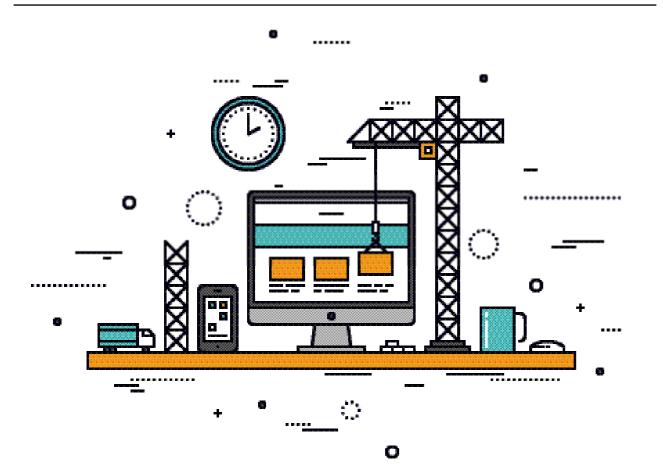
# Automated work force

Robots are no longer just speeding up processes on assembly lines; they are making inroads into offices around the world. Intelligent software is set to supplant a number of white-collar jobs, which is a cause for excitement and apprehension. Frank Casale, founder and chairman emeritus of the Institute for Robot Processing Automation (IRPA) and president of arago US, explains how the impacts are likely to be felt in finance departments and beyond.



en years ago, if someone asked whether robots would disrupt the white-collar workforce. they'd be considered a fringe thinker with a penchant for sci-fi and scaremongering. Increasingly, however, the question is not only being asked – it is also being answered in the affirmative. In December last year, billionaire Jeff Greene, founder of the Greene Institute.

warned that many traditional office jobs would be handed to robots.

"What globalisation did to the bluecollar worker in manufacturing over 30 or 40 years, artificial intelligence, machine learning, big data and robotics will do to the white-collar economy and at a much faster pace," he said at his two-day conference entitled 'Closing the Gap'

Likewise, a 2015 report by the Lords' Select Committee suggested that over a third of UK jobs were at risk of being automated within two decades. It advised that with the composition of the workforce due to change so drastically, the UK should funnel far more investment into digital skills. Just as physical robots are used to speed up processes in manufacturing plants - with a knock-on

effect for workforces - so too might intelligent robots replace human labour in many administrative and clerical roles.

In fact, with these changes already in motion - it is estimated that over half of the UK's secretarial jobs have vanished in the last ten years - the real concern is not so much if this will this happen, but how it will affect businesses and what it means for the people they employ.

### Frank Casale

definable, repeatable, rules-based and a candidate for intelligent automation. Because there are many of these processes in an organisation, you can

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Frank Casale, founder and chairman emeritus of the Institute of Robot Processing Automation (IRPA), and president of arago US, says the impact will be seismic.

"I won't say it's like the reinvention of the wheel, but it's significant," he says. "We're seeing shifts from automation software that assists the white-collar workers, to extremely intelligent software that can replace those same workers. Think of the impact of recent advances in artificial intelligence and machine learning: you have very advanced software, which is allowing, if not forcing companies to really revolutionise how work gets done. I see this as a digital labour play."

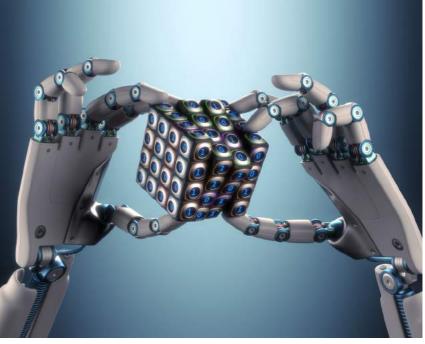
Casale has a long track record in spotting technological trends. Before founding the IRPA in 2013, he launched The Outsourcing Institute, a global network of outsourcing professionals, along with Casale Management Services, a recruiting firm for those working in complex technological applications such as big data, cybersecurity or the cloud.

### **Bigger than previous trends**

Robot process automation (RPA), also known as intelligent process automation or autonomics, is something different. He dismisses the idea that RPA is simply the latest iteration of finance or accounting automation software that has been in use for a while.

"It's bigger than any of the previous trends I've been involved in," Casale says. "Think of any work process that's think of this as a horizontal rather than a vertical application. It's generalpurpose technology, like the internet. If you sat down with someone in 1995, and they said, 'What can the internet do for me?', you'd say, 'Well it depends on what you do for a living, what business are you in?'."

The answer to that question may be especially far-reaching for an organisation's finance department. An article in the Wall Street Journal, published in 2015, suggested that "the new bookkeeper is a robot", citing a number of companies that have recently cut headcounts in their accounting departments. It mentioned research by



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Frank Casale is the founder and chairman emeritus of the Institute for Robotics Process Automation (IRPA), and president of arago US, a leader in smart-automation software. Casale launched the IRPA as a global network of executives interested in the advancements in process automation.



Hackett Group, which found that the median number of full-time employees in the finance department at big companies had declined by 40% since 2004.

Companies eager to save money on their back-office operations can use software to replace roles ranging from accounts payable clerk to inventory control analysts. It is likely that truly robotic software, which can quickly automate disparate applications without needing to invest in full-system integration, will expedite this change.

According to research by global research firm Source, robotic software automation could present significant opportunities in cross-system manual processing, data gathering and reporting, monthly account closure, bulk data updates and ERP IT processes.

While the potential job losses have proven the subject of much handwringing, the advantages have been underexplored. Casale feels it's time to change perceptions.

"You have intelligent software that learns, that's self-correcting, that's better, that's faster, that's cheaper; analytics like

Intelligent automated processes have already begun to replace personnel in accounting departments.

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we've never had before. On the labour front, you can envision a time when senior executives walk to the head of HR and say I need 500 people to do X. And if the head of HR is fluent in digital labour, they may say, 'Well let's sit down and revisit this. Maybe you don't need 500 people; maybe you need 150 people and some good software'."

While this may sound like it spells bad news for the other 350 people, Casale thinks this fear should be reframed.

"Companies have an opportunity to rethink how they get work done, and how they deploy limited talent and scarce resources," he says. "If you think about the war for talent, as it applies in many specialised areas, where there are more job openings than people, this will be where they really close the gaps."

### **Reluctance from community**

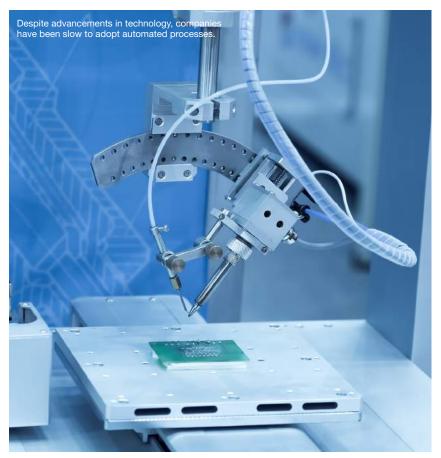
He says that this is a clear chance to save money, amounting to a 25–40% reduction in labour costs. There are also implications for risk mitigation. Because finance is such a highly regulated industry, an increasing number of compliance officers are exploring the ways that RPA might make their role more straightforward. This is not to mention that fewer mistakes will occur.

While these benefits may seem to speak for themselves, the business community is still hesitant to get on board. Casale feels that there are two main stumbling blocks in the way. The first is a lack of understanding, and the second is that this is essentially a disruptive technology that cannot help but shake up the status quo.

"You know the world is risky enough without some new-fangled technology coming in and flipping everything upside down," Casale says.

"So, it's always challenging in any scenario where you have a disruptive technology, no matter how wonderful it may be, to get the organisation to embrace it and cooperate. It's more mindset than toolset – the toolset we have works."

Most of the companies that have been willing to embrace robot process automation thus far have been those that are already in the market for change.



"There are risks to being an early adopter, but what I'm finding here is pretty much textbook – the majority of those adopters are the ones who really need a solution now, they cannot wait a year or two for the technology to be a little more mature," says Casale.

"There's an old saying that change occurs when the pain of doing nothing exceeds the pain of doing something, so I have found that the majority of the companies that are embracing intelligent automation are the ones who have significant cost-related issues and have tried everything else."

However, not even these companies are jumping in at the deep end. Typically, they are adopting an incremental approach. Even while exercising caution, they are starting to see cost-savings that outsourcing or management consultants cannot provide.

Casale says that as these companies grow in number, and as the benefits become more acknowledged, there will be a tipping point where robotic process automation stops being risky and starts being the only viable business choice. "Hemingway supposedly described how people go for broke: 'at first very slowly, and then very quickly'," Casale says.

"That is my prediction of how this plays out in the marketplace. I refer to this year as the 'year of the robot', not because everybody does it this year, but because this is the year that it begins to become accepted and understood by the advisers, by the service providers, by the analysts, by all the people who were very cynical about this two years ago."

He envisages that over the next 24 months, the technology will significantly alter the way finance departments are run. If an organisation's first choice is on-site labour, and its second is outsourcing or offshore labour, then robot processing automation will be the third choice in the form of digital labour.

Casale says: "My advice to executives reading this article is that if you're looking for a silver bullet in terms of cost saving and efficiency, and you've tried all the textbook approaches, you really should investigate and research intelligent automation. It will be your favourite new thing."