

**Deloitte.**



**Machines with purpose**

From theory to practice

Artificial intelligence in professional services

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## **About this report**

In this report AI refers to a range of artificial intelligence technologies. References to the professional services sector relate mainly to the legal profession. The report is based on secondary research, discussions with industry specialists and analysis by Deloitte.

In this publication, references to Deloitte are references to Deloitte LLP, the UK affiliate of Deloitte NWE LLP, a member firm of Deloitte Touche Tohmatsu.

# Foreword

Welcome to this Deloitte Insight report on artificial intelligence (AI) in professional services.

Professional services is largely a skilled industry but aspects of the work can be repetitive or laborious. While other labour-intensive industries have increasingly invested in technology, professional services have tended to lag behind. Due to increasing pressure from clients, the industry has now acknowledged the need to become more innovative and has begun to explore what new technologies could do for it.

AI has enormous potential to change not only how the sector operates internally but also broaden the types of services it offers to its clients. Software can simulate at least some of lawyers' analytical capabilities and carry out repetitive or complex tasks, such as reviewing documents or analysing contracts, within minutes instead of days. This means that in the future law firms might need to employ fewer lawyers who would focus their time on more value-adding tasks. Services can be offered more efficiently, meeting client demand for greater affordability and timeliness. Staff morale and satisfaction could also benefit. All of this would help to improve profitability.

These opportunities come with challenges. Technology has brought incremental change to the working practices of legal professionals; AI might push the boundaries further. The role of the lawyer and the law firm as we know it could change notably in the future. Technology will help legal professionals analyse information in a new way, enabling them to identify new types of services and meet 'untapped' client demand in new sectors or areas.

The role of the lawyer will become less about processing information and more about building relationships and contextualising insight. Lawyers can use technology to interrogate data and information, identifying issues and solutions in new ways.

This means we will see some structural changes in service offerings and the roles available in professional services. The tools and skills of the 'new age' lawyer will also vary from the traditional model. Professional services will need to evolve in order to stay competitive.

Although many professional services firms are by now aware of AI and perhaps even convinced by its benefits, they still find the prospect of using the technology daunting. They do not know how best to go about exploring the use of AI in their organisation.

This report offers both the theory around the use and benefits of AI and practical guidance on how to begin the process of exploring AI and its potential in a professional services business.

We hope you find the report insightful and thought-provoking, and we welcome your feedback.



**Peter Saunders**

Lead Partner, Deloitte Professional Practices Group

# Executive summary

This report aims to help professionals understand why AI is important to their businesses and how to take it from theory to practice.

## AI and people will work together to provide professional services in the future

New technology offers many opportunities for professional services to improve their operations; yet the sector has been at best reactive to previous waves of innovation. However, as AI begins to penetrate an increasing number of industries and shows the positive impact it can have, businesses in the professional services sector are also beginning to investigate its potential.

Research-based theories on the use of AI in companies suggests that machine and human intelligence are complementary. Machines excel at repetitive and complex tasks. Humans are better at contextualising and attaching socially-constructed meaning to data. This suggests that the focus should be not on replacing people with machines but on getting them to work together. If machines carry out complex or even more analytical work while people focus on creative problem-solving, businesses can benefit from the strengths of people and machines.

The business case for using AI in professional services is compelling. There is increasing pressure from clients to provide professional services in a more cost effective and timely manner. Moreover, many professional services clients are already using AI themselves to improve the efficiency of their operations, which puts more onus on services firms to understand the technology better. AI could also help to satisfy staff expectations on the type of work they do and strike a better work-life balance.

## Begin with an AI strategy

The first step towards adopting AI in professional services is to create a coherent strategy that outlines how the organisation will use AI to address some of its key business issues. The process of developing the strategy should also be an opportunity to review current processes and approaches because adding technology to something that is already not working would be wasteful.

The strategy should also address both short and longer-term plans for talent because introducing AI is inevitably going to impact the workforce.

It is also vital to carry out analysis of both the internal and external risks that might be created by the wider use of AI. The severity of these risks and how they manifest themselves will depend largely on how the organisation decides to address them at an early stage. Agreeing on the most suitable approach and on who should be involved in the process is critical.

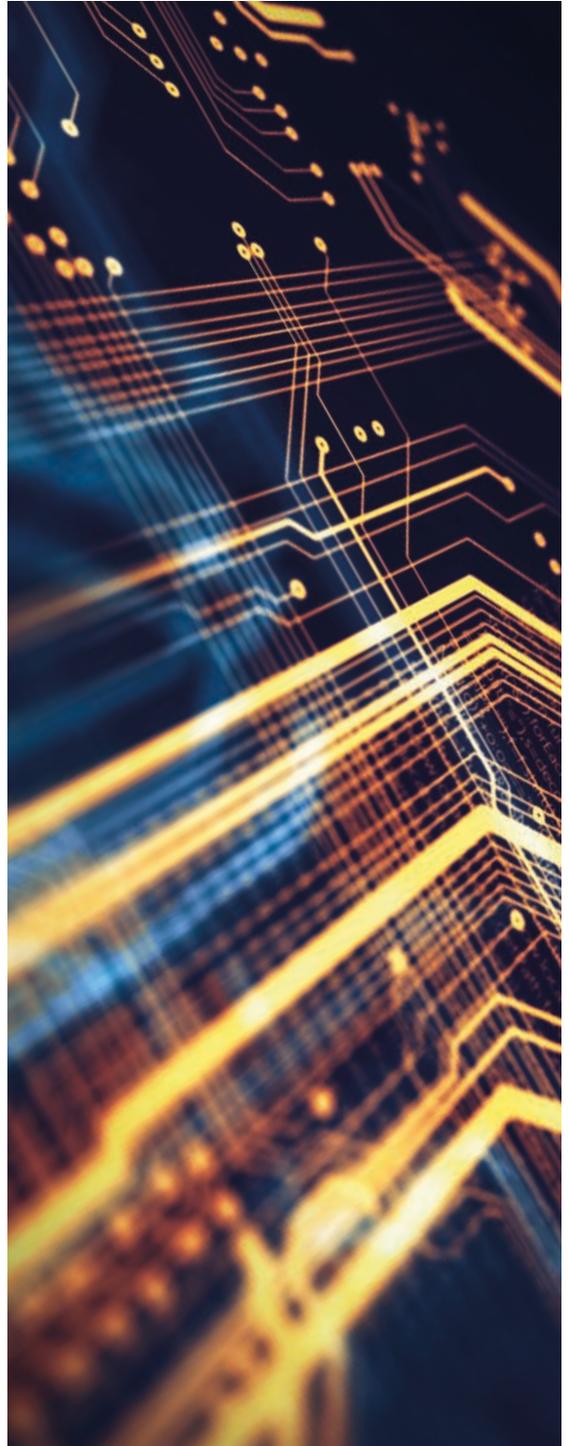
The first step towards adopting AI in professional services is to create a coherent strategy that outlines how the organisation will use AI to address some of its key business issues.

### Test, review, improve and scale up

When moving to actual adoption and implementation, it is important to translate the higher level AI strategy into a detailed business case for specific projects. Starting small by identifying appropriate test projects, which in the future could be repeated or scaled up, is a good way to develop AI capabilities before applying them to the business areas where they will have the greatest impact. It is also important to evaluate whether off-the-shelf products are sufficient, as more customised solutions tend to offer better value in the longer term.

The useful experience gained from AI projects should be documented and reviewed in order to improve in the future. As confidence and commitment grows, it is possible to scale up the use of AI and roll it out in other parts of the business. Regular checks on progress, learning and key performance indicators (KPIs) should be carried out to ensure AI continues to address the business's aims.

Organisations should have dedicated AI champions who take responsibility for the projects, either on their own or in combination with other parties. These staff should have both the technical skills and an understanding of the legal profession as the technology needs to be moulded by the people that interact with it. These AI champions should be empowered to make decisions but also lead the communication that helps to gain the trust and commitment of staff working directly or indirectly with AI. The technology may have notable impacts on existing practices so it is important that the champions, as well as senior management, adopt a consultative approach and actively prepare their staff for the new working models. Demonstrating the benefits of AI is vital to getting staff to back it.



# Understanding AI

AI is starting to build momentum in professional services.

## Defining AI

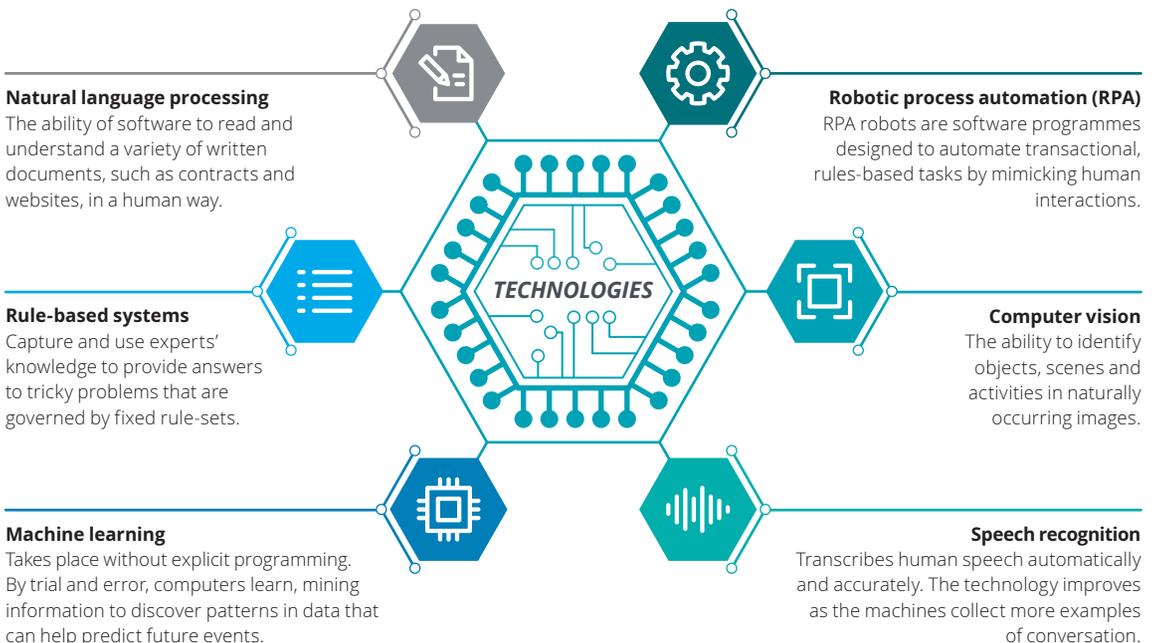
Digitalisation is generating new streams of data everywhere. Previously lawyers had a limited number of mainly paper based documents to review while now they are faced with large quantities of data in different formats. Luckily, technology makes it possible to process, structure and analyse huge amounts of data and also identify insights and build knowledge that can be applied in further analysis.

Broadly speaking, AI is the theory and development of computer systems able to perform tasks that normally require human intelligence.<sup>1</sup> Examples of such tasks include visual perception, speech recognition, decision-making under uncertainty, learning, and translation between languages.

Governed by algorithms, the software applies rules-based analysis and decision-making. Users can improve it by refining the rule set. In advanced forms, the algorithm can learn patterns independently and apply statistical methods to validate its decision-making. The type of algorithm determines the requirements for human intervention and a level of consistency for its outputs.<sup>2</sup>

Therefore, AI in essence represents a set of advanced data science technology 'building blocks' that, when combined with the mass availability of computing power and data, mean we can now build solutions we simply could not before. These solutions have matured rapidly and continue to improve. Figure 1 below provides a glossary of different types of AI technologies.

Figure 1. A glossary of AI-based technologies



Source: Adapted from AI-augmented human services: Using cognitive technologies to transform program delivery, Deloitte Centre for Government Insight, 2017.

It is worth noting that the set of tasks that normally require human intelligence is subject to change as computer systems able to perform these tasks are invented and then widely diffused. Thus, the meaning of 'AI' evolves over time.<sup>3</sup>

### Professional services develop a taste for technology

Professional services are often cited as an example of slow adopters: until recently they had introduced little new technology into their own operations.<sup>4</sup> Richard and Daniel Susskind in their book, *The Future of the Professions*, stated that by 2015 the working practices of lawyers had "not changed much since the time of Charles Dickens"<sup>5</sup>

It is largely due to increasing pressure from their clients that lawyers have acknowledged the need to adapt and, consequently, investment in technology has increased. In a survey of law firms 37 per cent reported technology to be their most innovative initiative in the last three years while 83 per cent agreed that law firms were increasingly adopting new technology.<sup>6</sup>

However, most of the investment in technology to date seems to have focused on alleviating pain points or creating more flexible 'infrastructure' for people to carry on with their existing working practices. The top three reasons for technology adoption in law firms have been remote access (82 per cent), case management (59 per cent) and document management (51 per cent).<sup>7</sup>

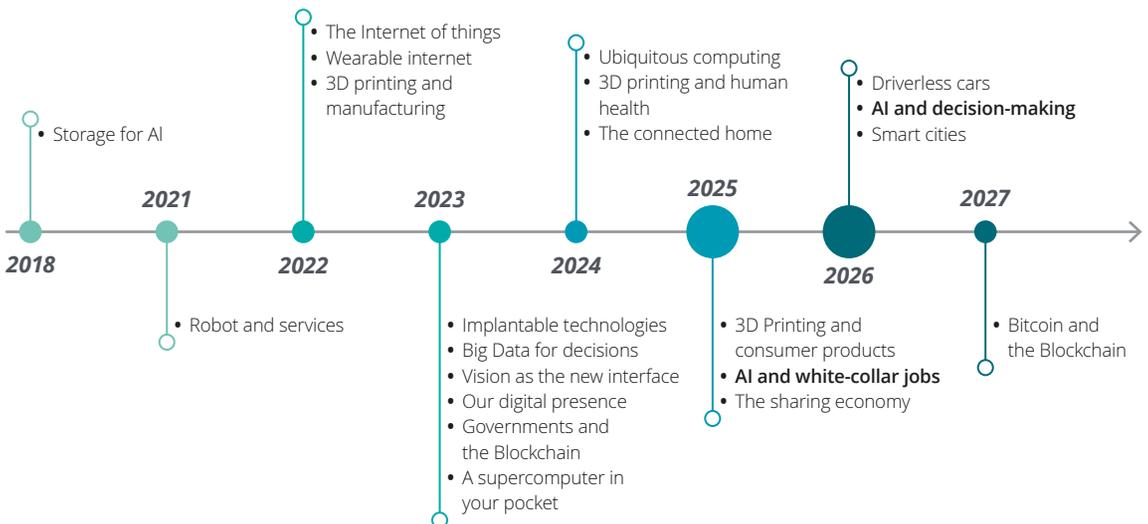
Thus until very recently the use of technology in professional services has focused on small improvements to patch issues rather than more complex initiatives that transform how professional services are delivered.

The World Economic Forum identified AI as one of the six megatrends shaping society. Their research revealed that for white-collar jobs the 'tipping point' for AI – the moment when the technology shift becomes mainstream – is expected to fall around 2025.<sup>8</sup>

With the 'tipping point' less than a decade away, companies have recently rushed to investigate AI's potential. It is already at the forefront of their long-term plans and tops the list for technology investment. The Deloitte *Digital Disruption Index* found that across all sectors, AI was the area with the strongest investor interest. By 2018 nearly half (47 per cent) of CXOs would have invested in AI and a further 38 per cent would do so by 2020.<sup>9</sup>

In professional services, there is also growing appetite for AI. A recent survey found that while eight per cent of companies in the legal sector are already using it, 54 per cent are likely to use it to assist in delivering legal services in the next ten years. When looking at the Top 25 law firms, the proportion of those using it already rises to 23 per cent, with a further 46 per cent saying it is very likely to be used in the next ten years. The majority (75 per cent) of law firms see it being applied in the next two to four years.<sup>10</sup>

Figure 2. Average year each tipping point is expected to occur



Source: Deep Shift Technology Tipping Points and Societal Impact, World Economic Forum, 2015.

# Building a case for AI in professional services

The future of professional services is about offering clients more value and quicker services by combining the knowledge of people with the processing power and analytical skills of intelligent machines.

## The theory: people AND machines

High-profile examples of AI have highlighted how powerful it can be. It has been able to beat human intelligence in a range of games such as chess or Go, and write music, articles or even books. Most recently two AI programmes outperformed people in a reading comprehension test.<sup>11</sup>

So, if these technologies can replicate or even exceed the human thought process, clearly it has potential to go beyond previous technologies in professional services that relied upon highly trained and experienced people. The question, then, is whether the future of professional services lies in machines, not people?

Probably not. The Deloitte Review article *Reconstructing work* discusses how machine and human intelligence are complementary. Machines find complex tasks easy but struggle to contextualise their findings. People can find repetitive or complicated tasks exhausting but excel in their ability to refer to the context around a problem and provide specific solutions.<sup>12</sup> Research also shows that if people perform roles that make the most of their social and creative problem-solving skills, companies can realise above-average growth and profits.<sup>13</sup>

AI, especially machine learning, can now contribute to human knowledge and offer ideas by identifying patterns in data that people might not spot due to the complexity of the analysis required. While this capacity could be incredibly powerful for professional services, it also presents some risks, especially considering that legal services are regulated. Technology that could evolve to offer its own advice and judgements based on previous knowledge but without full consideration of the world outside its 'black box' is a concern, especially if its logic is not formally validated.

Therefore the link between machines and people who understand the external context and how it affects the analysis should always remain.

Instead of planning for AI to replace humans, in most cases putting human and machine intelligence together makes better sense. This means empowering employees to use their experience and observation to identify problems, consider the context to the problem and enable them to make more informed decisions through the use of AI technologies.<sup>14</sup> The tools can help such professionals to process and analyse the information available more effectively and that way, possibly allow them make better decisions.

Professional services are well placed to implement this approach, as they already rely on employees to make educated, evidence-based judgements. They just need to explore how they can bring more technology for their staff to work with.

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### The business case for AI

Why should professional services consider AI? Why should they look to improve the efficiency of their operations, especially as the business models in the sector have tended to evolve around hourly charge rates?

#### Clients want it quicker and for lower cost

In part the answer is that they simply have no choice. Their clients are asking for it. Many clients have started to use professional advisors only when they absolutely require them, rather than when it might be helpful to use them. This is also reflected in a comment by Lord Thomas, the then Lord Chief Justice for England and Wales, who stated that “our system of justice has become unaffordable to most”.<sup>15</sup> The high cost of legal services has become a problem for society. Reducing the cost of the services would have social benefits and would be likely to generate a higher volume of work.

The demand for efficiency from clients is not limited to how much they can spend on professional services, but also the time it takes to get the service they need. As the speed of response to opportunities becomes increasingly important, professional services that offer fast support are likely to be more competitive.

Before AI, faster project turnaround meant adding more lawyers and hence more cost. Now software can perform tasks requiring analytical skills in a fraction of the time people would require. For instance, the use of such tools can decrease the average time of due diligence reviews from hours to minutes – while achieving more consistent analysis.

As the efficiency impact of technologies has begun to be evident in different sectors, clients have become shrewder. They have started to push their service providers to demonstrate the way in which they offer value. There are many examples of tender processes where bidders have been asked to prove that they use technology to improve their efficiency and value for money.

**Figure 3. Reasons to adopt AI in professional services**



Source: Deloitte, 2018



### **Financial incentives for professional services are starting to show**

Given that AI is still nascent and most of the development has taken place within the last couple of years, it is difficult to estimate the full return on that investment. The return is also hugely dependent on the technology used and the scale on which it is applied.

Based on their analysis, The Law Society is expecting AI and automation to accelerate productivity in the UK legal services sector to almost twice its current rate by 2038, with the large firms benefitting the most.<sup>16</sup>

There are also some examples from other industries that provide a sense of the scale of returns companies might expect. Fukoku Mutual Life Insurance, a Japanese insurance provider, replaced around 30 employees with an AI system that calculates payouts for insurance policy holders. They expected this to increase productivity by 30 per cent and see a return on investment in less than two years. After the initial investment of 200 million yen (£1.4 million) it was estimated to save about 140 million yen (£1 million) a year and cost about 15 million yen (£100,000) a year to maintain.<sup>17</sup>

In addition, a survey by Harvard Business Review found that 30 per cent of early AI adopters say they have achieved revenue increases by using AI to gain market share or expand their products and services. Furthermore, early AI adopters are 3.5 times more likely to say they expect to grow their profit margin by up to five points more than industry peers. The study concluded that while the question of correlation versus causation can be legitimately raised, other analysis has suggested that AI is already directly improving profits. The return on investment has tended to be in the same range as associated digital technologies such as big data and advanced analytics.<sup>18</sup>

Another financial incentive comes from timing. Factors such as open source technologies have meant that AI tools are gradually becoming commoditised. Recently the cost has started to decrease and, together with improving quality and better understanding and skills relating to AI, its value for money is improving.

### Meeting staff expectations

As outlined in our previous report on the future of legal talent, law firms need to consider the demands of the next generation of lawyers.<sup>19</sup> By 2025 around three-quarters of the global workforce will be of the millennial generation.<sup>20</sup>

The *2017 Millennial Survey* by Deloitte showed how most UK millennials had positive views about the benefits of automation, robotics and AI. It found that 58 per cent of millennials believed these technologies will improve productivity while 53 per cent believed they would generate economic growth. Most importantly, 46 per cent said new technology would increase the amount of time they have to spend on creative or value-added activities.<sup>21</sup> Earlier surveys have shown that they also seek to have a good work-life balance.<sup>22</sup> Therefore, using technology to allow staff to concentrate on creative problem-solving while maintaining a good work-life balance is likely to appeal to the next generation of workers.

If professional services want to embrace new technology, they need to acknowledge that they must attract more talent with the relevant skills. This might mean recruiting a different type of employee who has different expectations from today's lawyers.

For instance, both Millennials and generation Z – those born after 1995 – have unprecedented levels of technology skills and are ready to apply them in their working lives. However, they also have different expectations of how they would like to work.

Two-thirds (66 per cent) of Millennials say that flexible working has a positive influence on their well-being and 65 per cent believe it positively contributes to their motivation<sup>23</sup>. Previous research has suggested that this relates not just to the number of hours spent working but also to how personal and work time can be mixed. Interweaving work, hobbies and social interaction is important to them.<sup>24</sup> They might expect to have the freedom to go to an exercise class or meet friends for coffees as well as network on social media during their working day. As a result, the traditional pattern of fixed working hours and certainty of remuneration in many occupations will change.

The desire for more flexible working arrangements is also evidenced by the growth of the 'gig economy'. Working on short-term, flexible contracts is already getting more common in parts of professional services, with three quarters of management consultants believing independent consulting will grow in the future.<sup>25</sup> This could soon turn into a trend also in legal services.

Together with the increasing use of AI, the desire of the 'new age' lawyers to work more flexibly means law firms are likely to hire fewer permanent, full-time employees in the future. They should therefore consider how they could adapt their current working practices, management styles as well as remuneration packages to appeal to their new employees.

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# From theory to AI strategy

Adopting AI for the sake of 'ticking the box' will not generate return. Professional services must assess how AI fits in with their strategy and ambitions.

## How can AI solve your problems?

The first step in the AI adoption process should always be the formulation of an AI strategy. This should focus on building an understanding of how AI as a capability could solve the key challenges the business is likely to face in implementing its current strategy.

The key strategic question is whether the capability should be innovatory, enabling the business to offer something new or different to clients, or part of operational transformation, helping the business to operate more effectively. There might be an ambition to do both but it is important to have a clear understanding of which one should take priority so that resources can be deployed in an efficient way.

The process of determining a strategy should begin with a board level discussion on what AI is and what it is capable of achieving, both in general terms and in relation to specific business issues. In some cases senior management will need to improve their understanding of the technology before they can fully appreciate the role it can play. Conceptualising different AI technologies as 'data science building blocks' that can be combined to build a range of solutions is helpful to broaden the thinking around the possibilities of using it.

Once there is a shared understanding on what AI is capable of, it is important to build a view on how it could be applied, both across the organisation and at the functional level. This should also include discussion of the level of acceptable risk. This helps to clarify not only the overall demand and potential of AI but also where opportunities can most easily be converted into actual test projects. It also ensures that the business cases for specific AI projects are based on a common rationale and that technologies are implemented in ways that allow them to be combined.

## Reviewing and future proofing current processes and talent plans

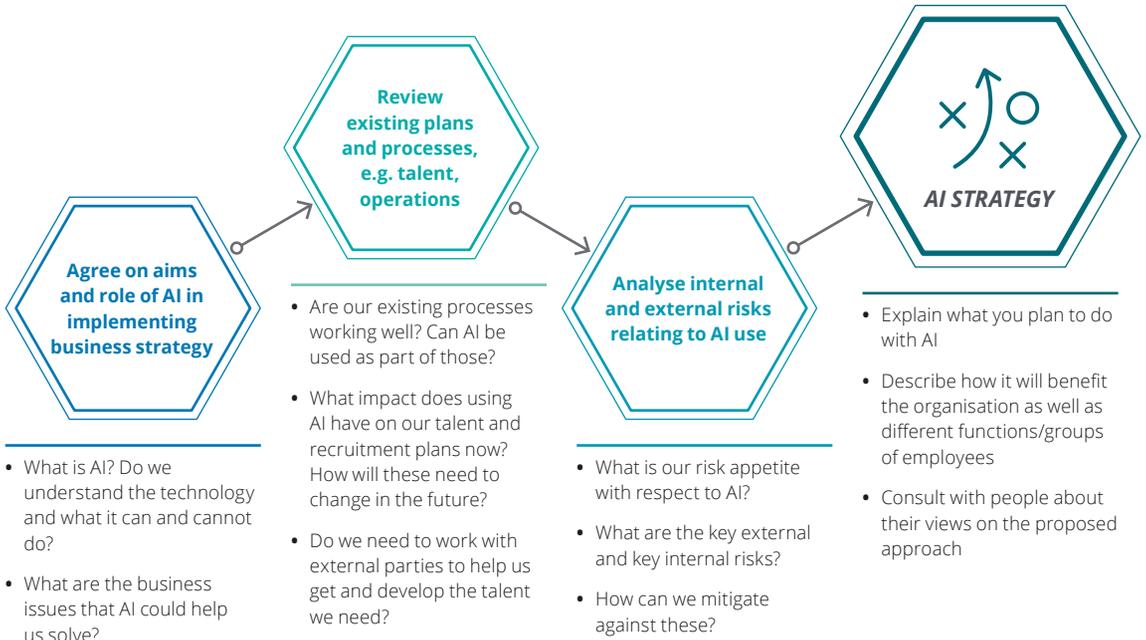
A review of current processes should also be part of this discussion. It is important to consider what the optimal process should be. What is needed is a process that enables people and AI to work effectively together.

This might lead on to a discussion of long-term talent plans. It is important to evaluate whether the current training will generate the knowledge and skills needed in the future. If AI is to replace some labour-intensive tasks in entry-level skilled roles, such as paralegals, then the company needs to understand how to train staff to maintain their former level of knowledge without doing the tasks. This is likely to involve working with education and training providers, to identify how they can help meet this changing demand.

If a professional services business has extensive plans to adopt AI, they need to consider whether they would like to develop the AI data science skills and capability to run such projects in-house or obtain external support to help with this. This would impact the extent to which they would require those skills directly at the outset but also longer term.

If they look to develop the capability internally, they will be faced with a need to train current staff and seek new types of talent. Professional services firms have traditionally employed only a small number of employees with technical skills. However, they might not be equipped to work on AI projects given the highly mathematical nature of the technologies.

Figure 4. Building an AI strategy



Source: Deloitte, 2018.

Research suggests that companies might also face challenges recruiting the necessary talent. A survey found that while 55 per cent of respondents identified data scientists as important for delivering their digital strategy, 59 per cent also reported recruitment issues and 63 per cent retention issues.<sup>26</sup> Given that AI is penetrating most industries and few candidates have the right skills, the competition for talent may be tough. To attract the best talent, companies need to understand what such employees value in terms of the working environment and remuneration.

### Risk analysis to understand the challenges

AI comes with some risks. Some of the risks are common across all AI projects. Others are specific to the context or the type of technology that is being implemented. However, the severity of the risks and how they are manifested will depend largely on how the organisation decides to control them from the early stages. Thus it is important that the approach to identifying and mitigating risks is agreed at the outset.

A mix of board level as well as more technical people should be involved in the risk analysis stage. This is not solely about addressing technology risks but also about the board identifying an overarching approach to managing and containing risks.

The risk analysis should always consider both internal and external risks arising from the use of AI. One area of external risk is regulation. There is currently little regulation that governs the use of AI in professional services. However, such regulation may come or existing regulation may be adjusted in the future to acknowledge more widespread adoption of this type of technology. Companies should consider what might be regulated in future and how that would affect their plans.

A few examples of regulatory and ethical dilemmas that could be part of external risk considerations are listed below:

- In the legal profession the practising workforce has to obtain a licence to undertake certain types of work. If AI software is used as part of providing a service to a client, there might be a requirement in the future to have the AI tool certified. AI itself might need to be licensed for legal use. The firm should consider how it would respond if this happened.
- Most professional services firms' staff are covered by a professional liability insurance. However, if a machine makes a mistake, can companies be insured against that? If not, who takes liability?
- Chatbots in customer-facing roles is a common use of AI in professional services. Does a customer that deals with a chatbot have the right to know that they are not dealing with a person? Should they be given the option to opt out? Might this be regulated?
- It is also important to consider how the company plans to address client expectations around the use of personal and confidential information, and decision-making by AI tools. For instance, does the company's use of chatbots comply with all elements of the GDPR? Can the company explain why or how a given decision is made by an AI solution?

With regards to internal risks, there are a range of controls, checks and processes for review and escalation that need to be put in place to mitigate risks from the use of AI in business operations.<sup>27</sup> One example is the introduction of bias to machine learnings. AI algorithms are built by people, who, unlike machines, tend to have conscious or unconscious biases. The internal risk discussions should thus look at identifying ways in which the introduction of such bias will be minimised.

### Communicate your AI plans

At the end of the process of forming the strategy it is important to disseminate the plans to staff. The introduction of such pervasive technologies can be daunting for them. However, if the introduction of the technology and how it will benefit them is explained, staff are much more likely to accept it. It is also important, where possible, to take a consultative approach to AI strategy development as this might increase engagement and encourage a more positive response.

At the end of the process of forming the strategy it is important to disseminate the plans to staff.



## To do list for formulating AI strategy:

- educate stakeholders on what AI is and isn't, and how different AI technologies can be used
- consider what the key business issues are and how AI can help you solve those
- take the AI strategy process as an opportunity to review existing processes and identify how technology and people can work together in the optimal process
- carry out risk analysis that considers both immediate and long term risks related to adopting AI and create plans to mitigate those risks. Consider how regulation and client expectations might impact your use of AI.
- identify how AI will impact your need for talent now, in the medium and long term, and formulate plans to prepare your workforce for those changes
- articulate AI plans openly to staff in a consultative manner so they can see the reasons and benefits to the business and for them as employees, but can also highlight their concerns



# Putting AI strategy into practice

Keeping the AI strategy and higher level business objectives at the heart of the implementation process is crucial for successful implementation of AI.

## Start small, experiment and then scale up

Especially when the organisation is new to AI, it is critical to start the introduction on a small scale by formulating a proof-of-concept (POC) project. Launching large, complex projects with high business impact first is risky, as most organisations will face a range of challenges in their first AI projects. The strategy discussions should have identified a list of possible areas where AI could solve important business issues. The next stage is to understand which of these could potentially be useful POC projects.

It is important to be realistic about what AI can achieve. AI projects often try to start in the most complex and difficult areas. Instead they should focus on relatively simple activities that:

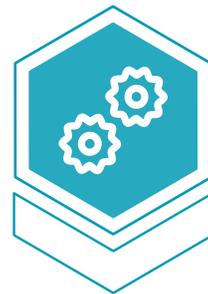
- represent a constrained business issue or activity that is repetitive, high volume and requires cognitive effort that can be codified into rules or is sufficiently simple to be 'taught' to an AI technology. A good example is 'reading' large volumes of documentation to rapidly identify jurisdictional implications or dependencies between documents
- ideally take place in various parts of the organisation so that the technology is scalable and the benefits and ROI can be realised quicker
- apply to an area of the business where AI risk is lower in terms of exposure to clients, potential regulation or critical business processes, at least initially
- have a clear set of KPIs or success measures that can be identified to evaluate benefits. If working with a technology vendor, make sure their definition of KPI success is aligned with yours.

Figure 5. Process of implementing AI



### POC

Rapidly test and evaluate the feasibility of solving the business problem with a selected AI tool and draft the business case for the next stage



### Production pilot

Take the POC into production with a defined, narrow scope to test the solution in the real environment and validate the business case



### Scale up

Implement the technology at the desired scale, identify roadmap and expansion options

### Identify the right tools and build a business case

There are also a number of considerations to factor into the selection of AI tools and methodology. These include:

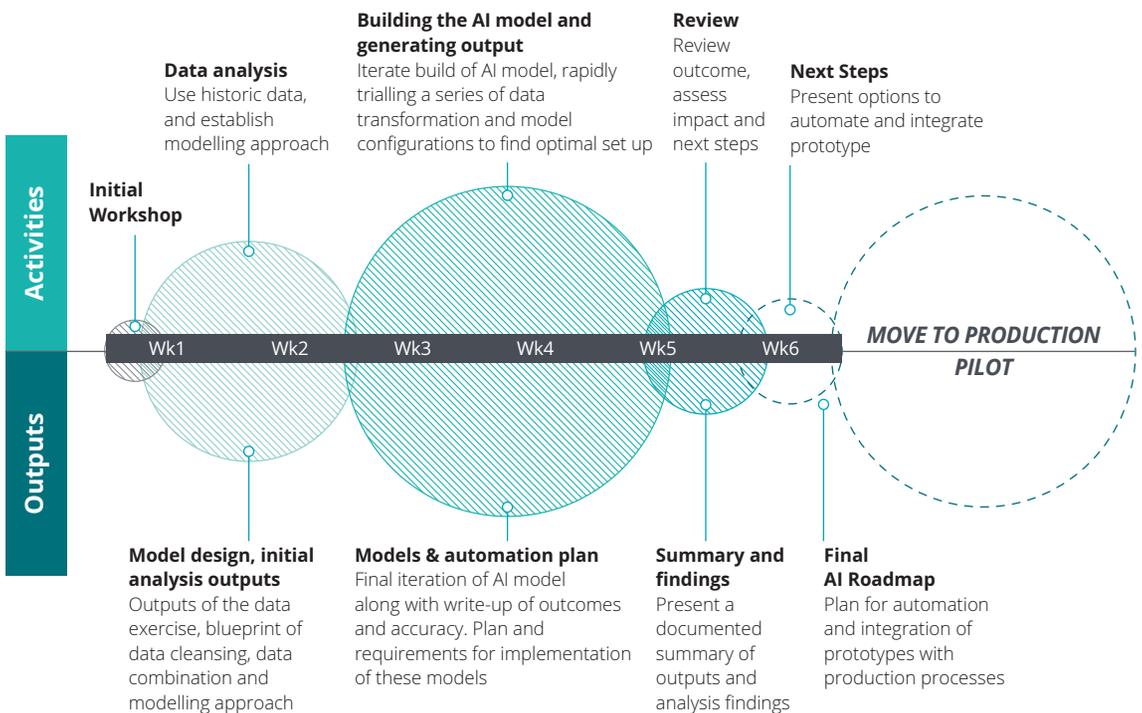
- examining the specific problem and working out what to try from the 'AI toolbox'. This may be an off-the-shelf solution, but a more bespoke approach tends to represent better long term value
- considering open-source tools as well as those from the big technology companies. Open-source tools are often industry leading and using them can reduce the up-front investment
- take an evidence-led approach to the POC stage by moving to piloting and full roll-out in a proportionate manner when the technology is working and the business case is supported.

Once the POC is identified, it is important to document the objectives and the intended processes in a well scoped out business case. This helps to guide the project in terms of what it should strive for and helps to evaluate the successes at the end. This is very important for building the AI capabilities in the firm and gaining traction for future implementation of AI.

Depending on the complexity of the use case, POC projects can take 6-12 weeks to complete. An illustrative POC design is shown in Figure 6.

After a successful POC, there should be a pilot with a narrow scope that would integrate the technology into other systems, either directly or through approaches such as RPA. Only after a successful production pilot, the project should be implemented on a wider scale, as outlined in Figure 5.

Figure 6. Example of a 6 week POC timeline and approach



Source: Deloitte, 2018.

### The human side of technology

AI projects have the best chance to succeed when the technology development and implementation make use of both technical and business expertise. While sectors such as insurance or financial services have traditionally employed a number of quantitative or technical specialists with background in computer science, physics and mathematics, this has tended to be less common in the legal sector. This means that legal firms will need to think carefully about how they connect the legal sector knowledge with the required data science skills to ensure the AI tools they implement are effective.

Identifying an AI champion who has both of these skills and is thus able to both mould the technology as well as have credibility within the organisation to deal with the various stakeholders is critical. These champions should be empowered to make decisions and engage with other staff. However, in further projects it might be helpful to combine experienced AI champions with less experienced employees to ensure the AI knowledge base and skills are broadened.

It is important to understand that AI champions might not be responsible for the day-to-day implementation of AI. Firms might decide, because of a lack of the needed skills or for other reasons that they want to obtain external support for technology development and implementation. However, it is still important to have someone in the organisation with responsibility and oversight for AI projects. This is to ensure that timely decisions can be made and the project continues to support the overall strategy.

Getting AI and people to work together might be challenging and it is therefore important to consider the direct and indirect impacts of the technology on people at an early stage. A key part of the planning for implementation should be about preparing staff for the new models of working. This might involve technical training but also, most importantly, open discussion and decisive leadership from both top management and the AI champions. Demonstrating the value the technology has already provided in other organisations or other parts of their business is likely to help.

## A machine with purpose:

### How would an AI system for contract analysis work?

An AI-powered system could be trained to empower legal professionals to quickly answer specific types of questions of the documents given, e.g. "How many contracts related to the issue of XYZ are under English governing law?"

It would carry out the following stages:

#### Search and index

- Traverses document management systems, file systems and email servers to identify and tag documents

#### Interpret and annotate

- Reads the contents of each contract
- Identifies contracts likely to be related to each other
- Identifies clauses of certain types, interprets dependencies between clauses
- Creates metatags to capture all analysis outputs

#### Present results

- Visualises outputs of its findings



## To do list for AI implementation:

- select a suitable POC project and ensure that it aligns with the overall AI strategy
- follow the guide for the AI implementation process
- identify AI champions and empower them to make decisions and lead on the projects. A key part of their role would be to identify the indirect and direct impact on staff and communicate that to them
- ensure staff have clear examples of how they will benefit from the use of AI as this is integral to them supporting it
- in further projects use a mix of experienced AI leads and less experienced employees who want to gain the experience to broaden the AI knowledge base
- don't be afraid to fail and keep learning from previous AI projects



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# Notes





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