. Software vendors are beginning to offer features that encourage suppliers to adopt supplier e-invoicing. Easier collaboration to resolve disputes or exceptions, interoperability with multiple networks and access to multiple buying organizations are features that help improve supplier adoption and thereby increase ROI for buying organizations.

Benefit Rating: Moderate

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Sample Vendors: Basware; Circulus; Corcentric; EDICOM; Esker; Pagero; Sovos; Taulia; Tradeshift; Tungsten Network

Recommended Reading: "Competitive Landscape: Supplier E-Invoicing, Worldwide, 2020"

"3 Steps to Creating an E-Invoicing Vendor Shortlist"

"Growth Strategies for Tech CEOs of Supplier E-Invoicing Software Vendors"

"Success With AP Invoice Automation Requires More Than Paper to Digital"

Supplier Information Management

Analysis By: Micky Keck

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.

Position and Adoption Speed Justification: 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 applications continue to slowly climb the Slope of Enlightenment, as the lack of options prevents a quicker rise. Customers have more options, if they are willing to compromise data-related functionality for lighter collaboration solutions.

In the long term, we expect SIM solutions to be absorbed into broader procure-to-pay or source-to-settle suites. Niche vendors with extended service offerings will act as content providers for the broader platforms. Examples of these niches include; supplier onboarding, regulatory compliance, prequalification, and vetting of vendors that specialize in specific verticals. Additionally, we are seeing the entrance to supplier discovery and analytics solutions that could operate as de facto SIM platforms. Often these emerging solutions use machine learning to standardize supplier data although that is typically not the primary use case.

User Advice: Leverage SIM solutions to enable suppliers to submit and manage their own information while also building in validations and controls. Use this information to manage incumbent suppliers but also to build up a register of potential suppliers. 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.

Coordinate SIM and supplier master data management activities. Most SIM solutions do a great job at collecting supplier master data from suppliers and supporting workflows to enrich the data based on internal requirements. However, organizations with complex enrichment, normalization and distribution needs may find SIM solutions are not always suitable for complete master data management.

SIM has become one of the foundational pieces of source-to-settle (S2S) suites; however, most S2S SIM offerings are very basic. S2S SIM functionality typically capture enough supplier data to support S2S processes but do not support collecting data needed for other internal systems. This means that buying organizations should carefully evaluate if SIM applications that 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.

Business Impact: Accurate information about your suppliers is critical to many business processes and applications. A SIM solution that collects, organizes and maintains this information by delegating this responsibility to the suppliers themselves significantly reduces the workload of procurement. Downstream process benefits include:

- Reduction in failed and incorrect payments
- Faster supplier communication, especially when mass communication is required
- Improved spend and supplier risk reporting

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Sample Vendors: apexanalytix; GEP; Graphite Systems; HICX; Informatica; Ivalua; JAGGAER; Lavante; scoutbee

Recommended Reading: “Procurement Can Provide More Than People in the Effort to Get Control Over Supplier Master Data”

“How to Navigate the Fragmented Supplier Management Solutions Market”

“Magic Quadrant for Master Data Management Solutions”

“7 Steps to Build a Successful Business Case for MDM Programs”

Source-to-Settle Solutions

Analysis By: Patrick Connaughton

Definition: A source-to-settle (S2S) solution is a complete suite of applications to support procurement and sourcing activities. Standard base modules include e-sourcing, spend analysis, contract life cycle management and procure-to-pay (P2P).

Position and Adoption Speed Justification: S2S suites continue to move up the Slope of Enlightenment as customers now have a more informed and realistic idea of the pros and cons to consider. This is in comparison to three to five years ago when expectations were extremely high and some suite vendors were overselling how seamlessly integrated their modules were. The truth is that while almost all leading strategic sourcing and P2P application vendors have built out their offerings to support the full S2S process, there are always trade-offs to consider. For example, finding a single suite that is capable of managing both direct and indirect spend together is still difficult. Also, in areas like supplier risk, contract life cycle management and service procurement, organizations often go with stand-alone, purpose-built solutions to complement the suite. One reason for this is that three areas specifically were simply not a big focus for the application vendors until fairly recently. As a result, the modules are immature relative to specialized solutions on the market. Some of the vendors who grew through acquisition also have a lot of work to do before the solution can really be considered a truly integrated source-to-settle suite. All in all, having a single suite that spans the entire process certainly has its benefits as long as organizations carefully weigh the cons as well in the selection process.

User Advice: For application leaders driving procurement initiatives:

- Measure your spend by different spend categories, and investigate whether you are better off investing in category-specific solutions instead of a single S2S suite.
- Evaluate strategic sourcing applications and P2P suites individually. Do not compromise on functionality to get a full S2S suite unless you can gain significant value from the full suite.
- S2S suites are available, but invest with caution. Before you purchase, vet S2S vendors' portfolios by profiling product maturity and client counts for every module. Some vendors have built their suites through acquisition. This means that you need to investigate the level of integration among the modules. Also, many vendors have uneven suites, with some modules that are quite mature and others that are relatively new.
- Small or midsize companies are likely to get greater benefits from S2S suites. They can be a good-enough improvement on the procurement modules offered by their ERP vendors.

Business Impact: A unified data model and cohesive platform has potential benefits in areas like a unified user experience, analytics and use of common data. But it is not a necessity for successful procurement transformation. The integration points between the upfront and downstream processes are limited. This is why the market has thus far tolerated point solutions and less-extensive suites.

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Sample Vendors: Coupa; GEP; Ivalua; JAGGAER; Oracle; SAP Ariba; Zycus

Recommended Reading: "How to Navigate the Fragmented Supplier Management Solutions Market"

"Magic Quadrant for Procure-to-Pay Suites"

"Magic Quadrant for Contract Life Cycle Management"

Contract Life Cycle Management

Analysis By: Patrick Connaughton

Definition: The term "contract life cycle management" refers to applications used for managing contracts from initiation through ongoing management and eventual renewal or termination. CLM solutions manage any legal documents containing obligations that affect an organization.

Position and Adoption Speed Justification: Interest in CLM is at an all-time high, as organizations seek to digitize their processes, manage compliance, minimize risk and eliminate inefficiencies. However, CLM adoption levels vary widely and its progress toward the Plateau of Productivity is much slower than we initially expected. The mixed adoption levels are often a result of lower-maturity contracting processes and limitations of the technology itself.

The most progressive approach to CLM is to adopt it as part of an enterprisewide strategy. Such a strategy considers the interdependencies between contracts, business processes and operational/financial results, and indicates a high level of maturity. However, in many cases, the features in an enterprise CLM solution actually far exceed what a lower-maturity organization can take advantage of. Given this, CLM remains "stuck" at the preplateau stage and we expect it to take another two to five years to reach the plateau.

User Advice: Application leaders responsible for contract management initiatives should recognize that adopting CLM does not require an all-or-nothing approach. CLM can be adopted at a departmental level (for example, for procurement or sales) as an organization matures its processes. Application leaders should:

- Evaluate CLM solutions from strategic sourcing application suite vendors when seeking a solution purely for buy-side contract management. Also consider these vendors if integration with e-sourcing, supplier base management and/or P2P tools is a priority.
- Evaluate CLM solutions that integrate with CRM or configure, price and quote (CPQ) suites when seeking a CLM solution purely for sell-side (customer) contract management.
- Evaluate CLM solutions that integrate with enterprise legal management suites when a solution for the legal department is a priority.

Pay close attention to CLM vendors' growth and financial viability when selecting or renewing contracts. There are a large number of vendors in this space, and market consolidation is escalating. Talk to a Gartner analyst to gauge the impact of the acquisition of a CLM solution you are using or considering.

Business Impact: CLM appeals to companies of all sizes in all industries. Implementing it can lead to significant improvements in revenue management, cost savings and efficiency. Understanding and automating CLM can also limit an organization's liability and increase its compliance with legal requirements.

The risks associated with poor contract management include overlooked penalties, lost revenue, damaged brands and lost savings. Poor contract administration can even lead to lost contracts, unexpected renewals and expirations, and hidden clauses that leave a company open to liabilities. When no CLM solution is in place, it is not uncommon for stakeholders to spend significant time determining which terms and pricing arrangements are current.

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Sample Vendors: Agiloft; CobbleStone Software; Conga; Coupa; DocuSign; GEP; Icertis; JAGGAER; SAP Ariba; SirionLabs

Recommended Reading: “Magic Quadrant for Contract Life Cycle Management”

“Quickly Create a CLM Shortlist With These 3 Steps”

“Selecting the Optimal Technology for Managing Contracts”

“Critical Capabilities for Contract Life Cycle Management”

Procure-to-Pay Suites

Analysis By: Micky Keck

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. P2P suites optimize the purchasing process, resulting in improved financial controls, cost savings and process compliance. Core P2P suite functionality includes e-purchasing, catalog management, e-invoicing and APIA. Extended P2P functionality includes supplier registration, employee expenses, services and contingent labor procurement and payments.

Position and Adoption Speed Justification: P2P solutions continue to climb the Slope of Enlightenment as customers continue to push a greater percentage of their overall spend through full-suite solutions. The P2P suite market is strong, with projected growth rates around 10% over the next several years, and broad appeal across industries and geographies.

Demand drivers include:

- Rationalizing a portfolio of point solutions handling catalog management, AP invoice automation, and payments
- Standardization of procurement across a varied financial system landscape
- Placing a priority on digitizing manual, paper-based processes
- Improving cash management

- Expanding coverage of spend under management

P2P solution providers continue to expand spend category coverage through acquisition and investment in core technology. Customers are increasing looking to manage direct material procurement processes within their P2P solution.

User Advice: Application leaders driving procurement initiatives should form multifunctional teams with procurement, finance, supply chain and IT to evaluate supplier solutions. Organizations with limited existing end-to-end process automation, multiple disparate systems and low spend under management are ideal candidates for P2P suites.

Other recommendations include the following:

- Supplier adoption rates are a key point to P2P solution success. Evaluate supplier-facing costs, functionality and user experience with the same rigor as buyer-side features. Vendors with larger supplier networks may simplify supplier adoption.
- Carefully review a potential P2P provider's ability to comply with local tax and invoice regulations.
- Plan to implement a cloud service delivery model. On-premises solution implementations are rare, and many vendors no longer offer this option.
- Review any potential P2P providers' integration capabilities with your core financial management applications.
- Include industry-specific P2P solutions in the evaluation process if your organization is in the healthcare, hospitality, or oil and gas sectors.
- Evaluate the benefits of metrics and intelligence derived from other customers and suppliers that use the platform.

Organizations that already have a P2P suite in place should evaluate how to further expand their usage by:

- Consider the full capabilities of P2P as the functionality continues to evolve, all company external spend is now a reasonable goal.
- Investigate how mobile capabilities can improve stakeholders' use of the P2P solution, as tablet and smartphone usage continues to grow in business operations.
- Integrated cash management options can increase the value to the business while also improving supplier acceptance.

Business Impact: Gartner rates P2P suites as being of high benefit for an organization. P2P solutions can increase the effectiveness of procurement and payables process across an enterprise. These solutions deliver strong ROI by enforcing compliance with sourcing agreements, approval workflows and financial policies. Automating the procurement, approval and payables processes brings many operational efficiencies. These efficiencies include superior cash management, reduced compliance risk, human error and fraud.

P2P suites continue to incorporate AI and robotic process automation technologies to make processes smarter and faster. Built-in benchmarking and proactive visibility to key P2P process metrics allow for real-time workflow improvements. Organizations with remote workforces that don't have access to traditional computers will benefit from mobile and voice-controlled UI advances.

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Sample Vendors: Basware; Coupa; GEP; Ivalua; JAGGAER; Medius; Oracle (Procurement Cloud); Proactis; SAP (Ariba); Synertrade

Recommended Reading: "Magic Quadrant for Procure-to-Pay Suites"

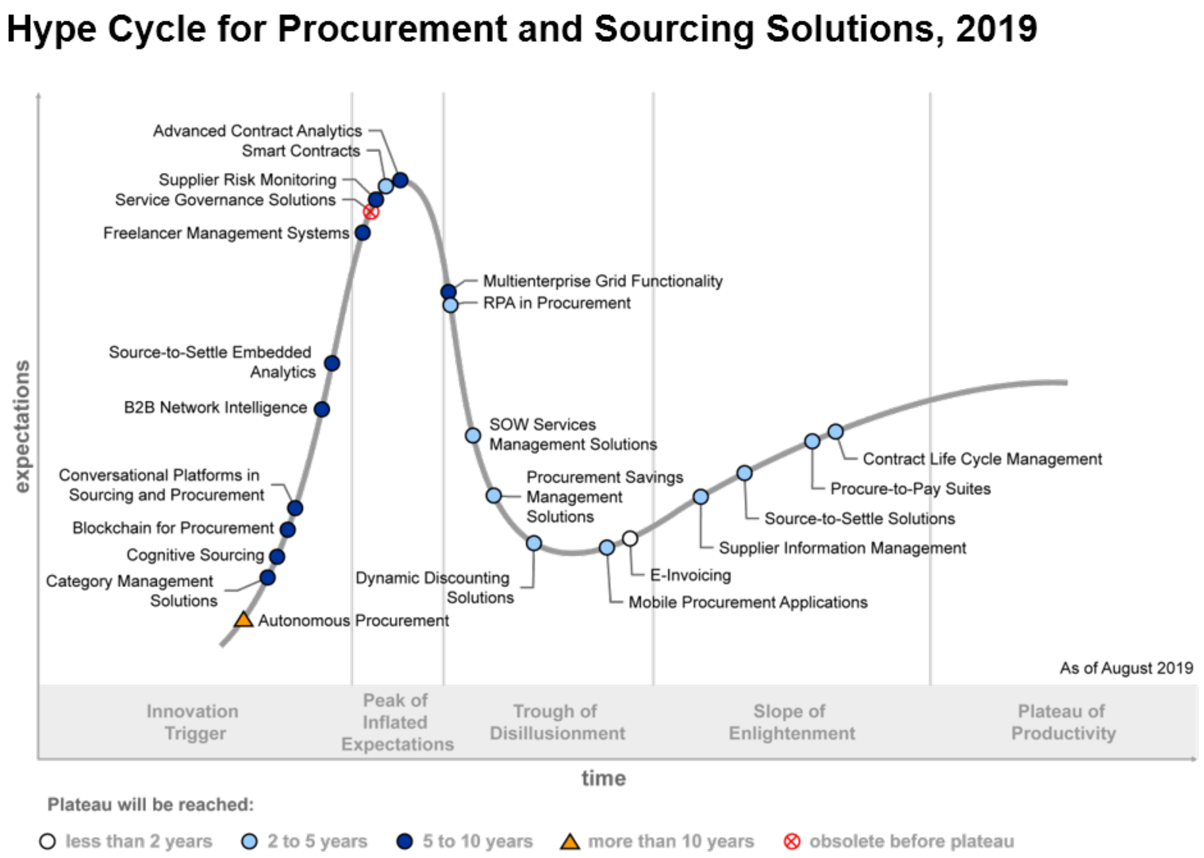
"Procure-to-Pay Suites: How to Choose Your Best-Fit Solution"

"Critical Capabilities for Procure-to-Pay Suites"

"Survey Analysis: Overcome Common Challenges to Maximize Cloud Procurement Application Investments"

Appendixes

Figure 3. Hype Cycle for Procurement and Sourcing Solutions, 2019



Source: Gartner
ID: 369483

Hype Cycle Phases, Benefit Ratings and Maturity Levels

Table 1. Hype Cycle Phases

Phase	Definition
Innovation Trigger	A breakthrough, public demonstration, product launch or other event generates significant press 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 technology is pushed to its limits. The only enterprises making money are conference organizers and magazine publishers.
Trough of Disillusionment	Because the technology 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 technology'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 technology 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 technology to reach the Plateau of Productivity.

Source: Gartner (July 2020)

Table 2. 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 2020)

Table 3. Maturity Levels

Maturity Level	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-the-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 2020)

Gartner Recommended Reading

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

Understanding Gartner's Hype Cycles

Market Guide for E-Sourcing Applications

Magic Quadrant for Procure-to-Pay Suites

Magic Quadrant for Contract Life Cycle Management

Win Big by Starting With High-Value, Low-Risk Procurement Applications

Innovation Insight for Advanced Contract Analytics

Innovation Insight for Autonomous Procurement: Reality Is Keeping the AI Robots From Taking Over

Success With AP Invoice Automation Requires More Than Paper to Digital

IT Market Clock for Procurement and Strategic Sourcing Applications, 2020

GARTNER HEADQUARTERS

Corporate Headquarters
56 Top Gallant Road
Stamford, CT 06902-7700
USA
+1 203 964 0096

Regional Headquarters
AUSTRALIA
BRAZIL
JAPAN
UNITED KINGDOM

For a complete list of worldwide locations,
visit http://www.gartner.com/technology/about.jsp