

# RESEARCH PAPER

## What's the use of AI?

Understanding how everyday businesses are already using common building blocks of Artificial Intelligence (AI), their aims and how channel partners can help finish the job

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## **Executive summary**

A common misconception associated with AI (Artificial Intelligence) is that it's all about self-driving cars and robots and that you need both a degree in higher maths and hugely powerful computer systems to make it work. However, that's far from the case and in this research paper we investigate real world business uses that are, in fact, based on widely available common technologies, tools and services which channel partners already provide, manage and support.

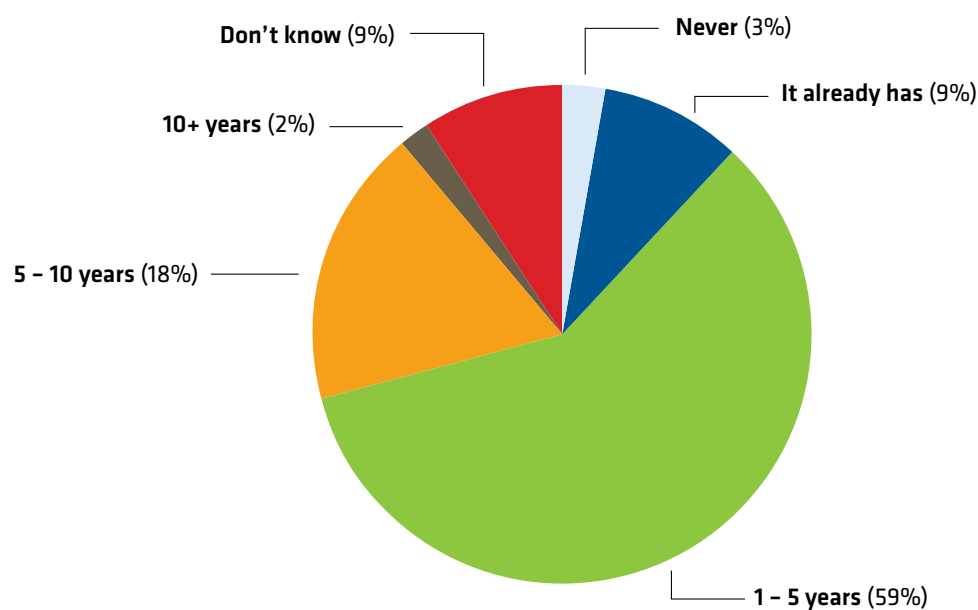
We also examine the awareness of potential users of AI in terms of where and how these technologies fit into the IT equation; the barriers to deployment and the need for training, support and other services. Important insights which, added to their in-depth experience and understanding of customers' businesses, will enable channel partners to fill in the gaps and work with companies, across the board, to achieve their AI aims.

## What's the use of AI?

From rogue autonomous vehicles to job-stealing robots and the charge towards the 'fourth industrial revolution', press coverage of Artificial Intelligence (AI) tends to favour the sensational over the everyday and the alarming over the mundane. Even beyond the popular press, the focus is very much on where the technology might be taking us rather than how AI is actually being used today, or where it fits into wider digital transformation plans.

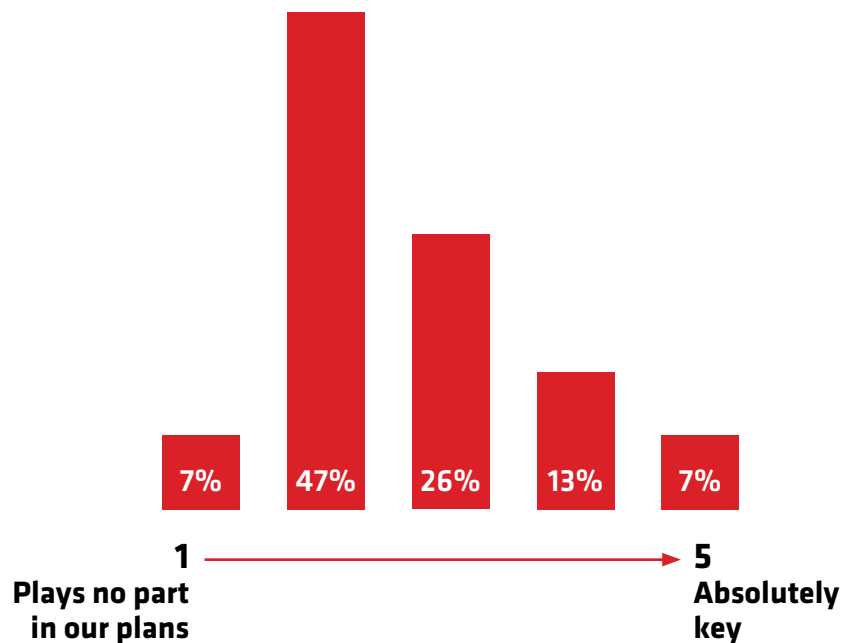
Practical advice on how best to get involved in AI is, similarly, thin on the ground which is a real concern. Especially given the results of a recent poll of IT decision makers with responsibility for application planning, development and management which show AI already having an appreciable impact and, more significantly, a majority (59%) expecting it to have a real effect on their businesses over the next 1-5 years (Fig. 1).

**Fig. 1 : When do you think AI will have an appreciable impact in your organisation?**



Representative of companies across a wide range of industries and markets, key takeaways from this survey show a great deal of interest in AI and a real desire to get involved. Furthermore, the survey found AI fast becoming an important part of wider IT strategy, often as part of digital transformation plans, with only 7 percent of companies polled saying AI was not on their radar (Fig. 2).

**Fig. 2 : Where does AI fit in terms of your organisation's overall business IT strategy?**



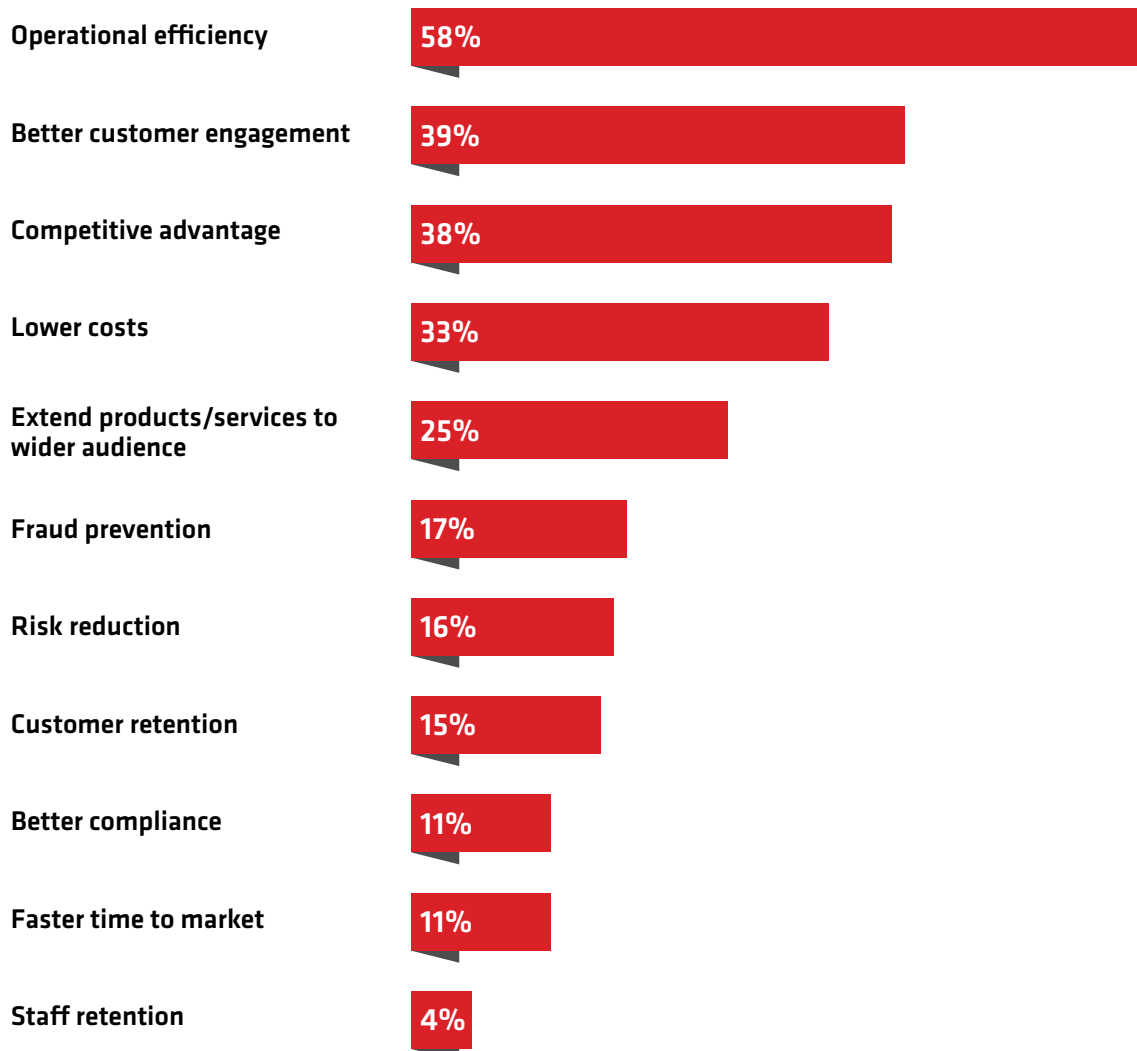
Putting this into context, the figures here put AI on a similar footing to other common trends, such as the adoption of cloud-native development technologies, for example, or the building of hybrid cloud infrastructures. However, with a fifth (20%) of companies quite clearly prioritising AI (scoring it 4 or 5 in terms of importance) it looks set to move up the order, prompting the question of why companies are so interested in adopting AI and what they see as the potential benefits.

## Perceived benefits of AI

In terms of benefits it's fair to assume that drastic cost savings courtesy of self-driving cars and robot workers will only be of interest to a handful of businesses. The majority will, instead, be found looking to use AI in much the same way as other new technologies - to build better business applications, improve operational efficiency and gain competitive advantage. Indeed, as Fig. 3 shows, this 'better business' approach is very much the case when it comes to what's currently driving AI adoption.

## What's the use of AI?

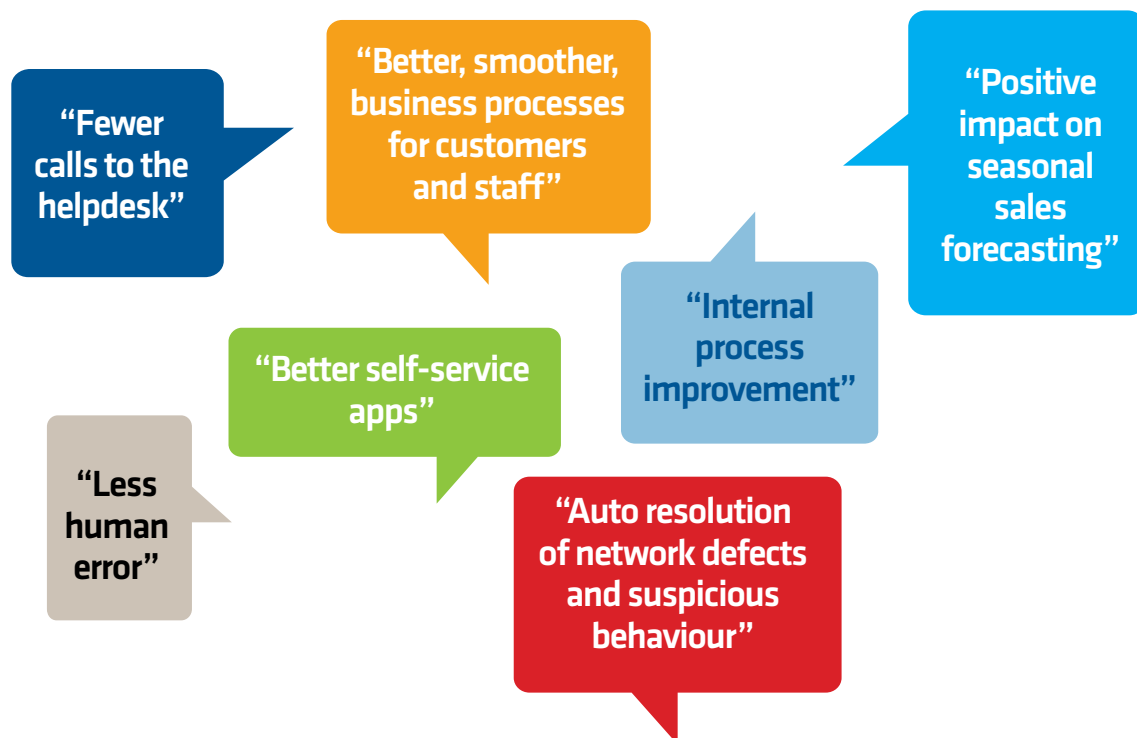
**Fig. 3 : Business drivers most likely to be achieved through the use of AI**  
(Respondents were asked to select top 3 from list)



As can be seen here, efficiency improvements were far and away the biggest anticipated benefit, coming in the top three for well over half (58%) of the companies polled. Moreover, there was a close tie for second between better customer engagement (39%) and competitive advantage (38%) with these two clearly, and understandably, seen as linked. Simple cost reduction, on the other hand, only made it into fourth place, although it was still seen as a benefit by 33 percent of respondents.

These results are further reinforced by answers given when respondents had free rein to describe the impact AI was having on their business already, as illustrated by the sample included in the word cloud below:

**Fig. 4 : Describe briefly the impact (good or bad) that AI has had on your business**



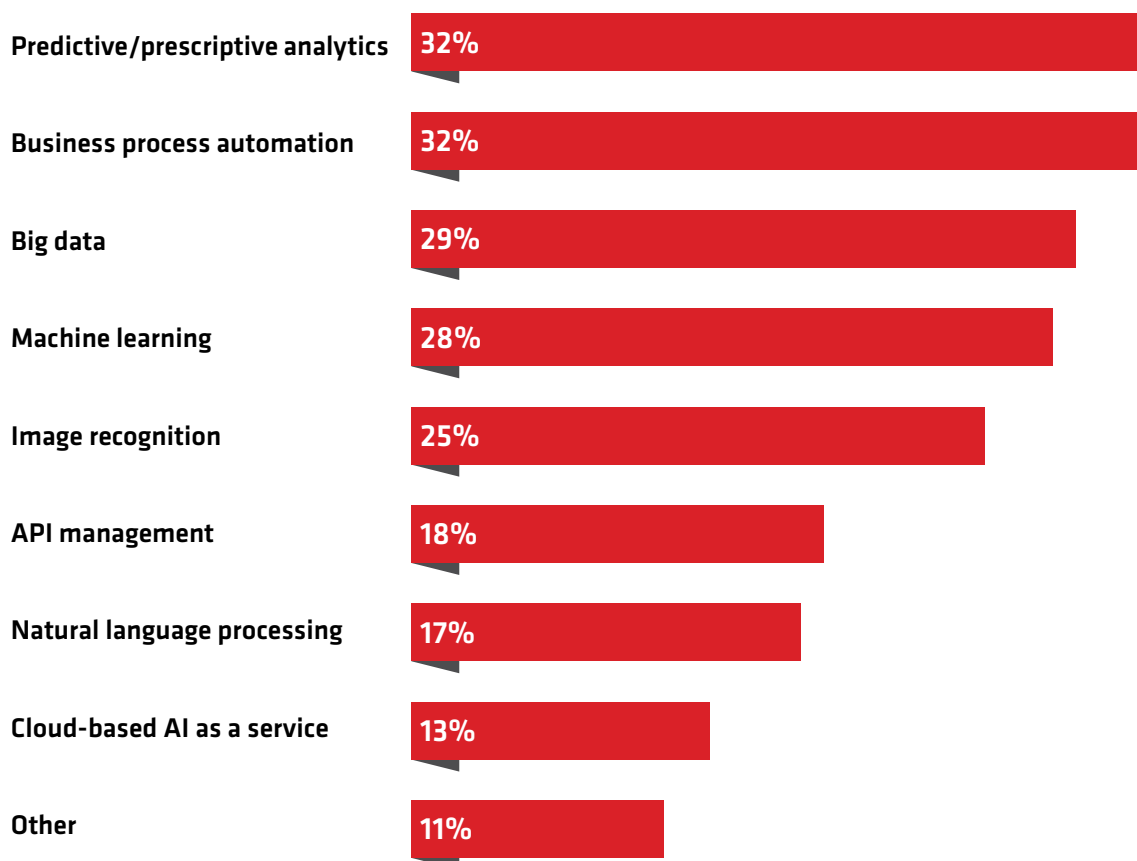
The majority of answers here were very positive, with no negative comments even though these were sought. They were also largely in line with what you might expect from a wide range of applications, not just AI. Indeed if you look at high-profile role models for AI many will be found using the technology to extend the capabilities of other tools aimed at streamlining business processes. As with Amazon, for example, one of the most tech-focused and successful companies on the planet which, reportedly, generates over a third of its revenue using a deceptively simple, but highly effective, AI-driven recommendation engine. You know the kind of thing – ‘you’ve bought this, so why not look at these’. Or Netflix, which has pioneered similar algorithms to build a business dedicated to understanding customer behaviour and which uses that ‘intelligence’ to automate and improve the user experience, drive sales and generate revenue.

# Practical AI

Unfortunately, one of the downsides to pointing at these role models is a perception of having to have the resources of Amazon or Netflix to make use of AI, when that's far from the case. Not least because, for the most part, AI technology also encompasses relatively straightforward and affordable ways of collecting and analysing data, and using that business 'intelligence' to make an organisation more effective and efficient.

For the majority of organisations, this means big data, analytics and business process automation tools which, whether it's called AI or not, most will either be using already or planning to deploy in support of wider digital transformation goals. Something that can be clearly seen in Fig. 5 which shows how organisations responded when asked specifically about the AI technologies they had already started to use.

**Fig. 5 : Which of these building block AI technologies have already been deployed in your organisation?**



Top of the list were, indeed, predictive/prescriptive data analytics and business process automation which, along with other technologies associated with Big Data, rarely get a mention in the AI headlines.



Machine learning, on the other hand, does and was reported to be in use by 28 percent of companies, which is quite high given that practical applications of machine learning are still very new. Many machine learning technologies will, however, be deployed within other wider applications, such as data analytics, which goes some way to explaining this apparently high level of early adoption.

Image recognition, too, appears to be being used in earnest with a quarter reporting its use in their applications, along with API management tools and natural language processing, which were found to be in use in 18 and 17 percent of companies respectively.

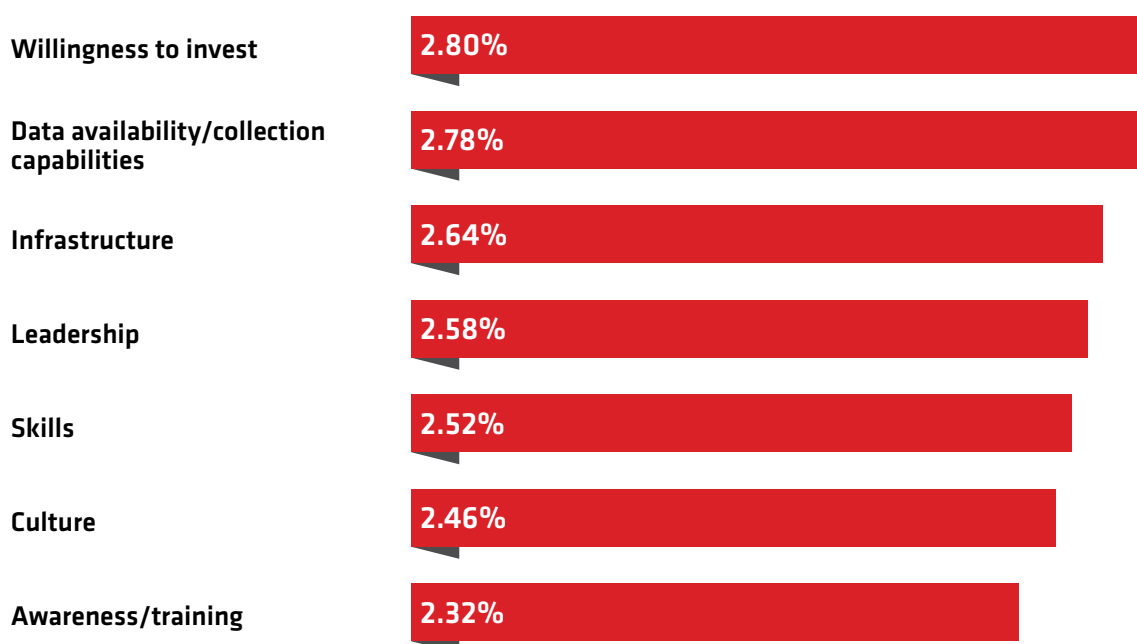
In fact, contrary to some reports, AI technologies appear to have been assimilated very quickly and are already being put to work in all sorts of areas. That, however, doesn't mean that there aren't issues to be resolved or barriers to AI deployment which need to be addressed for that to continue and others to do the same.

## Barriers to AI

There are several ways of establishing what might be holding businesses back from making more or better use of AI, one of which is to ask how well prepared they are to get involved. For example, are decision makers happy to invest in AI, does the company have the leadership to drive AI projects through, suitable infrastructure to support it, the right skills and so on.

Given that many see AI as having a big impact in just a few years you might reasonably assume a high level of readiness. However, when these questions were put to survey respondents the results showed that, while a few were generally 'good to go', most were poorly prepared across nearly all the areas asked about (Fig. 6).

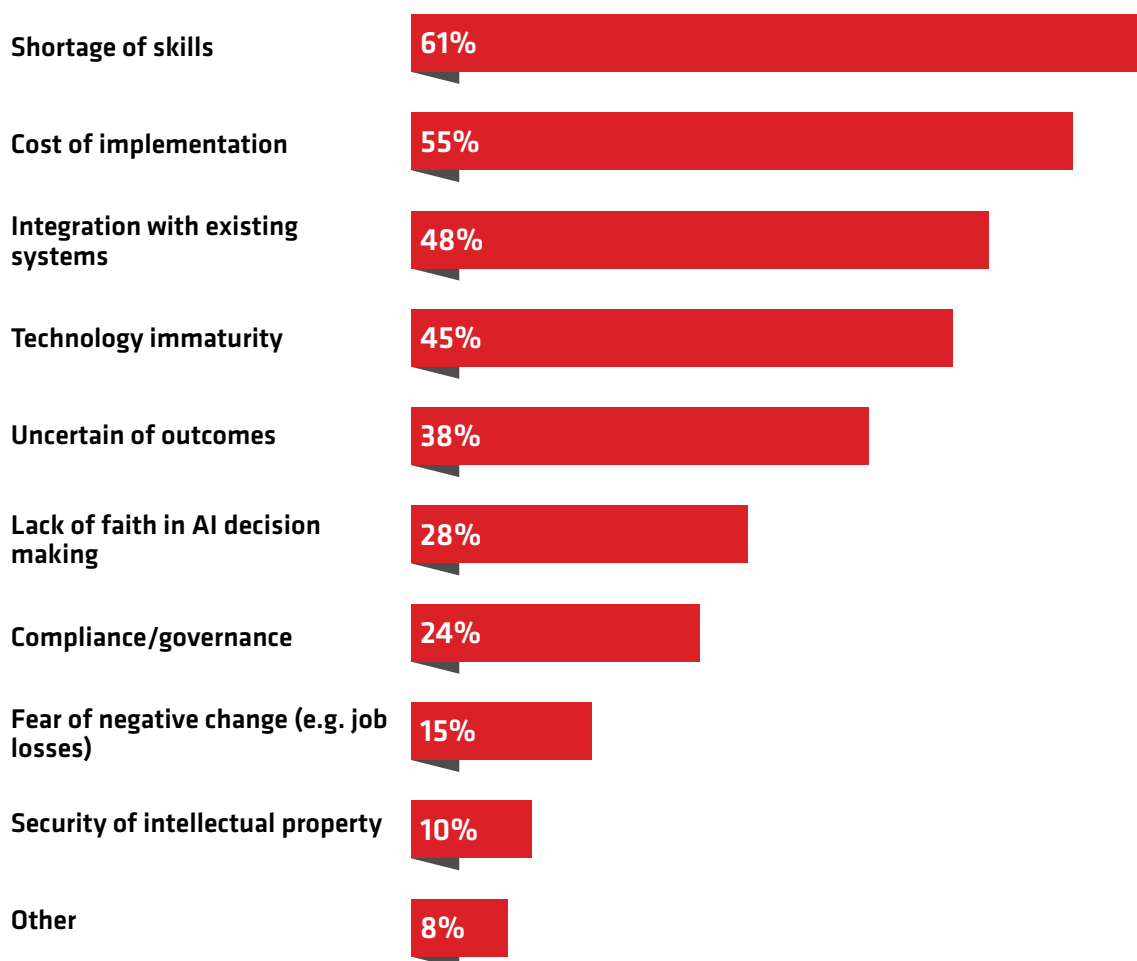
**Fig. 6 : How would you rate your company in terms of its readiness for AI in the following areas?** (Scored out of 5 where the higher the score the more 'good to go' the organisation)



## What's the use of AI?

It's worth noting that the scores here have been averaged which tends to minimise differences but, by delving into the data, we find most companies willing to invest in AI and reasonably confident that existing systems and infrastructure would be able to handle it. A large number, however, aren't that sure and confidence levels are low across the board when it comes to having the right skills, the right culture or levels of awareness and training. Moreover, those results were reinforced by the answers given when respondents were asked explicitly to identify barriers to their AI adoption plans (Fig. 7).

**Fig. 7 : What are the biggest barriers to introducing AI into your business?** (Respondents were asked to select all that applied)



Skills shortages were seen as far and away the biggest issue, beating the (to be expected) cost of implementation into second place. That was, in turn, closely followed by integration concerns (48% saw this as a barrier) and a general lack of understanding when it came to the ability of AI to deliver the goods. As reflected, for example, by 45 percent seeing the technology as immature, with uncertain outcomes (38%) and likely to lead to untrustworthy decision making (28%). Where there is a lack of understanding and skills, coupled with adoption and a desire to make progress, there is opportunity for the channel.

Due to a lack of in-house skills, few companies are ready to start enhancing their IT solutions with AI functionality. It is more likely that partnerships with third-party AI solution providers will be leveraged, relying on them to articulate the benefits of introducing AI functionality into their own enterprise IT solutions. And, beyond this, deliver appropriate AI solutions, and help define expectations around compliancy, functionality, the learning process, and end results.

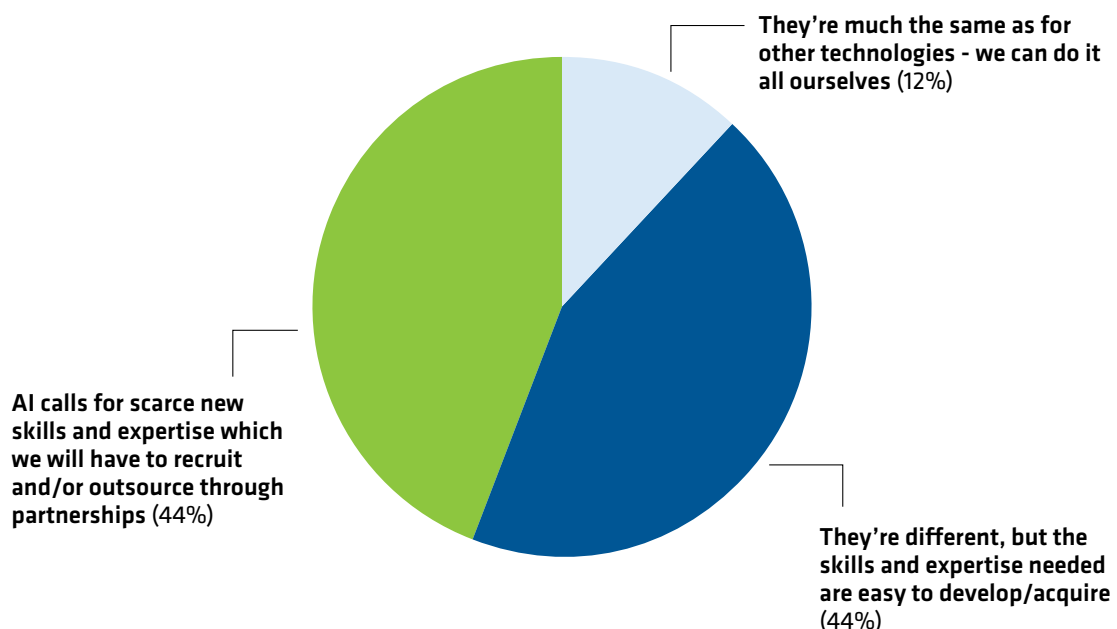
It is advisable to be on the lookout for so-called “intelligent” applications which do not satisfy more robust definitions of AI. Some applications may appear to be intelligent but are, in reality, based on complicated logical routines. These applications are usually inflexible, computationally expensive and very costly to extend.

## Help to AI

There's a clear gulf here between businesses wanting to benefit from AI and readiness to meet that goal.

Knowledge, expertise and practical experience are key to filling that gulf and many organisations will look to system integrators, VARs and other channel partners to provide these essential resources. Moreover, the need to partner with third parties to fill in the skills, experience and expertise gaps on the road to AI is widely acknowledged, as clearly shown in Fig. 8.

**Fig. 8 : Which of these statements best describes your view on the skills and expertise required for successful AI use in your organisation?**



## What's the use of AI?

A minority (12%) felt that they could do it all themselves, largely because they didn't think there was anything especially unique or challenging about AI! The remainder, however, took the opposing view that specialist knowledge and skills were required, with an equal split between those who thought them relatively easy to acquire and those rating them as scarce resources needing to be recruited or outsourced through channel partners.

Add to that the 59 percent of companies predicting AI as having an appreciable impact on their businesses in the next five years (Fig. 1) and there's obviously a lot of work to be done. Work that will, inevitably, rely heavily on the buying in of services from third party partners with not just the technical skills required to make use of AI but an understanding of how to best integrate AI technologies into existing systems and working practices.

In order to help an organisation extend their enterprise solutions with business or process intelligence, a number of useful tools have been developed, for example, Microsoft's AI tools on the Azure cloud platform. These tools aim to simplify the incorporation of AI into enterprise IT solutions. However, it is important to point out that these are tools, not complete solutions.

Channel partners are also uniquely placed to understand the specific needs of different markets, which is crucial as AI will have an impact across a wide range of industries, as reflected by one last graphic, based on the answers given when respondents were asked to describe a future project where they thought AI might be of value. A few of these are shown in the word cloud below (Fig. 9), illustrating further that, when it comes to AI, we're not just talking about chatbots and autonomous vehicles, but applications of value across sectors as varied as education, industrial manufacturing, healthcare, agriculture and many more. Sectors where channel partners can add real value when it comes to meeting the AI goals of both new and existing clients.

**Fig. 9 : Describe briefly a future project where you would like to see AI used in your organisation**

### *Just in time scheduling of preventative maintenance*

Intelligent search of audio and video clips

AUTO-DRAFTING OF LEGAL DOCUMENTS

Identifying radicalisation in student populations

Eliminating need for spot checks in financial audits

Checking validity

Automated drug trial analysis of overseas student credentials

Monitoring of vulnerable adults in care homes

IDENTIFYING  
BENEFIT  
FRAUD

Robotic movement of products through factory

SPOTTING IP THEFT AND PLAGIARISM

On-farm decision support

## Conclusion

The research results show a high level of interest in AI in businesses across the board. They also depict companies keen to incorporate AI into their IT strategies, chiefly by taking advantage of common building block technologies already being deployed to support other digital initiatives. Using these, most organisations are concentrating mostly on 'business as usual' uses of AI, led chiefly by data-driven process automation designed to boost operational efficiency and deliver a better customer experience.

Beyond this modest start, more advanced applications involving automated voice and image recognition, for example, are being planned and in some cases put into production already. But it's not all plain sailing, with a widespread lack of understanding, training and skills stopping businesses moving forward with AI as quickly as they might like. Which is where the opportunities for the channel to add value are most likely to be found, to provide the required technical expertise and integration skills along with an understanding, based on practical experience, of where and how AI can be deployed to benefit the business involved.

## About the sponsor, Comms-care

Comms-care, an Ingram Micro company, is the UK's leading solutions and services partner to the IT channel community. With a commitment to being 100% channel focused, Comms-care provides its customers with the ability to scale quickly and easily and enhance their skills as required, without the need to invest in in-house resources.

Through its longstanding partnerships with market-leading vendors including Microsoft, Cisco, VMware and Citrix, Comms-care delivers bespoke world-class IT solutions from design, consultancy and installation to maintenance and managed services, across a breadth of technology areas which include cloud, virtualisation, AI, IoT, data insights, wireless, cyber security, networking and unified communications.

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