



A CXP GROUP COMPANY

**EXECUTIVE
SUMMARY**

WHAT AI CAN BRING TO BUSINESS APPLICATIONS

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PREFACE



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So much has been written about AI at an abstract level recently that it's good to be able to talk about what's really happening. Who is doing what, where are they doing it and why? That's what this PAC survey and report gives us and why Fujitsu has enthusiastically supported the initiative.

It looks as if AI adoption is being driven by people like you and me, who can see unambiguous benefits on offer, and are driving initiatives to bring AI technologies and tools into business applications. This is not just a case of IT departments trying out the latest new thing - the understanding of what AI can contribute goes right across functional departments, including sales and marketing, finance, production and supply chain management. With AI already in use at approximately half of all the companies surveyed and that number set to rise to 70% within two years, this is clearly a highly significant trend.

But there is something missing. The fact that only 25% of the companies interviewed see AI as strategically important and just 11% have an AI strategy in place today - despite the involvement of board-level executives in two-thirds of the companies surveyed - suggests that the big picture is being submerged in a drive to deliver important but potentially limited optimization benefits.

There is a risk that the lack of a strategic approach to AI - which includes dealing with the internal cultural and process bottlenecks identified as an obstacle to AI adoption raised by over half the respondents - means that companies will miss out on opportunities to deploy game-changing apps which radically improve the customer experience. These are the strategic advantages on offer from AI and which will drive new, potentially disruptive business opportunities.

Fujitsu believes that now is the time for senior management to take ownership of AI strategy, to look into the longer term and to reach out for the high-level gains that will differentiate your organization in the future.

WHAT AI CAN BRING TO BUSINESS APPLICATIONS

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 .

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 a 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%**).

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.

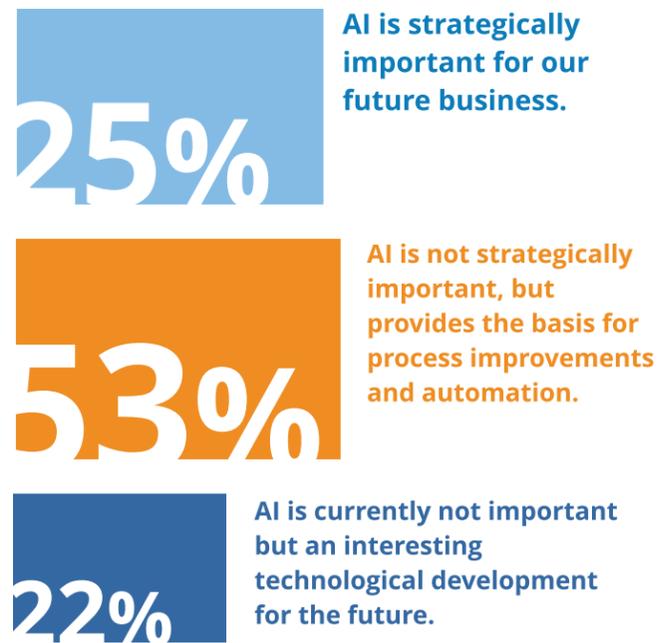


Fig. 1: Which of the following statements best describes the relevance of AI for your company?

A woman wearing a yellow hard hat, safety glasses, and a red and blue plaid shirt is looking at a tablet device in a factory setting. The background is a blurred industrial environment with blue machinery.

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.

In your opinion, to what extent would AI provide benefits for your company in each of the following areas?

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%

 STRONGLY AGREE

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



Value of AI with respect to specific processes

With the help of AI, business applications can be improved in many different ways. The possibilities for improvement also apply across various departments and lines of business.

Marketing, sales and services

The challenges in marketing, sales and services are manifold. Understanding customer-related data from various sources in order to personalize offers and to identify the next best action are areas in which AI can help and provide value.

Finance & accounting

Finance & accounting departments (F&A) are forced to become more efficient by automating administrative tasks. AI has particularly been identified to create a significant value contribution related to better detection and prevention of fraud.

Supply chain management

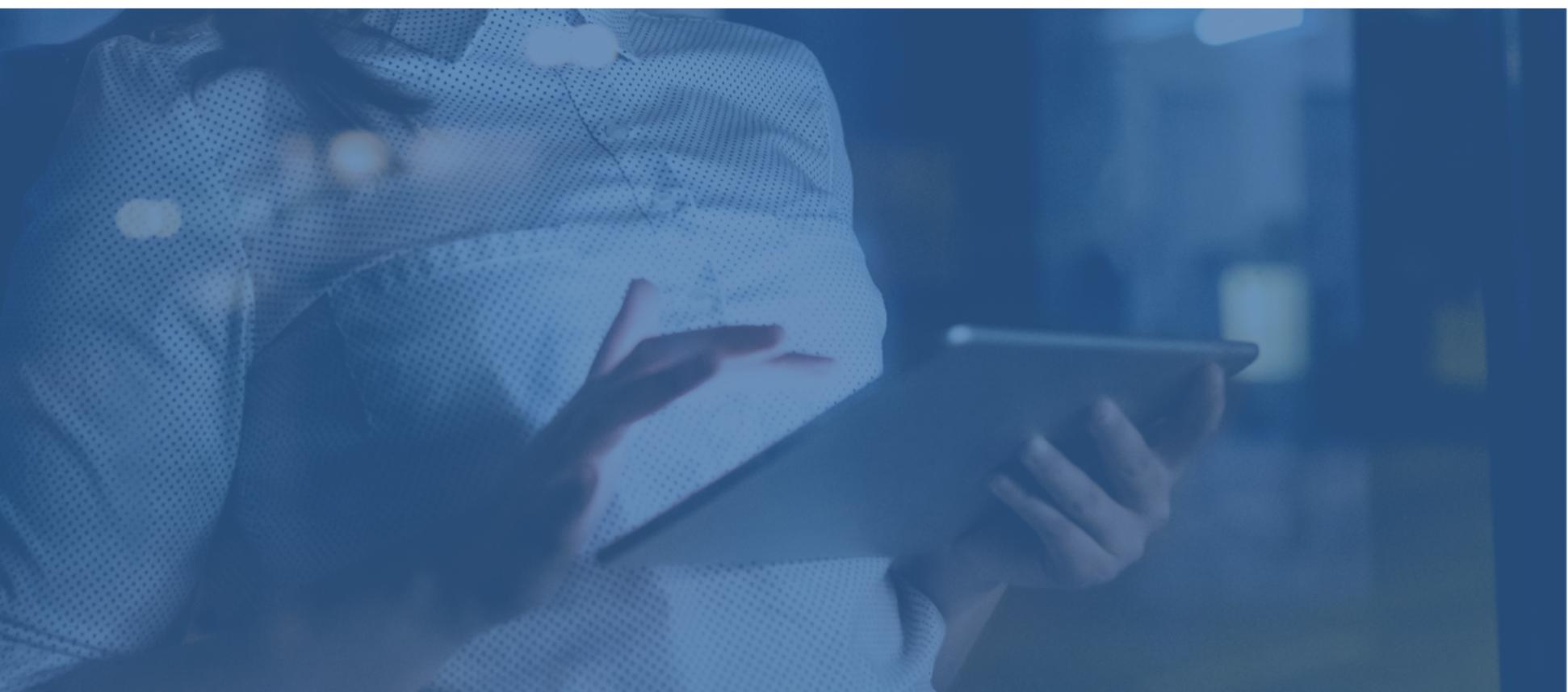
Supply chain management remains one of the most important topics for business innovation. SCM managers have been dreaming about automated processes for planning and fulfillment. AI can deliver great benefits in the analysis of data which is necessary for planning.

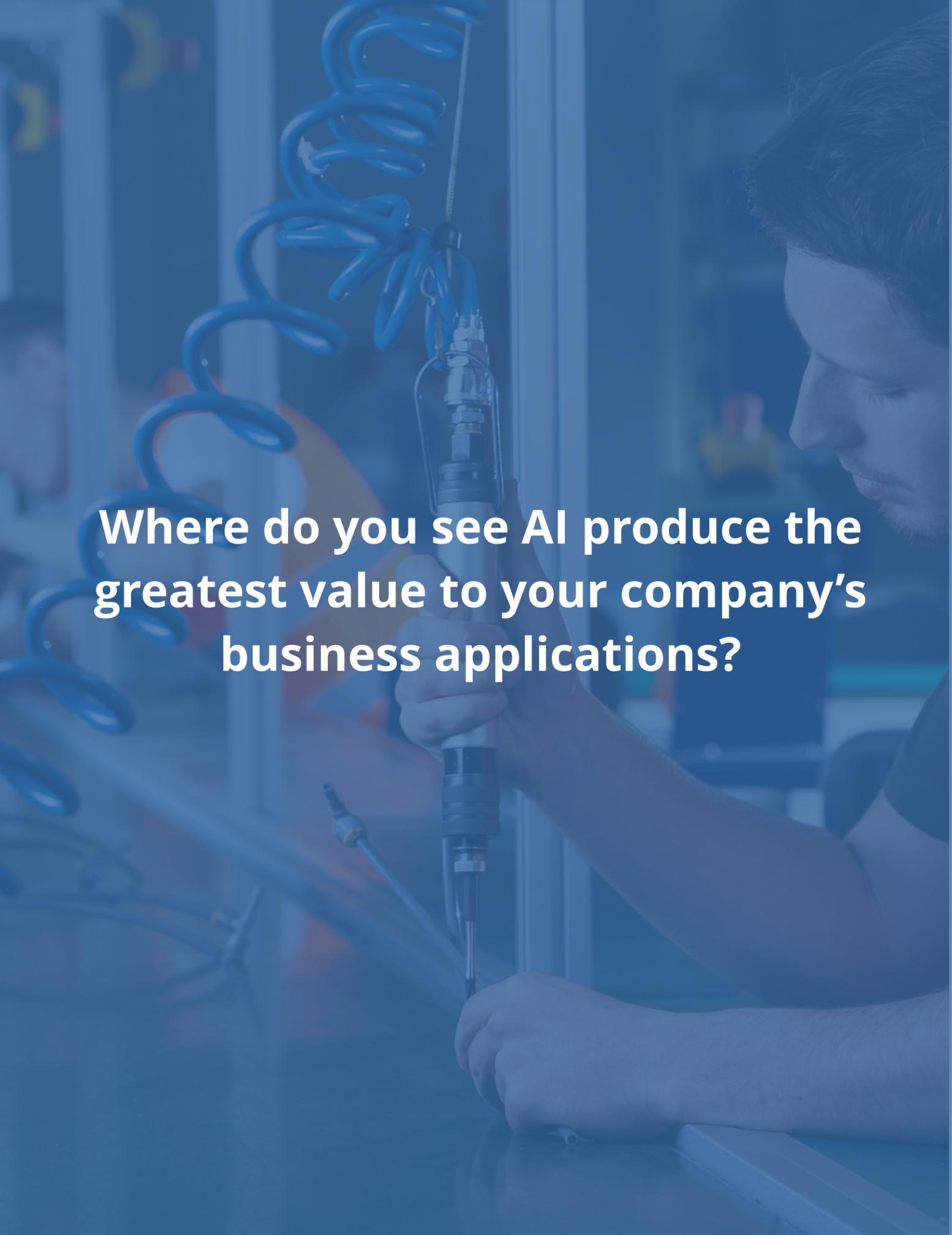
IT

Protecting data, applications and IT infrastructures has always been a challenge for IT departments. AI can create a significant value contribution to enhancing security by analyzing large amounts of data and by detecting suspicious activities.

Production

For those overseeing production processes, challenges arise from the demand for more individual products and changing customer requirements. One area where AI can produce a significant value contribution is predictive maintenance. This area, which has already seen many use cases, allows for the analysis of a machine's run time data, thus taking into account scheduled outages.





Where do you see AI produce the greatest value to your company's business applications?

Marketing & Sales

say greatest value of AI is in better understanding customer attitudes

74%

F&A

say greatest value of AI is in better detecting and preventing fraud

78%

SCM

say greatest value of AI is in automation of supply chain planning and fulfillment

91%

IT

say greatest value of AI is in enhancing cyber security

83%

Production

say greatest value of AI is in predictive maintenance

75%

CONCLUSIONS

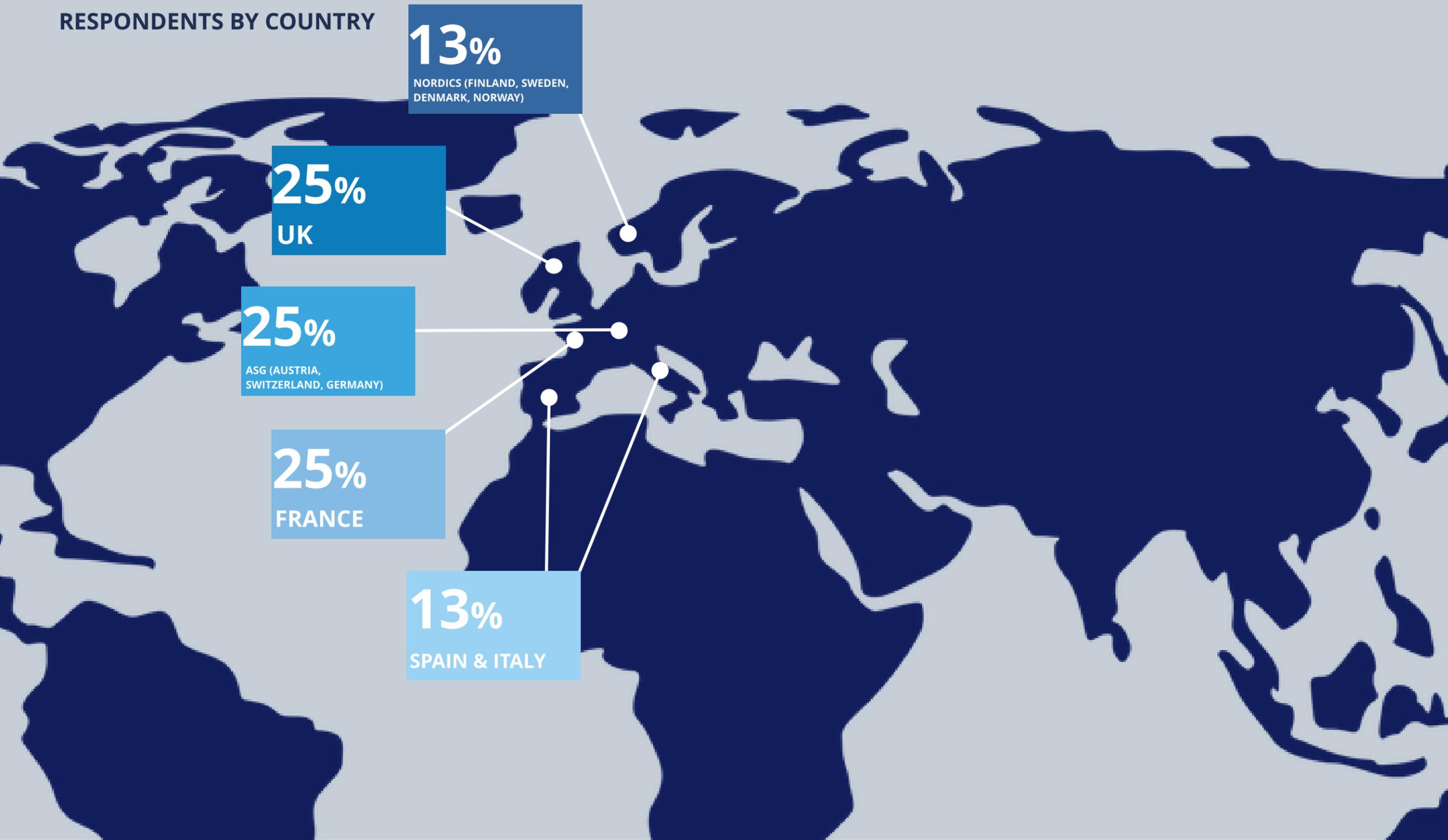
- ✓ For most of the European companies we surveyed, AI is relevant. For many managers, AI provides a basis to improve and automate business processes. All in all, the larger companies are more convinced about the strategic relevance and the benefits of AI.
- ✓ There are many different opportunities for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



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:

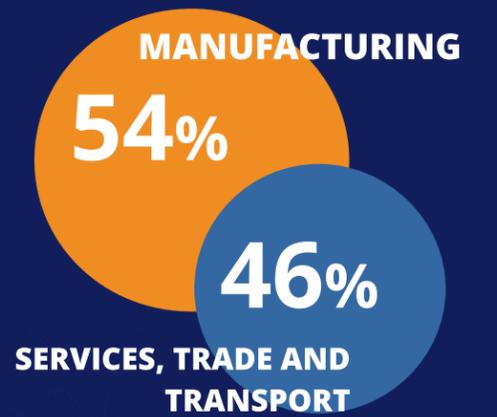
RESPONDENTS BY COUNTRY



RESPONDENTS BY WORKFORCE

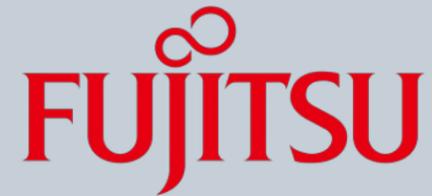


RESPONDENTS BY INDUSTRY



RESPONDENTS BY POSITION





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Artificial Intelligence in EMEIA

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In the EMEIA region, Fujitsu's Zinrai services focus on key aspects of business, such as Quality Control (manufacturing quality assurance, building/ structural maintenance, rail maintenance, drug design and till-fault prediction, for example); customer flow analysis (oil and gas and service stations); city infrastructures (airports, railways, roads, retail environments including malls, retail chains and urban development); the public sector (security, Police, etc.); and predictive maintenance (utilities, manufacturing, telecom, transport, etc.).

For more information, please visit:

<http://www.fujitsu.com/emeia/themes/ai>

<http://www.fujitsu.com/emeia/businessolutions/ai>

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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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