

# DE-RISK YOUR SUPPLY BASE WITH AI-DRIVEN SUPPLIER IDENTIFICATION

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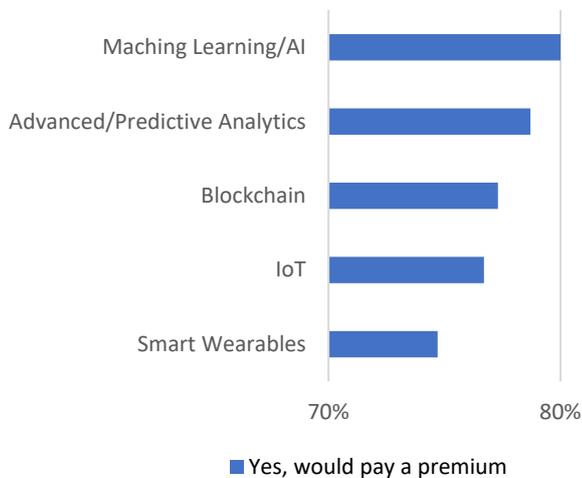
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# De-Risk Your Supply Base With AI-Driven Supplier Identification

**FIGURE 1**  
The Top 5 Capabilities Procurement Teams Would Pay a Premium For

Q. Would you be willing to pay a premium for a SaaS application that has the following core capabilities?



Source: IDC SaaSPath 2022, n= 150

## AT A GLANCE

### WHAT'S IMPORTANT

Organisations are experiencing supply insecurities resulting from global disruptions and a changing economic environment. Years of supply base rationalisation have left many procurement teams reliant on single sources of supply for critical products and services.

### KEY TAKEAWAYS

Diversifying the supply base is the most effective strategy for reducing supply risk, but the identification of the right new suppliers is challenging. The best potential new suppliers may provide substitute products or only currently operate in other parts of the world. Artificial intelligence can enable procurement teams to rapidly scan the globe for alternative vendors, while also factoring in the need to improve ESG performance.

## Introduction

Reducing the complexity of their supply base has long been a priority for procurement teams. Many of these oversized bases include tens of thousands of suppliers, swelling as business needs change and acquired businesses are absorbed. They are also likely to include suppliers that have undergone little, if any, vetting.

As an antidote to this complexity, many procurement managers dramatically rationalised the supply base in their category of spend, often choosing a single source of supply to capitalise on economies of scale and minimise complexity. But these single-source supply arrangements are operationally risky and often lead to a lack of commercial leverage on the part of the buyer. Many procurement managers now find themselves fully reliant on a single supplier and lacking the influence to encourage them to invest in risk mitigation, ESG, and performance improvement as a whole.

Since 2020, a multitude of factors have led to a sharp reduction in security of supply and a sharp rise in the cost of a wide range of products and services. Companies with highly concentrated

supply bases and a lack of identified alternative or contingency suppliers have been at a disadvantage in responding to these shocks. Some of these factors include:

- **Logistics disruptions:** The global logistics infrastructure has struggled to recover from a series of interruptions including ports and shipping routes being closed and substantial increases in fuel costs.
- **Production shifts:** The pandemic led to the shutdown of offices and factories around the world, but also to the switching of the remaining production capacity towards products where short-term demand was anticipated. This has led to reduced inventories and will accelerate the obsolescence of some items that it may never be economic to produce again.
- **High inflation:** High prices for energy and other commodities are driving up prices for other products and services. Not all suppliers will be impacted in the same way though, with impact varying according to their location and the way they operate.

The ability to access and utilise alternative sources of supply is critical to business resilience. But this diversification of the supply base must be undertaken in such a way that doesn't result in any of the following unintended consequences:

- Adding cost and complexity back into the business through the introduction of "spare" suppliers that don't add continuous value.
- Slowing down the procurement process and the procurement team at exactly the moment they must be accelerated.
- Compromising on ESG or compliance to processes.

To address the challenges of business in 2022, procurement teams must focus on de-risking the supply base by introducing the right new suppliers, while responding to the specific challenges their businesses are working to overcome. Given the pressures on the procurement function and nature of supply markets, changes to the supplier identification and verification process are urgently required. These changes include:

- Expanding the scope of scans for potential new vendors to new geographies, beyond the well-known local, near-shore and off-shore sourcing destinations.
- Overcoming difficulties with language and terminology quickly to beat competitors in the race to identify suppliers in previously untapped markets.
- Redefining the search criteria — the parameters that define a potential supplier — when scanning the market for new vendors. These need to shift from being product-based to outcome-based, a tweak to the supplier identification process that helps broaden search results to include substitutes to the product. Identifying substitutes is highly valuable in the current economic environment, as substitution may completely avoid supply chain risk or inflationary pressures.

Searches that are broad in terms of their geographic scope and yet open in terms of the solutions offered and the profile of the vendor mean a heavy workload. But this process needs

to be quick and efficient. The only practical way to address this paradox of scanning a wider range of potential suppliers while also reducing the time it takes to identify them is to apply the latest technology. Artificial intelligence (AI) is perfectly placed to address the challenge of vendor identification. This is because:

- Data is abundant, but not ideally structured. Almost all potential vendors will be referenced in some way on the internet. However, this reference could take many forms, ranging from directory entries or customer testimonials to more expansive websites.
- Vendor identification is a prediction/pattern identification problem, rather than a simple case of filtering for a set of predefined criteria.
- Static databases are, by definition, perishable, and are prone to categorisation errors.
- Language and terminology are highly variable.

AI is an extremely powerful tool when applied to the challenge of identifying sets of attributes in large datasets that cannot be precisely algorithmically defined. Supplier identification is a perfect example of a task that can be completely transformed by AI, reducing what would have been completely impractical searches to a few minutes of computing time.

## Benefits

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Applying AI to the task of supplier identification has the potential to address pressing key business challenges such as:

- **Reducing supply risk:** The best defence against supply disruptions is a secondary source of supply, or the ability to rapidly identify and onboard a second source. The only alternatives are to build a large buffer stock or invest in risk mitigation initiatives with the existing supplier, both of which are expensive and may not remove single points of failure.
- **Improving Environmental and Social Governance (ESG):** Driving improvements in ESG will mean replacing some existing suppliers and modifying the selection criteria for new suppliers. An intelligent supplier identification application can accelerate this process, prioritising suppliers that are likely to have strong ESG credentials right from the start of the identification process.
- **Accelerating sourcing cycle times:** The traditional procurement process is too slow for the pace of modern business, and anything that can cut sourcing times is highly valuable. Replacing a manual search and request for information (RFI) process with a rapid intelligent digital search could significantly reduce the time taken to execute sourcing exercises as a whole.
- **Early identification of anomalies:** Problems discovered with existing suppliers, or those found late in the sourcing process, can cause long delays as a whole new sourcing process may be required. An intelligent automated vendor identification process can front load some checks, meaning problems are discovered before time is invested.
- **Improving access to innovation:** The ability to scan a broader range of potential suppliers, and to do so on all sourcing exercises, improves the chances of identifying valuable

innovation. An intelligent scanning tool can also be configured to specifically identify signs of innovation.

Collectively, addressing these challenges enables businesses to respond to shocks and opportunities with agility. These benefits can be unlocked due to the ability of AI-enabled supplier identification to:

- Scan a much wider and more comprehensive range of potential suppliers than would ever be practical by other means.
- Execute the scan in a far shorter time than could be achieved using any other method.
- Conduct the scan intelligently, without the need to program the system to identify a fixed set of criteria.

Procurement teams recognise that given the nature of their work and the data they use, AI is a powerful capability worth investing in. IDC research shows that artificial intelligence is the software capability procurement teams are most likely to pay a premium for (Figure 1).

## Considerations

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Key considerations in the application of AI to supplier identification in procurement include:

- **Supplier qualification:** Search and identification tools do not "qualify" the supplier, they can only conduct some simple due diligence. The potential supplier will still need to be screened to confirm their suitability. This subsequent qualification process would likely need to be updated to capitalise fully on the power of the supplier identification tool, or advantages gained during supplier identification could be lost during the qualification process, for example by paper-based processes.
- **Training:** Procurement teams would need to be trained to apply the tool effectively. Just as people need to learn the best terms to use in a search engine, they will need to learn how to direct a vendor scanning tool.

## Trends

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Several business and economic trends have a bearing on the role of AI-powered supplier identification in the enterprise, such as:

- **Persistent uncertainty:** It is likely that we are heading into a long period of business uncertainty, meaning procurement teams will remain under pressure to improve the resilience of their supply base for quite some time.
- **Environmental and Social Governance:** ESG performance is now an essential supplier selection consideration, not a bonus or afterthought. ESG credentials must be surfaced early in the procurement process to avoid wasted effort. Corporate ESG programs will inevitably involve the removal of some suppliers, and the identification of new ones, and require all suppliers to be continuously monitored.
- **Innovation:** Larger enterprises are consciously seeking to do business with lesser-known vendors that might previously have been seen as unproved entities. These vendors may be hard to identify without networking or third-party facilitation.

- **AI explainability:** In some cases, such as when applied by government agencies, it could become necessary to explain how suppliers were identified. This may pose a challenge for businesses if they are relying on "black-box" AI processes.

## Conclusion

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Procurement teams must prepare themselves for an extended period of economic uncertainty, during which de-risking the supply base will be a priority. As the balance of risks evolve, so must the supplier base, meaning procurement work is never done.

The identification of new supply sources is a key tool for reducing risk, and the way to achieve this is to cast the net wider when identifying potential vendors. The long list of prospective suppliers then needs to be intelligently filtered, removing those that won't meet the criteria, while avoiding the removal of innovative suppliers in the process. This broadening of vendor identification must happen within dramatically accelerated sourcing cycle times, and without adding risk or cost to the business. Meeting these challenges is only possible through the application of technology, and artificial intelligence is perfectly positioned to dramatically accelerate and broaden supplier identification.

## MESSAGE FROM THE SPONSOR

Forestreet's AI-driven SaaS tool is a new Vendor and Market Discovery software that empowers businesses to map and categorise every company in any market. This is work that used to be done with weeks of desktop research or external consultants, now completed in minutes. All companies and products are identified live through our natural language processing capability, so you always have the most up-to-date information across 25 languages. Our AI also ingests a wide spread of news sites related to any search you perform, so you can see what is being talked about in your market right now. And with our suite of analytic tools, you can deep dive into an individual company's characteristics and performance, including information about size, funding and location, all the way down to product and feature comparisons. For more information on how to transform your sourcing process contact us at [info@forestreet.com](mailto:info@forestreet.com) or go to [Forestreet.com](https://Forestreet.com).

## About the Analysts

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Tom Seal is a senior research director in IDC's European enterprise applications team. He has over 20 years' experience as an analyst, consultant, and technology procurement manager. He focuses on the ERP market and the future of the finance and procurement functions. Current research includes investigating the business case for ERP modernisation and the economics of cloud technology. In addition, he is part of IDC's Intelligent Business Operations and Augmented Humanity practices. Seal also delivers consulting on the development and commercialisation of ERP and financial applications.

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