

Capgemini  invent

DIGITAL PROCUREMENT RESEARCH 2020-2021



FOREWORD

The corporate function of procurement plays a vital role in today's world – it is an essential function since within each corporation, small or large, it bears the greatest improvement potentials having been neglected by many corporations for far too long.

The procurement function is a cornerstone of the overall value chain and sits right in the middle between engineering, production, supply chain management and finance. Companies who can master the art of procurement are benefitting from faster order cycle times, higher process efficiencies, larger bottom-line savings and lower overall costs. With this, optimizing procurement means improving margins and competitiveness.

In order to achieve these goals companies are striving to improve some key elements of their procurement department: A well-defined procurement strategy, standardized and lean processes, and a strong organization with well-trained individuals. Many corporations spent a significant amount of time in improving these areas.

However, in our modern world these key elements are the foundation, but the true potential lies in enabling the strategy, the processes and the procurement organization and all individuals with digital procurement tools which fits together with the above mentioned.

Procurement efficiency is still one of the top priorities for CPO's with technology as a key enabler for efficiency gains, so setting up a digitization roadmap is an important milestone to reach. But the global landscape for digital procurement solution providers is complex and diversified, and therefore difficult to navigate for procurement and IT departments. There are global, full-suite solution providers that are covering almost all procurement process steps with standardized solutions. These providers are strong from an end-to-end process perspective, but they often lack the deep abilities of specialized niche solution providers that choose to focus on specific aspects of procurement. In

our observation in the recent years, the trend goes against the best of breed concept, with choosing several niche providers, towards the full-suite providers. This is especially because large full suite providers are deepening their solution portfolio either through own R&D efforts or through M&A of smaller niche providers. At the same time new market entries of interesting start-ups are increasing vendor competition even further.

Another trend is the increased push towards cloud solutions. For some organizations an on-demand setup is a reality since the early 2000s, but their solutions are outdated by today's standards. Other organizations have only recently started to embark on the journey from 'legacy' on-premise solutions and are equally overwhelmed by the sheer number of different players and options.

To make things even more complicated new technologies evolve faster than companies can implement them. In recent years many innovative technologies have appeared on the center stage ranging from Artificial Intelligence over Machine Learning to Robotics Process Automation, Autonomous Systems, Natural Language Processing, Process Mining and Blockchain to overcome systematic and functional weak spots. Which of these technologies deliver value already today and which of them are merely promises for the future?

Cappgemini has published the Digital Procurement Research for more than a decade to support our clients in achieving a comprehensive overview in this complex technology environment. Cappgemini is involved in many global large scale procurement transformation programs, helping its clients to articulate their process and solution requirements, to select the right software vendors based on their individual needs, to implement these solutions in large scale digital transformation programs and to optimize existing installations with pinpointed boost programs.

This study contains some of the best practice learnings from these numerous projects and a comprehensive market

overview of more than 30 procurement solution providers around the world. It will support procurement experts to identify the right fit partners for their digitization ambitions and is meant to inspire with additional expert articles covering a variety of interesting topics and trends in the world of procurement. We hope you will enjoy reading this as much as our team enjoyed creating it.

All the best
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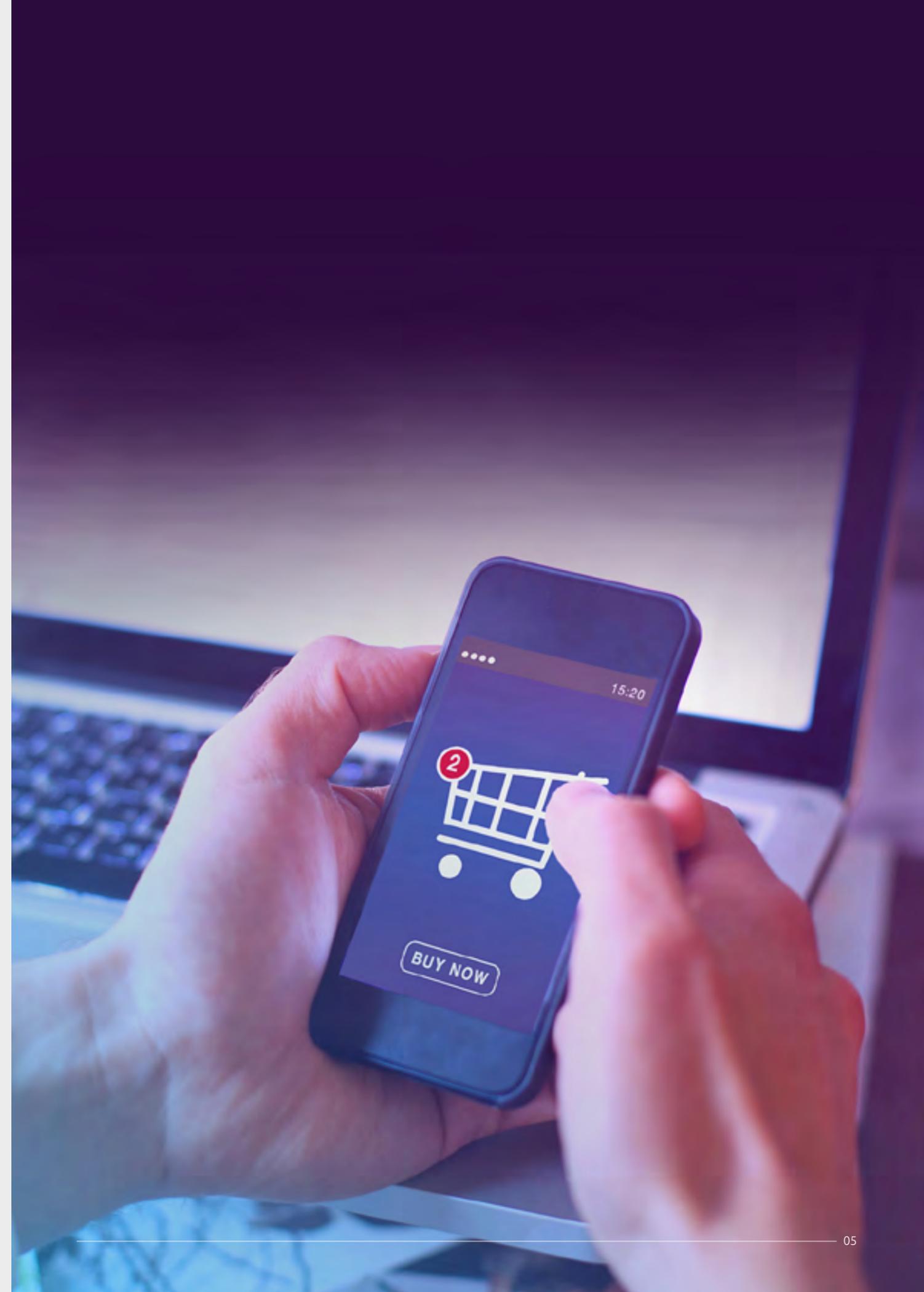


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INTRODUCTION

The procurement function is ever evolving. The shift continues from a department responsible for cost savings to a department that can realize value improvements for the entire chain. This transformation has been going on for the past years and is rapidly spreading. From spot buys to early supplier involvement, and from competitive bidding to supplier development initiatives, these are the changes that make a procurement department a strategic partner for the business. While the procurement strategy may differ per industry, organization and even category, there is one major linking pin: more focus on strategic tasks.

To be able to focus on strategic tasks, whatever the scope or procurement strategy, the setup of the procurement function must be right. Traditionally, three main aspects are considered in setting up a function in the right way: people, processes and systems. The right people performing the right tasks supported by the right systems. While the obvious focus of this research might be on the systems, it should be clear that the other two, people and processes, are highly interlinked with this. After all, setting up a system without the right processes will not bring any benefits, if not frustrate the procurement function even more. On the other hand, setting up a system that can either not be used well by the users, or does not support the user well in their tasks, could become a lost investment. A good digital procurement solution can be the Walhalla that connects the right people and processes across the organization and its partners, or it can be an annoyance, a bureaucratic necessity that frustrates all that work with it. Unfortunately, there is often but a thin line between the two outcomes. It all comes down to two key questions: are the processes set up right? And is the right system selected?

Setting up the right process

Whereas each organization has its own detailed processes, the general procurement process can be summarized by the often-used term 'Source-to-Pay'. Although it is often spread across the procurement and the finance department, which is fine from an organizational perspective, it should be considered as one process. After all, the same supplier with whom a contract was set up after a thorough sourcing process, would also like to get his payment on time (or early, to leverage any early payment discounts that are negotiated). It is therefore important to follow one end-to-end cycle

throughout the procurement process. In 2018, the Capgemini Procurement Wheel was introduced, which is shown in Figure 1, to highlight that the Source-to-Pay process is to be considered as one end-to-end cycle.

This cycle is being used as the main process flow on which this research is built. For each of these process steps, the right decisions must be made in terms of how to set up the process details for a specific organization (or even category). Amongst others this includes the right RFX

Definitions	
Procurement:	Overall process from sourcing to accounts payable, also known as Source-to-Pay
Sourcing:	The selection of a supplier, negotiation, contract creation, contract + supplier performance management and supplier information. Also known as Source-to-Contract
Purchasing:	Operational activities to place purchase order, including requisition creation, PO creation, goods/services receipt. Also known as Purchase-to-Order
Accounts Payable:	Invoice receiving, processing and payment
Source-to-Contract:	Strategic sourcing, contract management, supplier information and supplier performance management activities
Purchase-to-Order:	Operational purchasing activities only
Purchase-to-Pay:	Operational purchasing + accounts payable activities
Order-to-Pay:	Accounts payable activities only
Source-to-Pay :	All sourcing, purchasing and accounts payable activities

Table 1: Definitions used in this report

templates, the right purchasing channels and the right invoice matching requirements. It is important to touch upon all these different process steps before selection and during implementation of the system to ensure the solution is tailored to your organization.

Selecting the right system

There is not one system that is right for all organizations. One system may not even be the perfect system for all categories within one organization. Although it is generally not a desired situation to have multiple systems performing one process for different categories, it is of utmost importance to really understand what is required of a new system across different categories and business units. To understand this, gathering of requirements should be based on a desired to-be situation. Procurement processes and policies have often been in place for several years and organizations may tend not to change them. However, a new solution provides the opportunity to critically assess existing processes and simplify them where possible. It is often argued that 'the process should not be adjusted to the system, but the system should be adjusted to the process'. Alternatively, it may be worthwhile to look at best practices or standard process templates offered by solution providers and try to match this with an organization's specific requirements. Although this may cost more time, and therefore resources, it will deliver greater value in the end. The greatest value of implementation of a new system can be retrieved if the processes are revised simultaneously.

Solution selection processes are often conducted using a (long) list of functional and technical requirements stating what a solution should be able to do. As mentioned above, it is a critical aspect of assessing a solution to know the requirements and matching this with potential solutions. Often overlooked is a possibly even more important aspect: the look and feel of the solution. Whereas many solutions, large or small, offer in the basis similar functionalities, each solution has a completely different user experience. Besides the fact that a system must support a user in their daily work, user experience is critical to user acceptance, and therefore to the success of implementing a new system. Unfortunately, it is not quantifiable (at least not before implementation), which is probably why it is often overlooked. It is also subjective, as one user may prefer one system and a second user prefers another. It is therefore highly recommended to ensure that a high regard is taken to user experience of a solution in the process of selecting a new system, for example through demo sessions or allowing future users to 'play around' in a test environment for a short while.

Another point that may be overlooked when purely relying on internally listed requirements is the availability of 'advanced' functionalities that may not be part of the initial requirement scope because the team is unaware of the possibilities of a system. It is often argued that these functionalities, when not listed as key requirements initially, are 'nice-to-haves'. However, they could turn out to be the

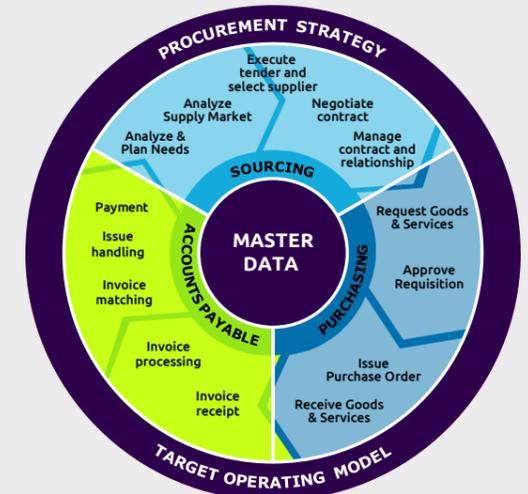


Figure 1: Capgemini procurement wheel

most value adding functionalities in the system, supporting people with something they did not know they could be supported on, or automating parts they did not know could be automated. Instead of setting up functional requirements too specifically and only stick to those it is advisable to engage in open discussions with potential solutions and learning what they have to offer.

Supported by the Digital Procurement Research

To support procurement professionals across the globe beforehand, Capgemini has launched the newest edition of the Digital Procurement Research 2020 - 2021. Whereas the previous versions have focused on comparing the different solution providers in the market, the focus of this edition has shifted towards a research looking for the newest and most interesting functionalities offered by the main solution providers in the market (see the Research methodology for more details). Enriched with experiences from Capgemini's global procurement experts, this report outlines the key results that came out of the research. In the following chapters the report will discuss the different 'elements' that are offered by the main solution providers in the market. These are supplier management, strategic sourcing, contracting, purchasing, accounts payable, reporting and analytics and implementation, pricing and technical aspects. Each of the chapters will provide insights in the main functionalities offered by the different solutions in that element and how these functionalities can bring value to your organization.

RESEARCH METHODOLOGY

The objective of the Capgemini Digital Procurement Research is to identify the key (new) functionalities offered by the major source-to-pay solution providers in the market. The aim is to provide insights in how these functionalities can support the procurement organization in realizing their goals. The report seeks to link the key trends that Capgemini identified in the procurement function to the functionalities that the different digital solutions offer. The focus of this year's edition of the research lies on discovering new digital technologies being used to solve relevant challenges of the procurement function. Capgemini has not weighted or rated any of the answers provided by solution providers.

Solutions invited to the research

Based on an extensive research of the digital procurement solutions available in the market, a total of 64 pre-selected solution providers were invited to take part in the research. Strict criteria were set up to identify the list of potential solution providers for the research. Participating solution providers must be globally oriented, with large, multinational organizations as their client base. This means they are present (with sales offices and clients) in at least two of the three following regions: North America, Europe, Asia-Pacific. Also, they have a wide client base of multinational organizations in different industries and are therefore suited for a wide range of companies across the globe. The selected solutions do not all offer the entire source-to-pay range as many of the solutions offer only part of that scope, such as source-to-contract.

Out of the invited solution providers, 33 solutions (52%) have responded to the questionnaire of this research. Every one of the 33 solutions are showcased at the back of this report. Unfortunately, a limited number of well-known solution providers have been unable to participate in our research due to resource limitations or time constraints. Figure 2 shows the distribution of HQ locations of the different solution providers.

Set-up of the questionnaire

To come to the research results, solution providers were requested to answer an extensive questionnaire. Depending on the scope offered by the different solutions, a maximum

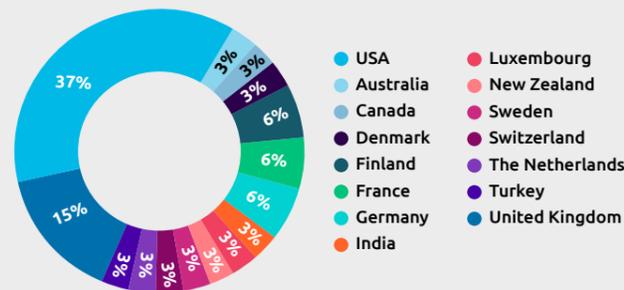


Figure 2: Headquarters of solution providers

of 386 questions had to be answered. The questionnaire has been divided into several sections and underlying sub sections and based on whether the solution offers a certain module (e.g. Strategic sourcing), the questions for that section were shown.

Different question formats have been used throughout the questionnaire. Most of the questions were inquiring on a certain functionality to which the respondent could answer 'Yes', 'No' or 'On roadmap', if necessary supplemented with a free text field requesting additional input. Additionally, some tick boxes questions were used to request on specific options (e.g. types of pricing strategy).

The questionnaire was open to responses from the solution providers from September 4th to October 9th, 2020 and the solution providers were asked to provide their answers based on the current standing of their solution at time of response.

Analysis of the responses

The results sections of this report describe the most interesting findings of the questionnaire responses. This was done on basis of the different 'elements' that are part of the research scope:

- Strategic Sourcing
- Contracting
- Supplier management
- Purchasing
- Accounts payable
- Reporting and Analytics
- Implementation, Pricing and Technical

Within each section, the team has identified the most relevant outcomes. Results are described relative to the number of solutions present in that specific section (i.e. not all solutions offer functionality in each 'element').

Disclaimer: Not all responses to all questions in the questionnaire are covered in this research report, the questionnaire was simply too extensive for that. The individual answers to the questionnaire are known at Capgemini and will not be published/shared outside of the organization and research team as agreed with the solution providers.

SUPPLIER MANAGEMENT



RESEARCH RESULTS OF SUPPLIER MANAGEMENT

Successful supplier management drives business value in terms of delivery, service and costs. Throughout the years, the meaning of supplier management has become broader and includes topics such as supplier visibility, collaboration and integration to further increase the value of supplier management. As part of the sourcing functionality in the Capgemini procurement wheel, supplier management includes supplier vetting and qualification, supplier performance, supplier development and risk management.

Large supply chains, both globally as domestically oriented, might include thousands of suppliers and third-party organizations. It can be a complex network of suppliers which asks for well managed processes. Depending on the procurement strategy, some organizations aim to limit the number of suppliers it works with. It is therefore crucial that only qualified suppliers are entered into the procurement system. A limited number of suppliers comes with a greater amount of value but sometimes could lead to higher risk levels as well. For example, higher risks coming with strategic items that are provided only by one supplier. It therefore is crucial to have good supplier management in place.

Key trends in supplier management

Global sourcing comes with a lot of benefits such as the access to new markets, product innovation and potentially to reduce cost. However, due to globalization the supply base is growing which causes increasingly complex supplier networks. It is crucial to manage supplier networks well to ensure delivery in time. Data sharing across the supply chain is required and results in increased supply chain visibility, improved supplier performance and the ability to better manage risks.

Supplier selection

More procurement solution providers make it possible to connect many suppliers to their solution. However, it is crucial to have the right suppliers in the system. Therefore, some solutions can support in selecting suppliers based on pre-set criteria. Or they can highlight preferred solutions based on outstanding performance. Not only internal, but also external information can be used to automatically identify the right supplier. For example, selecting the supplier that

partners have good experience with as well. However, selecting only one supplier for strategic items could lead to increasing dependency and risk levels.

Risk management

Organizations that source globally deal with a multitude of challenges such as short product life cycles, just in time delivery and demanding customers. Looking at a pandemic such as COVID-19, business resilience is being challenged around the world. COVID-19 caused supply chain disruption and some suppliers where no longer able to deliver according to pre-defined contractual obligations. Or suppliers were not able to deliver at all. In order to minimize negative impact, solutions offer software driven risk assessments on the entire supplier base. Risks assessments can be customized as unforeseen threats cannot always be part of pre-defined risk assessments. Solutions can use external data to be ahead of supply disruption. An example is using news articles or social media to identify risks in time. Based on the risks identified, some solutions can propose replacement of suppliers, suggest alternative suppliers and advice on improvement plans to boost performance.

Strategic supplier collaboration

To further incorporate improvement throughout the supply chain, working in close collaboration and building stronger relationships with partners can be of great value. When it comes to realizing product improvement, accessing new markets and incorporating sustainability initiatives, buyers are relying on suppliers more than ever before. Suppliers are not to be considered as providers, but as strategic partners that can help create competitive advantage. Effective collaboration requires continuous information sharing. E-mailing is a common way to communicate, but it is manually, not continuously and outside of the procurement system. Therefore, discussions with suppliers would preferably take place on the platform directly. Procurement software ensures that communication lines are always open which enables real-time data sharing with multiple critical stakeholders.



Research findings supplier management

Out of 33 solution providers, there are 31 that offer functionalities within Supplier management. Of those 31 solution providers, 90% offer supplier performance management. Both supplier vetting/ qualification and risk management is offered by 80% of the solution providers. 65% provides supplier development to some extent in their solution. Figure 3 shows the functionalities covered by solution providers.

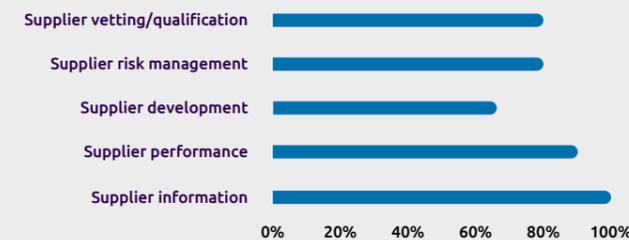


Figure 3: Functionalities offered by solution providers

Supplier information

All of the 31 solution providers offer the functionality supplier information to some extent. Supplier information forms the basis for other procurement functionalities, it is therefore crucial to have the right information stored in the solution. Organizations deal with thousands of suppliers; processing information manually is time consuming and an error prone task. Solution providers find ways to support in entering supplier information onto the system. Supplier self-registration functionality is supported by multiple solutions and can be offered in different ways. For example, 87% of the solutions make it possible to allow suppliers to enter its own details in the supplier database of the buyer. 77% offer automatic validation of existing supplier information in the database. Also, 71% of the solutions make it possible for suppliers to register their interest in doing business and submit information on their capabilities through an integrated web portal.

Supplier performance

Companies rely on the performance of suppliers when it comes to timely delivery, service quality and cost reduction. Successful supplier management can drive positive influence on business operations. When it comes to supplier monitoring, 84% of the solutions make it possible to perform supplier monitoring on quantitative aspects (e.g. price, quality, delivery, service). 78% offers to do supplier monitoring on qualitative aspects (e.g. visits, surveys, certifications).

KPIs are frequently used to track and monitor supplier performance. 87% of the solutions can measure supplier performance through KPIs. 68% of the solutions provide default KPIs in the software and 52% offer KPIs from libraries. Besides performance tracking, KPIs can also be used to investigate indicators such as the optimal number of suppliers, to explore alternative suppliers or identify strategic suppliers. These indicators can be company specific. 81% of the solutions of provide the feature to create customized supplier KPIs to build supplier specific performance management reports. When noticing good performance of suppliers, 7% of the solution providers indicate they can automatically identify and suggest additional categories that a supplier can be extended to when performing well.

Supplier development

To improve procurement operations, solutions can support by automatically suggesting supplier improvement initiatives. 19% of the solution providers indicate they can automatically suggest this based on internal information (such as supplier KPIs or similar suppliers). Only a small part of solutions offer possibility to suggest actions based on external information. 13% of the solutions can suggest supplier improvement initiatives based on external information, such as supplier capabilities in the market. Just 3% indicate they can automatically suggest supplier improvement initiatives based on unstructured data (using artificial intelligence technology). However, we can expect an increase of this in the future, since 16% has in on their roadmap, as shown in Figure 4.

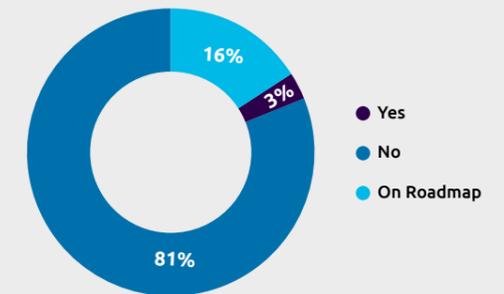


Figure 4: Automatically suggest supplier improvement initiatives based on unstructured data

Risk management

To be ahead of risks, functionalities to identify and monitor risks can be based on internal and external data. Based on internal data, 39% of the solutions can automatically identify supplier risks based on previous transactions with that supplier (e.g. late delivery or returns). However, less solutions can automatically identify supplier risks based on external data. 12% can identify risks based on information from other clients. 35% can automatically identify supplier risks based on news articles in any third-party data source, as shown in Figure 5. As 30% has it on their roadmap, using external third-party data sources might be an upcoming topic to identify risks.

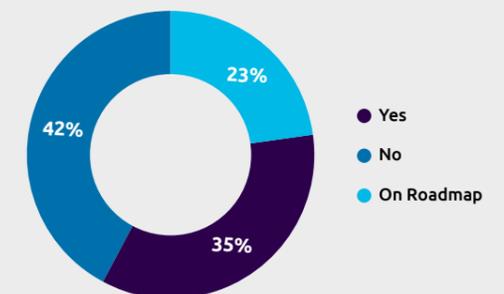
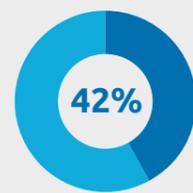


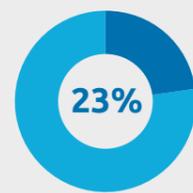
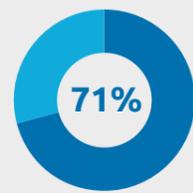
Figure 5: Automatically identify supplier risks based on news articles in any third-party data source

Solutions that offer...



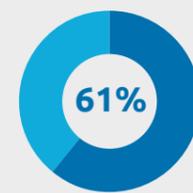
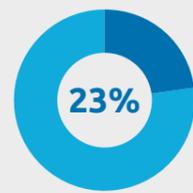
A program by which suppliers can submit ideas for relationship development

Risk assessments based on the response to qualification questions



Identification of unforeseen supplier risks based on external information

Identification of supplier risks to running orders and inform stakeholders



KPI's to be autoscored based on quantitative data from external resources

● Solutions that offer the functionality ● Solutions that do not offer the functionality

BUILDING SUPPLIER NETWORKS

Ewa Schramel and Padmashri SR

When Mark Zuckerberg first built Facebook, he had no idea how extensive his network would become. He did however understand the key ingredient to building a social network – marketing, and a common cause. In the case of Facebook, the common cause to create social connections, a key ingredient to college life. Mark quickly realized the value in extending this across other universities, and eventually the world, with over ^{2.5} billion users globally. Supplier networks are no different.

Supplier networks must also grow in order to be successful and while some growth will be organic, this alone will not achieve the network coverage required to reach a critical mass of suppliers using the network for sourcing events, purchasing orders and invoices and by that make digital procurement and invoice networks successful. Just like Facebook, there needs to be a constant focus on how to drive adoption through clear processes, an intuitive solution and a continued push, but there is one key advantage over social networks – most organizations already know their supplier base.

We have worked with many organizations who have approached the implementation of digital platforms and supplier portals with a “just build it – and they will come” approach. This might have worked in the famous movie “Field of Dreams” but when it comes to getting traction on supplier networks most organizations struggle to attract a desired number of supplies and by this can’t reach the outcomes and value for their investments they have made. Amongst the organizations that we collaborated with for implementation of supplier networks there were two where great success was achieved. The first one for a manufacturing client for enrolling suppliers to a leading supplier network, the second for a consumer products client enrolling their suppliers to a supply chain financing platform. Our task was to introduce the tools and make it effective.

For these two projects, the onboarding team comprised of a single point of contact (SPOC) from the business, a core vendor technical team and finally our team of procurement consultants. In both cases, our team managed the accounts payable department and a part of the procurement processes. Next to this, we worked closely with the vendor and the client to ensure we had the knowledge necessary to successfully implement the platform and make its usage a success. The on-boarding team worked together to develop the solution with the Capgemini team also providing inputs about the relevant business processes.

One of the fundamental factors at the very beginning was to have all the vendor master data updated and executing a clean-up of this data. By doing so, duplicate, incorrect and inactive vendors were filtered out.

We were aware that the change management needed to be planned carefully, with a clear understanding that business operations could not be disrupted. The teams classified each vendor as a critical, non-critical, essential or monopoly suppliers. After the vendors were classified, we prioritized the vendors based on above-mentioned criteria and by this prepared a clear list for each phase of the onboarding program. The next step was to ensure a clear and well-prepared communication. It was also important to secure that there were experts able to answer potential questions regarding the tool at any

times. Drafts for standard documents and letters were prepared, reviewed and validated.

In arranging proper on boarding communication to vendors, both communicative skills and subject knowledge played a vital role. It was necessary to not only provide reliable knowledge, but also to convince the vendors that their participation to the program would be beneficial for them – our “common cause”. An example of such benefits would concern the option of dynamic discounting, which enables a trade-off between giving discount to the buyer and then receiving the payment earlier.

Following the initial communication, we gave vendors an initial period to enrol and adopt to the new tool. After the transitional period, our next challenge was to enforce use of the platform and validate the effectiveness. For the supplier network tool which we deployed, one of the early challenges was that some additional manual effort by the vendors was needed to upload their invoices. We worked with these vendors to establish electronic integration to the tool, to avoid any manual effort. Another issue were duplicate invoices caused by change or resubmission. While these were caught by controls in the system, we implemented further changes that would identify these issues at the point of submission and provide immediate feedback to the suppliers.

Once these challenges were addressed, we continued to monitor the process – confirming there are no duplicates, incorrect or not actual submissions – and continue to add new suppliers to the platform. Currently 80% vendors use the supplier network tool with 60% of transactions being processed with no human touch. However, e-invoicing is no magic bullet with some invoices still needing to be manually posted due to price or quantity discrepancy. The focus of the team has now shifted to reducing these kinds of exceptions.

Establishing your digital supplier network is a long-term process. For both projects, the initial program took approximately two years including initial enrolment, moving the vendors to the new practice, monitoring the platform for exceptions, enrolling more vendors and further processes optimization. The success of both these programs was due to good cooperation and strong partnership with the client and the vendor from the inception of the program. In both cases, we leveraged a similar methodology, customized to the individual circumstances of the client, to successfully drive supplier adoption.

Based on our experience in building these networks for both Invoicing and Purchasing across many clients, there are five key factors that determine the success of such a program:

- A clear strategy for the adoption of the network, including updating and communication of your supplier policies, and be prepared to enforce it consistently.
- Processes that have been designed around the specific requirements and challenges of the business.
- Clean vendor data with up-to-date contact details, categorized by the importance of the vendor to the business, and the transaction volume.
- A strong change management approach to address the likely

resistance you will get, not only from vendors but also internally.

- Strong governance, including your category management and finance organization to continually review and refine the approach to meet the changing requirements of the business.

Such networks are essential to a successful digital procurement program to provide more visibility to both vendors and customers, improve the efficiency of the supplier performance management and risk processes, reduce the cycle time of the Source-to-Pay process, and improve working capital. However, be aware, that having most of your suppliers digitally enabled will not necessarily deliver proportional savings. Poor data quality or processes in your upstream procurement processes will continue to result in exceptions and negate any benefits achieved from your supplier network.

Research findings strategic sourcing

Strategic sourcing is not only crucial for procurement functions, successfully securing supply to agreed terms and conditions, it is also a measure to translate and execute corporate strategies and thus, cope with present business trade-offs between cost and quality on an operational level. Within the scope of this research, 25 of 33 solution providers offer strategic sourcing functionalities. Figure 6 illustrates the different functionalities offered.

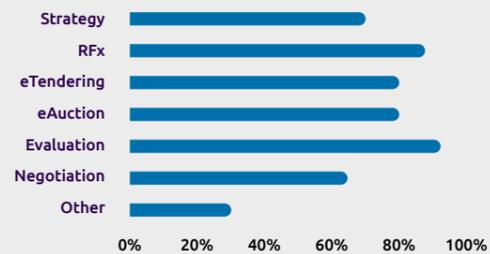


Figure 6: Functionalities in strategic sourcing

Sourcing strategy

Considering the continuously increasing dynamics in supply markets, procurement functions require transparency into strategic decision making processes to take better decisions in the future and thus, improve the value added by procurement. Sixty percent of solution providers offer registration of strategic objectives for sourcing activities. Most of them offer registration of category plans to further contribute to the value added and risk reduction on a category level. Automatically proposing category plans is offered by 24% of the solutions and can contribute to a resilient and cost-effective supply base. However, only 8% of the solutions utilize external data for this, which is particularly relevant for comprehensive market analyses. While 48% of the providers offer general registration of market analyses, 32% offer out of the box interfaces to external databases to complement internal analyses with external information.

RFX process

Generally, execution of the RFX process can be very time-consuming for suppliers. In 40% of the solutions, the supplier must be registered in the supplier portal to be able to participate in an RFX. While many procurement functions strive for operational efficiency, only a few establish it. Since 56% of the solutions offer support in the organization-wide gathering of requirements by, for example, the identification of users owning critical information, they touch upon both operational efficiency and quality.

This is emphasized by the value that AI can bring to the RFX process such as a proposal of relevant information to be considered in an RFX, which 20% of solutions offer and 28% have on their roadmap. Furthermore, 20% of the providers already utilize AI to evaluate external information to propose new potential suppliers for the participation in the RFX process in addition to suppliers that are already known and registered in the supplier database.

Electronic tendering and auctions

Following the RFX process, tendering is the next crucial activity in strategic sourcing, where it is important to provide as much information as possible to both sides, the procurement function and suppliers. Over 78% of the solutions provide insights to the progress of bid activities and show the status to end users. Popular within tendering are auctions, which are widely applied across categories. Providers exploit auctions in their solutions through various types as shown in Figure 7.

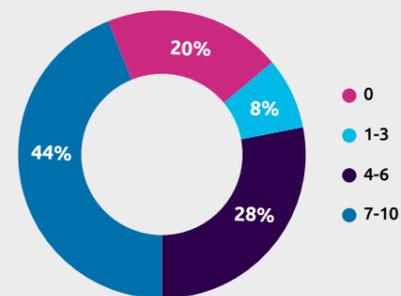


Figure 7: Ratio of numbers of electronic auction types offered

While 76% of the solution providers indicate the position of a bid in an auction, 52% even show improvement measures to suppliers to improve their position. Furthermore, many providers aim at increasing the automation rate at this point. This can, for example, be achieved with chatbots that automatically answer basic supplier questions and are used by 20% of the providers. Also, 60% of the solutions automatically transfer winning bid information into a contract after evaluation.

Bid evaluation

Important decisions in strategic sourcing rely on profound evaluations. Over 80% of the providers offer weighted total scorings as well as evaluations of non-cost factors of suppliers based on their capabilities. In addition to that, approximately 60% of the providers offer functionalities to calculate total savings, if baseline prices are given. Since even 52% assess total-cost-of-ownership including volume discounts, quality or service level indicators, it can be stated that most of the providers enable procurement functions to perform comprehensive analyses. However, only 16% of the providers utilize advanced technologies such as AI to automatically support procurement functions in the risk evaluation or optimal bid combination, for instance.

Negotiations

During supplier negotiations, many procurement functions seek for operational guidance and support so that resources can focus on strategic tasks. Automatically highlighting bids and other qualitative information as subject to negotiation is offered by 32% of the solutions. While 40% offer a negotiation database, in which target and previous prices as well as the negotiation strategy per supplier are stored, 32% perform updates based on actual evaluations. Selected providers aim at boosting operational efficiency through the automatic generation of target prices on item level, which 28% of the providers offer based on internal information. However, only 12% utilize external information for this purpose.

CONTRACTING

RESEARCH RESULTS OF CONTRACTING

A common classification and distinction between strategic sourcing and contracting is often unclear and definitions are not necessarily universally accepted. While contracting can be considered as final activity in strategic sourcing, it is placed separately at this point, given its importance within the scope of procurement. It contains contract creation, repository and performance as key activities directly following the strategic sourcing process.

The potential of digital enhancements for these key activities is frequently discussed and valued across procurement functions and industries. This particularly stems from first promising experiences, when utilizing digital solutions to a formerly very manual area of procurement. Especially, the essential interrelation between strategic sourcing and contracting emphasizes its relevance for modern procurement functions.

Key trends in contracting

Following the first developments in digital contracting, which included disc drives that solely store scanned versions of paper-based contracts, recent developments involve functionalities that initiate an era of smart contracts.

Smart contracts

Smart contracts are software-based and can drastically reduce transaction costs, while increasing contractual safety and quality. During the contract period, linked actions can be triggered automatically e.g. regular payments, depending on the underlying contractual terms. These contractual terms are stored in a centralized and continuously updated

clause library, which is crucial within the contract creation process. Applicable clauses, terms and conditions are automatically suggested, and often pre-filled, depending on contract related attributes such as organization, business unit or category. ShapeConsequently, there is improvement not only in the overall efficiency of the contract creation process, but also in the quality of the contract itself.

Archiving

Leading procurement functions require a full digitization of contracts through extracting and archiving meta data. Even though it is particularly relevant for old, paper-based contracts, it also applies for new contracts that do not follow a digital creation and signing process. Here, many solutions utilize Artificial Intelligence (AI) to deploy classification algorithms that automatically archive contracts in a contract repository based on organization, category or supplier related information. These contract repositories offer highly configurable search functions, which improve contract related transparency across the organization.

Finally, the way of writing, printing, signing, sending and storing contracts changes fast. Digital procurement solutions make themselves indispensable at this point through improving the efficiency and quality within the scope of contracting.



Research findings contracting

In an era of transformation towards digital procurement, sound and efficient contracting is key for each procurement function. Within the scope of this research, 29 of 33 solution providers offer contracting functionalities. While a contract repository is offered by all of them, 10 solution providers even offer functionalities beyond the investigated key functionalities, as shown in Figure 9. In this regard, contract risk assessment as well as contract life cycle and data processing capabilities are mentioned, among others.

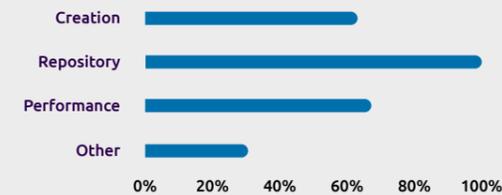


Figure 9: Functionalities in contracting

Contract creation

Building upon activities and results from the strategic sourcing process, contract creation reflects the primary activity in contracting. This process usually contains many standardized activities and thus, solely requires slight adjustments per contract, regardless if it is a first creation or renewal.

Consequently, solution providers aim at easing the process and increasing the operational efficiency. This research identifies five basic functionalities that set a solid foundation for digital contracting and are each offered by around 60% of the solution providers, as shown in Figure 10. Both the support of standard work software as well as linkages between organizational and commodity levels ensure user acceptance in the organization through a clear structure of contracting processes. In addition, the availability of templates, a clause library containing the most up-to-date terms and conditions as well as pre-filling features increase the automation rate of the contract creation process. Especially, the pre-filling of contract information based on sourcing activities gains increasing attention in this.

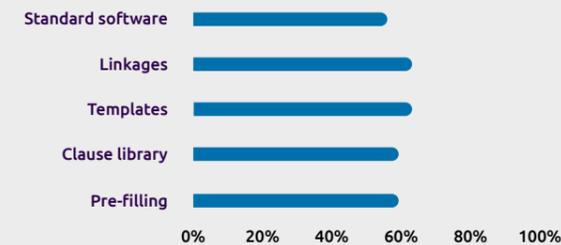


Figure 10: Functionalities in contracting

Complementing the basic functionalities above, this research also identifies several advanced functionalities that provide even further potential towards automation, five of which are shown in Figure 11. A little over one third of the solution providers offer these functionalities. Especially, the automatic preparation of internal and external information as well as of the contracting history must be mentioned. In addition, the possibility of signing contracts digitally through electronic signatures as well as simultaneously working in contract related documents without changing or overwriting content, reduces friction within the scope of contract creation.

Contract repository

Given the fact that a contract repository represents the most basic feature in contracting, it is no surprise that it is offered by all solution providers. Accordingly, standard filtering as well as archiving in relation to other contracts is offered by most solution providers. A very powerful and further developing functionality is a full text search in contract attachments to quickly find information without opening the respective contracts and attachments. It is currently offered by 62% solutions, with 21% having it on their roadmap. However, advanced functionalities through the utilization of new technologies such as AI are limited. While only 17% of the providers utilize AI for an efficient storing of contracts, almost one third utilizes AI for sophisticated searching and contract classification purposes. A few selected solution providers utilize AI mostly for meta data extraction and processing, followed by the removal of redundant or false contract information and documents, respectively.

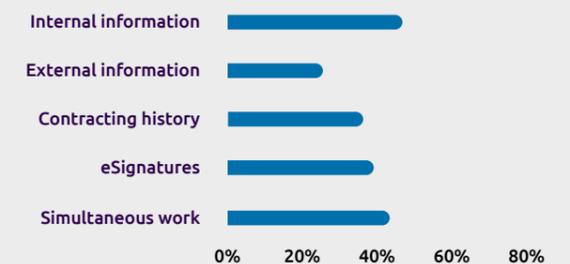
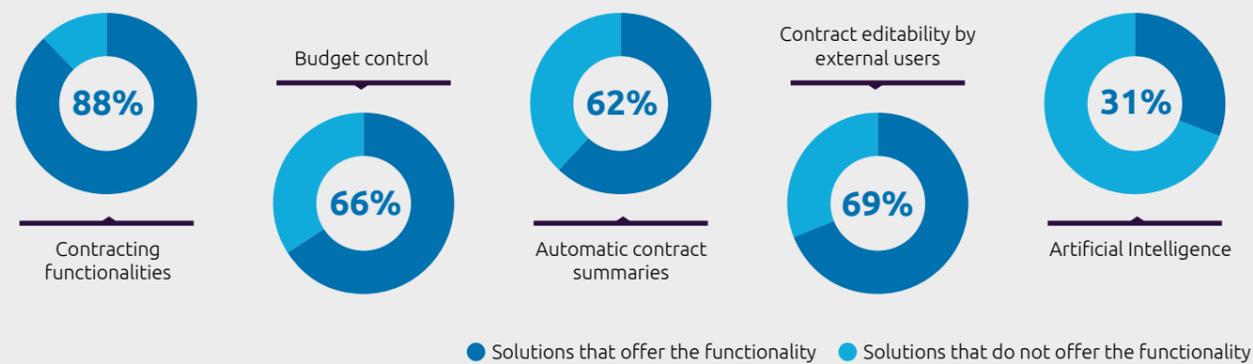


Figure 11: Advanced Functionalities in contracting

Contract performance

Since contract performance management examines and evaluates the supplier performance in accordance with contract terms and conditions, it is very important for both operational purchasing as well as strategic sourcing. Since it provides contract-, and thus supplier-related insights, it ensures a better outset for procurement functions to take value-adding decisions. A key feature is a configurable alert generation mechanism in, for example, budget control, which is offered by 66% of the solutions. While 59% of the solutions further provide spend monitoring, already 34% automatically propose measures in case spend is expected to exceed or has exceeded a contract threshold. With regard to upcoming contract rounds, approximately one third of the solutions offer a configurable KPI library, which ensures extensive control over time in easy to understand illustrations, as well as recognition mechanisms to mark specific contract clauses and gaps for improvement. In essence, these features equip procurement functions with sophisticated contract performance features to rather act in advance than reacting to non-compliant procurement operations.

Solutions that offer...



PURCHASING



RESEARCH RESULTS OF PURCHASING

Purchasing has many dependencies to various systems and processes. Therefore, purchasing has links with the procurement environment outside of its own function. For instance, the agreed prices in contracts (stored in contract management systems) should be reflected in the items in catalogues offered in the purchasing interface. Moreover, preferred status of a supplier and other details (e.g. name, address, contact details) should be correct and therefore require a link to vendor master data (VMD) or separate preferred supplier status systems. For availability of correct financial objects in the purchasing module as well as correct approval flows, close alignment is required with finance and their respective systems.

Key trends in purchasing

Dealing with the vast number of data sources outside of purchasing while still ensuring a proper operating purchasing function has resulted in three key trends. These trends have in common that they all ease the process of making purchases.

Increasing spend categories under catalogues

In purchasing, many data sources outside of purchasing are consolidated and put in an overview in a catalogue. Previously, catalogues were mostly used for simple indirect goods. However, there is an increasing number of spend categories that are put into catalogues, for instance services and direct goods. The benefits are known. For these categories, the requesters can enjoy a streamlined process for making a purchase, and items in the catalogue are always against a contract. This means maverick spend is reduced and organizations obtain improved control on spend. Moreover, some fields can already be prefilled, such as the vendor or the financial objects. This further reduces the time needed to make a purchase and can also steer for cost savings. Of course, the general challenge of catalogues also applies for direct goods: having in place the correct price and maintaining that. An exception should be made here for

punch-out catalogues – in this case the maintenance of the catalogue is done by the catalogue provider.

Finding the right buying channel

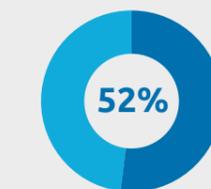
Enabling an intuitive process when making a purchase moves beyond just catalogues. Companies also have an increasing desire to ease the process of finding the proper buying channel for requesters. It is about designing the interface for the requesters in such a way that the correct buying channel is identified seamlessly. By doing so, awareness of using the correct channel is increased across requesters, lowering the necessity for providing trainings. Prioritizing on design rather than user training allows for a purchasing tool with a very high level of ease of use, resulting in less non-compliant purchasing behavior as the correct buying channel is used. This results in two benefits. Firstly, maverick spend is reduced as the lowest contracted price is always used. Secondly, a PO is always created for the purchase and therefore suppliers suffer no delay in payment as the invoice can be matched with the PO.

Automation of purchasing

While significant efficiency gains can be obtained from the requester perspective, additional value can be gained from automation. Identifying the right buying channel and subsequently filling in the required fields as much hands-off as possible offers two significant benefits. Firstly, this further reduces the time to purchase, enabling procurement personnel to focus more on strategic and therefore value-adding activities. Secondly, human errors are taken out of the process, speeding up the duration between PR creation and PO creation. The reduced process time also allows to handle urgent requests quicker.



Solutions that offer...



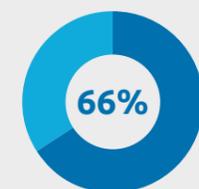
Functionalities to compare items and recommend the best item

Chatbots in catalogs



Submitting a PR that includes a vendor not VMD

Recording of PO created against contract



Automatic review of PO against contract terms

● Solutions that offer the functionality ● Solutions that do not offer the functionality

Research findings purchasing

Out of 33 solution providers, there are 29 that offer functionalities within purchasing. From these 29, there is 45% which offer all elements in purchasing. The number of solution providers that offer a certain element of purchasing is shown in Figure 12.

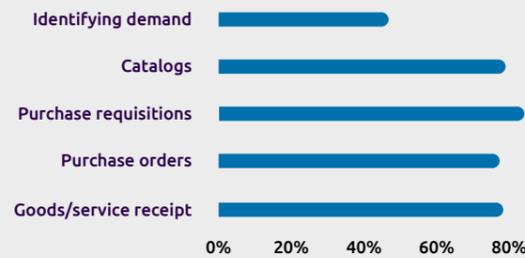


Figure 12: Width of purchasing elements

Identifying demand

While at times not considered a part of purchasing, it is not surprising that only 48% of solutions cover this topic. Yet, it serves as a trigger to start the rest of the purchasing process and is therefore also important to account for in tooling. There are different ways of identifying demand. This can be done based on remaining funds on a PO or purchase history, both of which are offered by 14% of solutions only. An explanation could be that such functionalities require significant IT interfacing. Possibly less complex, identifying demand based on contractual agreements or using current inventory levels is offered by 34% of solutions. Solutions that are able to identify demand (one way or another) do show to have incorporated follow-up actions with a high degree of automation. This is shown in Figure 14.



Figure 14: Types of follow-up actions when demand is identified

Catalogues

Catalogues ease the process of making a purchase. It is therefore not very surprising that the majority of solutions cover basic catalogue functionalities. Roughly 67% of solutions can connect to third party punch-out catalogues, offer a search option which is cross-catalogue, can include articles from different suppliers in a single catalogue and can also apply different pricing strategies. Less basic, but also a very valuable feature, chatbots are offered by 21% of solutions. Chatbots offer significant benefits to consumers as they improve the guided buying experience by searching (and comparing) items and answering other questions. It should also be noted that if the chatbot is available, its functionalities are mostly simple as shown in Figure 13. Furthermore 35% of solutions are applying machine learning (ML) to identify comparable and complementary goods. In this case, B2B catalogues still offer less functionalities than B2C catalogues. A potential explanation for this gap could be that consumers often are exploring what they want to buy, while B2B users know beforehand the precise item they want to purchase. Nevertheless, having ML to identify comparable

goods could significantly improve awareness of the buyer to select a product from the cheapest or most reliable supplier.

Purchase requisitions



Figure 13: Types of chatbot functionalities

For purchase requisition functionalities, offered by 76% of solutions, it can be observed that 62% of solutions can automatically convert ERP orders to PRs and also convert approved catalogue PRs to POs. Moreover, 52% can also check the PR for compliancy against corresponding contract and 10% of solutions can even check the purchased product against similar products that are contracted. While not offered by many solutions, such functionality can be considered a valuable addition in the validation process to ensure the right product is selected by the buyer.

Flexibility and ease of use in PR functionalities are also well considered by various solutions. All 76% of solutions can submit multi line services PRs. This means that in the event of having to purchase multiple items, the buyer can put it all under the same PR, avoiding doing the entire process all over for each service needed. Furthermore, 52% of solutions also enable a buyer to purchase a good from a vendor which is not yet registered in the vendor master data (VMD). This enables urgent purchases from vendors outside of VMD. On the other hand, it does work against reducing maverick spend. Therefore, this feature does require the right company policies to avoid maverick spend.

Purchase orders

For purchase orders (PO), a similar flexibility can be observed as 83% of solutions allow creation of POs without a PR and 59% of solutions do not require a link with a contract to create the PO. Once created, 66% of solutions allow the supplier to propose changes. The same percentage of solutions can record the number of created POs against contracts, giving direct insights into maverick spend. The fact that 79% offer this, clearly shows solution providers are aware of companies' desire to combat maverick spend and thus offer built-in features to do so. While recording PO creation against contracts appears to be widely possible, checking the content of the contract against the PO is only covered by 34% of solutions.

A final observation is that many solutions (79%) can record the balance on call-off POs. Additionally, 34% can even send an automatic request for additional funds when the PO is almost overbooked. Both functionalities ease finance processes as transparency is improved, allowing finance to make more accurate accruals and have a better view on cash management. Moreover, it also increases awareness of POs that are almost overbooked – by adding funds on time, situations where the supplier cannot be paid due to overbooked POs can be avoided.

BUYING CHANNEL OPTIMIZATION

Dominik Knotte, Elisa Senger and Rens Schoorlemmer

Introduction

Many procurement organizations struggle with trade-offs between delivering value, dealing with time pressure and ensuring compliance, all while remaining a 'customer-centric' and valued business partner to their stakeholders. Optimizing the value delivered by the procurement organization is not only achieved by strategic sourcing, negotiations or contracting, but also by running effective and efficient operations. In fact, failing to do so may even compromise the envisioned savings from strategic initiatives.

Because, where sourcing activities shape the circumstances for value realization, actual value is not delivered unless the contract is being used adequately and compliant during its term. This means minimizing the amount of procurement and business effort involved, disputes, and procedural inefficiencies, while maximizing the value of the agreed terms, volumes and pricing. In essence: value realization should be achieved largely during the Procure-to-Pay

(P2P) process. This entails the requisitioning, approval, ordering and payment of the required products or services. As demonstrated at many of our clients, an important step towards mastering this process is considering and implementing adequate buying channels, supported by technology and automation where possible. However, it takes time, organization and experience to optimize the management of these buying channels.

In this article, we will share our approach towards buying channel management, based on client experience and our capabilities.

Buying channel management

Buying channel management is a key efficiency driver within procurement operations, as it mitigates barriers in between business, strategic and operational procurement. The approach considers different premises of both strategic and operational procurement: it focuses on the usage of pre-negotiated frame contracts (strategic), but also increases

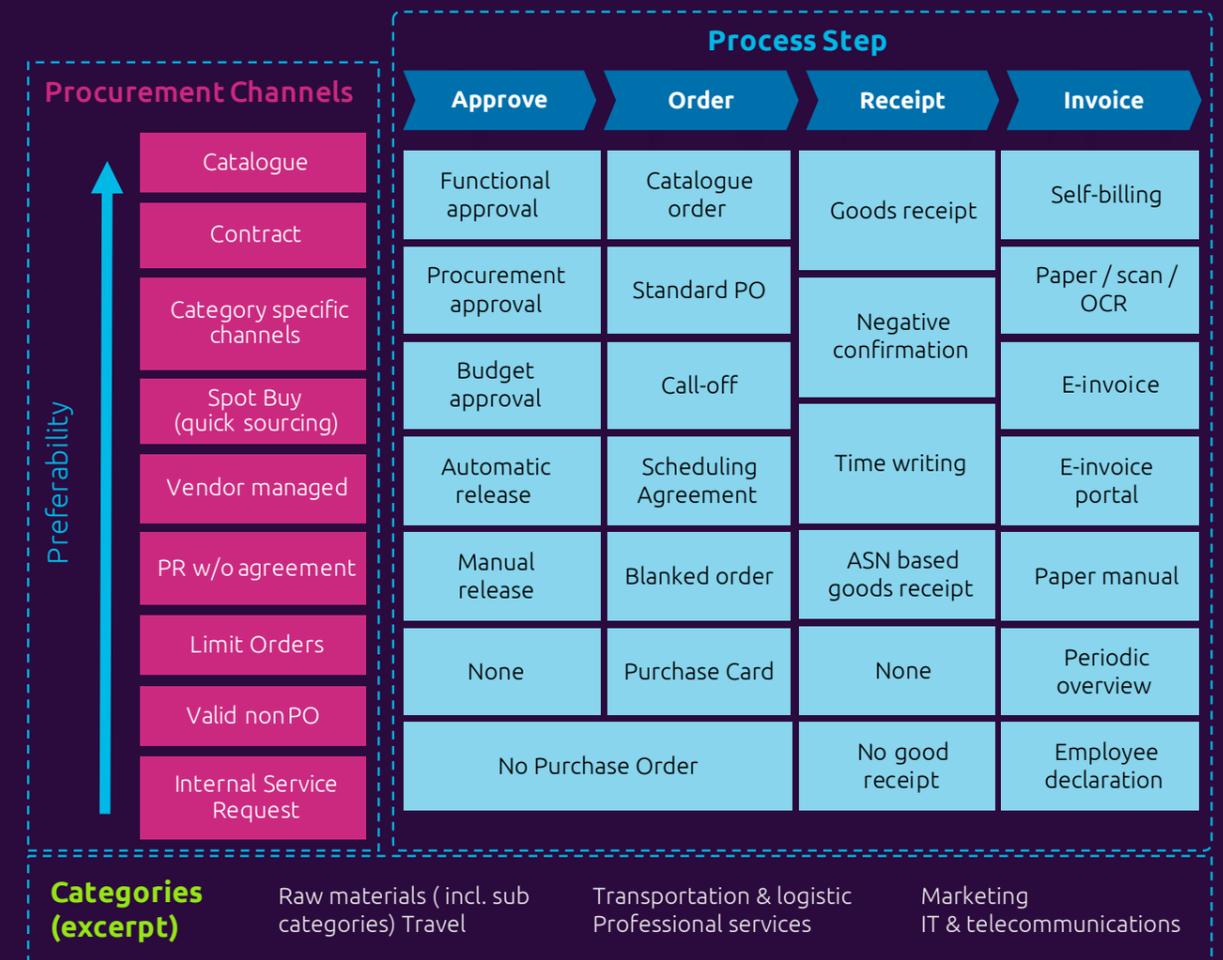


Figure 15: Buying channel matrix

THE BUYER JOURNEY

Greg Bateup

In his only novel – The Picture of Dorian Gray – Oscar Wilde wrote: “I do not want to be at the mercy of my emotions. I want to use them, to enjoy them, and to dominate them”. If only your employees had Dorian’s strength to conquer their emotions in sourcing their day-to-day needs. But what have emotions got to do with procurement? The answer is: everything! Let us consider for a moment the journey of a buyer, whether this is a young lady who needs a new dress for a party she has been invited to, or a plant maintenance engineer who needs to repair manufacturing plant. In each case there are four key steps the buyer will go through. Before I go into the actual emotions, let us step through this journey.

Awareness

The first step of the journey is the point where you become aware you have a “need”. Often, this “need” results from a problem that needs a solution. For example, in the cases above, this would be a party invite without the appropriate dress, or a halted production line. Sometimes this need is very specific, such as a specification from a bill of materials for a production run. In other cases, it may be as general as I need something comfortable to sit on to do my work. To add another dimension to this, some of these needs are predictable. Production demand is a clear example where I can predict based on a sales forecast but expected failure rates on parts or commercial real estate planning can also help with these predictions.

Research

The next step for any buyer is deciding how to fulfil their “need”. In the case of our dress above, this may involve a trip to the high street, or an on-line search. In the case of our faulty machinery, in a well-documented MRO environment, it should be “point, click and order”, but in many cases, will involve an engineer speaking to suppliers to identify a suitable replacement part, including a discussion on lead times and installation requirements. In organizations where the purchasing process is not clearly defined, employees can waste significant amount of time and energy on this step (time you are paying their salary for), especially for indirect purchases where

catalogues do not exist or are hard to find or navigate, or purchasing policies are not clear.

Consider and buy

Once the buyer has decided, he or she will then take the appropriate route to make the purchase. In the case of our partygoer, on-line checkout or taking the item to the counter to pay. Similarly, our engineer may have multiple routes to purchase, depending on the organization, tools available or the commodity. This could include catalogues, a free text sourcing request, direct purchase (using a procurement card) or contract call off. The channels could be on-line or through an order desk for example.

It should be noted here that in many organizations, this is the only step that is considered part of the core procurement function.

Receive and adopt

The journey is not over yet - in fact it has just begun. Our young lady will receive her dress from the courier, or leave the shop thinking about how to accessorize. For our plant maintenance engineer, confirming the part is compliant and installation and testing will follow. While for some categories of spend, in organizations where Supplier Performance Management is mature, adopt becomes part of the Category Management process. For the rest receive (and subsequent pay) is where the process stops. And, adopt becomes the buyer’s problem.

Emotions and demand management

So, coming back to Dorian Gray and emotions - how does one help organizations deliver more value through the procurement function. As any marketing person will tell you, the customer journey above shows just how much of an emotional rollercoaster a buyer (your employee) needs to go on to satisfy his or her “need.” While the emotions are different for requesting a replacement valve on your gas pipeline than buying a new dress, the principle is the same – how do you make sure emotions are kept in check and it becomes a pleasurable experience?

Just as marketers use emotions to drive buying decisions, in the procurement industry, we can also use emotions in a similar way. While a simple lack of frustration (good emotion) in the process will go a long way to ensure compliance with the process, using relevant (positive and negative) information to drive social acceptance on a buying decision can also help. Each of these opportunities can help your end users make the decision you want them to make (or even decide they don’t “need” anything).

Predicting Demand

So how can we get ahead of these emotional decisions - what are the key demand drivers that can be considered? In many cases, it is difficult to predict a specific need for a specific time. Simple steps like tying in with organizational systems, such as capex

automation and guidance of the requisitioner (operational). Therewith it addresses several procurement challenges such as low coverage of frame contracts, high manual efforts of handling free text purchase requisitions and manually released purchase orders. The core of the buying channel optimization is to route every demand through pre-defined buying channels preferring the channels with highest degree of automation.

The visualized matrix in Figure 15 shows how each type of a company’s demand can be classified leading to the proposed buying channel. The buying channel logic answers the question, what is the possible and most preferred way to receive and process a demand? Therefore, every buying channel approach starts with a transactional analysis to point out the weak spots based on data and facts:

- Which channels can be classified in no-, low- and high-touch?
- What are the transactions behind no-, low- and high-touch?

The classification in no-touch, low-touch and high-touch is related to the degree of manual effort during the process. A no-touch transaction is classified as a fully automated transaction without procurement involvement as with a catalogue or marketplace order. This is the most preferred buying channel, because there is no buyer involvement needed. Requisitioners are guided through a negotiated catalogue or marketplace where they can search and order a product themselves.

A low-touch transaction describes the usage of a pre-negotiated contracts, for example for consulting services. Buyer involvement is needed to some degree to make sure that the demand is specified in the right quality and the respective frame contract is chosen. As the frame contract is pre-negotiated, the supplier sourcing and contract do not have to be setup from scratch, which saves a significant amount of time. Another important aspect is that the bundling potential is increased by using these pre-negotiated contracts.

Finally, there is the high-touch transaction, which can consume a significant amount of time and effort, as there is

no source or contract in place. For example, this can be a one-time demand like a very specific tax lawyer.

A main lever of the buying channel approach is the optimization of the ratio between no-touch, low-touch and high-touch transactions. The result of every buying channel optimization project should be a significant reduction of high-touch and increase of no-touch transactions.

Leveraging this logic results in three key benefits: It increases spend under sourcing coverage, it ensures usage and compliance of existing contracts and lastly, it increases operational efficiency by routing requests (preferably) via automated channels such as catalogues and e-forms. The requisitioner will have a superior, autonomous buying experience by following a clearly defined buying process while receiving the necessary support from the procurement department when needed. To be able to reap these benefits, three key aspects should be considered before starting the buying channel optimization: Firstly, adequate procurement data quality (e.g. clean category structure, spend data, reference to existing contracts) needs to be ensured to get a clear picture of the as-is situation and the respective touch levels. Secondly, top management involvement is important to motivate employees to cooperate throughout the project and to jointly identify the improvement potential per supplier. Thirdly, the scope (differs per client) should be clearly defined, e.g. applying the 80/20 principle: focus on the 20% of suppliers, that cause 80% of medium and high effort transactions.

Conclusion

Optimization of buying channels and the way they are managed is a critical theme for companies that want to get the most out of their procurement function. They ensure that value from strategic procurement activities is realized, while ensuring a comfortable process for business users and efficient use of procurement resources. In order to start optimization, clear support from the top management and accurate data are a prerequisite. Capgemini is experienced in delivering optimized buying channel structures, that distinguish low-, medium-, and high-touch routes to enable your procurement function to deliver on promises, be a solid business partner and spend its time on the issues that matter.

Client success story

The procurement function of a global leader within the oil and gas industry, with a total revenue of 6 billion Euros annually, approached Capgemini to get support on their buying channel optimization journey. The client had two main goals: Firstly, to increase the automation rate – already being at 75% – within the procurement function. Secondly, to re-adjust the procurement operating model and to re-distribute the procurement activities in a more efficient, headcount reducing way. By analyzing the client’s transactional procurement and finance data, conducting several focus interviews and workshops, multiple improvement measures were identified. Some examples for such improvement measures were the enhancement of current catalogues, the consolidation of spend with suppliers where catalogues already exist and the increase of certain approval thresholds. The identified measures were prioritized according their estimated effort and effect and a detailed implementation roadmap was developed. Through the implementation of all measures, the automation rate has been increased to 86%. In addition, the client’s procurement target operating model was designed, implementing a clear split between strategic and operational activities executed by a leaner procurement function.

ACCOUNTS PAYABLE

project tools, HR systems for joining or training plans, or annual marketing plans will provide some forward visibility, however, with tools such as machine learning and predictive analytics, there are more and more options.

Using weather forecasting, for example, to predict when the air-conditioning or heating in your offices, or specific components in a power distribution network, may fail so you can plan to have the correct parts on contract, ordered or on hand as you require them or using break-fix records within your network infrastructure. It will never be perfect, but the more you can plan your demand, the more power you will have to negotiate reduced spend and optimize your inventory, and the less your customer journey is governed by emotion.

Once you have a view on potential, demand, the research step can be a key giveaway to understand where specifically your next request may come from, but one that many organizations have limited visibility on. One opportunity may be your help desks (technical or functional). Questions from users such as asking about the life of assets such as laptops, or even searching the procurement catalogues may provide some insight of an impending request.

Guiding Emotions

Providing additional resources such as knowledge bases for key assets (e.g. Marketing, MRO, IT or Office Equipment) may be another way of guiding users to a specific choice. This may be an internal product review site, online technical portal for technical parts, research material (of course carefully curated), an online chat service, or even simply improving your internal communication (newsletters). A feature article with solid reviews on the choice of corporate laptop, or ergonomic information on my office chair can help a buyer in his or her research and guide them towards a specific choice.

Obviously, there needs to be the requisite change management to ensure users are aware of these resources, and they need to be maintained and easily linked to the procurement process.

Making it Easy

For easy adoption, purchasing needs to be easy to navigate and use. Too many or too few items in a catalogue, unnecessary and complicated approvals and poor user interface will all lead to poor user adoption and compliance, and result in increased maverick buying. The way of buying also needs to be aligned to each user group's specific circumstances. A field engineer may require additional

support and may not have access to the internet to request what they need in an emergency, whereas an office worker can use a catalogue on a PC.

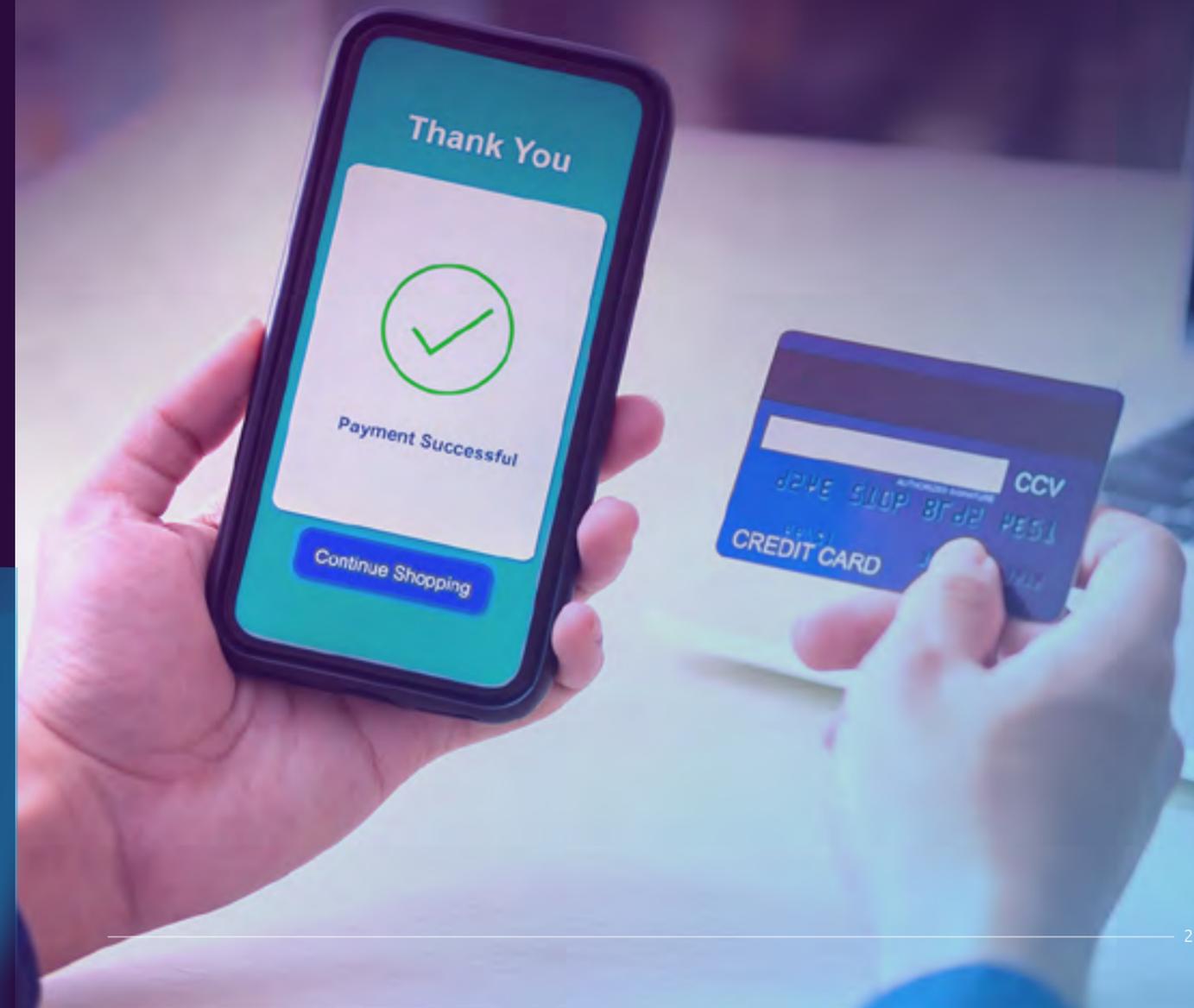
The Last Mile

Receiving is critical to closure of the payment process, but not usually a priority for the end user once they have what they want. Control versus convenience needs to be addressed at this point – for example, can I assume something has been received? Also, what support can I provide for users when things go wrong, and what is the supplier performance management process for my tail suppliers to ensure happy buyers?

COVID-19 also presents both an opportunity to re-look at the post receipt processes, with more people expected to work remotely and not able to get to the office for support.

Conclusion

For most organizations, customer satisfaction (and managing emotions) is not the main objective of procurement – keeping costs in check is! But, as you better understand the buyers' journey, you'll find opportunities to help drive compliance with the process, as well as guiding your employees' buying decisions to better align with your organization's strategy.



RESEARCH RESULTS OF ACCOUNTS PAYABLE

After purchasing, the procure-to-pay cycle is completed by accounts payable (AP), which can be considered the process of receiving, processing and paying the invoice submitted by the supplier. In order to provide approval for payment it is not only the invoice that must be compliant to company policies (e.g. provide correct BU or correct format) but also the initial process of making the purchase. For instance, when using the correct buying channel so that the PO is created and can be matched with the invoice. As such the efficiency of the AP function depends on processes that are performed in other procurement functions. If company policies require a three-way match, a link is required with the purchase for PO and good/service receipt. If company policies require a four-way match also a link with the contracting module is needed for AP. Therefore, a good AP organization must anticipate on errors in any of these sub processes outside of its own function by having the right processes in place for error handling.

Key trends in accounts payable

In designing processes to anticipate on errors which go beyond AP, companies can differentiate in the type of process they design: avoid, mitigate or transfer. The trends identified corresponds to these three design choices.

Change in governance of AP function

In most cases, the AP function is part of the finance department of a company. However, this currently changes as the AP related activities are increasingly performed by the procurement organization. This change in governance is also understandable, since in case of any errors in invoice processing, it often happens that the AP organization reaches out to the buyer and asks him to get in touch with the supplier to solve the issue. By involving procurement in AP processes the speed of error handling is increased. This of course does not mean that AP should be fully governed by procurement since approving invoices has implications on budgets, which are managed by finance.

Moreover, there is also a risk of non-compliant purchasing behavior going unnoticed. For instance, when a buyer orders goods at a supplier without PO and then approves the incoming invoice himself. This would impact PO compliance significantly and confronts finance with surprises. Therefore, the increasing presence of procurement in AP should be carefully monitored by finance. Processes should also be put in place to safeguard integrity of AP reporting.

Dealing with high volumes of invoices with errors

Next to a change in governance of the AP organization, changes in activities within the AP organization can also be observed. Namely, how organizations deal with the high volumes of invoices that contain errors. These invoices either do not meet invoice submission requirements (e.g. different formats of invoice or missing information) or cannot be matched with a PO. As such, companies are focusing on automation of the AP function and invoice flipping. Especially the latter is still niche but has high potential – the idea behind it, is that as the supplier delivers the good, they also revert the PO and submit it as an invoice. By doing so, matching the invoice with the corresponding PO is eased as they are identical. These solutions complement each other as companies benefit from less errors (invoice flipping) and a higher speed at which errors are resolved (automation).

Supply chain financing in AP

A notable key trend also concerns the increasing investment of companies to incorporate early payment rates and supply chain financing (SCF) functionalities. These functionalities offer the benefit of having more control over the company's cash management and potentially reducing costs with early payment rates. Moreover, the relationship with the supplier is improved as they are given more flexibility in receiving payment, thereby also improving the supplier's cash management.



Research findings accounts payable

Out of 33 solution providers, there are 24 that offer functionalities in AP. From these 24, there is 67% that offer all elements in AP. Figure 16 shows an overview of the functionalities offered by solution providers.

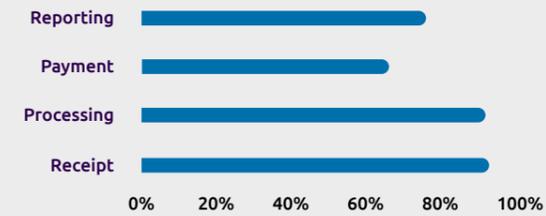


Figure 16: Width of accounts payable functionalities

Invoice receipt

For invoice receipt, more than 79% of solutions cover basic invoice receipt functionalities. This includes checking the invoice for consistency and compliance, identifying duplicate invoices and receiving invoice data from ERP or third-party systems. Next to this, 71% of solutions make it possible to invoice directly against contracts instead of POs. For some spend categories such as consulting or rentals, invoicing against a contract make more sense since the PO would be of the same value as the contract. Removing the PO from this process would make the P2P flow less document heavy.

Another interesting feature is self-billing, offered by 58% of solutions. When sending out the PO to the supplier, someone from the purchasing company also immediately formulates the invoice. By doing so, there is a high certainty that the invoice will be matched with the PO. The supplier does benefit from not having to formulate the invoice anymore but does require to trust the buyer formulating the invoice which fits the PO. A potential downside is that arranging payment on an overbooked PO will become difficult: the PO and invoice are in sync, but not the good receipt. Finally, 67% of solutions leverage intelligent character recognition technologies (OCR) for deriving information from different invoice formats.



Figure 17: Different ways of assigning priority to invoice

Invoice processing

An interesting finding in invoice processing is the high level of automation, which corresponds well with the second key trend described earlier. More than 90% of solutions provide workflows for non-PO invoices, even when the invoice is not matched. When this is the case, 71% of solutions can automatically determine the root cause and communicate this back to the supplier. In doing so, 29% of solutions leverage AI in this process, whereas 21% of solutions have this on their roadmap additionally. When the invoice is fully compliant, 79% of solutions can attach the invoice to the PO in the ERP. The high level of automation is understandable, as performing these activities manually is very time consuming

and error prone due to its repetitiveness. A feature where a lower level of coverage can be observed concerns the assignment of priority to invoices, offered by 63% of solutions. This is a feature which helps the AP organization in dealing with urgent matters, but also ensures that invoices are paid on time. When looking at the different ways in which priority can be assigned, simple features are mostly offered such as invoice amount and due date, while more sophisticated features are lacking behind as shown in Figure 17.

Payment

In the final AP process, we see that 67% of solutions offer functionalities in payment. The payment process within AP represents the transaction from buyer to supplier for the delivered service or good. In executing payment, cost savings can be achieved by early payment discounts. Most solution providers do not yet offer all functionalities to achieve these cost savings. Only 46% of solutions offer the functionality of dynamic discounting and early payment discount, as shown in Figure 18. This functionality is leveraged by 41% of solutions to also identify cost saving opportunities. Payment terms can also exceed, in which case there are late payment fines. There is 63% of solutions can record the number late payments. This could serve well as KPI for AP and further stress the relevance of PO compliance. Interestingly, the fines related to these late payments cannot be captured by most solutions (33%). This could be explained as late payment fines are often excluded from the contract between supplier and buyer. This reduces the business need to have such functionalities in their tool. A surprising finding is that only eight percent can record and forecast available working capital. This could be explained by the fact that obtaining (real time) insights into working capital is often very complex in large companies. However, when achieved it would be possible to make more accurate decisions in opting for early payments while maintaining a healthy cash flow.

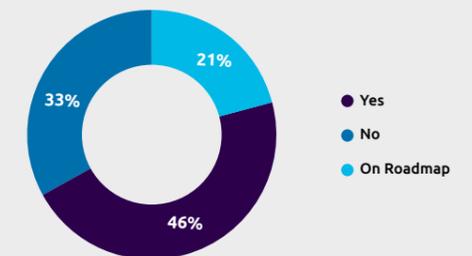
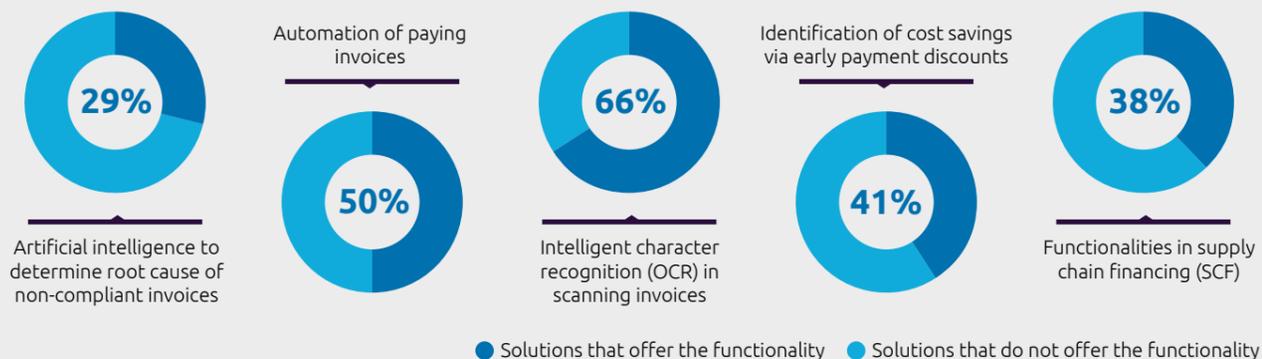


Figure 18: Solutions that support dynamic discounting

While the number of solutions that cover automation functionalities in invoice processing is quite high, it is significantly lower in payment processes. There is 67% of solutions that can send an 'ok-to-pay' message to the ERP with details to proceed with payment. As a matter of fact, payment of invoices can be fully automated by 50% of solutions. The same number of solutions is also able to scan for duplicate payments. Especially in large complex organizations or M&A contexts where an overview of invoices can be lost easily, this is a very useful feature. Finally, 38% of solutions offer functionalities within Supply Chain Financing (SCF). The functionalities often comprise a full SCF module, covered by the solution itself or provided by the solution via a partnered third party.

Solutions that offer...



PROCURE-TO-PAY OPTIMIZATION

Dico van Dijk and Maciej Zebro

Late or misplaced deliveries, lost invoices, suppliers threatening to stop supply, accruals made on gut feel basis ... sounds familiar? You are not alone. The good news is that it can be done better and there are best practices to learn from.

What is the Procure-to-Pay process - What does "good" look like in P2P

The commonly accepted definition for Procure-to-Pay (P²P) is that it is an end-to-end process that begins with identification of the need to purchase goods and/or services, through requisitioning and order creation, up to the payment to the supplier.

The Procure-to-Pay process could be complex and often create frustration amongst company's large employee population, as well as the unnecessary friction between some departments, like Procurement and Accounts Payable. On top of this, mixed formats, poor compliance and adoption have been barriers to efficient capture, processing and analytics of the P²P data, to turn them into useful information and insights.

However, a well-designed P²P process should remove above issues. It can do so by positive user experience, providing high-level compliance, enabling reliable data analysis and production of insights. And eventually becoming a source of cost savings.

User experience

The end user can easily define and select the right product, material or services from the right supplier for the best overall value with delivery to the right place at the right time. The requests can be done anytime on any device and the experience should be like the use of the B2C platforms.

There are means for effective and efficient collaboration between the requester, the buyer, and the suppliers for the goods and services purchased.

Risk and compliance

The expenses are properly authorized prior to making a commitment towards the supplier. The process balances risk vs. efficiency, so the low-value and low-risk items are automated, whilst the high-value and high-risk items follow rigorous review and approval process.

The solution provides a high-level of data integrity to be able to track the effectiveness of the process.

It ensures that invoices are accurate and approved prior to being released

for payment. There is an effective process to make sure to take advantage of any discounts and quick payment options that are offered.

Data and insights

The solution provides buyers with the information they need to effectively create or refine category strategies and run sourcing projects to negotiate improved terms & conditions for the company.

Value

Acknowledging all the above, the optimal P²P process may become a source of value for its participating stakeholders. For the company, through becoming a key contributor to its financial success. For P²P employees, by making their jobs less clerical, more interesting and meaningful. And for suppliers, by higher integration into client's operations, more reliable payments and better visibility into transaction, information and financial flows.

- Understanding the technology market and particular tools' strengths and weaknesses.
- If you have the internal know-how and resources to deploy and run the solution on your own, or do you need to hire external experts to support you?

Knowing the answers to the above, you can move to the execution phase of a process improvement program. In execution, there are five principles to consider.

- Don't be too quick to automate or robotize processes. Instead, start with asking yourself what non-value-add activities can be eliminated, standardized or optimized. Capgemini's ESOAR (Eliminate, Standardize, Optimize, Automate, Robotize) methodology can be a great reference in doing so, for example making sure you don't robotize the processes that you don't even have to perform.
- While selecting the technology that fits your business, think about the aligned process design that will run smoothly with this technology. If you follow the agile methodology, you'd expect to see such alignment already during the first sprint session(s).
- If not done by your implementation partner before, invest enough time into system configuration to follow your best-in-class process, but make process alterations where system can't be customized. It should be an iterative process to find the optimum balance between the two, to ensure the best outcomes.
- Test the solution properly before launching – otherwise the initial hick-ups will create perception for a long time and will impact negatively your change management efforts.
- Communicate, communicate, communicate – the organizational change management program is (often

underestimated) a key success factor in a P²P transformation program. As it impacts such a vast population of the company workforce, it can derail even well-designed processes, if not done effectively. The importance of change management is further outlined in the article about Change Management.

Successful launch of the solution is just the beginning of the journey. To deliver on the expectations, the company needs to assure proper maintenance and development of it, including the content (e.g. catalogues, contracts, users, suppliers), training of newcomers, analytics and continuous improvement.

It all takes time and effort, but the reward at stake is significant, if enough attention is being paid to it. Given that a big share of the company expenses goes through this process and it can be either the source of the competitive advantage (if managed well) or the opposite.

Conclusion

Whereas there are many factors to consider and it takes an effort when transforming the P²P process, the good news is that it can be done and the result being that quite a few companies have succeeded in this field. There are tools and providers on the market which possess required capabilities to guide their clients through this journey and deploy it successfully.

Once the P²P program has been properly launched, it will benefit your company in many ways, such as increased savings delivery, better compliance to negotiated contracts or buying channels, as well as simplified processes that drive the end-user satisfaction.

What's the 'recipe' for successful deployment of the best-in-class P2P solution

The answer has several facets. First, it's difficult to imagine nowadays running a best-in-class process without an appropriate supporting technology. Yet, it's not always given that technology is built the way that makes life easier or, that it perfectly matches your company business needs. A lot depends on how you configure and deploy it, not forgetting about proper organizational change management and supplier onboarding programs.

So, which way to go? Align process to technology? Or the other way

around, tailor the technology to the process? The answer is neither of the above. In our experience only the holistic approach will deliver expected outcomes. While the individual approaches will vary, you need to consider several factors, including:

- The business sector you are in. The type of purchasing needs will vary, depending on your business, so the processes and tools should reflect that. For example, if your company falls into manufacturing sector, you will likely purchase

more materials, whereas companies in the banking industry, will be much more focused on services. Your system selection should address these various needs.

- What type of organization you are in. Are you looking for a 'turn-key' solution, or (for whatever reason) you believe in heavy customization of the solution? Platforms will differ in the degree you can "play" with the design and configuration.

REPORTING AND ANALYTICS



RESEARCH RESULTS OF REPORTING & ANALYTICS

From its basis, organizations mostly look at analytics in procurement from a cost savings perspective, focusing solely on spend analysis. During recent years, data has become increasingly important across the entire Source-to-Pay scope. Data analytics includes the process of collecting, preparing and structuring data to support decision making across the procurement department. This ranges from simple excel-based spend analyses to enhanced analytics based on both internal- and external data. Procurement solution providers support decisions based on data by offering functionalities for reporting & analytics, including KPIs and dashboards.

Key trends in reporting and analytics

Depending on the business type, internal company data is stored across multiple tools and software. Integrating the data provides insights such as stock levels and ordering information. With new technologies, data collection from across the supply chain provides a better insight into a company its performance. As external factors have impact on the performance, for example supply disruption due to a pandemic such as COVID-19, data should be shared across the supply chain to get more accurate supply information. Not within the supply chain, but data coming from external sources, such as news articles, can be used for predictions in a dynamic competitive environment.

Technology

Analysing large data sets is a complex, time-consuming and an error prone task. Procurement solutions can support in solving complex problems, such as Machine Learning (ML) (being an application of Artificial Intelligence (AI)) to support in speeding up the data cleansing and analysis process more accurately. For example, spend data analysis might have been performed manually at first. Since there are higher quantities of data available, technology-based solutions can

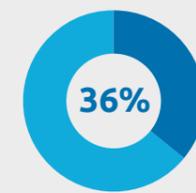
run the analysis in a quicker way. Machines can learn based on previous records within a specific spend category to continuously improve procurement processes.

Machine Learning can also be used for price development. In order to accurately predict prices of components in an early stage, ML uses data from previous years in a certain time period to combine this with other semi-structured data to provide accurate insight in a component's price level that increases or decreases. It can thereby have a direct impact on the product margin. Furthermore, technologies such as process mining providers in analysing whether procurement processes are performing well, or which part of the P2P process shows bottlenecks. When it comes to contract management, metadata can play a valuable role. Metadata is automatically structured data about contracts. It makes a large contract database searchable by coding (paper) contracts and it provides real time dashboards on multiple metadata types.

Data analysis

With an overload of procurement data, it gets harder for data analysts to process the right data, which could lead to a reduction of decision quality. Therefore, procurement solutions often provide standard dashboards to process and visualise the bulk of data. However, companies need insights specifically for their industry, their company and their procurement strategy (often different per category). Whereas one strategy may be to minimize the supplier base in order to get scale advantage, another strategy looks for setting up multi-sourcing. Each strategy needs its own data analysis. Also, people within the organization need to have the right skills to interpret the data correctly, as in the end actions need to be taken upon analysis outcomes that impact the business.

Solutions that offer...



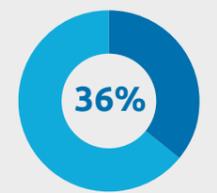
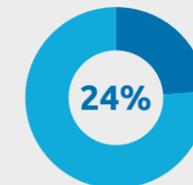
Custom dashboards in the mobile app

Process mining analysis based on workflows



To automatically categorize spend data into categories based on machine learning

Benchmarking against other clients across industries



Link to databases recording sustainability ratings of suppliers

● Solutions that offer the functionality ● Solutions that do not offer the functionality

Research findings reporting and analytics

All 33 solution providers offer the functionality reporting and analytics. Although some solution providers offer more advanced functionalities (39% indicate they can perform process mining analysis based on workflows), all the solution providers indicate they cover reporting and dashboard functionality to some extent. As shown in Figure 19, 91% of the providers offer spend analysis functionality and 55% have benchmarking functionality in place. The paragraphs below further elaborate on these functionalities.

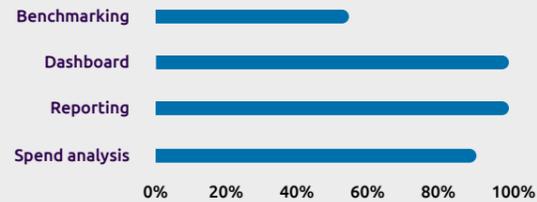


Figure 19: Functionalities offered in Reporting & Analytics

Reporting and dashboards

In the Digital Procurement Research of 2018, 89% of the participated solution providers had the reporting- and 86% had the dashboard functionality in place. In 2020 - 2021, all solution providers offer these functionalities. Solution providers have made improvements on the functionality. Almost all solutions can create graphical dashboards using real-time data (97%). Also, as many companies have KPIs in place to measure performance and support decision making, 85% of the solutions can provide dashboards based on these KPI's.

The standard types of dashboards that solutions have in place are easy to use and give, in general, good insight in performance of standard KPI's. However, more valuable to a company is information relevant to the company strategy. Solution providers become aware of the value of customization since 82% can configure users' dashboards in the solution and 9% have it on the roadmap. However, providing custom dashboards visible in the app is a newer feature, since only 46% cover this feature and 21% have it on the roadmap. Also, not many solution providers (58%) currently provide the ability to suggest KPI thresholds based on internal information, 15% have it on their roadmap.

Spend analysis

From the 33 solution providers that offer reporting and analytics to some extent, 91% cover the spend analysis functionality. Most solutions can consolidate spend data from multiple sources (82%), can show spend data on different levels (88%) and are able to classify spend analysis reports (76%). However, machine learning to automatically categorize spend data into the right categories is less often covered by solutions (42%). Also, automatic savings tracking based on previous contracts (same commodity) is less often provided (46%), as shown in Figure 20.

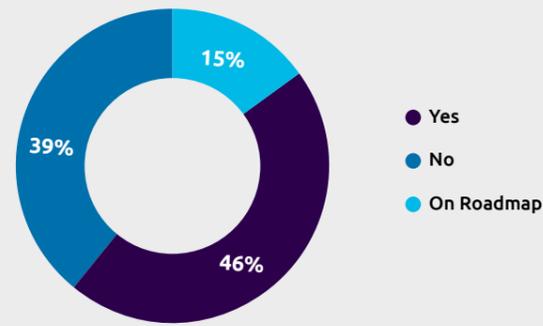


Figure 20: Automatic savings tracking based on previous contracts (same commodity)

Benchmarking

Internal benchmarking compares the performance of different categories or business units within the organization. It is common to perform a fit gap analysis to get insight into the specific points of improvement, to develop a plan and take action to close the gap. Most of the procurement solutions offer benchmarking on simple procurement figures, such as the average payment terms, number of active suppliers, percentage spend managed by procurement and purchasing process/ cycle times, this is shown in Figure 21.

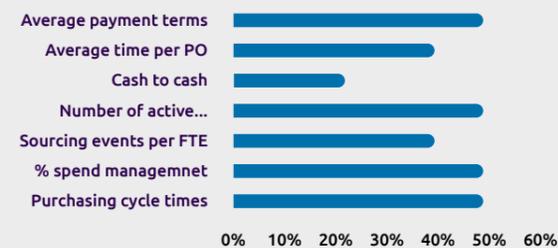


Figure 21: Internal benchmarking supported by Procurement solutions

The availability of external benchmarking creates the opportunity to improve performance insights based on comparisons with best practises in the market. 39% of the solutions offer benchmarking against industry and/or market averages and 9% has it on the roadmap. To make more in-depth comparisons, only 24% of the solutions offer benchmarking against other clients of the solution across industries. As 15% has the functionality on the roadmap, there is a chance this to be covered more often in the future by other solutions.

Sustainability

There is also a chance to have more sustainability related features covered by solutions in the future. 79% of the solutions can maintain and display sustainability data, such as supplier's level of environmental, social and economic compliance. 36% offers out of the box links to databases recording sustainability ratings of suppliers, and 24% have it on their roadmap.

IMPLEMENTATION, TECHNICAL AND PRICING



RESEARCH RESULTS OF SOLUTION IMPLEMENTATION

The implementation of a solution comprehends design, configuration, testing and roll-out. Every organization has different processes and requirements. A customized approach is always necessary. Agile, characterized by its iterative approach, has found its way in procurement IT and is nowadays a popular method to develop a solution towards specific business needs.

To accelerate upon the implementation process, 58% of providers offer default templates for specific markets and industries (Figure 22). These templates offer a starting point but often need to be configured to the specific needs of an organization. Depending on the requirements configuration can become more technically complex than initially planned.

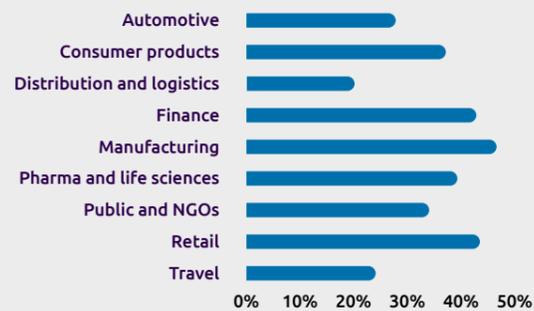


Figure 22 Default templates offered for specific industries

Roll-out, change management and training

The implementation of a new procurement solution has direct impact on existing internal governance policies and processes. To reap the full benefits of a new digital procurement solution, the users need to adapt to the new way of working. The implementation should be approached as a business transformation, with a defined strategy for change management. The roll-out can be conducted in several ways, depending on the size and (geographical)

complexity of your organization. Common roll-out approaches are big-bang or phased. A popular way to train large groups of users is via a key-user set-up.

Organizations often choose to work directly with the solution provider or with a third-party implementation partners to support upon (parts of) the transformation project. Implementation partners are specialized in guiding procurement transformation projects. An implementation partner, such as Capgemini, can advise upon functional business requirements, change management approaches, conduct specialized stakeholder workshops or provide technical configuration services. It can even be the case that the implementation partner takes over parts of the project management. Depending on the complexity, outsourcing specialist topics to experienced third party implementation partners can work as an accelerator for implementation.

All participating providers are offering IT implementation services, whereby business transformation services are offered by 73%. Results also show that 67% of the providers offers training services directly to end-users.

Operational support

After the roll-out, the new solution must be maintained. Maintenance relates to change requests for new- or existing functionalities, operational (helpdesk) support, master data management and general solution maintenance such as user- and access management. The participated solutions offer different types of support after the solution has been implemented. The maintenance model after implementation is always a tailored set-up. Organizations can choose to outsource the operational support or assign own dedicated employees. 70% of the providers offer advanced training and certification paths to guarantee a high-level standard for internal employees or consultants to learn to configure and maintain the solution.

CHANGE MANAGEMENT IN DIGITAL

Renata Rybak-Pazdur

Companies invest a lot of time and money in implementing new tools and solutions. However, maximizing the advantage without a proper change management will degrade the benefits available from these investments. While change management during the implementation of new technology is essential, the infrastructure to continually enforce the changes in people's approach is even more important.

There is no doubt that a strong change management program should be a fundamental part of a technology change program. These programs, focused on breaking old habits and establishing new for more effective operations with new technologies and processes, certainly help realise the initial benefits on any project.

But how do you ensure that once the program team has finished that the changes you made continue to be enforced. Organizations change with new team members, mergers and acquisitions, varying business conditions. And the roles of the people within the organization change – at one point an employee might use procurement often, but with a promotion or role change, it may be rarely. These are not considerations of the upfront change management program but must be addressed to ensure the value of the digital platforms are being realised.

To take as an example, a software implementation for a financial services organization. After a careful evaluation, it was clear that the software in case had the features required to deliver value, but while the change management effort dealt with the initial onboarding, it didn't address the ongoing user change requirements. As a result, there was still a significant part of work being performed manually, resulting in additional effort and increased cycle time.

As part of the service delivered for our client, we were supporting users with issues encountered when using the platform. It was recognised early, that if we did not work together with the solution implementation, the support requirements would continue to remain high, and we would find it difficult to drive compliance and ultimately value from the implementation, thus impacting the client business case.

We worked closely with the implementation team to develop processes and a support function that performed three functions:

- Provided support for end users to use the newly implemented software platform
- Drove compliance by pushing back on non-catalogue requests that are available in a catalogue
- Identified training needs for users and notified the training team within the client.

This approach helped to enhance Purchase Order compliance to over 90%. Requestors are more familiar with the process, more aware of both their responsibilities and system's capabilities. Thanks to higher awareness and close

cooperation between our delivery team and the client stakeholders, the whole process encounters less friction. In addition, there is more transparency in the process. Before the implementation of the new software, there were many ambiguities in systems. It was very difficult to track a Purchase Requisition or Purchase Order. The software in case enables higher visibility and easier data retrieval. Reporting is also much easier.

So, what are the key factors for successful change management? First, the process needs to be well designed. We need to carefully plan the implementation to meet the objectives of the program. This needs to consider not only the system implementation but the end user adoption of these processes. Processes that are poorly designed or do not meet the end user requirements will make it difficult to gain adoption.

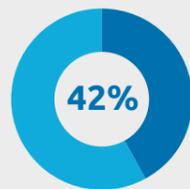
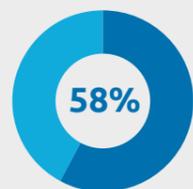
Secondly, it is necessary to decide on suitable communication channels. Ongoing collaboration with communication teams will help to find the best ways of reaching the target group. Interactive content like videos or newsletters are common and still effective in gaining the end users attention. However, there are no rules for this – much depends on a team, and there is huge responsibility on managers and communication teams to find the most effective channels.

Standardization of processes is also an important factor in helping to drive adoption. It is necessary to adopt the existing rules to a new technology or provide new procedures, suitable for the introduced tool. Otherwise, old habits will be transferred to the new tool and preclude deriving maximum profit from the innovation. Lastly, and most importantly, the change management process should not stop at the end of the project - it needs to be continually reinforced by the end user support functions, providing proper training and reinforcement, as well as driving process compliance.

Change is a long-term process – an evolution rather than a revolution. Digitalization offers lots of opportunities. Nevertheless, it is worth remembering that progress itself is not only about investing in the latest technological solutions, but also in people who use them. Well-planned and properly conducted tool implementation is the only the start to get the maximum value from digital transformation. A robust support function and compliance management is equally as important. Employees must be well-trained and aware of the benefits to them of new technology. Project teams should not underestimate the value of the extension of change management beyond the initial implementation.

Solutions that offer...

Default templates for specific markets/ industries



Implementation support in their license fees

Configurator training and a certification path



● Solutions that offer the functionality ● Solutions that do not offer the functionality

RESEARCH RESULTS OF TECHNICAL SOLUTION ASPECTS

The technical aspects of a procurement solution can make or break the perceived user friendliness and therefore the adoption by the business. Although many organizations are aware of the importance of the technical set-up and architecture of a procurement solution, this part tends to be neglected in the selection process.

Integration

A modern business user does not accept to repeat work in multiple systems to provide the required data. A clear trend has emerged to downscale the number of systems in organizations, whereby only a few systems accommodate for the business needs. If this is not possible, for example in a scattered IT landscape, organizations integrate the systems to facilitate a seamless flow for the end-user. The integration aspect of a solution implementation must not be underestimated. Integrations tend to add complexity to a project and, if not managed properly, can lead to exceeding the project timeline. In the selection phase of a new procurement solution, it is therefore wise to assess if the provider and implementation resources have experience with building the specific integrations to the same systems of your organization at other clients. Integrations are not necessary for a procurement solution: 97% of the solutions can function stand-alone without an integration to a back-end system.

Master data management

With every new functionality implemented, new data points emerge. Before, during and after implementation it is of high importance to define and maintain a strategy for Master Data Management (MDM). Often and traditionally, procurement solution users are faced with the need to aggregate and consolidate information of multiple (ERP and sourcing) systems to form a 360 overview of a supplier. The right procurement solution set-up combined with the right master

data governance leads to automated insights per supplier, including overviews of overall spend, placed orders, price developments, KPIs and performance. This single source of supplier truth can be achieved by having dedicated policies in place to maintain the master data in the architectural domain of the procurement solution. 64% of the solutions can be used as the primary source for material or service master data.

User experience

The user friendliness of the tool has a direct influence on the adoption rate, since users are far more likely to use a tool that has a fast response, clean interface and logical flow. Modern solutions are tailored to the end user, with the help of customized notification messages and personal dashboards. A feature that is on the roadmap of 30% of the solutions is active personal guidance via intuitive questioning that leads users through workflow steps, depending on answers provided. All solutions can be accessed by a mobile web browser and 55% offer a dedicated Android and/or iOS app (Figure 23). Single sign-on is nowadays no longer a nice to have feature but a pre-requisite; 100% of the solution are supporting this functionality.

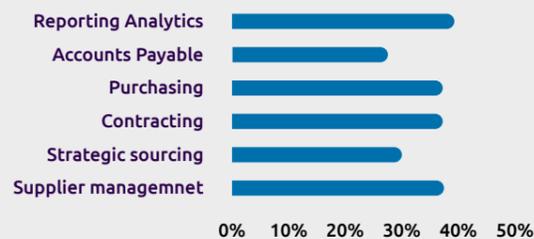
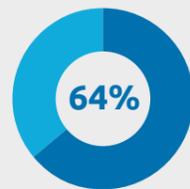
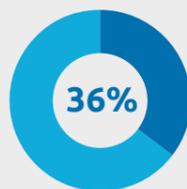


Figure 23: Types of modules that can be accessed by app

Solutions that offer...

Data input of other clients to anonymously feed artificial intelligence/machine learning algorithms



Choice to select in what datacenter data is stored

Stand-alone functionality without any integration to a back-end system



● Solutions that offer the functionality ● Solutions that do not offer the functionality

DIGITAL PROCUREMENT TRANSFORMATION

Ali Valadez and Sanjeev Singh

Digital procurement has come a long way, and in general, organizations now recognize the benefits of robust procurement platforms and are willing to embrace them. The implementation of new procurement processes along with Software-as-a-Solution (SaaS) based technology platforms requires well-through approaches. It takes a lot of coordination and effort from people, both internal and external (e.g. suppliers) from the organization and demands for a substantial change in existing practices. Whether an organization is making incremental improvements in existing landscapes or implementing a brand-new procurement platform, several areas consistently derail technology led transformations.

Here are six critical factors that ensure successful digital procurement tool implementations:

Stakeholder identification and key project sponsorship

While most Procurement projects start with a client business case that centers around cost savings for the company, as well as process improvements, it is paramount to get the right stakeholder team aligned to the objective. Champions to the project enhance the message of importance and overall company-wide objectives. It is important to have strong stakeholders at the leadership level to drive the project objectives and mission to completion, not only with the implementation team, but with the overall organization. Key stakeholders are essential to the change management team being successful, with key messaging and communications to the wider audience affected. They garner stability to the resources whose job responsibilities are evolving and give direction to the wider company resources on what is changing in the enterprise roadmap. Stakeholders in C-suite, Procurement and Finance are critical as core processes are touched in these areas and are the baseline for recommended stakeholders on the project. Other groups with interest could include warehouse for receiving and/or plant maintenance if MRO materials are in scope.

Data quality and master data management

Organizations can be caught unaware of the depth of data management needed for a digital procurement transformation. Master Data Management (MDM) can have project wide impacts which range from standard integrations to complex customization considerations. Not understanding the data implications of key design decisions and requirements may lead to going over budget, overtime, or scope reduction in MDM i.e., commodity alignment, contract hierarchy, supplier normalization. Underestimating the importance of master data can also cause the inability to reach goals for Supplier Enablement and PO automation due to capacity and scope. For a successful procurement transformation there needs to be a focus on master data, the earlier in the project timeline the better. While all data elements are important, we tend to focus on two major categories based on their impact to the overall project: Vendor master and material master.

Vendor master identification and harmonization is critical to project success. A digital procurement system will require a clean vendor master for implementation as it impacts ease of use for an end user choosing a supplier, preferred supplier lists, catalogue maintenance, contract maintenance, and supplier ease of use and integration among other factors. Understanding your critical vendors, typically identified as most spend or most PO's generated, allows you to have centered focus on which suppliers are critical for the implementation. Identifying duplicate vendors, reasoning and processing for vendors, and creation and deletion are other elements that impact the digital procurement project and should be addressed in the vendor master stream.

Material master harmonization starts with identifying categories bought through the digital procurement tool. We also promote asking key questions about the material purchasing process: Is the requisition generated in the source ERP system or in the new tool? Are there special requirements for approval? Do the item masters need to be available for purchase via a catalogue or item master number noted on the catalogue? Are there any special intricacies with the material or how it is bought and/or received and/or invoiced? Understanding the answers and requirements around these critical questions helps a client understand what next steps need to be taken for implementation. For instance, where the material master will be used in the digital procurement tool, understanding how the materials are classified (i.e., if a material is created based on different attributes like color or size), and how best to match those material creation requirements to the end users' ability to search and buy the item in the tool are key aspects for material data management.

Supplier enablement

Understanding lessons learned and implementation experience throughout project delivery in the digital procurement space, it is more apparent that Supplier Enablement is a critical stream for any successful digital procurement transformation. Supplier enablement typically deals with identifying which vendors are critical, how they'll interact with your system, communicating with the suppliers, and partnering with the master data team to make sure you have a supplier contact and existing record for key

suppliers to start the enablement process. Contacting the suppliers, confirming how they will transact - over a platform, through email, in an integrated fashion like cXML (commerce eXtensible Markup Language), manual through paper – if they have catalogue abilities and how that catalogue will be implemented on the procurement platform, are critical aspects of supplier enablement.

A successful supplier enablement strategy usually encompasses a wave roadmap, with the go live date coinciding with the implementation go live of the procurement tool. The waves are typically broken down into highest spend and/or PO count and can range in number of suppliers per wave, but typically are broken out to 500 suppliers. Contacting the supplier, working with them on an integration strategy, and previewing your requirements to do business takes effort and manpower. A properly resourced team is critical for the success of Supplier Enablement. Supplier enablement has a direct impact on user adoption and user experience. The stream addresses if the user has their suppliers, they purchase from on day one of the tool release, if a catalogue is maintained (for a streamlined purchase process while adhering to policy or contract pricing), how quickly the end user can receive their product and how that user is communicated to on the product's status (i.e., ASN or Order confirmation).

Best practices driven process transformation

It is important when undergoing a digital procurement transformation that emphasis be put on transforming current business processes to fit best practices. If a system is not currently in place, a client's current business practice may not be ideal for future state. Therefore, best practices help you understand where to get the most efficiency with resources, can enable a touchless process for PO processing to pay, and essentially set guidelines for the system implementation to use out of the box configurations, avoiding costly customizations that provide no real value add to the organization. As a transformation embarks, it is important to encourage the mission of transformation by reminding the implementation team to avoid lift and shift, or thoughts of "we've always done it this way". Providing the team with a pathway to remain focused on transformation and to build the right system will allow an environment of transformation to best practice for realizing the total value of the digital procurement project.

Procurement policy

Digital transformation projects have key foundational pillars that drive success of the overall project, one being procurement policy. A clear, specific policy is paramount to success of the transformation of any organization. It brings about rules and guidelines for end users and business units to follow. Policy allows the organization to set forth ways to save costs through contract purchasing compliance, approval and spend limits to assist with separation of duties, and supplier policy for payment to ensure user adoption and a seamless process for procurement. The policy also brings about awareness to users on who to reach out to for assistance, creating a streamlined process for the procurement team to assist their business partners while understanding key gap areas to improve process and communication. It is always recommended that a procurement policy is reviewed or created to align with the new digital transformation project and has the key elements of how to buy what and where to buy it, when there is an exception process and what steps to follow, how to garner

appropriate approvals, how to support the suppliers in sending goods and receiving payment, and where to gain assistance for business scenarios that may not be covered in the general policy. It is critical that the procurement policy is released in correlation with the transformation project so that the rules and guidelines set forth in the document allow for the transformation to take place among the organization.

Communication

Organizations that are successful with their digital procurement transformation have a well-focused program for communication. Key groups are identified for who the most effective person or group is to send communication, which groups or areas are targeted for communication, and how the communication differs between those groups. To achieve best in class communication, communication culture of the organization is also considered for timing and frequency – too little or too much can have negative affect for the overall project. The effectiveness of the communication is also key – understanding which groups need to know about which aspects of the project that are important to them. Overall, communication helps the project team stay on track and focused, the affected business resources feel a sense of stability and awareness for the changes coming, and the organization is informed on important initiatives and changes that affect the company. When communicating effectively to all these groups, your transition into a new business process, a new tool, and overall transformation is more streamlined and met with less fear and challenge as the organization knows what to expect, when and why. Focus on User Experience.

Throughout each of these success factors, a common group arises continually – the end user. Whether through how master data affects the system, communicating effectively, or determining best business practice for a successful transformation, all these factors affect the end user and their experience with the overall transformation. As mentioned previously, cost saving to the company is one of the major factors that drive a digital procurement transformation business case. Cost savings are realized when an end user purchases from the correct supplier, at the contracted price, repeatedly and easily bolsters your spend analytics data to garner the best contract pricing based on a company's spend. When a system is hard to use or is not clear and concise to guide the end user to the right product and supplier, this is where cost savings are lost, and risk for low user adoption is high. Therefore, importance should be placed on the users' experience, not only with the tool, but with the business processes and the policy to purchase effectively in the organization.

Conclusion

There are several other factors that also have an impact on success of a procurement technology implementation including having a business case with clearly defined metrics, selecting the right tool based on requirements, setting up realistic timeline and deployment strategy (phased approach vs big bang). The factors highlighted in this article are the ones which are often overlooked for various reasons. By paying close attention to these and correctly applying them during the program, achieving success is more certain than an elusive aspiration.

RESEARCH RESULTS OF SOLUTION PRICING

At the start of a digital procurement transformation the cost models are often perceived as unpredictable. Providers calculate their prices in different ways and are at first sight not easy to compare. Many characteristics could affect the price of a solution such as scope, project timeline, required resources, number of users, number of integrations, and more. Figure 24 shows the most common elements affecting the price of a solution. And, although solution providers often have a list of characteristics on which they base the price, the negotiation process generally has significant impact on the landed cost.

Since the price can change based on many different factors, the recommendation of Capgemini is to always start with a thorough business case stating the benefits and costs per scenario. This business case must be supported by a clear implementation timeline, specifying the required time, resources and the defined deliverables. It is important to get a grip on costs already in the sourcing phase of a new solution. The more time invested in the start-up phase of the project, the easier it will get to maintain the control of cost in the implementation phase.

The most common used licensing models for procurement solutions are pay-per-use and module based. Pay-per-use

models are defined by how much the procurement system is used, measured in for example the number of contracts, users, invoices or sourcing rounds. This licensing model is offered by 48% of the providers and is attractive when there is a predictable usage of the platform. The module-based pricing model is based on the functionalities that have been purchased and offer an unlimited use. 91% of the providers can offer a module-based pricing model. What pricing model is used often depends on the functionalities that the solution offer. Most commonly, a Source-to-Contract solution is module based and a Purchase-to-Pay system is based on pay-per-use.

Another aspect to consider is the cost of implementation. 58% of the solution providers charge additional cost for basic implementation support in their pricing models. Often, basic technical support is included, but integrations, advanced configuration, business process transformation and change management come with additional cost. If organizations do not have the required resources and skillsets in-house, it is possible to work with an implementation partner. Capgemini is one of several implementation partners that guides a wide portfolio of procurement solution implementations across all industries and can therefore offer the right support to manage scope, timeline and costs.

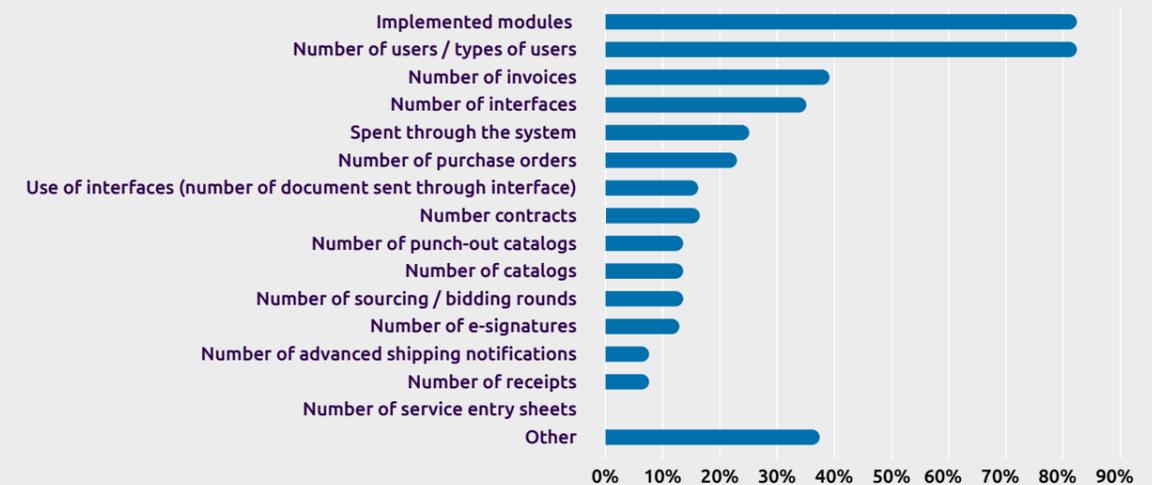


Figure 24 Most common elements affecting the price of a solution



TRENDS AND INNOVATIVE FEATURES

START-UPS AND MARKET TRENDS

Sourabhaya Kumar Vikram, Rens Schoorlemmer and Dominik Knotte

Procurement has long been supported by technology of different levels of sophistication and coverage. But as new technologies keep arising in ever increasing speed, clearly this does not leave the procurement function untouched. Over the past years, both well-known solution providers but also very promising start-ups have introduced and leveraged technology to bring all kinds of improvements to the procurement function, buyers and management alike. Even though procurement technology might not be as hyped as fields like 'FinTech', it seems to be riding the same wave of potential.

Logically, FinTech is a field that attracts a larger level of anticipation. Over the past years, it has attracted over €130 billion in investments annually, whereas investments in procurement technology are closer to only one billion euros for the past couple of years combined. Still, the level of innovation is promising. The Capgemini Group has a large community of procurement experts that have tremendous experience in procurement transformation projects and are closely watching the latest developments. An inquiry amongst them indicated the same: 63% of participants think that the venture capital invested in procurement start-ups is relatively low, whereas just 32% said it is appropriate to its potential. It seems that there is still space for further growth within the procurement start-up landscape. Some key investments uncover part of the potential that lies in emerging procurement technology companies. Last year, Scout RFP was acquired by Workday for €487m and Tradeshift, having reeled in a \$250m investment in 2018, announced another \$240m round in early 2020.

So, how big exactly is the potential for procurement technology start-ups? And what new technological trends do they bring? This article will outline some of the trends that are currently observed by Capgemini's procurement experts. What do we see happening and where do we think procurement technology will bring us in the upcoming years?

Technology trends

Looking at the start-up and innovation landscape, one will recognize a lot of new companies dealing with topics all along the Source-to-Pay process. Besides some big players offering complete procurement suites, there are plenty niche companies focusing on a specific topic, such as spend analytics, smart contracting or payment in B²B. Nevertheless, our procurement experts across the Capgemini Group have indicated some key technological developments, which seem to have a significant impact on the future of procurement: cloud computing, intelligent automation and advanced analytics.

The first trend might seem like an obvious one. Even if cloud computing has been core to solution provider offerings for quite a while, a large part of the user base has not yet fully leveraged the technology in their procurement landscape. There are several general benefits compared to on-premise solutions such as lower total cost of ownership, scalability, mobility and security. The provided software, platform or

infrastructure is accessible from everywhere with internet connection and the customers only pay for what they use.

In terms of procurement the usage of cloud services allows the procurement function to work more efficiently with the supply base and the cross-functional businesses together. The Source-to-Pay process and all related documents can be managed within the cloud. Some major benefits for procurement include digitized documents that are centrally available, smoother approval workflows and improvement of process cycle times and compliance.

The second major trend, intelligent automation, empowers the procurement function to have fully automated end-to-end business processes. The first stage is robotic process automation (RPA), the second stage is artificial intelligence (AI). RPA concerns miming simple repetitive human actions and process steps. It is often utilized to automate steps which are not covered by the system or to bridge parts between different systems. Typical use cases are automated updates of order confirmations in the ERP system. Another use case is a robot, which automatically places purchase orders for low value goods under a specific threshold. The major benefit lies in the reduction of transactional costs and improved process cycle time.

The next expansion stage is AI, which is defined as an algorithm that is considered as "smart" by imitating intelligent human behavior. A typical procurement use case is best price detection for specific categories. The algorithm performs the market research and connects the buyer with the best suppliers based on the searching criteria. It can also automate and support the category classification process.

Advanced analytics, entailing amongst others predictive and prescriptive analytics, enable the procurement function to improve transparency, decision making processes and increase efficiency. Advanced analytics automatically analyze patterns within large amounts of data from different sources, to eventually propose actions to users. It answers both the questions of what will happen (predictive analytics) and what the buyer should do (prescriptive analytics). For example, it can create spend insights and advise on cost reduction opportunities from multiple unstructured data sources. Another typical procurement use case is price prediction of a raw material or labor costs.

Future of Procurement

All these technologies are in continuous development and it is difficult to assess the complete scope of their contribution to procurement functions. Some technology providers are already leveraging these developments to deliver solid use cases for procurement functions, taking a closer look at these might help us understand what new technological advances could mean for current procurement practice, as well as changes they may ignite in the years to come. Cloud-technology is already something seen and leveraged in a wide variety of procurement technology, regardless of industry or part of the Source-to-Pay process. Given the clear benefits of cloud over on-premise hosting in many use cases, from parts like contract management to complete S2P suites, it is safe to say we may expect procurement functions to mostly adopt cloud-based solutions in the future. They will enable greater flexibility & technological performance as well as improved collaboration between procurement departments, business stakeholders & external parties.

Automation is currently most common within the P2P process. This is often due to more standardized processes that are relatively easy to automate. Also, the desire to exclude any possibilities of failure in the process of invoicing & payment has led to a lot of procurement functions striving for automated purchasing, invoicing & payment processes, for which automation technology is being selected. However, several procurement technologies companies have started to develop use cases that move more towards the -traditionally more complex- sourcing process. These are, for example, automation of negotiations and sourcing tasks. Therefore, we may expect the usage of automation to expand more and more towards complex tasks and support buyers in tasks like supplier discovery, sourcing & negotiation.

Advanced analytics have already shown to open new possibilities out of traditional challenges like data management. Valuable use cases for procurement functions contain greatly simplified spend analysis, management & taxonomy by use of AI that does not only offer companies value from their own data but lets them leverage and build upon data from others as well. Technologies like that are now pro-actively advising buyers on where to save cost and showing improvement opportunities (e.g., cost differences between plants) that were out of sight before. It can now also be utilized for supplier discovery, where technology

can provide insights and added value from data or market information that used to be very non-transparent or hard to navigate for procurement analysts, in order to find & contract new suppliers. As advanced analytics matures further, we may expect it to support or replace complex human analysis and research outside of the current use cases and improve procurement effectiveness by predictive & prescriptive analytics more and more in the future.

Outlook

In all different technological fields that deliver value for procurement organizations, more and more complex tasks have either been simplified or taken over by technology that enables procurement professionals to cope with traditionally challenging or cumbersome tasks like purchasing and invoicing optimization, spend analytics, supplier performance and contract management. We are likely going to see procurement technology take a more pro-active role in the daily work of buyers, contract managers and other procurement professionals by providing prescriptive or even autonomous actions. These developments will lead to a shift in required competences by procurement professionals. The competencies and buyer profiles will shift into the direction of more data and tech-savvy to be able to work and manage the new tools, to deliver procurement value to businesses in new ways.

INTELLIGENT AUTOMATION IN PROCUREMENT

Move beyond buzzwords and start with intelligent automation in procurement

Nina Leibel and Dario Kühl

Why should your procurement function focus on intelligent automation?

We understand intelligent automation as the utilization of smart technologies that successfully address business process challenges and represent the source of continuous value added and improvement. In this regard, Robotics Process Automation (RPA) and Artificial Intelligence (AI) as digital technologies have proven their value in procurement through significant benefits in the field of spend, visibility and productivity, among others. The value stems from the change of the way business is done. When all governance, implementation and risk management requirements are met, RPA and AI have a revolutionary impact on businesses, from delivering operational efficiency with higher productivity to an increased understanding of suppliers, end users and markets. Intelligent automation reflects the start of a new era in procurement, where untapped potential will be realized through the right development and utilization of RPA and AI.

What is intelligent automation anyway?

While intelligent automation is the successful interaction between RPA, AI and Analytics with interrelated elements, we will focus on RPA and AI as digital technologies. RPA can be described as a set of technologies that uses software as a virtual workforce/robot to interpret information in existing software applications and to execute repetitive rule-based processes and tasks. RPA realizes its full potential, when other process criteria such as repetitive, manual, structured and machine-readable input and a consistently high volume are met as well. In contrast to other digital technologies, RPA has a minimal impact on the existing IT landscape, since it acts like a human through interfaces between existing systems. Thus, it ensures a technological transformation without heavy investments. While RPA accelerates operative processes with a consistent quality and dedication, regardless

of the time or external factors, people are responsible for more complex aspects of the business as well as exception handling. In summary, RPA combines the skills of people with the speed and reliability of robots.

Leading procurement functions, however, extend of RPA as rule-based automation leveraging AI. AI is a collective term for capabilities of learning algorithms/methods that are perceived by humans as intelligence. These capabilities own attributes that have a corresponding human sense: Communication – interacting, monitoring – seeing, knowledge – remembering, analysis – thinking and service – acting. AI applications exist across various areas with many being relevant for procurement including speech, image and document recognition, natural language understanding and generation, prescriptive modelling as well as complex analytics and predictions among others. As a collective term, AI spans

over different learning algorithms/methods such as machine learning, neural networks, deep/reinforcement learning and is enabled by technologies that include big data systems.

Finally, both RPA and AI bear tremendous value potential for procurement functions. First, the procurement staff can effectively be freed up from repetitive time-consuming tasks e.g., processing of order confirmations, updating master data or identifying bundling opportunities. Second, the procurement staff can better work on complex tasks augmented and not replaced by virtual counterparts e.g., AI-based recommendation systems through a faster understanding of complex interrelations. Hence, the procurement function can position itself as a true value partner for customers, suppliers and within the organization. But where exactly can intelligent automation be utilized?

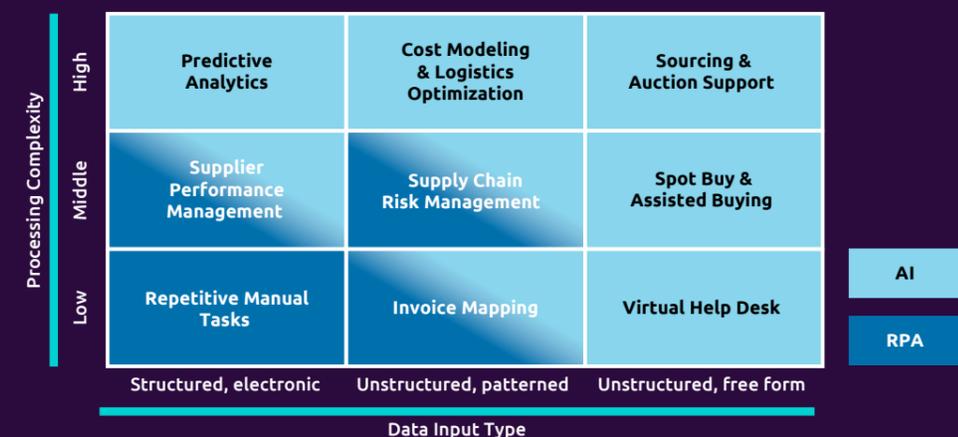


Figure 25 Classification of RPA and AI to procurement and supply chain management processes (Capgemini Invent DACH)

Where can your procurement function utilize intelligent automation?

It is clear there are many possibilities to leverage RPA and AI in Procurement. However, the shift between RPA and AI as well as between learning algorithms/methods are blurry. They strongly depend on the respective use case as well as the organizational and technological environment. All in all, while RPA is utilized best for repetitive rule-based processes, AI fits best for more complex processes with large volumes and semi-/un-structured data (Figure 25).

Since RPA is a maturing digital technology, there is already an extensive and steadily growing list of use cases in procurement, from the creation of a purchase requisition to the actual payment. Among other use cases at the beginning of the process, a purchase requisition can be enriched with missing information and validated. Information can be reliably processed through document processing technologies such as Optical and Intelligent Character Recognition (OCR/ICR) to automatically confirm the corresponding purchase order. At goods receipt, service time sheets, for instance, can be automatically scanned through an invoice mailbox and processed for automatic approval. Invoices can be automatically validated depending on specified business rules including a full duplicate rejection and invoice approval process, initiating the payment.

In contrast to RPA, AI is currently not as widely utilized in procurement. Only a few leaders in procurement moved beyond pilots and proof of concepts. Especially strategic procurement activities can be supported by AI. At the very beginning, AI can bring deep supply market intelligence. For instance, it is possible to analyze risk in supplier performance or supply market through the combination of historical and real-time data with externally available information to detect anomalous behavior. As a most intuitive use case, AI can bring transparency to spend and category data with flexible aggregation levels through clustering algorithms. While data transparency is the necessary basis for any standardization initiative, whether it is process, payment term, product specification or price related, it also ensures reliable data modelling through AI. Data modelling helps to analyze causal relationships in procurement, which is especially beneficial for scenario planning and price simulation purposes e.g. impact analyses of component price and exchange rate volatility.

How can your procurement function further improve automation and sustain benefits?

All successful use cases in procurement regardless of the digital technology share a common denominator, which is a sophisticated Intelligent Automation Target Operating Model (IA TOM), visualized in Figure 26. The IA TOM avoids major impediments that many organizations as a whole and procurement functions itself face due to various automation

initiatives. They often run simultaneously, all aiming at automation but lack shared measures and streamlining. The IA TOM is a vital requirement for digital transformation projects towards automation. It ensures a minimized need for resources due to the elimination of double work and inefficient governance elements and can be approached through the following six steps.

First, an IA TOM gap analysis must be performed. Collaborative workshops are conducted to walk through the dimensions of the existing TOM, whereas the number of different TOMs may vary given the setup of existing automation initiatives. The status quo in each dimension is compared to the Capgemini Reference IA TOM. Second, a role concept and detailed role specifications must be developed based on the identified gaps. Here, the importance of procurement expertise becomes evident e.g., determining the scope of operational buyers and accounts payable accountants in the Purchase-to-Pay process. Third, governance elements and RACIs must be defined for the Idea²Automate Lifecycle, which covers the iterative software development process. Using the Idea²Automate Lifecycle as reference, concepts for automation use cases are developed. Fourth, the role concept as well as the Idea²Automate Lifecycle must be presented and discussed with the automation project team as well as enhanced based on respective feedback. Fifth, all results must be aligned and concepts for automation use cases must be approved by the automation project team. Finally, existing automation use cases must be reviewed and adjusted according to new roles and responsibilities. At this stage, both missing and new automation use cases can be developed to drive further automation initiatives guided and streamlined by the IA TOM.

What's next?

Increasingly, procurement transformation is being driven by intelligent automation, with an impact on operational efficiency, improved decision support, visibility and thus, the business value added by procurement functions. However, integrating intelligent automation into procurement processes requires a change in mindset. As much as intelligent automation is being used to replace processing, it is also being used to augment human decision making, and not necessarily replace it. The level of trust in automation must be measured, and it must be ensured that relevant feedback is provided so that both machines and humans can collaborate and operate in an optimal way. Realizing the full potential from intelligent automation is still some way off, as organizations and technologies continue to mature. In the meantime, the human factor will remain the biggest challenge in the evolution.

BLOCKCHAIN IN DIGITAL PROCUREMENT

The Next Wave in Digital Procurement: Blockchain

Swarnim Pant and Pankaj Mathur

How we buy and pay has changed. Organizations have transitioned from maintaining dockets of ledger entries and array of filing cabinets to data management in cloud. Most companies today use enterprise resource planning (ERP) and/or bolt-on supply chain software to run business. From connected manufacturing devices to RF-based receiving and storing, electronic shipping notices and delivery confirmations, products can be tracked from origin through end-of-life. Yet, supply chain agents struggle to pin-point the exact quantity and location of their products. Inventory is duplicated or lost, and Accounts Receivable teams struggle to realize revenue within 45 days of delivery.

In most cases, disparate systems across the value chain cause gaps in how we track, manage and execute our supply chain. The challenge is how and when siloed systems communicate with each other. These systems use Electronic data interchange (EDI) and extensible markup language (XML) messaging to communicate with central systems for most transaction and permission level details. By design, this introduces latency and concentrates power at central nodes.

Enter blockchain. As you have likely heard, blockchain is a decentralized system and it offers a great solution due to its security focus and peer-to-peer nature. Not surprisingly, familiarity with blockchain has gone up significantly in recent years and more industries continue to implement blockchain solutions. Supply chain organizations – and procurement teams in particular -- are at the forefront of blockchain implementations. Procure-to-Pay (P²P), contract life cycle management (CLM) and back to source traceability implementations have proven tangible benefits across industries.

Contractual Compliance and Timely Settlements

As the name suggests, the Procure-to-Pay macro process has two significant components: purchasing and payment. The latter often faces delays in settlements due to mismatching or duplication of invoices, paper-based transactions, months-long invoice processing times. To account for these inefficiencies, contracts maintain accounts payables as a long cycle. A blockchain-based smart contract can transform contract execution. Defined as computerized transaction protocols that self-execute based on pre-defined terms and conditions, smart contracts accelerate payment processing and settlements in a transparent and timely fashion and instils trust amongst stakeholders. Coupled with other new-age tech such as Internet of Things (IoT), smart contracts ensure that all contractual obligations are met and only then disburse payments, reducing space for disputes. For instance, if a pharma company observes that the temperature of one of its refrigerated truck carrying insulin increases beyond contractually defined limits (thus impacting the insulin's potency and stability), a pre-set penalty clause can be activated during payment, ensuring compliance visible

across the value chain. Likewise, the pre-contract and bidding process can be made more tamper- and corruption proof with government's e-market place (GeM). This government agency platform streamlines smart contract creation. GeM uses blockchain during vendor registration through awarding the bid.

Authenticity & Traceability is critical to procurement

The problem of counterfeit goods and parts costs the global economy in billions of dollars each year, almost as much as 3.3% of the world trade, this has huge industry implications. Sectors such as pharmaceuticals, food/ agriculture have procurement regulations that make it vital to track provenance of all parts, assets, components and any modifications made to them. Also referred as back to birth traceability in aircraft industry. Blockchain establishes product ownership across its journey from supplier to manufacturer, OEMs, distributor, retailer and customer. This ensures trust and transparency across partners who may be globally dispersed. In fact, this very reason is why blockchain has found its way in the social sector with the Akshaya Patra foundation, a non-profit organization that operates a mid-day meal scheme for over 1.9 million children in India. The foundation uses blockchain that helps perform accurate audit across its service provisioning chain thereby ensuring timeliness in mass meal production and delivery. In retail and consumer products sector, this also enables the company to provide warranty to the customer without the fear of losses, while in critical areas like pharmaceuticals, aeronautics, customer safety is guaranteed. Louis Vuitton (LVMH), a leading luxury goods conglomerate has developed Aura, a blockchain based track and trace platform to fight fakes and establish a system of genuine goods procurement

Shared business sustainability

Sustainable procurement is now a business imperative for all organizations. With globally dispersed supply chains, they can meet their sustainable development goal (SDG) targets only when their entire value chain adheres and adopts them. Using blockchain, organizations can identify hot spots in the supplier network ecosystem that have a high environmental

impact. It ensures vendor compliance to established metrics (carbon footprint, sustainable materials management, life cycle assessment) through continuous monitoring and evaluation. Additionally, with the rise of the conscious consumer, blockchain can act as a medium of record keeping with a secure and trusted history of the product, providing assurance about ethical sourcing of raw materials and fair work practices. A business's sustainability is not just a one man show but requires close collaboration. Blockchain allows for that inclusion and multilateralism in problem solving and achieving a unified vision. De Beers (diamond mining trading company) has initiated a pilot project – Tracr™, that tracks stones right after they are mined to the time they are sold to the consumer. Apart from other benefits, this ensures fair trade by tracking stone's provenance hence avoiding conflict diamonds in trade.

Connected ecosystems with process and data integrity

The procurement function is seeing a shift from the reactive mode to a data driven, proactive digital mode where the narrative is about creating shared value that requires process standardization and connectivity across systems. Blockchain would become a game-changer in strategic sourcing and supplier network management by connecting systems across the chain through a shared ledger and allow organizations

to move from linear way of working to continuous feedback loop. It works in conjunction with legacy ERPs as well as new-age disruptive technology like advanced analytics and IoT. This makes blockchain an integrative technology enabling disparate, siloed systems talk as one. The results are greater process synchronization that allows an organization to have a complete view; be it of supplier compliance or inventory levels at a distributor or factory asset maintenance. In the digital maturity journey, transition to blockchain becomes a necessary step for multi-tier supply chains with global distribution.

How realizable is blockchain: The ROI

Is blockchain just an exciting concept or could it be practically implemented? Although it depends on the scope of implementation but blockchain could prove beneficial just by ensuring the authenticity of the final product and its ingredients or just by eliminating the audit spend. If technical intricacies put organizations on the back foot, blockchain-as-a-service (BaaS) is also an option. Needless to say; there is no one size fits all solution, and a pre-implementation analysis could determine the apt blockchain approach for an organization or none there off.

RESEARCH CONCLUSION

The objective of the Capgemini Digital Procurement Research is to find the newest and most interesting functionalities offered by the leading solution providers in the market. A new version of the research is released every two years, whereby often the following version shows significant improvements on functionality offered by solution providers. Looking at the research results of this year, it becomes clear that across the full Source-to-Pay cycle several new functionalities have been adopted in the core functions of the participating procurement solutions. The 2020 - 2021 research is showcasing how these new technologies can be applied in the procurement function, already today.

Functionalities in Digital Procurement

The Digital Procurement Research 2020 - 2021 marked the leading providers and the latest trends and developments within their solutions. Common for most of the solutions is that the 'procurement end-user' is placed at the center of the solution, with intuitiveness and a high level of automation as the guiding principles. New technologies that have not been remarkably present in previous versions of the research, such as Machine Learning and Artificial Intelligence capabilities, are now (to some extent) applied as core functionality. It is also visible that Source-to-Pay processes are becoming more digitally integrated. There have been several large acquisitions in the digital procurement market. The research results show that several of these recently merged solutions offer a larger part of the Source-to-Pay suite than when they were stand-alone specialist solutions. The merged solutions facilitate upon a broader set of business requirements by combining multiple procurement processes into one dedicated solution.

In Supplier management, the core functionality contains supplier registration, end-to-end supplier lifecycle management and risk- and performance management. Amongst others, the element of supplier management enables digital collaboration between the procurement function and their suppliers. Functionalities within Strategic sourcing comprehends the definition of sourcing strategies, sourcing rounds, evaluation of bids and negotiations. Expanded functionalities are seen within automation of RFX sourcing rounds and e-Auctions. In Contracting, new emerging technologies are smart contracts and AI-driven contract metadata enrichment. The core functionality of this element focuses on the creation and storage of contracts in a repository and shaping insights on performance and obligations across the entire lifecycle of a contract.

Purchasing contains functionality around demand identification, catalogues, purchase requisitions and purchase orders. A useful technology that emerges in this element are chatbots, supporting upon the process of automated guided buying. The Accounts payable element focuses on invoice receipt, invoice processing and payment, often offered with many possibilities for automation and data analysis.

The functionalities around Reports and analytics are easily configurable reports and dashboards, spend analysis and benchmarking. An interesting finding, in line with global trends, is that new functionality is offered around sustainability related KPI's and (sub)supplier compliancy data tracking.

Selecting and implementing the solution the right way

A digital procurement solution can work as an accelerator for the procurement function by enabling automation, data insights and structure. The research describes that implementation of merely a new fitting solution is not the full recipe for success. Evenly important is the change management process. The people within a procurement organization must adopt and utilize the new opportunities the solution can bring, otherwise the full potential cannot be achieved. Digitization of procurement has a direct impact on the existing governance model and corresponding people and processes. Implementing a new solution should therefore always be approached as an end-to-end business transformation.

The research shows that all participating providers have different focus and capabilities around industries, functionality, geography, implementation methods and more. Besides this, every organization has different requirements, standards, budgets and priorities. There are many providers that offer good functionalities in the procurement area, but this does not mean that this is the right functionality for your organization. To find the fitting solution, Capgemini recommends a thorough selection process considering all aspects impacting the decision. An excellent starting point for the Digital Procurement journey is the dashboard overview of participating solution providers, located in the final chapter of this research. Considering the broad range of available functionalities that is continuously being improved and expanded, there is a fitting solution for every organization that can drive their specific future of procurement.

SOLUTION PROVIDER SUMMARIES



Introduction to the solution provider summaries

The following section provides a summary for each of the participating solution providers of this research. Each solution provider is highlighted on a half-page dashboard, outlining general company details and its solution characteristics.

The dashboard is directly populated based on the data that has been provided by the solution provider in the questionnaire, without any scoring or interpretation to it. The dashboard contains the following information:

General solution provider details

- Key information about the company behind the solution; employees, clients and mission statement.
 - A map outlining the location of the company's headquarters (specific country) and regional sales offices (distinction between Asia, Europe, North America, South America).
 - The most distinctive feature of the solution, as stated by the solution provider
 - An overview of the industries the company currently serves with this solution, indicated by the icons as explained in Table 2.
- The functionalities and sub-functionalities that are covered by the provider in their solution. Sub-sections marked in blue are covered within the solution. Sub-sections marked in grey are not covered. The sub-functionalities are divided under the following functionalities, all within the scope of Source-to-Pay:
 - Supplier management
 - Sourcing
 - Contracting
 - Purchasing
 - Accounts payable
 - Reporting and analytics

 Automotive	 Pharma and life sciences
 Consumer products	 Utilities
 Distribution and logistics	 Public
 Finance	 Retail
 Manufacturing	 Travel



Capgemini Digital Procurement Research

101-250
Employees

251-1.000
Clients

Industries served



MISSION STATEMENT

We provide flexible business solutions that help clients scale and adapt quickly.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Built on a no-code platform, Agiloft's flagship contract lifecycle management suite (CLM) comes with fully customizable best practice functionality for buy and sell-side contract management including repository and templates, clause library, flexible approval workflows, built-in AI, security and compliance safeguards, automated notifications and seamless integration with existing systems.



Capgemini Digital Procurement Research

500+
Employees

1.000+
Clients

Industries served



MISSION STATEMENT

At Basware, we believe that a world of transparent exchange of money, goods, and services, enabled by the ready availability of data, empowers people to make more effective and more ethical business decisions.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Basware delivers 100% spend visibility: 100% of your users adopting our procurement solution, 100% of your suppliers connecting through the largest open commerce network and 100% of your invoices. What separates our AP functionality is that we can achieve the highest levels of automation through a combination of flexible matching, payment plans and automated coding.



Capgemini Digital Procurement Research

11-50
Employees

101-250
Clients

Industries served



MISSION STATEMENT

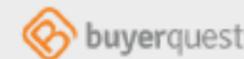
We are a leader in self-service data analytics with a platform that can capture, prepare, and analyse all your data and contracts, then securely deploy and share analytics for valuable insights faster than you ever thought possible.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

AnyDATA delivers Innovative Digital Transformation Solutions, seamlessly integrating data capture, preparation, automation, OCR, AI modelling & machine learning, analytics and smarter insights faster than you ever thought possible. A leader in data integration, analytics, contract management and on-boarding.



Capgemini Digital Procurement Research

76-100
Employees

51-75
Clients

Industries served



MISSION STATEMENT

BuyerQuest combines the power of cognitive computing with the discipline of enterprise procurement, offering an agile solution that empowers companies to solve their complex procurement problems.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

BuyerQuest, the global leader in Procure-to-Pay, is best known for their Amazon-like user experience, reducing the change management effort and lowering the total cost of ownership. Buyers, Suppliers, and even the Accounts Payable team have a single solution that is as simple to use as any B2C eCommerce website.



Capgemini Digital Procurement Research

251-500
Employees

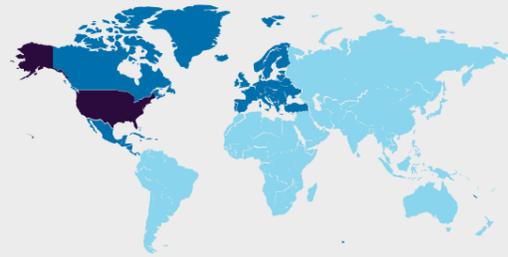
101-250
Clients

Industries served



MISSION STATEMENT

Corcentric delivers technology, managed services, and strategic advisory focused on reducing costs, optimizing working capital, and unlocking revenue.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Corcentric is a global provider of market-leading source-to-pay, order-to-cash, and fleet solutions. From the mid-market to Fortune 1000, Corcentric delivers technology, consulting, and financial services focused on reducing costs, optimizing working capital, and unlocking revenue. Since 1996, thousands of companies have trusted Corcentric's expert team and its suite of world-class solutions.



Capgemini Digital Procurement Research

11-50
Employees

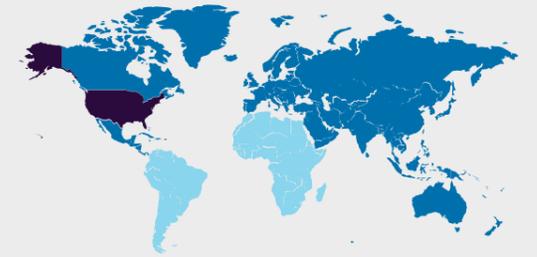
51-75
Clients

Industries served



MISSION STATEMENT

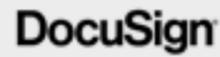
Eyvo exists to provide best practice workflow solutions in the area of corporate procurement with special focus on ease of use, transparency, auditability and world class customer support that surprises and delights our customers.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Eyvo's 'eBuyerAssist' procurement platform is a user friendly yet powerful workflow tool that emphasizes a modern user interface in front of a feature rich, modular package. Modules include requisitions, purchase orders, RfX, receiving, inventory, assets, OCR invoice matching, vendor portal, catalog management, risk management, integrations to accounts/ERP - All with full customization options.



Capgemini Digital Procurement Research

500+
Employees

1.000+
Clients

Industries served



MISSION STATEMENT

DocuSign has been on a mission to accelerate business and simplify life for companies and people around the world.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

DocuSign CLM+ adds AI-driven analytics to DocuSign's market-leading CLM product. This combination helps organizations automate workflows intelligently across the entire contract lifecycle. The result is greater visibility into risks and opportunities at radically less cost than reliance on manual analysis of inbound and stored contracts.



Capgemini Digital Procurement Research

500+
Employees

250-1.000
Clients

Industries served



MISSION STATEMENT

Our commitment is to provide our customers with the most creative, most effective and highest value end-to-end procurement and supply chain solutions.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

GEP SMART is source-to-pay software, built with user-first design, on a data-centric foundation, and powered by AI. GEP SMART is a complete platform for direct and indirect procurement, built for optimum performance, easily handling the heaviest, most complex requirements and delivering the very highest levels of performance, scalability and resilience of any digital business platform anywhere.





Capgemini Digital Procurement Research

500+ Employees

250-1.000 Clients

Industries served



MISSION STATEMENT

Empower procurement and supply chain leaders to transform their business and beyond by better managing their spend and suppliers.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Ability to manage all spend and all suppliers, without compromise. Single integrated and unified S2P solution but with best of breed capabilities in major areas such as S2C, P2P, SRPM. Single supplier record and true 360 degree view of all supplier information and activity.



Capgemini Digital Procurement Research

11-50 Employees

101-250 Clients

Industries served



MISSION STATEMENT

We believe in a better way for Procurement teams to manage their function than by emails, spreadsheets and legacy software tools. Market Dojo was created to be that better way.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

We are the only on-demand, entirely self-service strategic procurement specialist, with our pricing openly available on our website. This highlights how accessible and easy we are to work with, verified by the highest rating on Capterra for strategic procurement tools based on independent client feedback.



Capgemini Digital Procurement Research

500+ Employees

1.000+ Clients

Industries served



MISSION STATEMENT

JAGGAER drives customer value for buyers and sellers through our global connected network.



Capgemini Digital Procurement Research

76-100 Employees

251-1.000 Clients

Industries served



MISSION STATEMENT

To create value by bridging supply and demand based on structured evaluation/negotiation metrics, leading to effective contracts and business relationships.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Negometrix is the First Choice of Procurement Professionals in the markets it chooses to operate. It offers a broad en deep web-based solution for tendering, contract-, supplier- and spend management. Broad: from the planning phase until the contract phase. Deep: from simple tenders to the most complex and sophisticated tenders as well as vendor- and contract management needs.





Capgemini Digital Procurement Research

500+
Employees

1.000+
Clients

Industries served



MISSION STATEMENT

Our mission is to help people see data in new ways, discover insights, unlock endless possibilities.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Oracle Fusion Cloud Procurement is a modern standards based solution with embedded analytics, and collaboration to simplify supplier management and contracting, reduce risk, increase cost savings, and enforce compliant spending. It is part of the only complete, single cloud ERP that is enterprise grade and recognised a leader by industry analysts for several years in a row.



Capgemini Digital Procurement Research

11-50
Employees

101-250
Clients

Industries served



MISSION STATEMENT

The Procurement Performance Accelerator.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Per Angusta is reinventing Procurement Performance Management. With Per Angusta's cloud-based PPM Solution, procurement teams can create a step change in their productivity — all while managing and sharing their performance with stakeholders and Finance in all simplicity. The solution enables purchasing teams to drastically increase agility and efficiency in their day-to-day sourcing activities.



Capgemini Digital Procurement Research

500+
Employees

1.000+
Clients

Industries served



MISSION STATEMENT

To partner with and challenge organisations to realise the benefits of digital business processes using our innovative technology and our team's expertise.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Proactis provides an easy to use, intuitive consumer-style interface allowing users to automate all their Source-to-Pay processes and control 100% of their spend. The cloud-based platform is a modular, fully integrated solution that continually benefits customers with regular updates and access to new features. The solution's flexibility suits many different sized organisations and sectors.



Capgemini Digital Procurement Research

101-250
Employees

101-250
Clients

Industries served



MISSION STATEMENT

Help organizations around the globe quickly transition from inadequate procurement processes to an easy to implement, enterprise class, cloud-based e-procurement suite.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

ProcurePort helps organizations around the globe quickly transition from inadequate procurement processes to an easy to implement, enterprise-class, cloud-based e-procurement suite. An easy to use interface provides a powerful workspace to automate tasks such as requisitions, managing RFP-RFI-RFQ, hosting reverse auctions, managing contracts, P.O.-invoice-payments, spend analysis and more.





Capgemini Digital Procurement Research

101-250
Employees

251-1.000
Clients

Industries served



MISSION STATEMENT

Make business spending smart and simple



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Procurify is a spend management software platform that helps organizations proactively drive operational efficiencies and business growth. Companies around the world request, approve and track the resources they need to move the business forward through real-time budget data, remote-optimized procurement workflows and spend insights.



Capgemini Digital Procurement Research

101-250
Employees

101-250
Clients

Industries served



MISSION STATEMENT

To provide a fair, transparent and innovative purchasing service and to create value and commitment for all our stakeholders by adapting technological developments in line with our current needs to our services, with working principles in accordance with Koç Group values.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

We are serving tailor made managed service function in sourcing modules with an advanced operational support. Our clients need little guidance to get up and running by the help of Promena's intuitive user interface and granular configuration. Our modular approach is helping our clients to reach such kind of an experience with low budgets and fast implementation processes.



Capgemini Digital Procurement Research

51-75
Employees

11-50
Clients

Industries served



MISSION STATEMENT

Source better.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

We're helping forward-thinking procurement, treasury and finance teams all over the world make dynamic changes to their businesses, by providing trusted and impactful insights and recommendations across a variety of customisable domains. Robobai provides a choice of tailored areas to focus on to understand your spend and to minimise your risk, all visible on an easy-to-use intuitive dashboards.



Capgemini Digital Procurement Research

76-100
Employees

251-1.000
Clients

Industries served



MISSION STATEMENT

Understanding technology, techniques and processes associated with building and sustaining successful eSourcing programs is our core strength. Our Scanmarket Mission is to share our expertise by coaching and helping our customers be successful.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Scanmarket is an industry leading strategic sourcing software platform that delivers superior results in savings, transparency and efficiency to hundreds of organizations globally. Known for its ease of use and expert support, Scanmarket increases user adoption by more than 300% on average. Whether it is Spend Analysis, eRfX, eAuction, CM, PM, SBM or Consultancy Services, we help you get results.



101-250
Employees

101-250
Clients

Industries served



MISSION STATEMENT

Sievo helps turn procurement data into dollars by providing the leading procurement analytics solution combining software, services & content.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Sievo is a leading procurement analytics SaaS company. Known for our deep procurement expertise and our AI-powered source-to-screen process with out-of-the-box integrations to 100+ ERPs & source systems, data extraction, cleansing, classification and 3rd party data enrichment. We go way beyond spend visibility and also offer savings program, contract analytics, forecasting & benchmarking solutions.



251-500
Employees

101-250
Clients

Industries served



MISSION STATEMENT

SirionLabs is transforming the contracting engagement between enterprises by bringing buyers and suppliers closer together across the full lifecycle of the contract – from authoring to performance to closure.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

SirionLabs, the SaaS leader in enterprise CLM, leverages advanced AI technology to enable effective management of all types of enterprise contracts including buy-side and sell-side. Sirion goes beyond legacy CLM solutions to automate the complete contracting lifecycle on a single platform – from authoring to contract analytics to ongoing governance of contracts.



251-500
Employees

76-100
Clients

Industries served



MISSION STATEMENT

We provide flexible business solutions that help clients scale and adapt quickly.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

SupplyOn is the number one Supply Chain Business Network for Automotive, Aerospace and Manufacturing.



11-50
Employees

101-250
Clients

Industries served



MISSION STATEMENT

We are proud to help all our customers reduce the risks associated with contract lifecycle management enabling them to make their businesses more efficient and productive.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Within the Symfact product all the authoring/editing of the contract template is done completely through MS Word; so, you are using the same tools as you are currently using. The application also offers the ability to automatically embed contract meta-data into the document so that the system will automatically fill in the associated data in the correct location within the Word document.



251-500
Employees

251-1.000
Clients



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Synertrade is a fully seamless, integrated solution in one modern UX. It is one of the few solutions equally powerful in direct and indirect procurement. We do not only cover Source2Contract, full SRM (Supplier Lifecycle Management) and Purchas2Pay, but also innovation processes, PLM and QM. We deliver smart AI tech today incl. Augmented Analytics, powerful RPA and NLP/NLG best in class BOTs.

MISSION STATEMENT

Innovative Procurement Now!



500+
Employees

101-250
Clients



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Tradeshift helps companies digitize trade transactions across a global networked marketplace solution. Our unique seller value products include pre-approved early payments and supplier-facing analytics. We leverage embedded native machine learning to help businesses digitize all their trade transactions, collaborate on every process, and connect with any supply chain app. That's digital trade at scale. That's Tradeshift.

MISSION STATEMENT

We build technologies that help companies grow by giving them access to cheaper capital, increased efficiency, and digital global trade. Tradeshift's goal is to connect every company in the world, creating economic opportunity for all.



251-500
Employees

1.000+
Clients



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Tungsten Network is a rapidly growing, global community of Suppliers and Buyers exchanging fully compliant electronic invoices. Complementary services of Compliant Archiving, integrated PO Delivery, real time Analytics, Supplier Early Payment and Invoice Status Service (for credit control) 100% digitisation of Accounts Receivable and Accounts Payable has been done and is within everyone's reach.

MISSION STATEMENT

To be the most trusted global transaction network.



11-50
Employees

51-75
Clients



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Unimarket offers simple and easy-to-use software that brings all your procurement into one place. Our cloud-based solution brings together purchasing, invoicing, payments, contracts, sourcing, expenses, and an integrated supplier marketplace – all in one unified platform.

MISSION STATEMENT

We make it easy for people to find and buy everything they need to do their best work, by providing simple, open and easy-to-use procurement technology. We champion procurement professionals and support the vital role they play in helping the people in their organizations to fulfil their purpose and do their best work.





Capgemini Digital Procurement Research

101-250
Employees

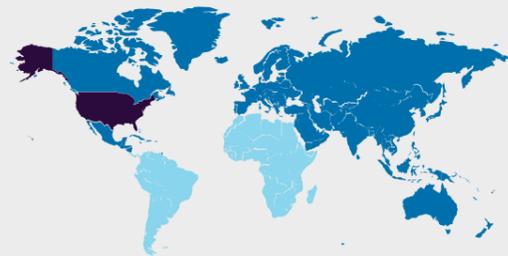
67-100
Clients

Industries served



MISSION STATEMENT

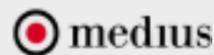
Deliver modern, mobile, and modular eProcurement and accounts payable automation solutions for all employees across enterprise and SMB organizations.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Vroozi's modern, mobile and modular procurement and AP automation platform combines a consumer-like experience with enterprise-grade financial controls. Vroozi digitizes the entire procure-to-pay process - purchasing, invoices and payments – to deliver better margins and stronger financial controls. It connects seamlessly with financial systems to fuse the power of ERP with digital procurement.



Capgemini Digital Procurement Research

251-500
Employees

1.000+
Clients

Industries served



MISSION STATEMENT

Medius' mission is to enable organization to simply manage their spend by delivering the worlds favorite spend management suite with best-in-class customer experience and fastest implementations.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Medius has a strong following in direct materials heavy industries such as retail, consumer goods, manufacturing and distribution due to it's rich functionality in line level invoice matching and ability to truly automate complex AP processes. Medius also differentiates through it's integration offering that accelerates speed to value and through it's user experience that is modern and intuitive.



Capgemini Digital Procurement Research

101-250
Employees

251-1.000
Clients

Industries served



MISSION STATEMENT

WE SCALE Digital Change
WE CONNECT People and Systems
WE AUTOMATE Buying and Selling
WE DIGITIZE Business Relationships
WE INTEGRATE Company Applications.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

The well-known procurement solution (with all its previous versions) has been used for many years and proved itself in over 60 countries worldwide. Over the years it has been extended by a number of additional modules from different fields such as service procurement, invoice management, contract management, sourcing, supplier management, content integration, as well as reporting.



Capgemini Digital Procurement Research

11-50
Employees

251-1.000
Clients

Industries served



MISSION STATEMENT

Create user-friendly software to simplify time-consuming and overly complicated financial processes, giving organizations complete visibility of expected costs and enable better spend control.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

Zahara Purchase Management Platform is designed to bring significant efficiencies to an organization's finance team; providing visibility of spend; controlling expenditure; streamlining processes; automating common tasks; etc. All delivered via a SaaS cloud based system to fully enable remote working, with automated workflows, allowing staff to focus on the business and the real issues that matter.

ZYCUS

Capgemini Digital Procurement Research

500+
Employees

101-250
Clients

Industries served



MISSION STATEMENT

To inspire the procurement and sourcing teams of the world's leading organizations to realize their full intellectual and strategic potential by providing them with the best technology solutions and by raising awareness of the enormous contributions they can make to business performance.



Headquarters & sales offices

MOST DISTINCTIVE FEATURE

AI-led autonomous procurement. Intuitive solution. Integrated processes. Zycus is the world's leading provider of AI-led comprehensive, seamlessly integrated and easy-to-use source-to-pay solution suite. It enables autonomous procurement with its Merlin AI Suite- a unique platform consisting of intelligent BOTs to automate tactical procurement and AP tasks & optimize strategic resource allocation.



ACKNOWLEDGEMENTS

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