
2020 STATE OF ELECTRONICS SOURCING

A Survey of Sourcing Decision Makers



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Introduction

The surge in the use of electronic components has complicated the lives of many sourcing professionals. With the enormous range of “connected” products reaching the market, electronic components are increasingly critical. The fast update cycle as consumers demand new capabilities means sourcing decisions must be increasingly nimble.

This report examines these trends and endeavors to answer important questions. What impact do sourcing issues have on business outcomes? Have the capabilities of sourcing applications kept up with market realities? What application improvements would be most beneficial?

This research, sponsored by Supplyframe, is based on an online survey of 217 decision-makers with responsibility for sourcing electronic components. All worked at an OEM company with more than 500 employees.

Key Findings

- **Sourcing has a direct impact on business outcomes**
 - 91% say sourcing issues have caused product launch delays
 - 81% have been forced to make expensive spot buys because of availability issues
 - 93% report compliance negatively impacts sourcing processes
- **Early and effective collaboration between teams is key to sourcing success**
 - 99% report direct benefits from early collaboration between engineering and sourcing teams
 - 79% report collaboration issues have caused product introduction delays and 85% say engineers select components that can't be effectively sourced
 - 95% agree that the path to solving component sourcing issues requires integration of engineering, sourcing, and partners
- **Existing sourcing technologies are often archaic**
 - 89% report challenges with existing applications used for sourcing electronic components
 - 77% say ERP and PLM are not a fit for the needs of electronic component sourcing
 - 99% report challenges as a result of issues with sourcing applications
 - 81% report that their sourcing applications prevent the selection of optimal cost options
- **Improved sourcing technology offers significant potential**
 - 99% would benefit from additional capabilities or sourcing applications
 - 91% say their companies could grow faster with more effective sourcing technology

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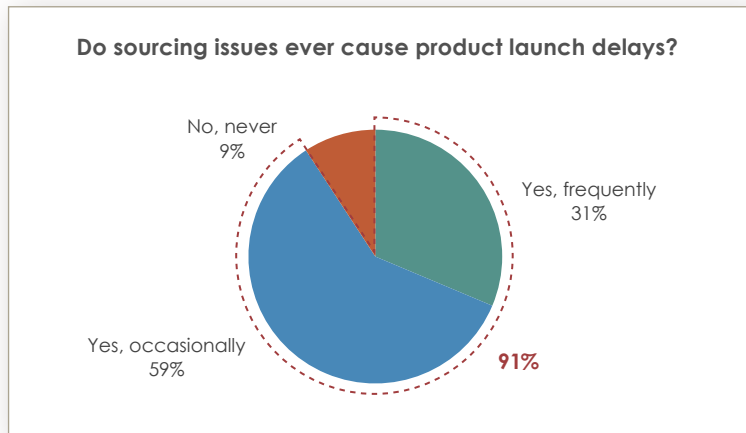


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Detailed Findings: Sourcing has a direct impact on business outcomes

Sourcing professionals, responsible for ensuring that all components necessary to manufacture an end product, are absolutely critical to manufacturing operations. If a single necessary piece goes missing, the entire production process can grind to a halt. There has always been a range of factors that can impact sourcing processes—suppliers can go out of business, critical weather events can shut down entire regions, or electronic component producers can have their own downstream issues. In the age of pandemic-related, shelter-in-place orders, the challenges to sourcing can be even more extreme.

This research clearly shows that sourcing issues are not merely an annoyance for the professionals who are responsible for solving them. They have a direct impact on many tangible business outcomes. The majority of companies (91%) that manufacture products with electronic components report that sourcing issues have caused delays in product launches. This includes almost a third (31%) who say this happens frequently.



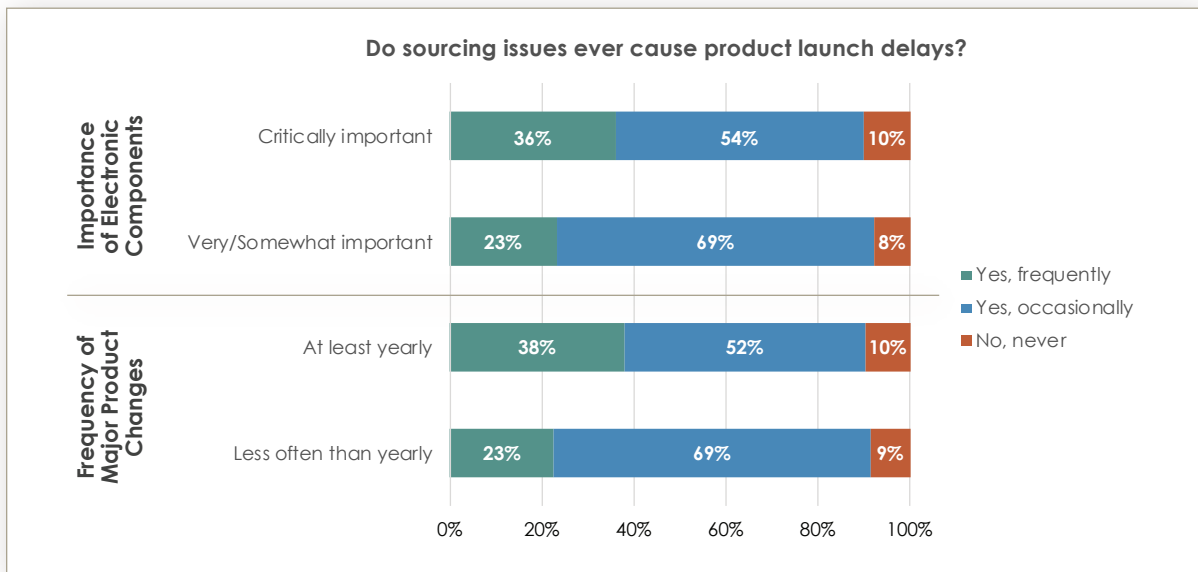
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Sourcing issues are most likely to result in product launch delays in two specific environments. When electronic components are “critically” important, sourcing professionals are much more likely to say that sourcing issues frequently cause product launch delays (36%) than those who say their electronic components are only “very” or “somewhat” important (23%). The frequency of product updates also impacts the likelihood of sourcing issues causing product launch delays, with companies that make major product changes at least yearly reporting that sourcing issues frequently cause product launch delays at a much higher rate (38%) than sourcing professionals who deal with products that are updated less often than yearly (23%).



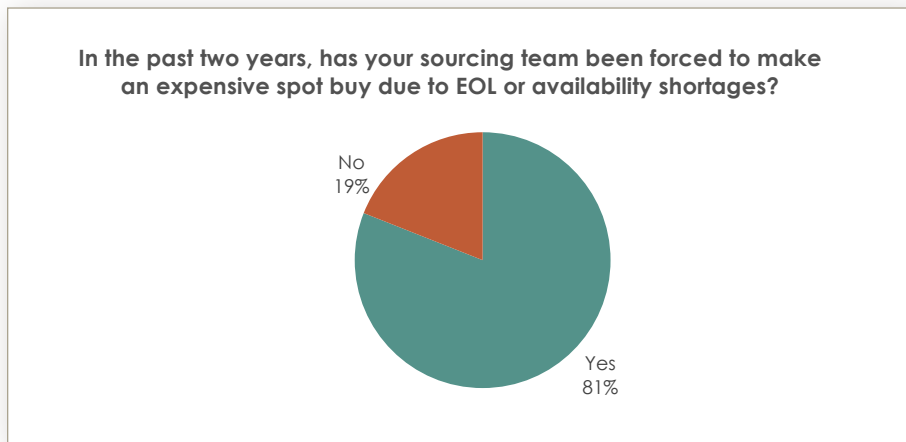
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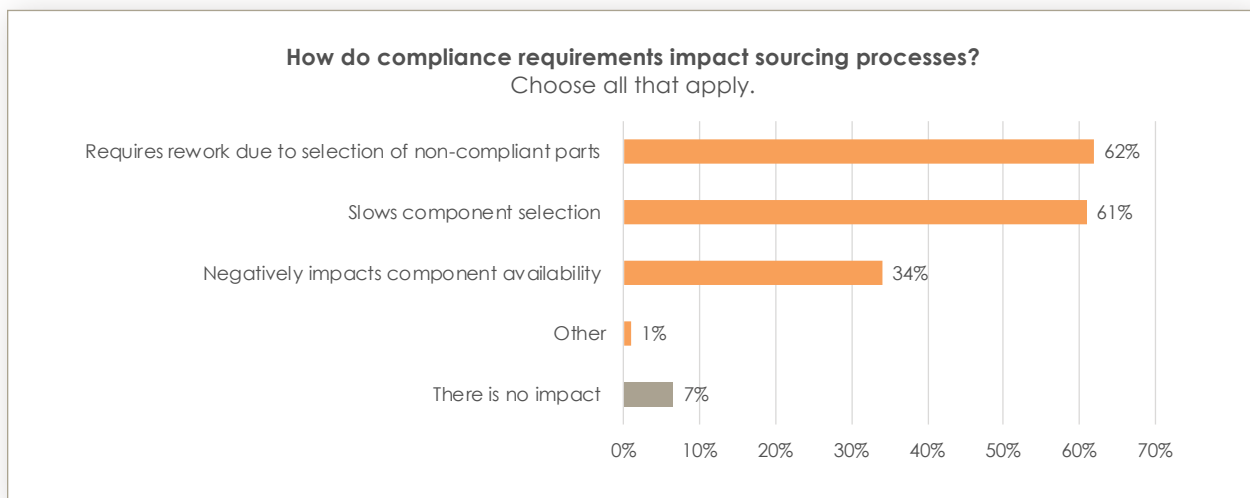


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It can be particularly frustrating for a sourcing professional to have done an excellent job at procuring a needed component for a good price, and then lose availability due to shortages or even EOL (End-Of-Life). However, this is a very common scenario among sourcing professionals. More than four in five (81%) report that they have been forced to make an expensive spot buy as a result of a situation like this.



Compliance is critically important for electronic components. No OEM wants to deal with bad press due to products causing fires or other safety issues. But compliance can have a significant impact on sourcing processes. Most sourcing professionals (93%) report that they are impacted negatively by compliance requirements including having to rework bids due to selection of non-compliant parts (62%), having their processes slowed down because of extra efforts to select compliant components (61%), and the negative impact on component availability (34%). “Other” impacts were also reported by survey participants including needing to meet specific specs and certifications.



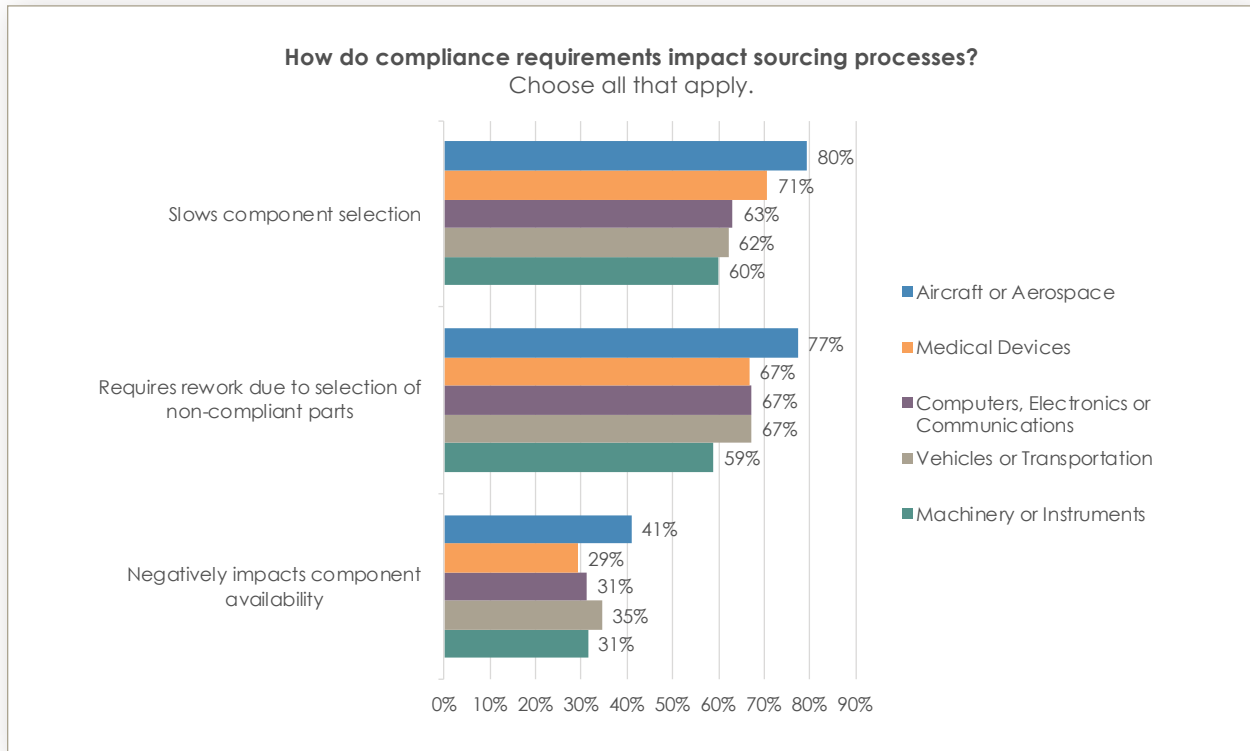
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While compliance impacts every sourcing professional who works with electronic components, certain industries are more impacted. For example, those who work with aircraft and aerospace (80%) and medical devices (71%) are most likely to report issues with compliance requirements causing a slowdown of component selection.



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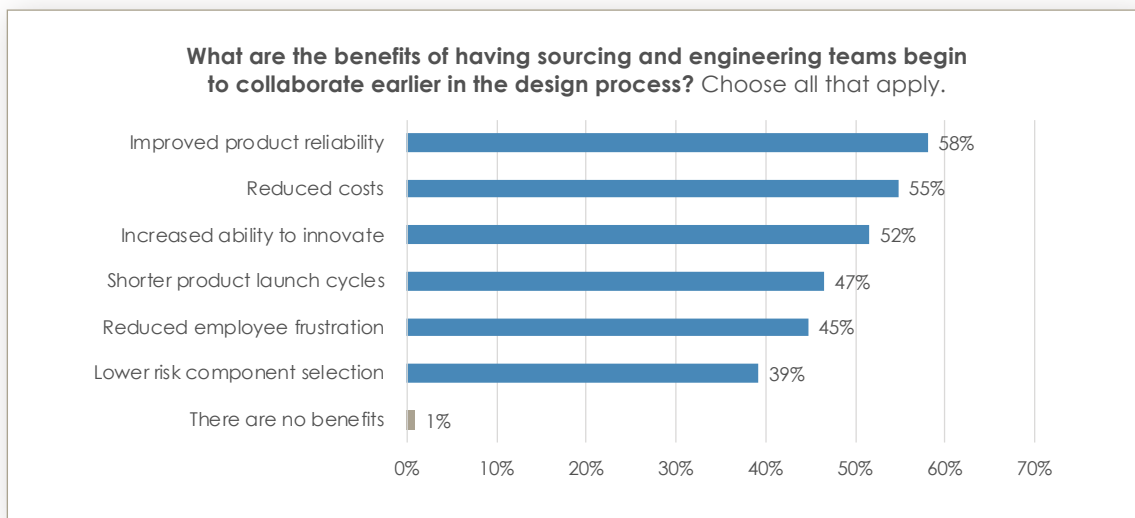
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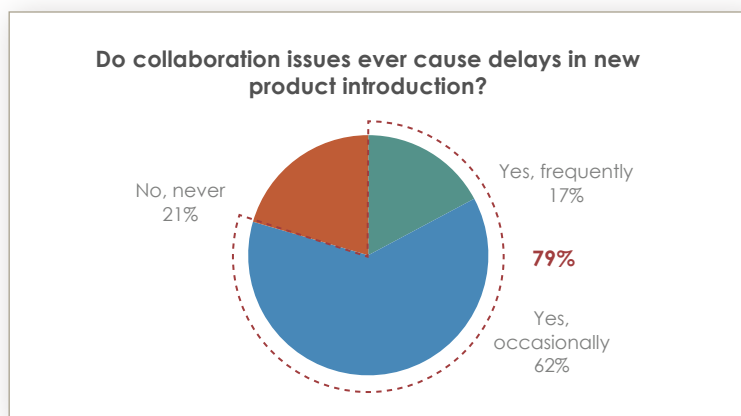
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Detailed Findings: Early and effective collaboration between teams is key to sourcing success

Sourcing professionals are in agreement (99%) that good things happen when sourcing and engineering teams collaborate early in the design process. The reported benefits are numerous including improved product reliability (58%), reduced costs (55%), increased ability to innovate (52%), shorter product launch cycles (47%), reduced employee frustration (45%), and lower risk in component selection (39%).



Unfortunately, when collaboration does not happen, sourcing teams lose these benefits and there is a significant downside. Almost four in five sourcing professionals (79%) report that lack of collaboration has caused delays in new product introduction timelines. This includes a worrying 17% that report this happens frequently.



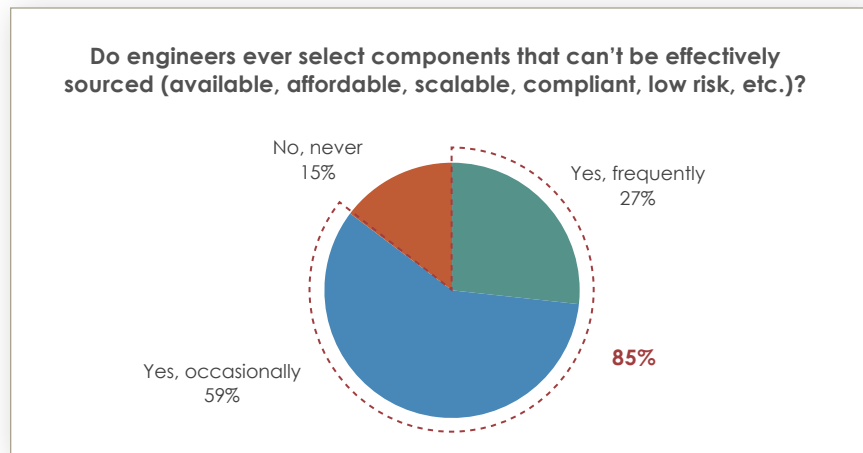
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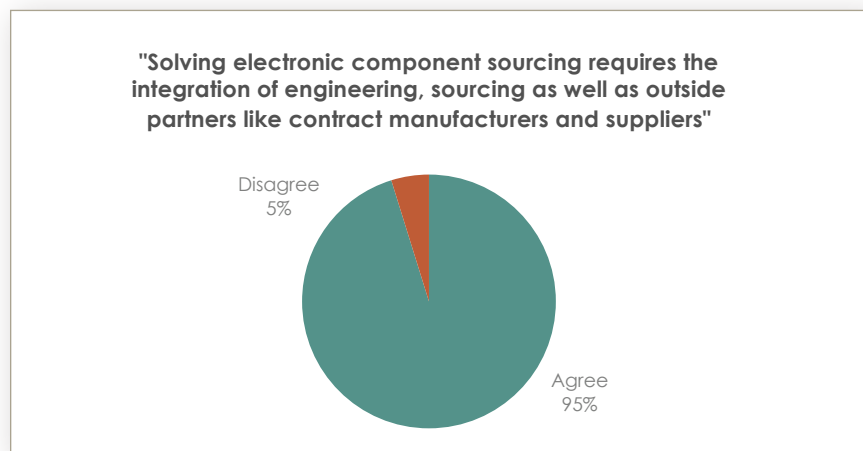


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When engineers and sourcing teams collaborate, requirements that impact availability, cost, scalability, compliance, and risk can be identified early. Unfortunately, this does not happen for all sourcing professionals. Most (85%) report that their engineers select components that can't be sourced effectively. This includes more than a quarter (27%) who report they deal with this situation regularly.



When considering solutions to sourcing issues, there is broad agreement that collaboration is an important factor. The vast majority (95%) of sourcing professionals agree that engineering, sourcing, and outside partners such as contract manufacturers and suppliers all need to be included in any solution to solve electronic component sourcing issues.



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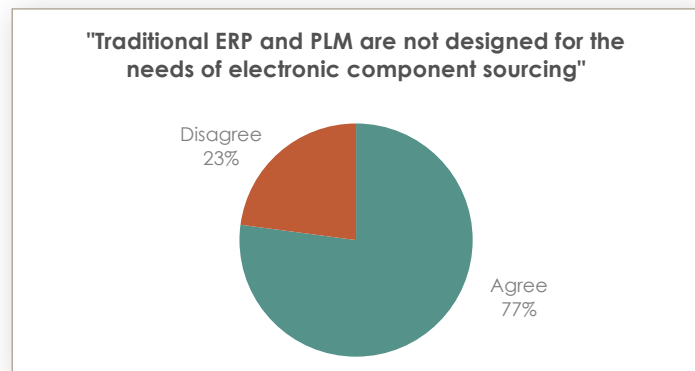
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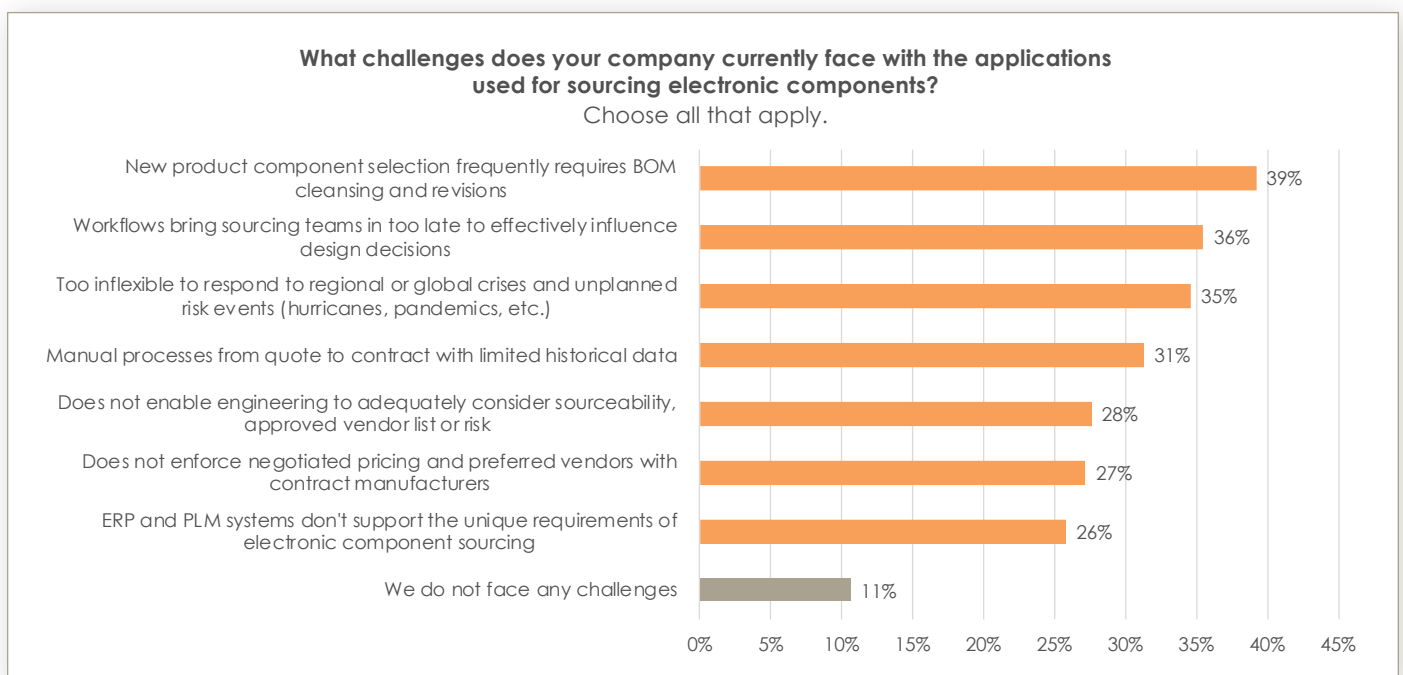
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Detailed Findings: Existing sourcing technologies are often archaic

OEMs have made significant investments in technology for their sourcing teams. Unfortunately, these existing applications, often traditional ERP or PLM, do not deliver what sourcing experts need. More than three-quarters (77%) agree that these applications are not designed for the unique needs of electronic component sourcing.



There are specific issues with existing sourcing technology. Most (89%) sourcing stakeholders face challenges with the applications that they are currently using to source electronic components. They report that they frequently must clean or revise BOMs for new product component selection (39%), the workflows bring sourcing teams into the process too late (36%), systems are inflexible to adjust in times of regional or global crisis such as hurricanes or even pandemics (35%), processes are frequently manual with limited historical data (31%), engineering is not to consider given the ability to sourcing issues including risk and approved vendor lists (28%), and systems do not enforce negotiated pricing (27%).



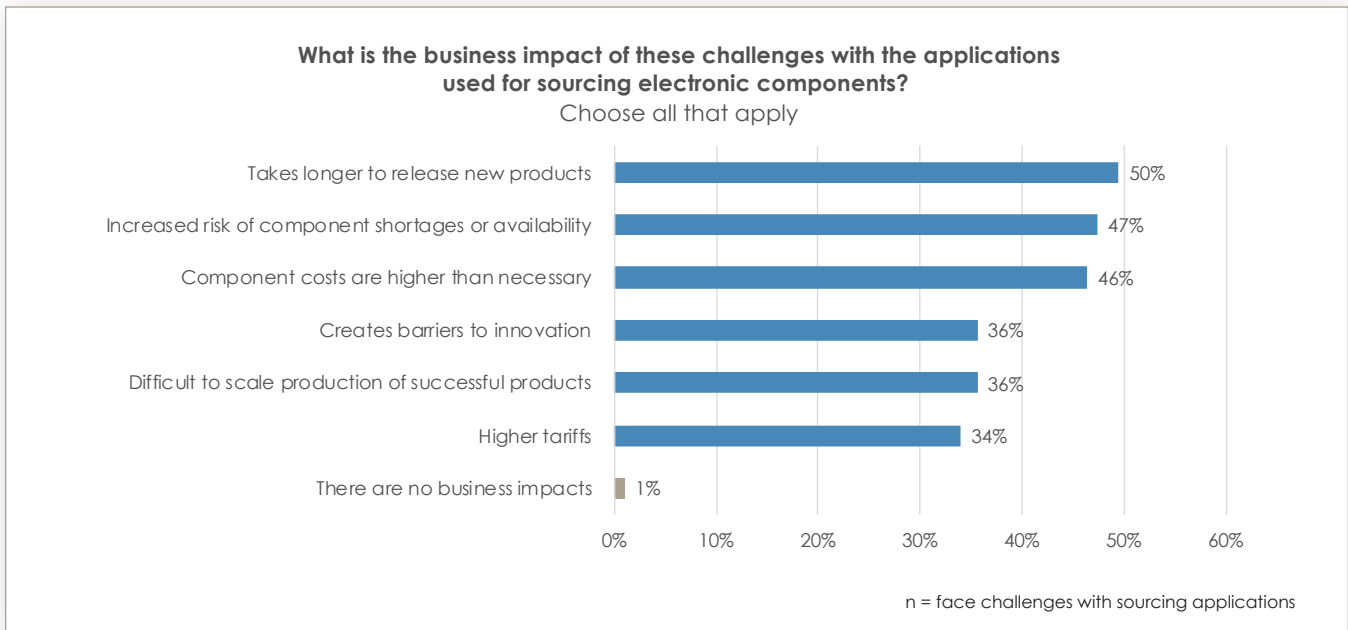
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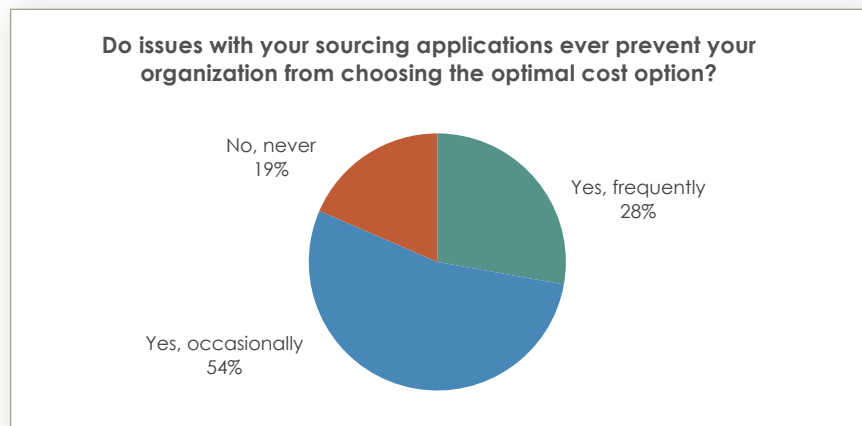


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It is important to note that issues with sourcing technology are not just user irritation. These sourcing application issues have a direct impact on company performance. Almost all (99%) sourcing stakeholders who report challenges with their technology cite a direct connection between these issues and business outcomes, including longer product release cycles (50%), increased risk of component availability (47%), higher component costs (46%), barriers to innovation (36%), issues with scaling successful products (36%), and even having to pay higher tariffs (34%).



It is particularly alarming to note issues around costs related to sourcing applications. The intent of sourcing technology investments is frequently to optimize cost tradeoffs, but more than four in five sourcing professionals (81%) say that their applications actually prevent them from choosing the optimal cost option. This includes more than a quarter (28%) who report this is a frequent issue.



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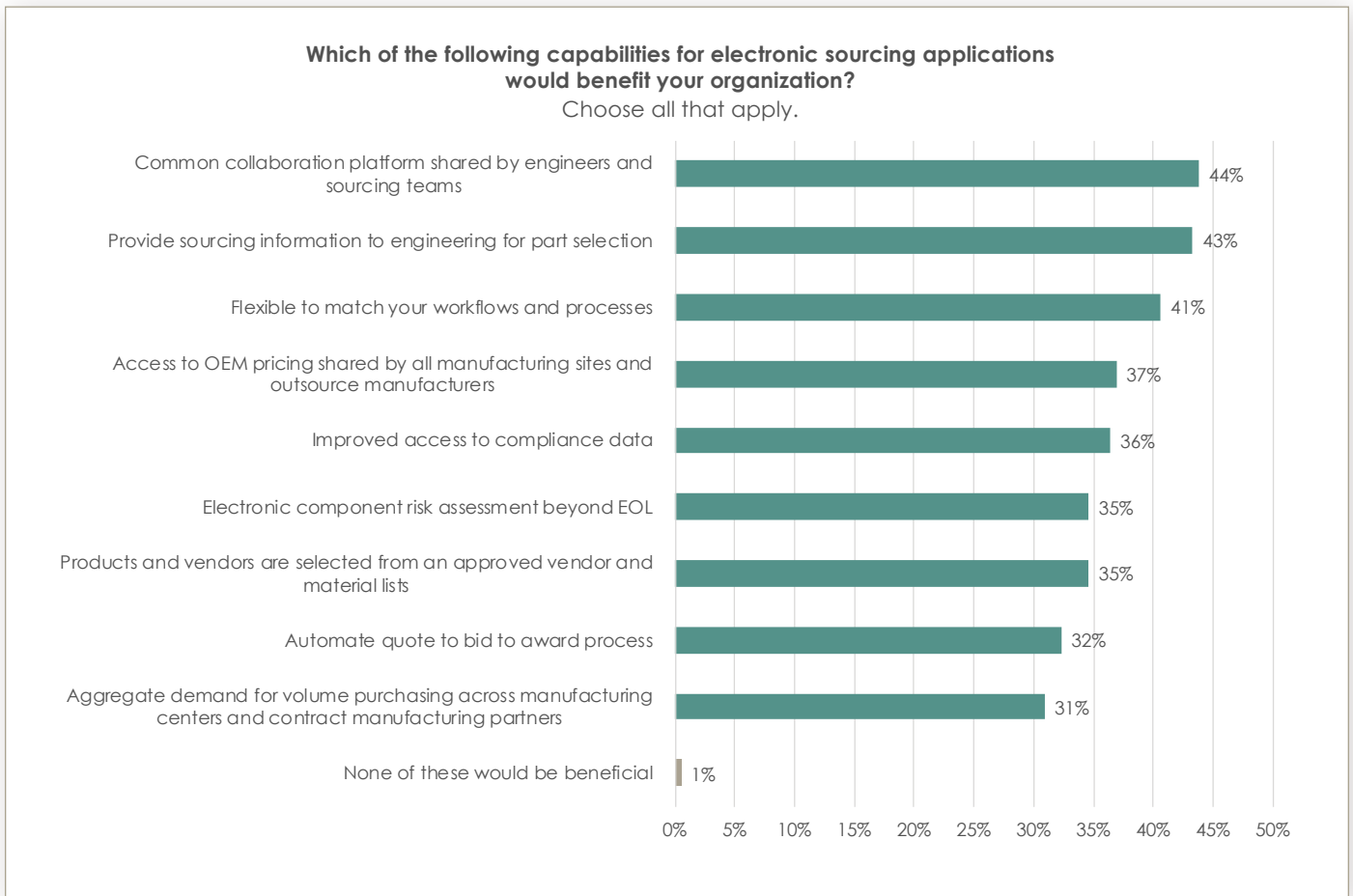


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Detailed Findings: Improved sourcing technology offers significant potential

Given the issues that sourcing professionals report with their sourcing technology, it is not surprising that there is interest in improving their applicaitons. This is an area that is ripe for innovation.

Almost all (99%) of sourcing professionals indicated that additional application capabilities would benefit their teams. We saw above that collaboration is important, and 44% indicated they would benefit from a common collaboration platform shared by engineers and sourcing teams. Similarly, 43% would value providing sourcing information to engineers during part selection. Two in five (41%) want an application that is flexible to match their workflows and processes, and access to OEM pricing that is shared by all manufacturing sites would benefit 37%. Other helpful capabilities include improved access to compliance data (36%), electronic component risk assessment beyond EOL (35%), built-in access to approved vendor and material lists (35%), automated quote-to-bid-to-award processes (32%), and aggregating demand for volume purchasing (31%).



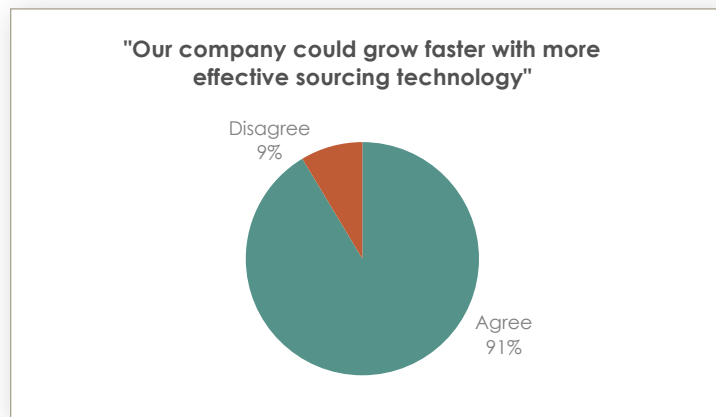
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It is not just sourcing professionals and their direct collaborators who would appreciate better sourcing technology, the entire company would benefit. Given the direct impact sourcing activities have on business outcomes that was reported above, it is not surprising to discover that nine in ten (91%) agree that more effective sourcing technology would have a direct impact on overall company growth.



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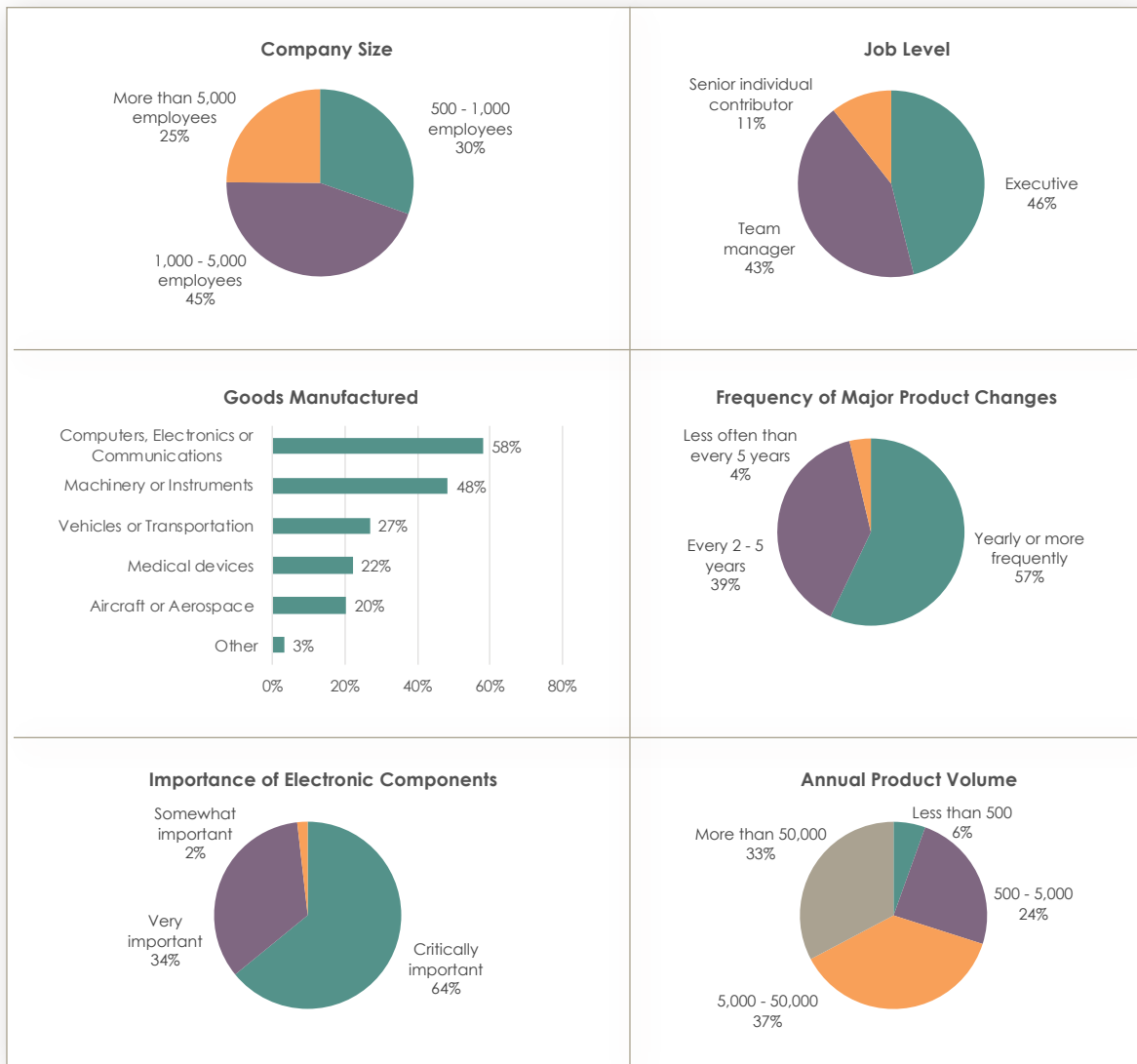


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Survey Methodology and Participant Demographics

Independent sources of sourcing, procurement, and supply chain professionals were invited to participate in an online survey in April 2020. A variety of questions were asked on topics including issues with sourcing, state of collaboration, and challenges with technology.

A total of 217 qualified individuals completed the survey. All had decision-making responsibility for electronic components in a sourcing, procurement, supply chain, or other purchasing function. All participants worked at OEM companies with 500 or more employees.



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About Supplyframe

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