WHAT AI CAN BRING TO BUSINESS APPLICATIONS

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PREFACE

We are in the midst of the Fourth Industrial Revolution—an incredible wave of innovation and technology that is radically transforming our economies, our societies and our daily lives. In this new world of innovation, companies must shift from just selling products to creating more personalized, predictive experiences across every touchpoint.

This study reveals practical areas where companies recognize the potential of artificial intelligence (AI) and advanced analytics in delivering intelligent, predictive experiences. Organizations of all types and sizes and in every industry want to use AI to gain a better understanding of their customer, address challenges related to operational excellence, and automate business processes to enhance the customer experience.

While we see in this study that cloud-based applications are the preferred AI technology to achieve these goals, that is only part of the equation for business success. The realization of AI strategy rests significantly on identifying emerging technologies that reduce the barrier of entry for developing AI models. Addressing this challenge requires focus on the most valuable data about customers, CRM data. Salesforce Einstein is AI for CRM that eases the burdens of data, algorithms and change management, making it easier than ever before for employees to develop the skills necessary to manage company-wide AI deployments.

Salesforce believes it will be Trailblazers who drive customer success in the Fourth Industrial Revolution. Whether it's leading breakthrough business initiatives, delivering awesome user experiences, or accelerating productivity, Trailblazers are leaders in businesses who propel the future of technology. Trailblazers are customer innovators, technology disruptors, and global shapers who understand the potential of AI for your business. Right now there are Trailblazers in every organization who are ready to learn and harness the power of AI to solve business problems. They have the ability to adapt quickly and build proofs of concept, in order to rapidly deploy pilots to prove and showcase the value of AI faster than ever before.

We look forward to seeing how Trailblazers in every industry will leverage the power of AI to blaze new trails of customer success in the Fourth Industrial Revolution.

INTRODUCTION

Artificial intelligence is currently evolving from a niche technology to the mainstream. It offers, among other things, new ways to analyze various sets of data, help optimize planning processes, automate voice/text interactions and responses, and suggest possible next steps, e.g. in sales or customer service. Such features provide the basis for a higher level of automation and increase efficiencies of both processes and people.

Business applications have been providing efficiency gains and automation for business processes for quite some time. Quite a large number of companies rely on enterprise software to run their businesses. One major driver is their need for insights based on accurate enterprise-wide data to make decisions as fast and as relevant as possible.

The intersection of AI and business applications

Therefore, artificial intelligence can very well complement business applications, for instance, by guiding the user through ERP, by automating the analytics process, or even by making some recommendations. In addition, the combination of the two can help companies to reinvent their business processes as well as their business models. The use of AI in the application context is an area of dynamic innovation – many major software vendors, Internet platform providers, start-ups as well as IT services companies have developments underway.

A business perspective on AI

We have conducted a comprehensive European survey among decision-makers from various departments, including sales & marketing, finance, production and supply chain, and IT.

Our analysis and comments provide an overview as well as detailed perspectives considering countries, industry segments, and company sizes

A guide for European executives This document provides commented survey results. However, more importantly, it is a business guide for executives. For them, this guide provides insights into what benefits companies can expect from artificial intelligence and how the technology can help innovate processes that are driven by business applications.

78% of the companies describe AI as a basis for process improvements or automation. Some even believe it is strategically important for their business.

KEY FINDINGS

IT: enhancing cyber security, automating user support and asset monitoring

Improvements in cyber security is a key challenge for many companies. 83% of IT managers expect that AI has the potential to help them in their fight against intruders and malware. Another 77% regard AI as a way to automate user support tasks.

AI benefits: business process improvements and automation

53% of European businesses are convinced that AI can help them to improve existing processes and increase the level of automation. Only 25% think that AI is strategically important. Only a minority of 22% regard it as a future topic.

Improvements are expected in areas such as customer lifecycle management as well as better products and services. Most of all, companies believe that AI will help to reduce human errors.

Production: predictive maintenance and adaptive manufacturing processes

Predictive maintenance has become a popular AI use case. 75% of executives in production departments like the idea of scheduling maintenance based on predictions. They also regard AI as an approach to increase the adaptability of manufacturing processes to deliver new products and services.

Highest value contribution: automation of workflows and less human interaction

78% of companies say that AI offers high value in the automation of work flows so that less human interaction will be needed. 73% believe that this technology will lead to a faster completion of business processes. More and better recommendations for actions are expected by 72%.

Investments: AI-ready applications and tools to AI-enable solutions

Almost half of the companies surveyed already have some kind of AI technology in place today. However, in the short term, 56% want to invest in business applications with AI features and 55% in AI technology that can augment their solutions. Further investments in the mid-term are planned for systems integration (51%), hiring AI experts (58%), and process & strategy consulting (59%).

Marketing & sales: a better understanding of the customer

74% of marketing and sales executives see great value in AI to better understand customers' attitudes by analyzing social media and e-mails.

Main obstacle: legal and compliance-related restrictions

Neither the lack of a business case nor the fear of job losses are the largest obstacles for using AI in the context of business applications. For 82%, the biggest problems are legal and compliance aspects.

Finance & accounting: fraud prevention, predictions, and automation

78% of the managers of finance departments are convinced that AI will help them to detect and prevent fraud much better. A similarly large group expects that AI has the potential to help make predictions about their company's financial situation. Automation in accounts payable management as well as bank reconciliation are other areas where AI can make a manager's life in finance easier.

Providers of cloud-based applications are the preferred AI technology provider

92% name cloud application vendors as their preferred provider in respect to business applications. Only 28% think the same of on-premises software vendors. For 85%, a systems integrator with AI competencies is the provider of choice. 70% favor an AI tool specialist. Of course, a business application provider must be able to implement AI. However, companies also expect them to provide applicable use cases.

Supply chain management: automation of planning and fulfillment

Almost all of the heads of the SCM department (91%) see a great value contribution in the automation of supply chain planning and fulfillment. This means that executives of this department can benefit the most from AI.

AI strategy under development

Only 11% have an AI strategy in place today. However, within the next two years, the share will increase to 74%. The remaining 26% are at least discussing such as strategy, which means that nobody disputes the importance of this. The company board and the IT department are strongly involved in AI strategy, the lines of business to a much smaller degree.

The most common way to support AI strategy is development of a new business function for a company-wide AI deployment (74%) or the development of internal AI skills (65%).

KEY TRENDS

SPAIN AND ITALY

An overall cautiousness towards AI of companies from Spain and Italy can be observed. Only **17%** of respondents believe AI to be strategically important for their future business. Accordingly, advancements and overall investments in AI are behind that of other countries in Europe.

Manufacturing

For manufacturing companies, the major benefits and value of AI lie in creating greater automation by reducing manual steps **(43%),** in minimizing human interaction **(51%),** and in reducing the number of human errors **(60%).**

ASG

Compared to other regions in this study, companies from the ASG region are not as advanced when it comes to AI as others. Although **25%** of respondents believe AI to be strategically important for their future business, only **10%** of companies are already using AI tools and technologies, with **52%** stating that they plan on using AI within the next 2 years.

Services, trade, and transport

More companies from the services, trade, and transport industry already have an AI strategy in place **(15%).** Also, companies from this sector are more willing to seek skills and appropriate insights from outside their organization with **25%** stating that they have entered a partnership with an AI specialist, and **19%** have suggested collaborating with research institutes or universities.

NORDICS

Compared to other countries in this study, companies from Nordic countries have particularly been driving forward the topic of AI. **17%** of companies already have an AI strategy in place and **70%** will/have started to develop internal skills for AI.

UK

33% of companies believe AI to be strategically important for their future business and **52%** of respondents stated that they have already invested in AI technology to augment their business applications.

FRANCE

22% of respondents believe AI to be strategically important for their future business. **38%** are planning to put an AI strategy in place within the next 2 years and **75%** will create/or have created a new business function to deploy AI across their company.

RELEVANCE OF AI

Strategically important or just hype?

Companies expect that AI has the potential to help improve existing business processes. This could be the reduction of errors, a higher quality as well as a greater level of automation.

Therefore, AI is not just hype. For many companies, AI holds the potential for better business outcomes.

25% AI is strategically important for our future business.

53% AI is not strategically important, but provides the basis for process improvements and automation.

22% AI is currently not important but an interesting technological development for the future.
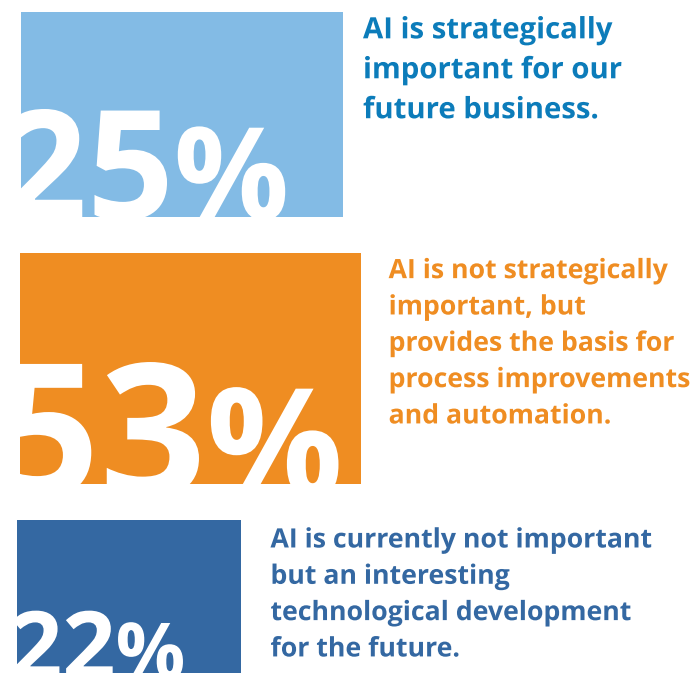
Fig. 1: Which of the following statements best describes the relevance of AI for your company?

Detailed view

View by country: In Spain and Italy, fewer companies see AI as strategically important. In the UK, the share of respondents who see AI as strategically important is the highest compared to any other country.

View by company size: Depending on the company size, the perception of AI regarding its importance and its relevance for today differs. Many more larger companies (those with more than 2,500 employees) call AI strategic, while there are many smaller companies (those with less than 2,500 employees) that believe AI to be an interesting future topic.

View by industry: A larger share of manufacturing companies (27%) see AI as a future technology than companies from services, trade, and transport (16%) industries.

Recommendations:

- Consider AI as important to improve and automate business processes (both internal and customer facing). This is where the potential benefit lies for most companies.

- We are convinced that AI can and will be the basis for new and innovative services based on processes that do not exist today. However, to benefit from AI in this respect, a much broader approach is required, which may involve organizational changes.

POTENTIAL PROCESS IMPROVEMENTS

Regarding the improvement of existing processes, the biggest impact companies expect comes from the reduction of human errors. These could be incorrect data inputs, mistakes when performing tasks, wrong decisions, or tasks that people forget. AI is frequently used today to provide support at the user interface level, for both customers and employees. Chatbots (software that conducts conversations with humans via audio, video, or text, also called conversational agents) allow for a dialog which can help people to fill out forms correctly. AI technology can check the plausibility of data entries, guide users through processes, and make sure they are completed. Also, AI provides mechanisms to automate repetitive tasks, which can free employees from these duties.

According to the survey results, all activities surrounding the customer are another area where AI can provide huge benefits. As AI can leverage vast amounts of customer-related data, the technology can support companies in optimizing the customer lifecycle, which is associated with an increase in customer intimacy. Interestingly, improvements in customer relations is ranked higher by respondents than automation of business processes or automation of helpdesk tasks in IT operations.

REDUCE THE NUMBER OF HUMAN ERRORS

65%

OPTIMIZE CUSTOMER LIFE CYCLE MANAGEMENT

60%

IMPROVE CUSTOMER SERVICE AND CUSTOMER INTIMACY

58%

IMPROVE THE QUALITY, EFFICIENCY, RELIABILITY OR DURABILITY OF OUR PRODUCTS AND SERVICES

56%

DEVELOP AND DELIVER NEW AND INNOVATIVE SERVICES OR PRODUCTS BASED ON EXISTING DATA

36%

INCREASE THE AUTOMATION OF OUR BUSINESS PROCESSES

36%

RAISE THE LEVEL OF AUTOMATION IN IT OPERATIONS INCLUDING HELP DESK

25%

IMPROVE SALES TEAM PRODUCTIVITY AND WIN RATES

16%

IMPROVE THE USABILITY OF OUR APPLICATIONS BY NON-EXPERTS

15%

Fig. 2: In your opinion, to what extent would AI provide benefits for your company in each of the following areas? ("Agree", "Disagree" and "Strongly disagree" not shown)   n = 240

Detailed view

View by countries: There are some differences from country to country: more companies in the UK and France believe that AI can help to reduce human errors than in Spain and Italy.

View by company size: Across all areas, larger companies are generally more convinced about the benefits of AI than smaller companies.

View by industry: There is a greater number of companies from the services, trade, and transport industries which strongly believe in the potential benefits of AI.

Recommendations:

- **Although companies evaluate the various topics differently, there is no topic where AI is not seen as beneficial. So you should be able to identify AI use cases for business process improvements in various areas.**

- **However, do not underestimate the potential for your business from the development of new services or products. We recommend viewing AI-based innovation as both improving the existing and inventing something new.**

AI STRATEGY

Companies are convinced that an overall strategy for AI is necessary. By this we mean identifying a department or task force that leads the AI initiative and setting up a clear roadmap for implementing AI and AI-based innovative services.

Only a few firms have such a strategy already in place, which is not a surprise since the topic is still fairly new. The fact that a large number of companies are planning on having a strategy within two years or earlier is a clear indicator of the business relevance of AI.

Those companies that at least plan on adopting an AI strategy have a clear understanding of how their organization will support this. Internal skills are key. In most of the cases, a dedicated task force is or will drive AI. Also, many firms foresee specific training for AI. These internal efforts are supported by external know-how from AI specialists and research institutes.

As the overall strategy for AI impacts the entire organization, it is a good sign that in many cases the company board is involved. And as AI is about implementing technology, it cannot become reality without the involvement of the IT department.

ALREADY IN PLACE
UNDER DEVELOPMENT
PLANNED WITHIN THE NEXT 2 YEARS
BEING DISCUSSED

11% **29%** **35%** **26%**
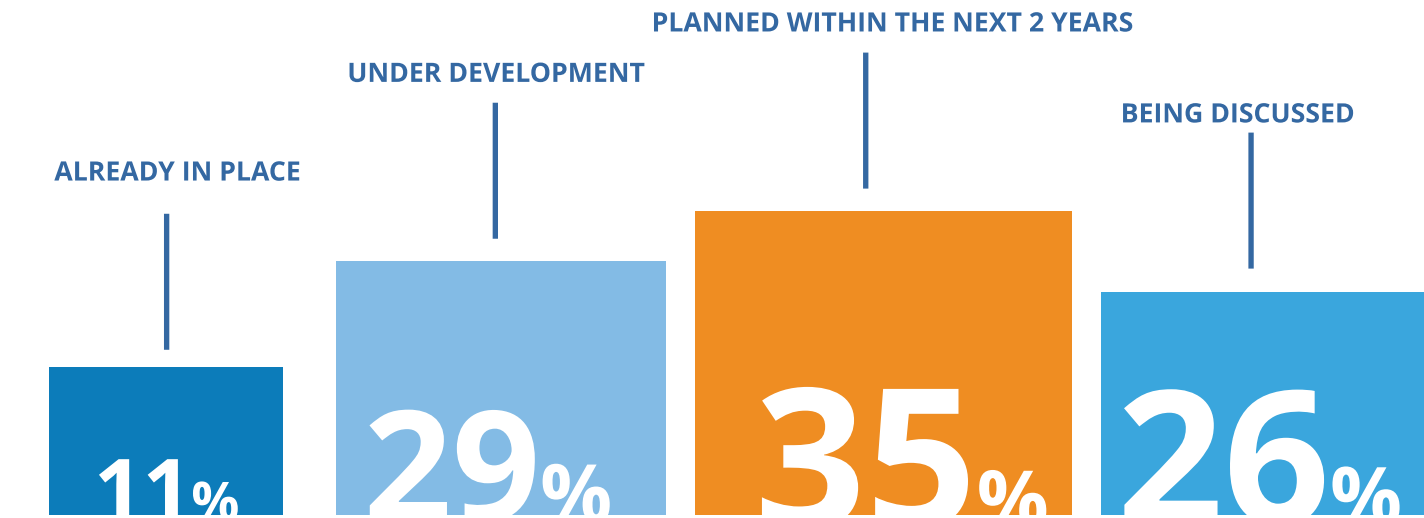
Fig. 3: Does your company have an overall strategy for AI in place, under development, is it planned within the next 2 years, at least being discussed, or not relevant at all?

Detailed view

View by countries: Nordic countries have been taking on a role as a forerunner with more companies from this geographical region already having an AI strategy in place or such a strategy planned for the next 2 years.

View by company size: A greater share (22%) of large companies already have an AI strategy in place, whereas smaller companies are in the process of planning or discussing such a strategy.

View by industry: A larger share (15%) of companies from the services, trade, and transport industry already have an AI strategy in place.

How will the AI strategy be supported?

Yes, applies   **No, does not apply**   **Not decided yet**

We will create/have created a new business function to drive/deploy AI across the country

| 74% | 5% | 20% |

We will start/have started to develop internal skills for AI based on specific trainings

| 65% | 6% | 29% |

We will enter/have entered a partnership with a company which is an AI specialist

| 20% | 34% | 45% |

We will start/have started to collaborate with universities and research institutions

| 17% | 41% | 42% |

Fig. 4: How is your company supporting/will support this strategy in terms of organization?
n = 240

Who is involved in the AI strategy?

Strongly involved   **Somewhat involved**   **Not involved**

Board Level

| 67% | 33% | 1% |

Lines of business

| 20% | 68% | 12% |

IT Department

| 69% | 29% | 2% |

Other Entities

| 17% | 83% | |

Fig. 5: Which of the following units are strongly, somewhat, or not involved when it comes to your AI strategy?
n = 240

Recommendations:

- For AI, internal skills are needed in many ways: identifying use cases and how they can be applied to improve business processes, educating the workforce in how to use AI technology in the context of business applications etc.

- We also think that AI will require some level of change management in terms of how people work. It is by far not just the technological part that matters. A dedicated AI team should consist of experts from various lines of business and experts in the subject in order to make sure that the technology can bring its advantages to bear.

- We also recommend looking for existing use cases and references for AI - external experts can be of help here.

- The different parties involved in defining the strategy should have a common understanding of what AI could do and what not. It should not be considered as yet another IT technology, but rather as an enabler of new innovative digital services. As the topic is still immature, there should be room for experimentation and failure.

Detailed view

View by countries: Nordic companies state they are planning or having started to develop internal skills for AI based on specific trainings. Companies from the ASG region, on the other hand, state they are planning or in the process of collaborating with universities and research institutes.

View by company size: Both small and large companies are planning on adopting a new business function to drive AI across their company. Also, there is a greater number of large companies which are planning on entering partnerships with AI specialists.

View by industry: Companies across the industries state that they have implemented a task force to drive AI topics across the company or are planning on developing AI skills internally. Interestingly, a greater number of companies from the services, trade, and transport sector are also focusing on gaining insights from outside their company through partnerships or collaborations with universities or research institutes.
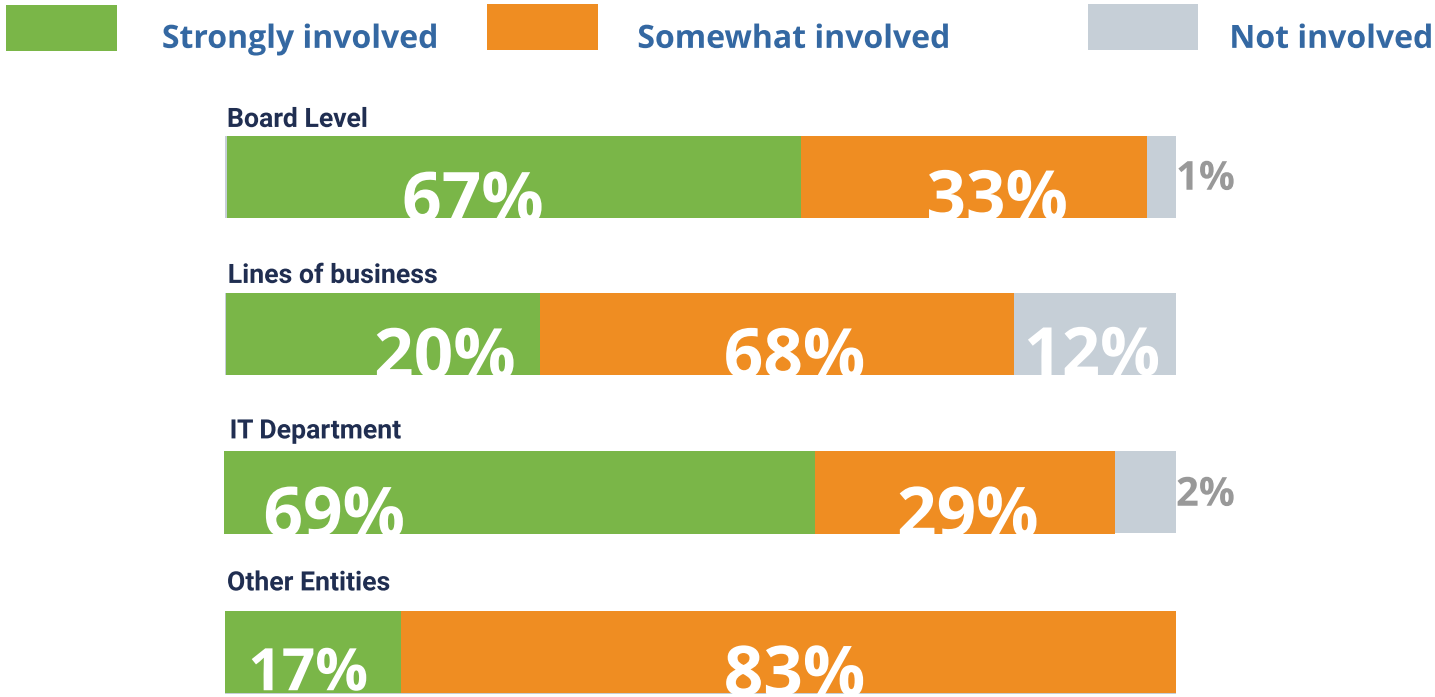
Detailed view

View by countries: Across countries, respondents stated that mostly IT departments and board members are strongly involved in their company's AI strategy.

View by company size: Regardless of company size, IT departments seem to be taking on the biggest role surrounding AI strategy. However, among larger companies, also the board level is involved in AI strategy.

View by industry: Also across industries, mostly IT departments and board members are involved in AI strategy.

Value of AI with respect to Business Applications

Business applications can be improved in many different ways with the help of AI. Automation and the reduction of user interactions are areas of high importance. Many applications that are in place today require a lot of interactions as user interfaces are not easy to deal with and workflows are often too complex. Machine learning, for instance, can "learn" what users do with applications and mimic their behavior. Therefore, processes can be automated without the need to manually input knowledge into a repository or knowledge management tool. This is how RPA-based applications (RPA = robotic process automation) self-improve over time with the help of AI.

These improvements clearly relate to the benefits companies expect from AI to reduce human errors. Also, companies hope that AI will speed up processes that are managed with business applications.

Topics relating to decision support such as the provision of recommendations as well as planning, forecasting, and alternative options seem important as well. Recommendations can be the next best offer for a specific customer, the optimal route in logistics, or the best-fitting supplier for procurement. In addition, AI offers more options for forecasting demands and supporting planning processes.

Improving business applications and the contribution of AI

Legend:
- 🟧 Very important
- 🟦 Important
- ⬜ Somewhat important
- 🟩 Highly valuable
- 🟩 Somewhat valuable

Automate workflows to minimize human interaction
| 50% | 44% | 6% | | 78% | 21% |

Reduce the amount of data entry and other manual steps
| 46% | 48% | 6% | | 71% | 29% |

Reduce the time for completing the business process
| 45% | 51% | 4% | | 73% | 28% |

Provide more and better recommendations for actions
| 44% | 50% | 6% | | 72% | 28% |

Automate transactional processes so that users only need to take care of exceptions
| 33% | 45% | 21% | | 50% | 50% |

Automate the crawling of knowledge bases and other DBs to answer queries
| 25% | 49% | 26% | | 33% | 67% |

Improve support for business forecasting and planning
| 21% | 51% | 28% | | 25% | 75% |

Improve decision support by providing forecasts, alternative options and consistent simulations
| 16% | 52% | 32% | | 31% | 68% |
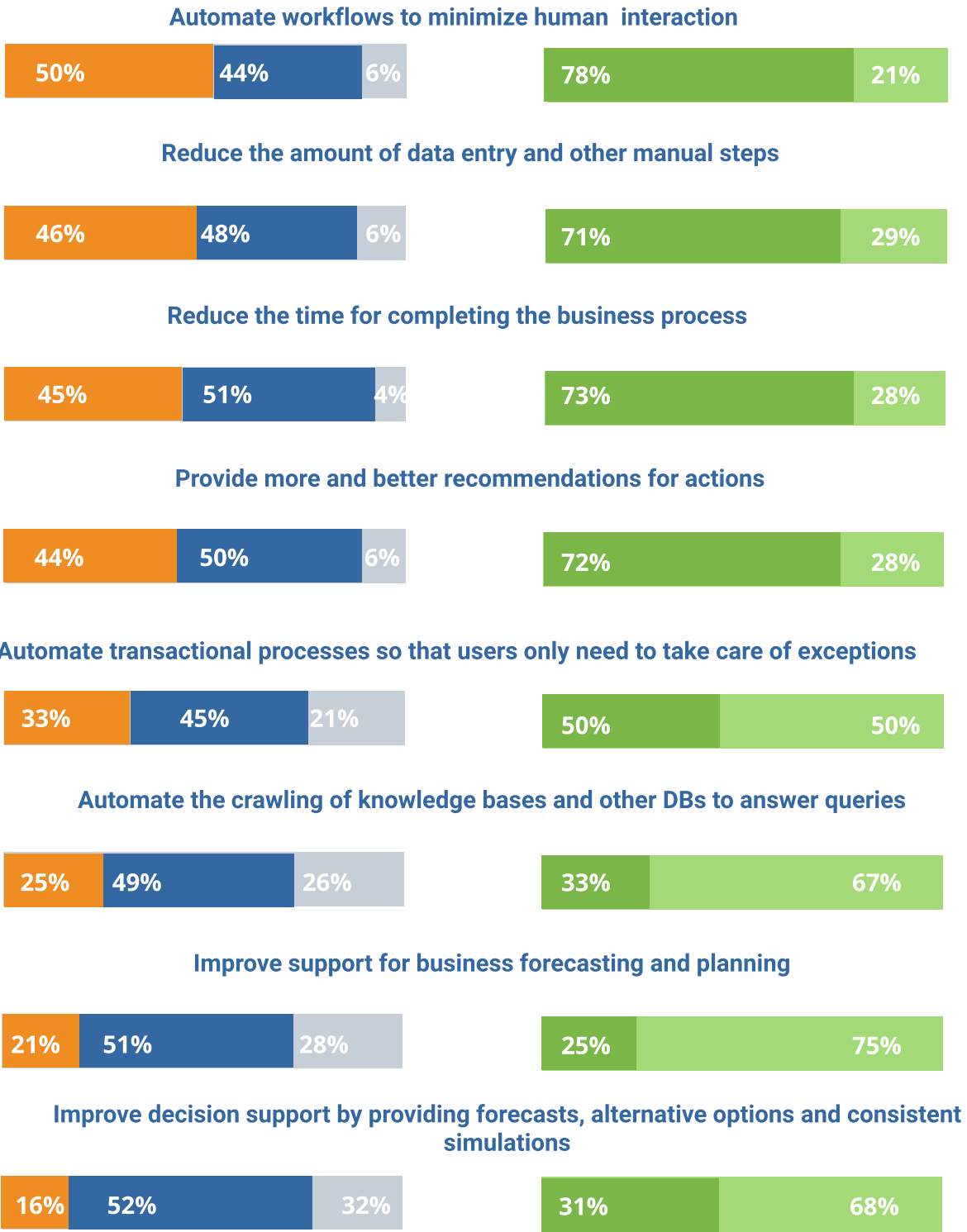
("Not important (at all)" not shown)

n = 240

("Not valuable (at all)" not shown)

n = 240

Detailed view

View by countries: For companies from the ASG region, improvements in automating transactional processes and decision-making processes through support of business forecasts is rated as important. French companies see factors such as providing better recommendations for actions and reduction of time for completing processes as important. Overall, more companies from Spain & Italy rate the various benefits emerging from AI as valuable for their business than companies from other countries.

View by company size: Whereas large companies see AI benefits particularly in areas surrounding improvements in business forecasting & planning and in providing decisional support through forecasting, smaller companies see AI benefits in receiving better recommendations for actions and in reduction of time for business processes as important. Smaller companies see the value of AI particularly in areas where technology can offer support in decision-making processes and planning by providing specific forecasts and simulations.

View by industry: For companies from the manufacturing industry, particularly greater automation of various processes is perceived as important. For companies from the services, trade, and transport industries, AI technology is seen as important in order to improve the decision-making process through forecasts. Unsurprisingly, for companies from the manufacturing industry, AI technology is seen as particularly valuable to minimize manual steps and to automate workflows otherwise deployed through human interaction.

Improving the user experience with AI

In recent years, the user experience of business applications has become one of the key selection criteria. Improvements in this field result in improved productivity of users. Users of business solutions will welcome it if the user interface rearranges itself automatically. One example is to offer additional information or program features depending on the context of a business process. Also, the interface may "learn" from the users' activities and optimize its appearance accordingly.

54% / **42%** / **4%**
The user interface should be more intuitive and rearranged according to individual users and contexts

Very important
Rather important
It depends

46% / **42%** / **11%**
For us, AI functions are essential for the evolution of our business applications

27% / **43%** / **30%**
The user interface should provide a conversational interface that supports written or spoken commands in natural language

21% / **41%** / **38%**
AI-enabled applications should provide real-time responses

Fig. 8: Regarding the user experience of your business applications and AI, which of the following improvements

are important for your company?

("Rather unimportant" and "very unimportant" not shown)   n = 240

View by countries: Particularly the fact that AI-enabled applications should provide real-time responses has been identified by companies from the UK and Nordic countries either as very or rather important.

View by company size: Especially large companies identified AI functions in business applications as very important. A fact which small companies do not rate as highly.

View by industry: Across industries, the fact that business application user interfaces should be more intuitive has been identified as very important by most respondents. Likewise, most respondents across industries believe AI functions to be essential for the evolution of business applications.

Recommendations:

- There are a lot of opportunities to improve the productivity of employees and to better support decision-making by augmenting existing business applications with AI.

- We recommend analyzing the processes and workflows that are managed with business applications from the perspective of end users. Repetitive tasks are potentially the ones that can be automated well. The same applies to workflows that require a lot of user interaction such as mouse clicks, selections etc.

- In our view, decision support with additional help from AI can provide much higher business benefits for companies. However, these are harder to achieve than "just" the automation of tasks and require more effort in terms of design, implementation, and configuration.

- It may be useful to start with AI projects that increase user productivity – the low-hanging fruits. Consider that besides the automation of workflows, this can be achieved with a more intuitive user environment. Improvements in the field of decision support with the help of AI may come later, when the data architecture is ready for it.

- Consider that a number of vendors of business applications have started to embed AI into their products. An evaluation of the respective roadmaps makes sense.

Value of AI with respect to Specific Processes
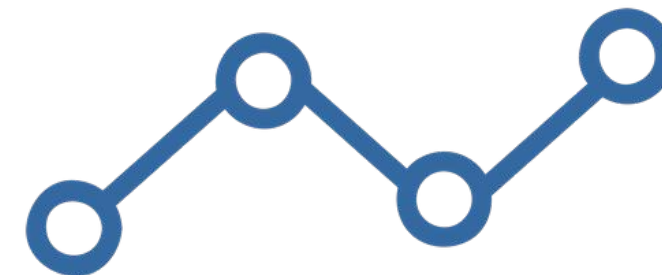
SALES MARKETING AND SERVICE

The challenges in marketing, sales and service are manifold. Many of them are about being able to interact in a more meaningful way with customers by better understanding their individual needs. More sophisticated data analysis is a key aspect for this. The respective data comes from sources such as CRM applications, databases as well as web user analysis and social media. In addition, new ways of interaction are emerging such as text or voice conversations via a virtual digital assistant or a chatbot as well as through the analysis of faces and gestures of humans, to automatically determine intents, gender, age, emotions etc.

Understanding customer-related data from various sources in order to personalize offers and to identify the next best action – such as the kind of content to push, the preferred media, and the preferred timing – are areas where AI can help and provide value.

Improving business applications and the contribution of AI

Better target customers in B2C marketing with more personalized offers of services, products, tariffs etc.

54%	40%

68%	28%

Text/speech-based customer interaction

52%	32%

44%	50%

Recommendations for the next best offer, action or combination products.

44%	54%

52%	48%

Understanding customers' reactions by analyzing their faces and gestures

44%	46%

70%	24%

Accelerate pipeline and lead generation in sales

40%	56%

34%	64%

Scoring of leads and opportunities to focus on most promising and profitable customers

38%	58%

40%	58%

Understand customers' attitudes by analyzing social media content and emails

30%	64%

74%	24%

Predict customer behavior, such as churn and forecast sales success

29%	68%

46%	54%

("No challenge" not shown)

("No value at all" not shown)
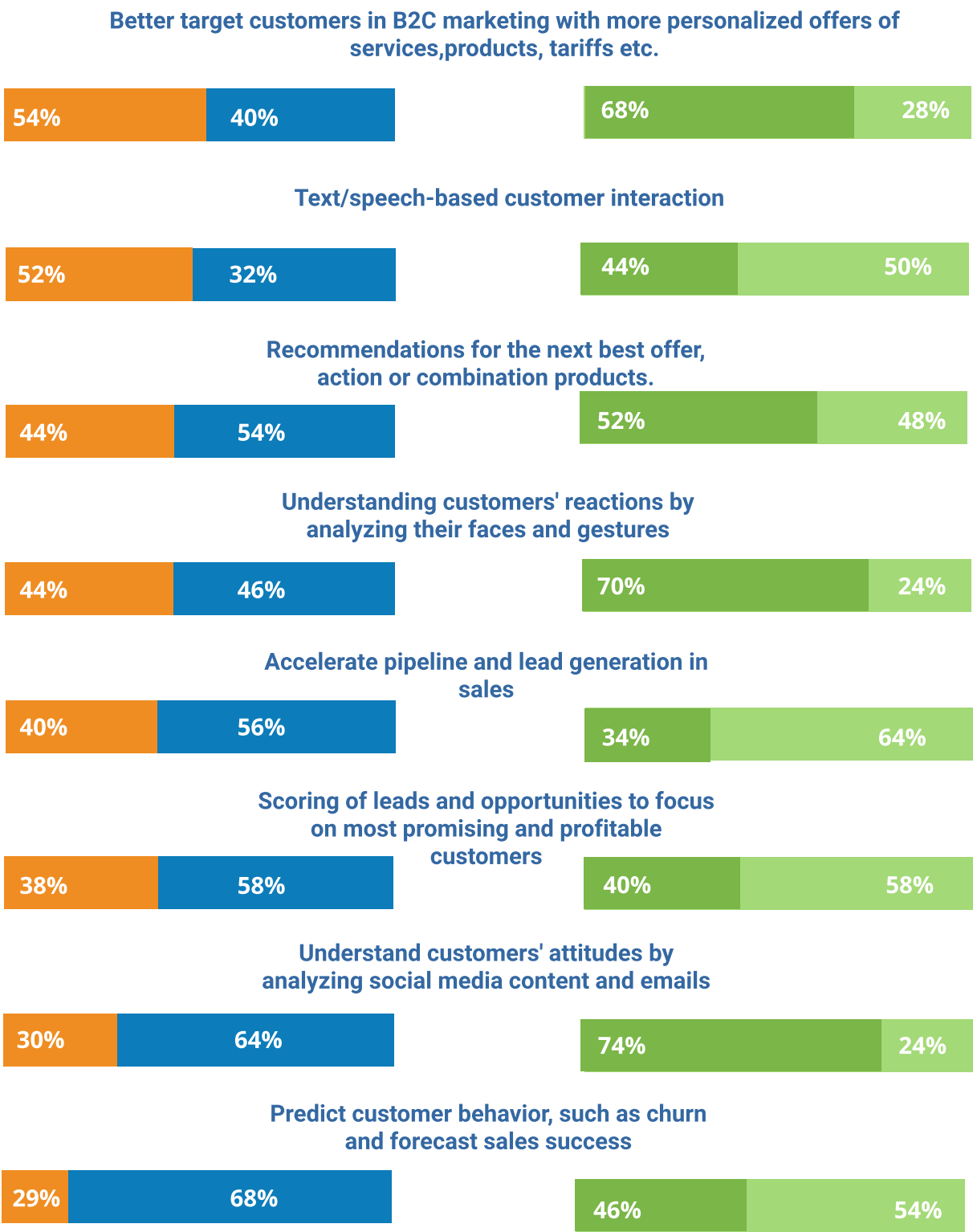
n = 240

n = 240

Fig. 9 : Which of the following aspects are a major, a minor, or no challenge for your company when it comes to business applications? (Head of Sales/Marketing/Customer Experience)

Fig. 10: How would you rate the value contribution of AI to dealing with these challenges for your company when it comes to business applications? (Head of Sales/Marketing/Customer Experience)

VIEW BY COUNTRIES

Across countries, challenges surrounding business applications vary significantly. Whereas understanding customers' reactions by analysis of faces and gestures is perceived as a major challenge in the UK, companies in Spain and Italy see it only as a minor challenge. Similar results can be found with regards to providing product recommendations. Here, companies from the ASG region see this topic as a major challenge, whereas French companies only see it as a minor challenge. Particularly companies from Nordic countries see great value in AI for better predicting customer behavior and for providing better personalization for B2C customers. Companies from the UK value AI's contribution to better understanding customer attitudes and companies from Italy & Spain see AI's greatest value in providing better product recommendations.

VIEW BY COMPANY SIZE

Depending on company size, perception of challenges with regard to business applications also varies greatly. Many more small companies see the prediction of customer behavior as a minor challenge than large companies. Likewise, many more large companies see the understanding of customer attitudes as a minor challenge compared to small companies. Smaller companies perceive the value contribution of AI to be the greatest when it comes to understanding customer attitudes and to better targeting customers through personalization or specific recommendations. Large companies see the greatest value of AI in being able to better understand customers' reactions through analysis of faces and gestures.

VIEW BY INDUSTRY

For companies from the manufacturing industries, prediction of customer behavior, understanding of customer attitudes, and lead generation in sales are all seen as minor challenges. For services, trade, and transport companies, product recommendations and scoring leads to focus on most profitable customers are seen as minor challenges. Across industries, companies see the greatest value contribution of AI in better understanding customer's attitudes and reactions. Furthermore, companies are hoping AI to be beneficial when it comes to targeting customers with better personalized offerings.

RECOMMENDATIONS

- Powerful data analysis is a key success factor in marketing and sales. We recommend that companies evaluate how AI can bring analytics to another level. The technology can process large amounts of data plus it can identify patterns and relationships between data sets.

- Personalization is a hot topic for sales and marketing executives. Consider if and how AI can help you to personalize your customer interactions with much higher granularity and with a higher level of automation.

- Business applications for customer relationship management, marketing automation, and e-commerce are increasingly equipped with built-in AI features. It is worth checking what is available off the shelf or will soon be available.

FINANCE AND ACCOUNTING

The finance & accounting department (F&A) is being forced to become more efficient by automating administrative tasks. Also, it has to be able to provide vital information about financial situations including liquidity. Fraud detection in financial transactions is very important to ensure the financial stability of companies.

Like no other department, F&A has to deal with mass data processing, which is a good starting point for automation and recommendations. Matching payments with invoices and bank reconciliation are examples for this.

F&A managers have high expectations that AI can help them to address their key challenges.

The contribution of AI to F&A processes

Major challenge ▮ (orange)
Minor challenge ▮ (blue)

Great value ▮ (dark green)
Minor value ▮ (light green)

Better detect and prevent fraud

| 78% | 22% | | 78% | 22% |

Automate accounts payable processing by matching payments with invoices

| 59% | 41% | | 67% | 33% |

Predict the financial situation, such as liquidity

| 59% | 41% | | 78% | 22% |

Automation of bank reconciliation

| 63% | 37% | | 67% | 33% |

Reporting and data crunching with a natural language query

| 41% | 56% | | 59% | 41% |

Automation of invoice management from entry to payment

| 30% | 70% | | 52% | 48% |
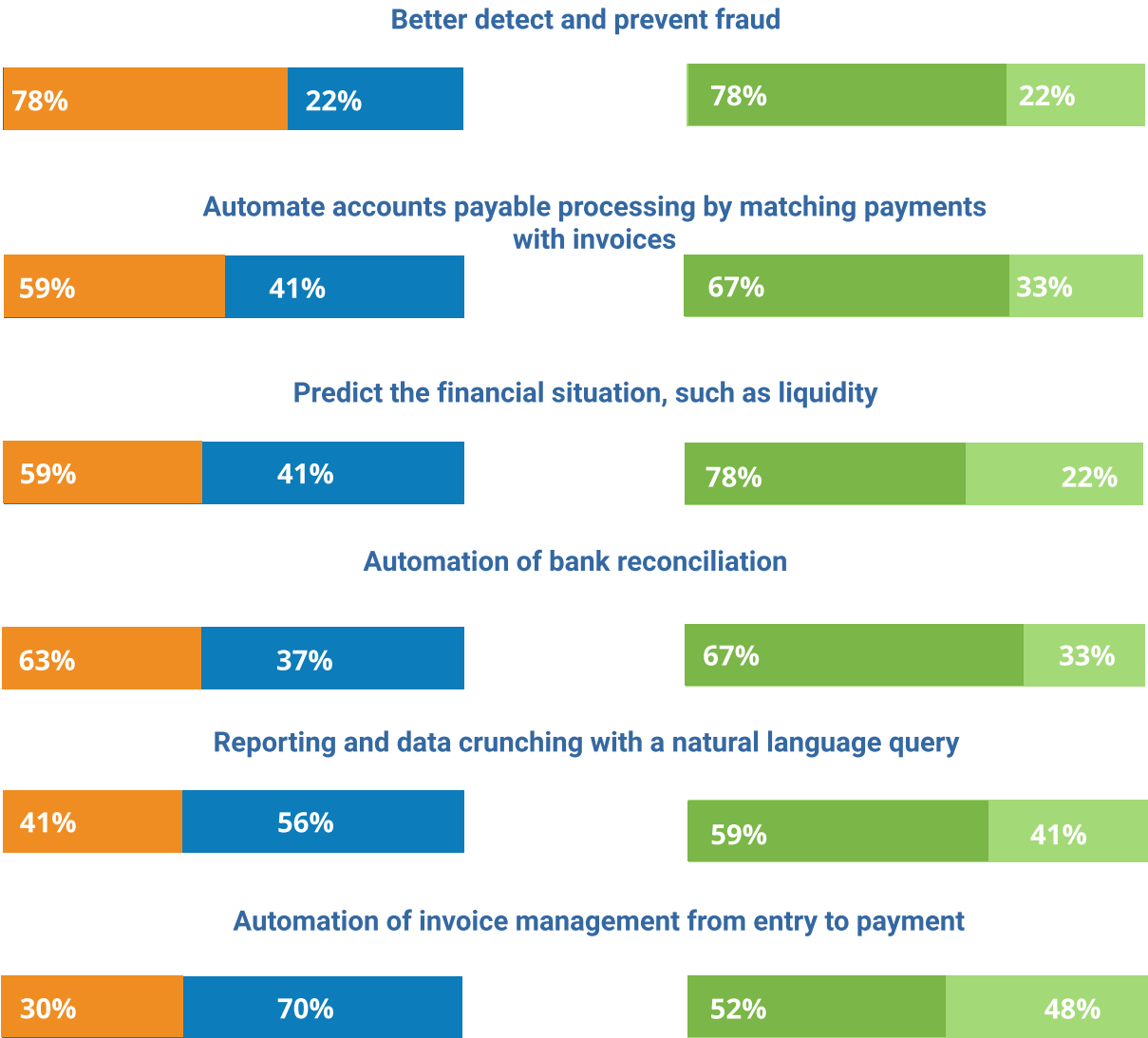
("No challenge" not shown)

n = 240

("No value at all" not shown)

n = 240

VIEW BY COUNTRIES

For companies in Spain & Italy, predicting the financial situation and greater automation in account processing are seen as major challenges. For companies from France or Nordic countries, particularly the detection and prevention of fraud have been identified as major challenges. For companies in France, the contribution of AI in predicting financial situations and automation of bank reconciliation produces the greatest value. At the same time, for companies in the UK, AI produces the greatest value contribution in automation of invoice management and reporting of queries.

VIEW BY COMPANY SIZE

Whereas for small companies better detection and prevention of fraud as well as automation of bank reconciliation pose the greatest challenges, for large companies automation for matching payments with invoices is producing the greatest challenge. For smaller companies, AI produces the greatest value in allowing for better detection and prevention of fraud as well as for data crunching by using natural language queries. For large companies AI produces the greatest value in predicting financial situations.

VIEW BY INDUSTRY

For companies from the manufacturing industry, automation of bank reconciliation and automation of payments have been identified as major challenges. At the same time, automation of invoice management has only been identified as producing a minor challenge. For companies from the services, trade, and transport industries AI produces the greatest value contribution in automation of invoice management as well as better detection and prevention of fraud.

RECOMMENDATIONS

- Fraud detection is an example par excellence for AI: identifying suspicious activities in business transactions, issuing warnings, or even preventing fraud. AI can also look at external information sources, such as Twitter or news feeds, to correlate the data. This topic should be part of your AI strategy.

- Automating the processing of invoices on the basis of optical character recognition and the matching of data in accounting systems is still an area where companies invest. AI provides additional features to allow an even higher level of automation and with this a further reduction of errors. We recommend evaluating such concepts. In addition, you may consider that many vendors of F&A solutions have started to embed AI functions into their products.

SUPPLY CHAIN MANAGEMENT

Supply chain management remains one of the most important topics for business innovation. Estimates claim that 65% of a company's products and services are derived from suppliers. Firms have been looking for ways to optimize SCM processes for quite some time in order to reduce the amount of goods in stock on the one hand and to eliminate out-of-stock situations on the other. Developing sourcing and procurement strategies based on the analysis of structured and unstructured data has become another key topic.

New challenges for SCM arise from omni-channel commerce as it requires different fulfillment and logistics requirements for the different online and offline channels. This requires an even more sophisticated demand planning and execution of supply chain activities.

SCM managers dream of automated processes for planning and fulfillment in the supply chain. The "chain" is often a complex network of suppliers. A major challenge within SCM is the collection and analysis of internal data, data from different suppliers as well as external data such as weather information, information about traffic etc. AI can deliver large benefits in terms of the analysis of data that can be used for planning.

Another important topic is the reaction to unexpected events relating to traffic conditions, unreliable suppliers, or the weather situation. Identifying or predicting possible bottlenecks and problems as well as the identification of possible solutions is an area where we believe AI will be able to provide benefits.

Delivery of goods in a shorter period calls for a higher level of automation inside of warehouses, for example with robots that move goods around autonomously and which pick items for an order.

AI in Supply Chain Management

Major challenge

Minor challenge

Great value

Minor value

Automation of supply chain planning and fulfillment

85%	15%

91%	9%

Robots for picking orders and moving them inside warehouses

79%	21%

70%	30%

Increase the profit by identifying the best procurement strategy

61%	39%

73%	27%

Forecasts based on analyzing internal sales data and external data on costumer behavior

24%	76%

48%	52%

Route optimization and delivery date forecast considering factors such as traffic conditions , weather forecasts etc..

18%	82%

33%	67%

("No challenge" not shown)

n = 240

("No value at all" not shown)

n = 240

Detailed view
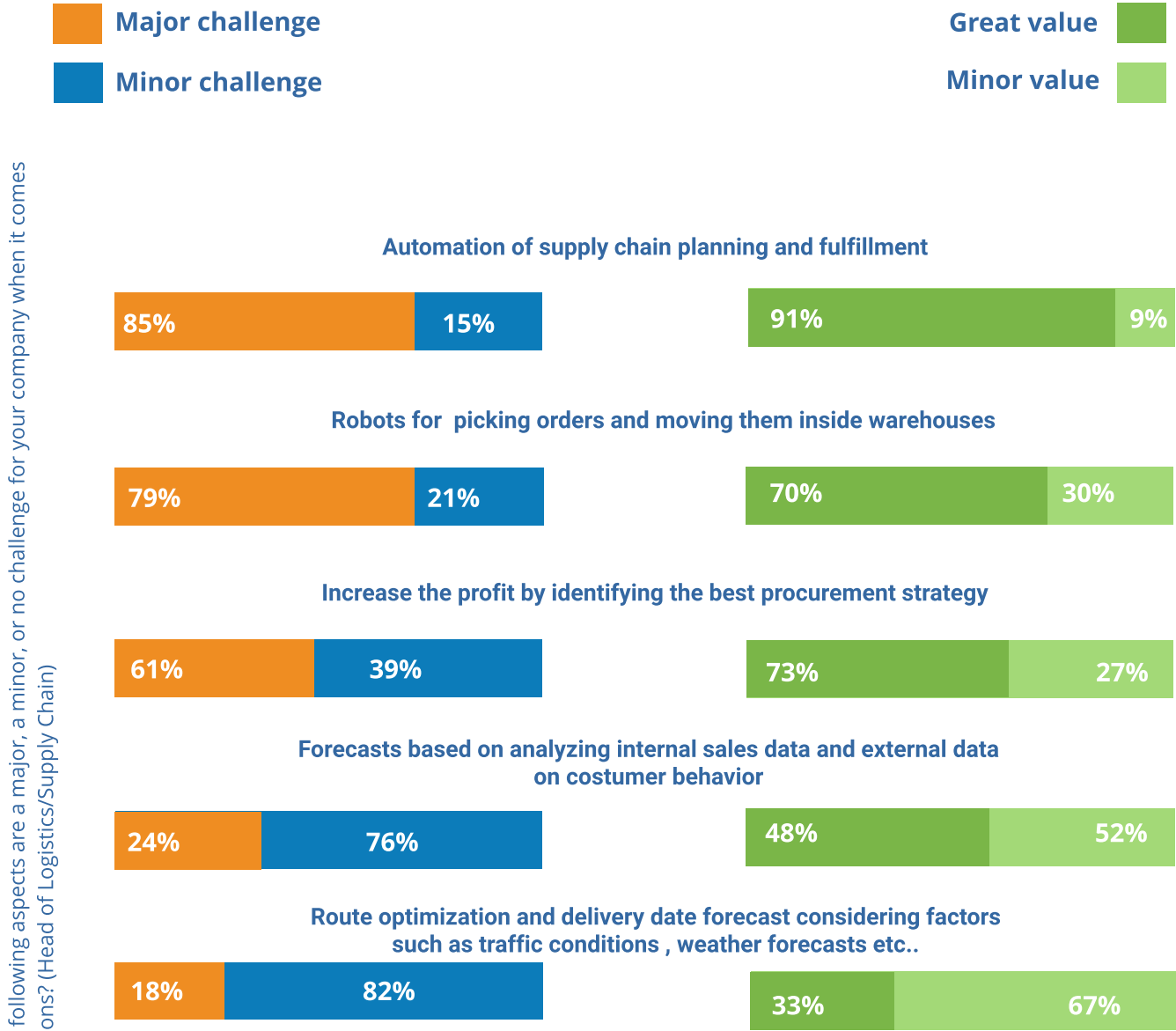
View by countries: Particularly companies from Spain & Italy state that automation of supply chain planning and fulfillment as well as identification of best procurement strategies pose the greatest challenges. The contribution of AI in the automation of supply chain planning and fulfillment is seen as producing great value particularly for companies in the ASG region and in Spain & Italy. The latter two also see great value in AI when it comes to identifying better procurement strategies.

View by company size: Smaller companies state that especially the automation of supply chain planning and fulfillment as well as the deployment of robots for picking orders in warehouses are posing major challenges. Both small- and large-sized companies see great value in AI in the automation of supply chain planning and fulfillment as well as for the optimization of procurement strategy. However, a significant difference can be found for the deployment of robotics for picking in warehouses. Especially small companies see greater value in AI here.

View by industry: Companies from the services, trade, and transport sector see challenges mostly deriving from the identification of optimal procurement strategies. Companies from both the manufacturing and services, trade, and transport industries believe that AI makes a considerable contribution to the automation of supply chain planning and fulfillment, the identification of optimal procurement strategies and finally, the application of robotics for picking orders in warehouses. The only significant difference applies to forecasts produced by customer behavior. Here, companies from the manufacturing sector see greater value than companies from the services, trade, and transport sector.

Recommendations:

- **Improvements in the SCM space has a positive impact for the entire organization. SCM processes are highly complex and differ from company to company. AI offers a lot of potential to augment and optimize existing SCM processes.**

- **Given the nature of SCM, AI projects will be to a large degree customer-specific. Do not expect to find the perfect off-the-shelf solution for your company. Nevertheless, evaluate new developments from ERP and SCM software vendors as well as AI specialists.**

- **Also, we expect that companies have to invest in the integration and preparation of data before AI can take effect. Therefore, take into account some data integration investments.**

IT

Protecting data, applications, and IT infrastructures has always been a challenge for the IT department. With the proliferation of web-based services, e-commerce, and mobile phones as well as the growing threats from cyber attacks and espionage, the situation is becoming even more challenging. AI can help to enhance security by analyzing large amounts of data and by detecting suspicious activities. Providers of IT security technology use AI to detect and prevent attacks from intruders or malware.

The IT organization has to assure a high availability and performance of both the IT infrastructure and the applications. At the same time, it has to respond to user requests and trouble tickets respectively. In order to reduce costs and to lower the workload of their internal teams, IT managers are looking for ways to automate processes for the operation and maintenance of software and hardware systems as well as for the helpdesk. AI can be used to automate tasks in IT operations that today are performed by humans.
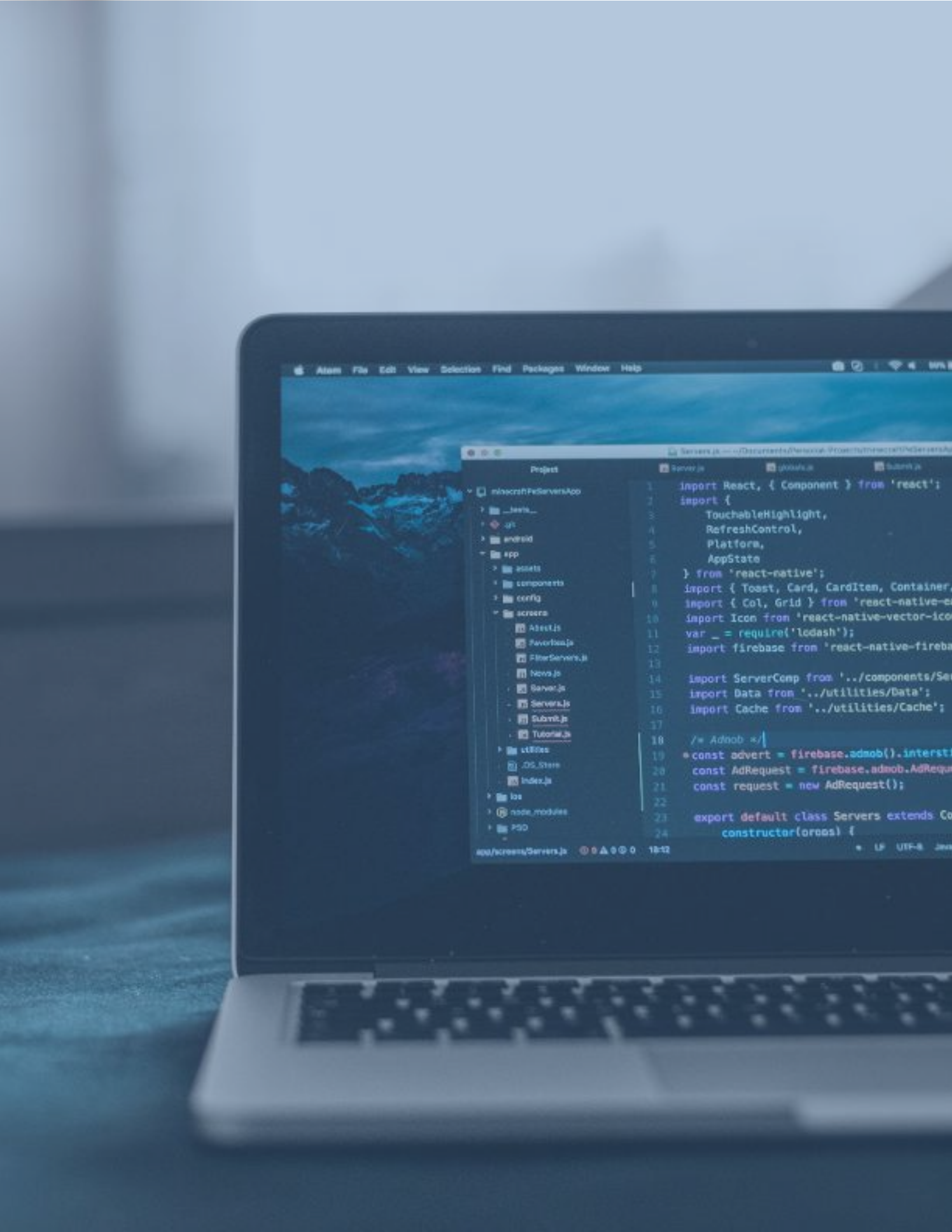
IT related positions

Major challenge ■ (orange)
Minor challenge ■ (blue)

Great value ■ (dark green)
Minor value ■ (light green)

Enhanced cyber security

86%	11%		83%	16%

Automated user support

58%	36%		77%	23%

Patch and upgrade management

36%	52%		57%	41%

Asset monitoring and predictive maintenance to improve overall service availability

60%	37%		75%	25%

Tuning and optimization of the application and its infrastructure

52%	48%		67%	33%

Problem-solving driven by log file analysis

10%	87%		25%	75%

Automated monitoring and prioritization of relevant issues

29%	65%		45%	55%

("No challenge" not shown)

n = 240

("No value at all" not shown)

n = 240

Fig. 15: Which of the following aspects are a major, a minor, or no challenge for your company when it comes to business applications? (IT-related positions)

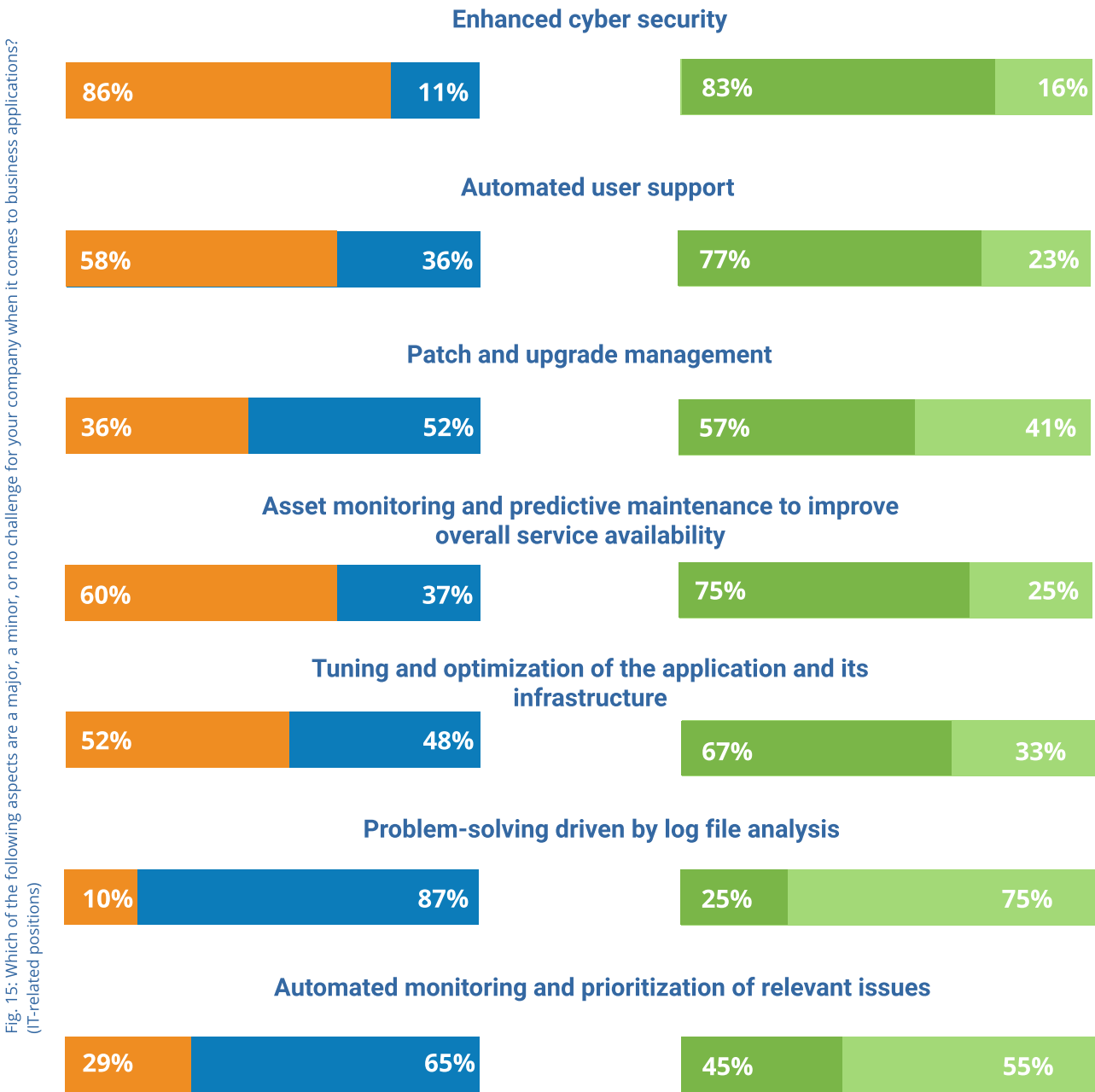Fig. 16: Which of the following aspects are a major, a minor, or no challenge for your company when it comes to business applications? (IT-related positions)

VIEW BY COUNTRIES

Contrary to most companies in other countries, those in France see automated monitoring and prioritization of relevant issues as a major challenge. Likewise, companies from Spain & Italy perceive automated user support or the optimization of applications and their infrastructure as particularly challenging compared to other countries in Europe. Most significantly, for companies from Nordic countries, patch and upgrade management as well as the optimization of applications and their infrastructure have been identified as two areas where AI is believed to add the greatest value. For Italian and Spanish companies, however, AI is believed to add the greatest value for cyber security and for asset monitoring to improve overall service availability.

Across company sizes, providing automated user support and the topic of cyber security have both been identified as two major challenges for companies. Automated user support, patch and upgrade management, cyber security, and asset monitoring to improve overall service availability are all topics which, no matter the company size, have been identified as areas in which AI is believed to add great additional value.

VIEW BY COMPANY SIZE

VIEW BY INDUSTRY

For IT departments both in manufacturing industries and in services, trade, and transport industries, automated user support, optimization of applications and their infrastructure, cyber security, and predictive maintenance to improve overall service availability have all been identified as major challenges for companies. Across industries, AI is believed to add great value when it comes to topics such as automated user support, cyber security, and asset monitoring to improve overall service availability. Problem-solving by log file analysis is one area in which companies of various industries see AI only adding minor value.

RECOMMENDATIONS

• There is no question about the relevance of cyber security and therefore your AI strategy definitely should cover this. However, do not expect miracles. We think that AI may help to augment existing security measures very well, but it is a part of an overall cyber security concept.

• Regarding automation, there is an increasing number of AI-enabled tools available for IT managers and we recommend looking at what already exists when it comes to starting an automation project for IT operations. For instance, you can find an increasing number of IT service management tools that leverage AI technology. Some of these solutions are able to resolve trouble tickets automatically or they allow end users to interact with a virtual helpdesk assistant via text or voice, for most basic requests such as retrieving a password or troubleshooting common issues. Some vendors speak about "self-driving" features that take over some of the tasks system administrators have to perform today.

• Moreover, IT teams can learn a lot by implementing these AI features for their own needs, improving their competency for next, business-led projects.

PRODUCTION

Challenges for the department that oversees production processes arise from the demand for more individual products and changing customer requirements. One outcome of this are smaller lot sizes – down to a lot size of one – instead of mass production. This calls for an increased flexibility and adaptability of manufacturing processes.

On-time production or delivery of ordered products requires a smooth operation on the shop floor. Predictive maintenance for machines that allow for scheduled and planned outages has become a popular use case for AI. Predictions are based on the analysis and use of algorithms on a machine's runtime data, among other things.

Quality assurance and earlier detection of defects in manufactured goods is important to save costs as well as to deliver on time. This can be done by analyzing sensor data, images, or videos. Machine learning is also used to better predict the number of units to produce, relative to both the demand and the usual percentage of non-quality, in order to reduce the cost of non-quality and overproduction.

AI in production

Detailed View

Major challenge

Minor challenge

Great value

Minor value

Enable predictive maintenance

| 80% | 15% | | 75% | 20% |

Increase the adaptability of manufacturing processes to new product/service lines

| 65% | 35% | | 70% | 30% |

Improve production efficiency through the automation of AI supported manufacturing

| 60% | 35% | | 60% | 35% |

Improve product/service quality overtime through process improvements based on predictions

| 50% | 50% | | 50% | 50% |

Increase product/service quality through predictions and defect detection

| 50% | 50% | | 60% | 40% |

Provide better after-sales support

| 50% | 45% | | 35% | 55% |

("No challenge" not shown)

n = 240

("No value at all" not shown)

n = 240
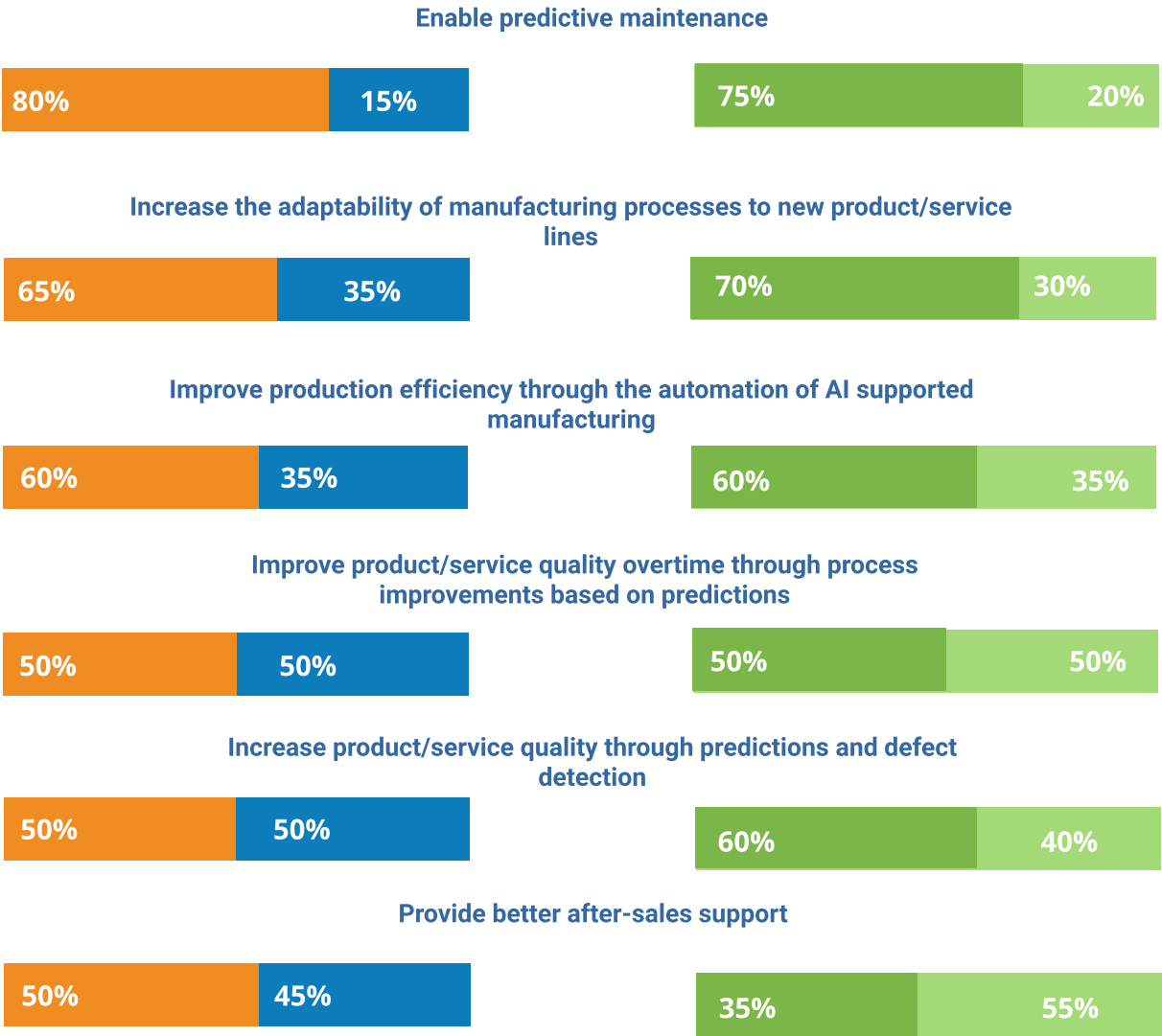
View by countries: For companies in France, particularly providing better after-sales support and improving product quality are two areas which have been identified as being major challenges. Companies in Nordic countries identified predictive maintenance and companies in Spain & Italy identified increasing the adaptability of manufacturing processes as major challenges. Where AI will be adding value is perceived very differently across countries. In Spain & Italy, for example, AI is believed to add great value in product/service quality and in increasing the adaptability of manufacturing processes. Companies in France and the UK, on the hand, believe AI will add the greatest value in after-sales support.

View by company size: Most significantly, large companies identified improvements in production efficiency through automation as a major challenge. For small companies, the most significant challenge lies in providing better after-sales support. For large companies, AI is providing great value particularly in areas such as increasing product/service quality through prediction and through process improvements. Smaller companies see the value of AI especially in improving production efficiency through greater automation.

View by industry: Companies from services, trade, and transport industries identified the provision of better after-sales support as a major challenge. Contrary to this, manufacturing companies see major challenges in predictive maintenance and increasing the adaptability of manufacturing processes. Companies from the manufacturing industry believe AI to add significant value particularly when it comes to the topic of predictive maintenance.

Recommendations:

- It makes sense to look into predictive maintenance today. For us, it is a proven use case for AI as it has been implemented in various locations. Software vendors have started to offer specific applications for this.

- In contrast to predictive maintenance, using AI to make production processes more adaptable to meet new requirements is much less matured. However, we expect massive innovation in that area in the near future from both software vendors as well as the makers of machine tools and production plants, for example.

- In production, increased automation has been a topic for decades. Evaluate how AI can take much better advantage of previously unused product-related data to automate workflows and autonomously manage operations in production.

- AI can also detect defaults by inspecting a product line much faster and more accurately than any human could.

Obstacles for the adoption of AI with respect to Business Applications

Of course, there are a number of obstacles to be taken into account. One factor that is publicly discussed in connection to AI – the loss of jobs – is not seen as the major problem. Neither is a lack of trust in using AI to manage business processes a major issue.

Only a few respondents find it difficult to identify a compelling use case for AI in the context of business applications. This is a clear sign that the managers we interviewed are convinced about the benefits.

The main obstacle – legal and compliance-related restrictions – have little to do with technology. Companies fear that if AI technology is involved in the management of business processes, this may cause results that are not compliant. This can be the case with workflows that are automated with the help of AI. Who is responsible in the case of an error and what about traceability and auditability? To address such concerns, vendors are working on AI that can explain how it came to its decision or recommendation, instead of acting like a black box.

An obstacle that is hard to address is the fact that many companies think that neither the internal organization nor their firm's culture is AI-ready. However, this obstacle will eventually diminish over time, and partners such as system integrators have a great role to play here, by accompanying the change and explaining how AI will ease the work of the employees.

Major obstacle   **Minor obstacle**

Legal and compliance - related restrictions
82%   **18%**

Our software provider is slow to implement AI within it's solutions
61%   **39%**

Due to our internal processes and culture our organization is not ready for AI
52%   **44%**

Our business applications cannot be integrated technically with AI
37%   **61%**

We lack the availability and quality of required data
27%   **72%**

It is difficult to identify a compelling business case
26%   **73%**

Lack of internal skills and know-how
20%   **79%**

AI solution offerings are unsuitable or poorly aligned to our use cases
20%   **64%**

Trade unions and work councils are opposed to AI
18%   **77%**

We don't trust the usage od AI in our business context
17%   **80%**
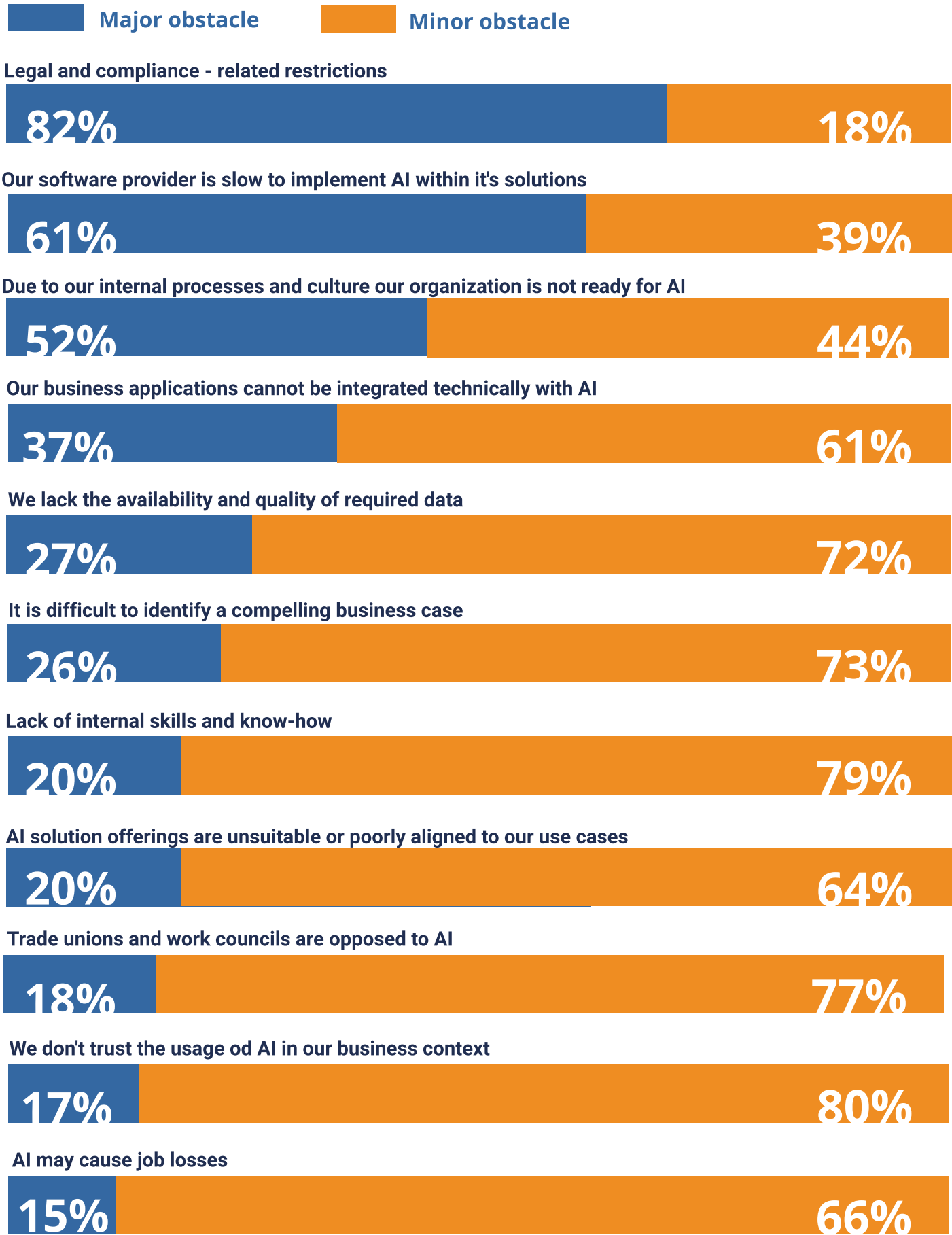
AI may cause job losses
15%   **66%**

Fig. 19: Which of the following is a major, a minor, or no obstacle to the adoption of AI technologies in your company with respect to business applications?

("No obstacle" not shown)   n = 240

Detailed view

View by countries: Whereas most companies across countries rated adopting compelling business cases from AI as a minor obstacle, companies in France see this fact as significantly challenging. The lack of internal skills and know-how to handle AI has been rated by most companies to pose only a minor obstacle with companies from Nordic countries especially standing out.

View by company size: Particularly small companies identified various factors which prevent – or slow down – the adoption of AI. For instance, companies identified that their business applications are unable to adapt to AI, that internal processes prevent adoption of AI and, most significantly, that software providers are too slow in implementing AI in their solutions.

View by industry: Across industries, companies see legal and compliance-related restrictions as the most significant obstacle in adopting AI.

Recommendations:

- Consider all these obstacles even if they are not seen as major obstacles. Since only a few of the companies surveyed have experience with AI so far, problems may occur once the solutions are in place.

- It may be a challenge to solve technical issues such as lack of AI support from software providers. However, we believe that there will be more and more AI-enabled business software and that existing applications can be enhanced with AI technology from third-party providers.

- The AI strategy should address all legal and compliance topics as well as the measures to transform existing processes. Consider that the change to how people work and collaborate is much harder than transforming technology.

- If the internal processes and culture are not ready for AI, it does not make a lot of sense to start a broader rollout. You may start with small use cases in areas where positive results can be demonstrated easily. An important part of the readiness for AI is the common understanding inside an organization what exactly it is, what it is good for, and what it means for the respective company.

Planned investments in AI and external support

AI Initiatives

Most of the executives we surveyed want to integrate AI into existing business applications in the near future or have done that already. They will evaluate tools and technologies. Only a few companies are already using them.

"**71%** of the companies plan to integrate AI into their existing applications or have already done this."
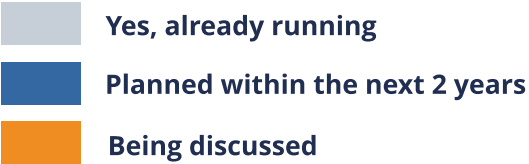
Monitoring of the AI tools & technologies market

| 40% | 30% | 30% |

Integration of AI tools & technologies into existing business applications

| 21% | 50% | 30% |

Evaluation and testing of AI tools & technologies

| 15% | 55% | 30% |

Usage of AI tools and technologies

| 13% | 54% | 33% |

Fig. 20: Which of the following AI initiatives are already running, planned within the next 2 years, being discussed, or not relevant?

("Not relevant " not shown) n = 240

VIEW BY COUNTRIES

What stands out is that particularly Nordic companies have been making advances in AI. Indeed, most respondents are monitoring the AI tools & technologies market carefully and are planning on testing or using AI tools and technologies within the next 2 years.

VIEW BY COMPANY SIZE

Similar results can be found across company sizes. Although most companies are monitoring the AI tools & technologies market, investments in testing or adopting such technologies are planned for most companies within the next 2 years.

VIEW BY INDUSTRY

Across industries, most companies are monitoring the AI tools and technologies market carefully, although most companies are only planning on testing or adopting AI within the next 2 years.

RECOMMENDATIONS

- It makes sense to monitor the market as it is very volatile with many start-ups entering the market (and many being rapidly acquired by big fishes). Also, software vendors continue to embed AI technology. Companies should check which features are available out of the box.

- We also expect that more and more AI tools will become available for specific use cases in areas such as marketing or SCM, which will allow for a fast deployment.

Areas of investments

AI Initiatives

According to the survey, almost every second company have invested in an application that contains AI features or a tool to augment their business solutions. So, in many cases, the technology is already in place. However, the number of firms that have invested in training on how to use these tools in the context of business applications is much smaller.

48% AI technology to augment our business applications

47% Business applications that provide AI features

32% Training our internal staff

25% Process and strategy consulting

24% Programming

18% Hiring of AI experts

Fig. 21: In which of the following areas have you invested already?

("Not invested" not shown)   n = 240

There are a lot of investments planned in all areas. Many will invest in AI technology and applications in the short term (within the next 12 months). In the mid-term, investments for process and strategy consulting, systems integration, training, and the recruiting of AI experts are planned.

Yes, Investments planned within the next 12 months

Yes, Investments planned within the next 24 months

Yes, Investments planned within the next 4 years

Business applications that provide AI features

| 56% | 30% | 14% |

AI technology to augment our business applications

| 55% | 30% | 15% |

Training of our internal staff

| 40% | 46% | 15% |

Systems integration including programming

| 34% | 51% | 15% |

Hiring of AI experts

| 28% | 58% | 12% |

Process and strategy consulting
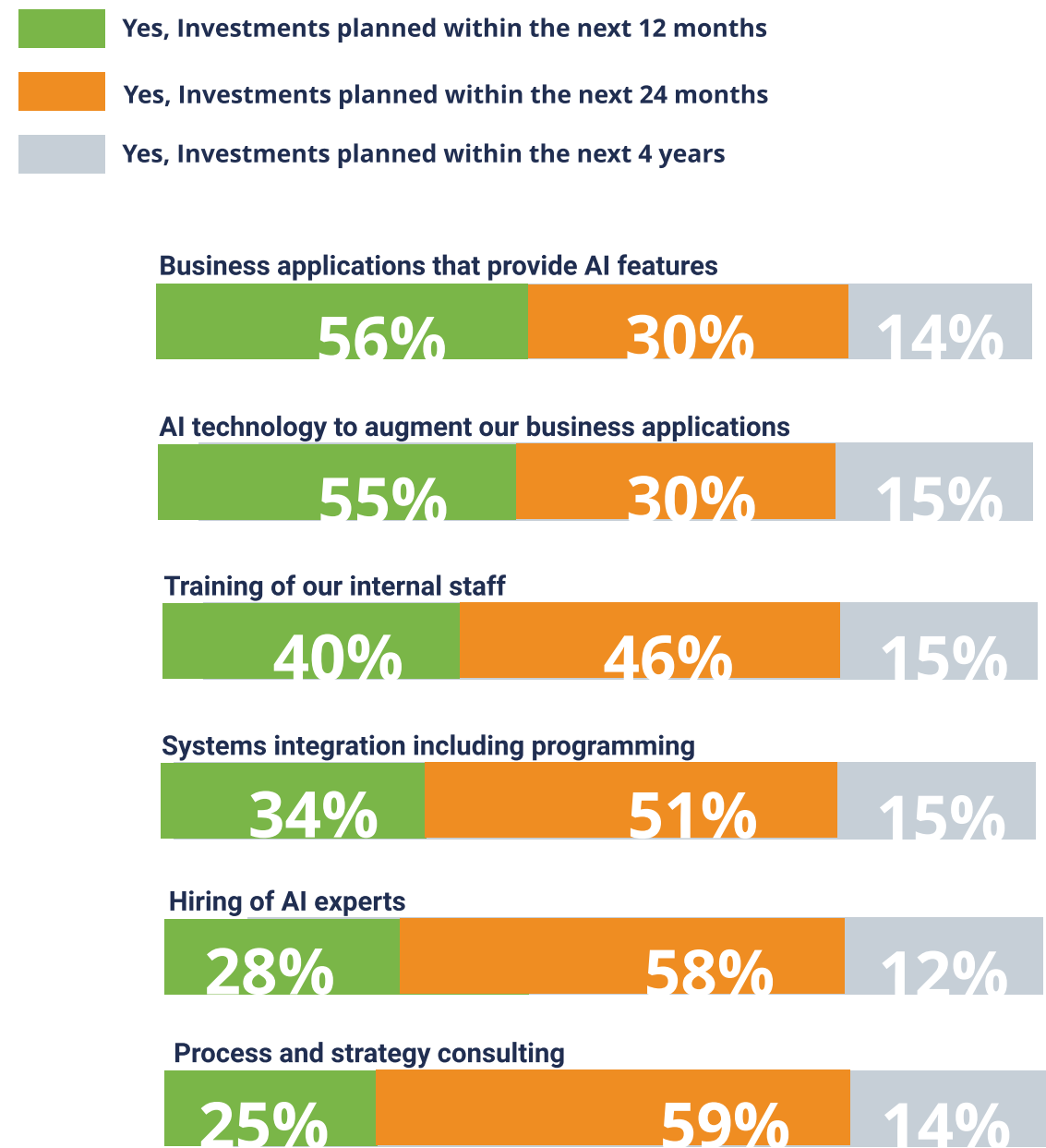
| 25% | 59% | 14% |

Fig. 22: ... And are further investments planned within the next 12 or 24 months or within the next 4 years?

("No investments at all" not shown)   n = 240

Detailed view

View by countries: Most interestingly, whereas companies from Nordic countries have already invested in business applications that provide AI and in AI technology to augment their business applications, Spanish or Italian companies stated opposite results in that their advances in AI have not progressed as much. Unsurprisingly, companies from Nordic countries are planning investments in AI sooner than companies from other European countries. Only respondents in France stated that investments in training internal staff are planned within the next 2 years.

View by company size: Company size correlates directly with advancements in AI. Large companies are more likely to have already made investments in AI. Again, larger companies are making more advancements in AI. Indeed, most respondents stated that they are planning on investing in business applications which provide AI features or AI technology to augment their business applications within the next 12 months. Furthermore, a large number of respondents stated that they are planning on making investments in system integration and training of internal staff.

View by industry: Even though rather limited, mostly companies from the services, trade, and transport industries stated that they have already made investments in AI technologies. However, so far, the greatest advancements have either been in applications which provide AI features or in training internal staff on AI. Across industries, most companies are planning to invest in business applications that provide AI features or AI technology to augment their business applications within the next 12 months.

Recommendations:

- Consider investments in different areas, not just technology. We believe that training is key not just to making sure that AI features are used properly but also to making internal staff understand the possible benefits of AI in the context of business applications.

- The more you want to transform existing processes with AI-enabled business applications (i.e., doing more than just deploying out-of-the-box features of an application), the more you should evaluate if and how external providers of process and strategy consulting can support you.

- Expect that the amount of integration work to augment existing applications with AI is highly dependent on their technology foundation. Integration capabilities and interfaces, adaptability, and extensibility are important topics to consider.

Preferred suppliers of AI technology

For many companies, the provider of choice is a vendor of cloud-based applications that offers solutions with embedded AI or a maker of an AI tool, whose product can be integrated into business applications. Only a few respondents think that they will get what they want with regards to AI from on-premises software.

A very large number of firms prefer a systems integrator with competencies to augment existing business applications.

92% will choose a cloud-based application vendor as their preferred provider of AI technology

A provider of cloud-based applications

92%

A systems integrator with AI competencies

85%

A specialist for AI tools, such as start-ups

70%

A provider of on premises business applications

28%

Fig. 23: Who will be your preferred supplier of AI technology with respect to your business applications?

Detailed view

View by countries: Across all countries, respondents stated that their preferred supplier of AI technology would be a provider of cloud-based applications.

View by company size: Most respondents of either small or large companies prefer adoption of AI to be in the form of cloud-based applications. Small companies, however, would also be willing to opt for a systems integrator with AI competencies.

View by industry: Across industries, most respondents wish for a provider of cloud-based applications for the adoption of AI. Even though differences are minimal, particularly the manufacturing sector is seeking such solutions.

Recommendations:

- In PAC's view, most of the AI innovation in the context of business applications is happening in the area of cloud-based applications. They provide a modern software architecture that makes it much easier to embed AI technology if compared with legacy applications.

- Consider that existing applications (on-premises or cloud-based solutions) can be augmented with AI technology either from the same vendor (some vendors offer a cloud platform that contains AI features) or from third-party AI specialists.

- If you evaluate an AI-enabled application, check if and how these features can be adapted. Out-of-the-box features are important, but they may no longer be suitable in the future if you have more advanced requirements.

- The criteria for the provider of choice highly depend on the AI use cases. Consider for which lines of business you want to provide AI-augmented business processes.

Required competencies of business application providers

Besides the technological competencies of implementing and integrating AI, the providers of applications must be able to provide use cases that are applicable and not just theory. The provider must also be able to demonstrate the innovation potential of AI. Of course, the respondents from the different departments such as marketing and finance expect domain-specific use cases and innovation, respectively.

Must have

Nice to have

Ability to implement, integrate and train AI technology

| 68% | 32% |

Ability to provide applicable AI use cases for our business processes

| 58% | 41% |

Ability to demonstrate the innovative potential of AI to IT and business executives

| 46% | 53% |

Ability to explore with our teams whether and how we can use AI

| 42% | 58% |

Provider is part of an AI ecosystem of different technology companies and research institutions

| 20% | 78% |

Ability to foster the adoption and consumption of AI among the workforce

| 19% | 79% |

Provider is willing to use open source or client-specific AI technology to avoid lock-in
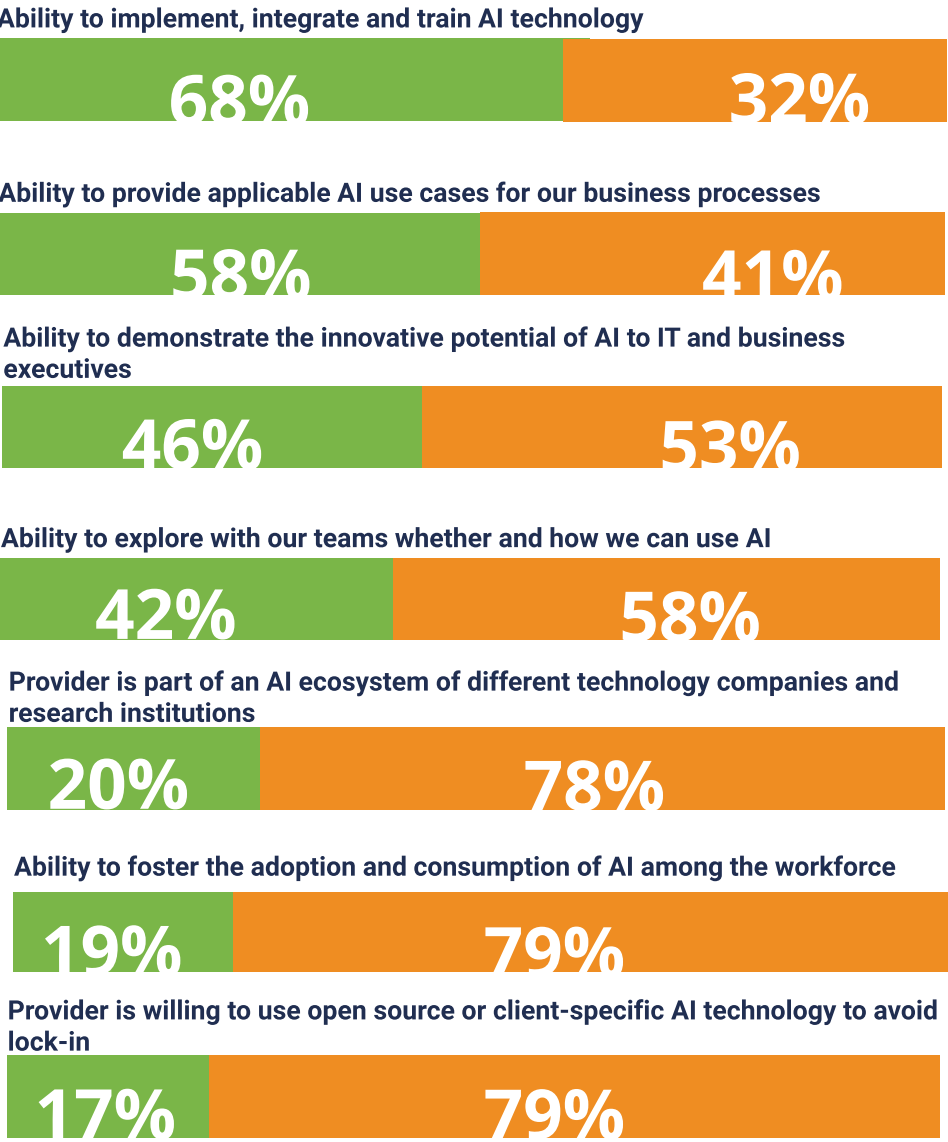
| 17% | 79% |

Fig. 24: With respect to AI: Are the following aspects a must-have, nice to have, or not relevant when it comes to the selection of a business application provider?

("Not relevant" not shown)   n = 240

Detailed view

View by countries: Across countries, most respondents stated that the ability to implement, integrate, and train AI technology is the most significant must-have when it comes to selecting a business application provider.

View by company size: Also across company sizes, respondents see the ability to implement, integrate, and train AI technology as the most important must-have when it comes to selecting a business application provider. What stands out is that particularly small companies see the ability to explore with their teams whether and how AI can be used as a relevant aspect when it comes to selecting a business application provider.

View by industry: Similarly, the ability to implement, integrate, and train AI technology is also rated across industries as the most significant must-have when it comes to selecting a business application provider. Even though the difference is very small, companies from the manufacturing sector perceive this aspect as even more important.

Recommendations:

- Especially when selecting a business application that is going to be used across the organization – an ERP system for instance – you should evaluate the available AI use cases the solution can provide for the different departments.

- When selecting a provider of business application software, consider that you might also need internal and external experts to implement and integrate the AI features.

CONCLUSIONS

✓ For most of the European companies we surveyed, AI is relevant. For many managers, AI provides a basis to improve and automate business processes. All in all, the larger companies are more convinced about the strategic relevance and the benefits of AI.

✓ There are many different opportunities for companies to innovate their business processes by augmenting their business applications with AI. This includes increasing the level of automation and reducing human interaction. However, it also has the potential to predict business outcomes, improve customer lifecycle management, and prevent fraud.

✓ As many different departments of a company can benefit from AI-enabled applications, a company-wide AI strategy is almost mandatory. The good news is that all the managers we spoke to do not dispute the relevance of such a strategy. As such, AI may be part of a broader discussion on digital transformation strategy.

✓ AI can provide great value where masses of data need to be analyzed in order to identify patterns to detect fraud or cyber attacks and to better understand what customers want. AI can have a large business impact if it can help to automate complex processes that are essential for the success of a company. The best example is the automation of supply chain planning and fulfillment.

✓ Overall, European companies see a lot of potential to innovate their processes with new, AI-enabled applications or with AI tools that augment existing solutions. They are willing to invest in technology, training, consulting, and integration. The main barrier for respective initiatives is not a lack of ideas regarding what to do with AI in the context of business applications, but rather legal and compliance issues as well as the internal culture.

PAC'S
OPINION

In PAC's view, AI is a hot topic in the IT industry today and the expectations of what it can provide are huge. While some companies will develop new and innovative services on the basis of AI, the vast majority will use it to address challenges regarding operational excellence, the innovation of customer experience, and the automation of core processes. For this, AI needs to be consumed as easily as possible, e.g. by embedding it into software. This is why we think that the combination of business applications and AI is so important. However, it will not stop there. AI will be fundamental for the various use cases of the Internet of Things.

We regard AI as one of the key drivers for the innovation of software, be it for digital workplaces, the Internet of Things, core applications, or solutions for digital customer experience.

Innovation will come from the automation of processes, improved user interfaces (including voice and gestures), the analysis of large data sets, and more flexibility through AI-enabled business process management. That said, the challenge for many companies will be how they can innovate existing legacy applications with the help of AI. The good news is that all the companies we talked to say that once employees have learnt how to deal with AI-enabled business applications, they enjoy working with them and ask for more.
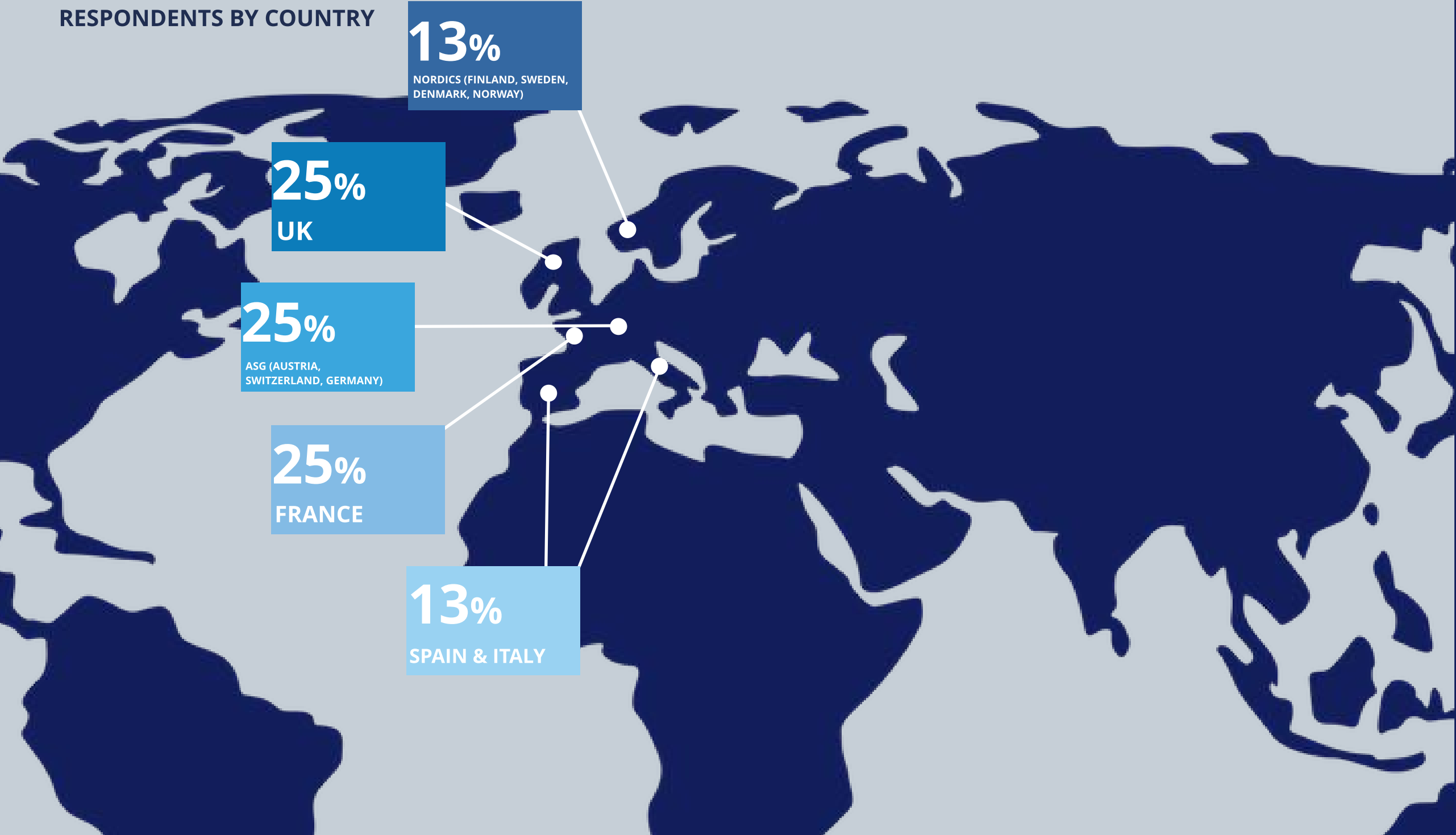
METHODOLOGY

This study is based on interviews with senior business and IT decision-makers with responsibility for AI strategies at 240 medium and large companies from the UK, France, Austria, Germany, Switzerland, the Nordics (Finland, Sweden, Denmark, and Norway), Spain, and Italy. The study was completed during the first quarter of 2018. Here is a more detailed breakdown of the participants in the study:
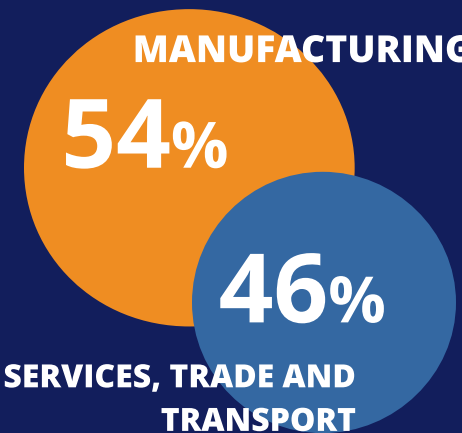
RESPONDENTS BY COUNTRY

13%
NORDICS (FINLAND, SWEDEN, DENMARK, NORWAY)

25%
UK

25%
ASG (AUSTRIA, SWITZERLAND, GERMANY)

25%
FRANCE

13%
SPAIN & ITALY

RESPONDENTS BY WORKFORCE

50%
1000 - 2499 EMPLOYEES

50%
2500 EMPLOYEES OR MORE

RESPONDENTS BY INDUSTRY

MANUFACTURING
54%

46%
SERVICES, TRADE AND TRANSPORT

RESPONDENTS BY POSITION

IT Director/Head of IT or Deputy
24%

CIO
8%

Head of Enterprise Applications
7%

Chief Data Officer
6%

Head of Sales/ Marketing/Customer Service/Experience or similar position
21%

Head of Logistics /Supply Chain or similar position
14%

Head of Finance & Accounting or similar position
11%

Head of Production /Manufacturing /Operations or similar position
8%

PREMIUM
SPONSOR

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Founded in 1976, Pierre Audoin Consultants (PAC) is part of CXP Group, the leading independent European research and consulting firm for the software, IT services and digital transformation industry.

CXP Group offers its customers comprehensive support services for the evaluation, selection and optimisation of their software solutions and for the evaluation and selection of IT services providers, and accompanies them in optimising their sourcing and investment strategies. As such, CXP Group supports ICT decision makers in their digital transformation journey.

Further, CXP Group assists software and IT services providers in optimising their strategies and go-to-market approaches with quantitative and qualitative analyses as well as consulting services. Public organisations and institutions equally base the development of their IT policies on our reports.

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