



ASSESSING THE VALUE OF AI AND AUTOMATION

A VALOIR REPORT

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As organizations consider how to manage the potential of artificial intelligence (AI), policy and technology considerations will play a big role in determining AI's value. However, the most important factors will be the human ones. AI has the potential to automate 40 percent of the average work day. Leveraging that potential will depend on the ability and motivation of employees to take advantage of it.

The arrival of generative artificial intelligence (AI) has raised awareness of the opportunities AI presents to increase productivity and efficiency, as well as its risks. AI, robotic process automation (RPA), and similar tools and technologies have been around for some time. However, the availability of large language models (LLM) generative AI tools like ChatGPT and Google Bard, and the embedding of generative AI in various enterprise applications from human resources to customer service to development platforms is causing companies and their employees to take notice.

As companies develop and evolve their policies for the effective, safe, and ethical use of AI, many employees see the potential to automate more of their work day – but just as many are wary of the impact of AI on their jobs. Maximizing the value of AI and automation will require new strategies for information technology (IT), human resources (HR), and management, as well as for individual workers.

To better understand the potential impact of AI and automation on productivity, efficiency, and jobs, Valoir conducted a global survey of more than 1000 workers in a broad range of industries and validated the data with in-depth interviews with people employed full-time in finance, HR, IT, marketing, operations, sales, and service roles.

Key findings

We found that the potential for generative AI and other tools and technologies depends on both technology and human factors:

- Automation is already under way at many companies, with workers reporting they have automated an average of 20 percent of previously-manual tasks in the past two years. Although the level of automation varied by geography, job role, and industry, nearly all workers have experienced some automation in the past two years. In many cases, low-code and no-code platforms have enabled business users to automate their own processes. Rules-based and traditional AI approaches have driven automation as well.

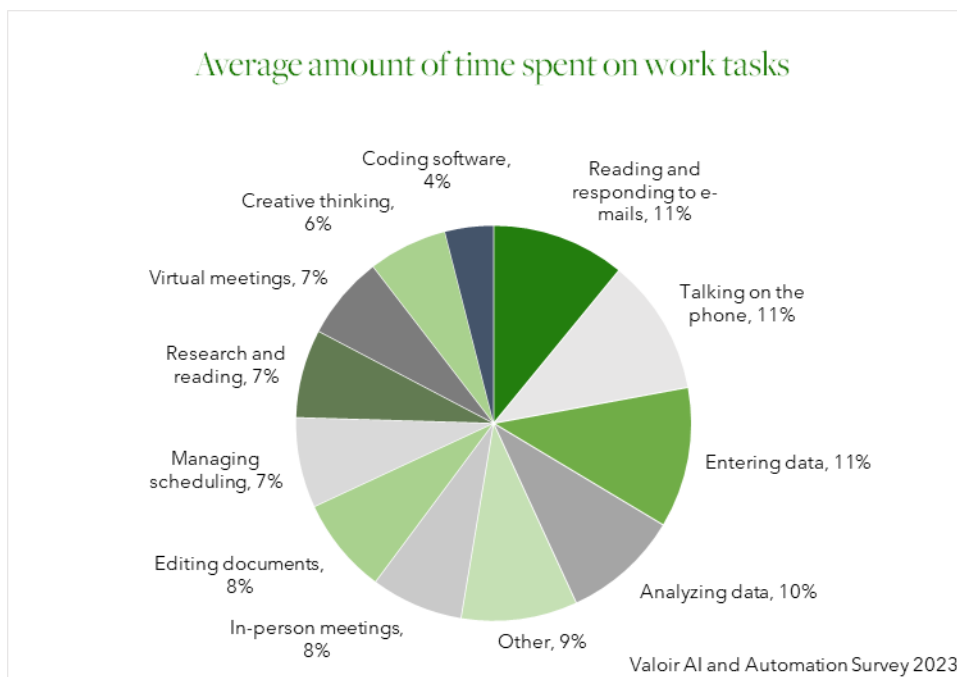


Automation is already under way at many organizations, with workers automating an average of 20 percent of their work in the past two years.

- Generative AI has reached the tipping point, with more than 50 percent of workers having experimented with generative AI, either at home or in the workplace.
- Workers could see significant automation through generative AI and other technologies, with 40 percent of the tasks of the average work day ripe for automation.
- Most employees believe this automation will lead to job replacement, with the average worker believing 48 percent of their co-workers could be replaced by automation in the next two years.

AI's potential for job automation or replacement

To understand the potential for automation by job role, Valoir asked workers what share of their day they spent on 13 different work tasks, such as reading and responding to e-mails, managing calendars and scheduling, talking on the phone and attending meetings, entering data and coding, research and writing, and creative thinking and brainstorming.



Reading and responding to e-mails, talking on the phone, and entering data made up the largest portion of the average work day, with the average employee spending 11 percent of their time on each activity. Those in sales and customer service spent the most time on those activities, while marketing, finance, and IT employees spent the least amount of time on those activities.


Valoir then conservatively estimated how much of each of those tasks could be automated based on data from in-depth interviews with employees in a

variety of different roles. For example, we estimated that a high percentage of time spent managing calendaring and scheduling could be automated through AI while there would be limited automation in areas such as brainstorming and in-person meetings.

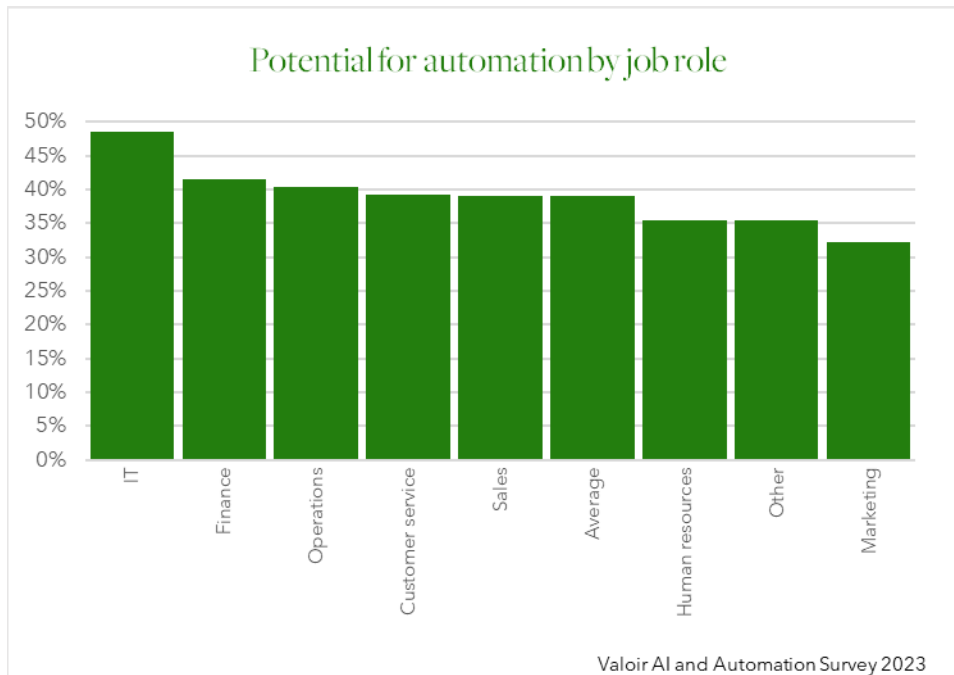
Based on this analysis, Valoir found that the greatest opportunity for automation was in IT roles, with a potential for 48 percent automation, followed by finance, operations, customer service, human resources, and marketing. If employees in these roles were to fully take advantage of AI's potential for automation, they could automate, on average, 40 percent of their work day, effectively enabling a 3-day work week.

However, realizing AI's potential for automation will depend on a number of factors including:

- Company policies and culture. Organizations' official policies on the use of AI will matter, but so will culture. Companies will need to balance the potential for increased productivity of employees with the risks of potential misuse or unintended adverse outcomes. Cultures supporting a high degree of autonomy and personal responsibility are likely to benefit more from automation.



Forty percent of the average work day is ripe for automation.



- Technology and data readiness. To fully take advantage of AI's potential, companies will need connected and reliable sources of data, and safeguards in place to ensure the security, privacy, and ethical use of data when AI is involved.
- Human factors. Employees' technology aptitude, willingness to experiment, and job confidence will impact their ability to effectively

adopt AI. They will need to see AI as a potential benefit, not a potential replacement.

The human factors

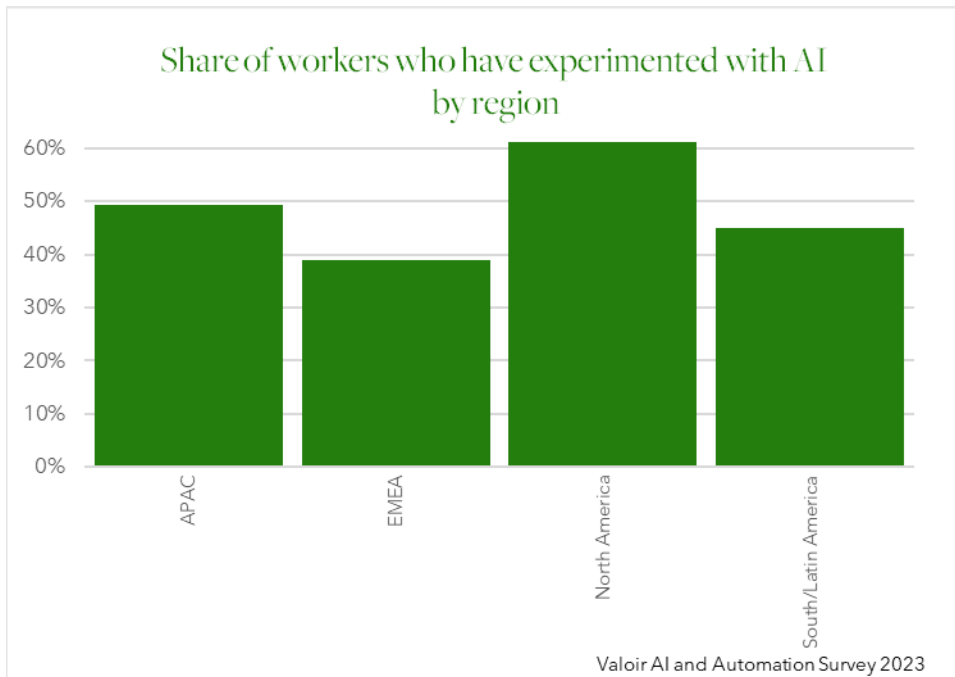
To assess the potential impact of human factors on maximizing the value from AI and automation, Valoir examined a number of key indicators including adoption of AI and automation to date, employee perceptions on the share of their work that could be automated, and employees' expectations and fears of job replacement.

ADOPTION OF AI

Valoir found that North American workers lead in the initial adoption of the technologies, with more than 60 percent of employees having experimented with ChatGPT, Google Bard, or other AI tools or frameworks. Nearly 50 percent of workers in the Asia-Pacific region (APAC) had also tried generative AI technology, followed by 45 percent of employees in South and Latin America (LatAm) and 39 percent of those in Europe, the Middle East, and Africa (EMEA). It is not surprising that European trail their counterparts in early adoption given Europe's relatively strict regulatory controls on data and privacy.

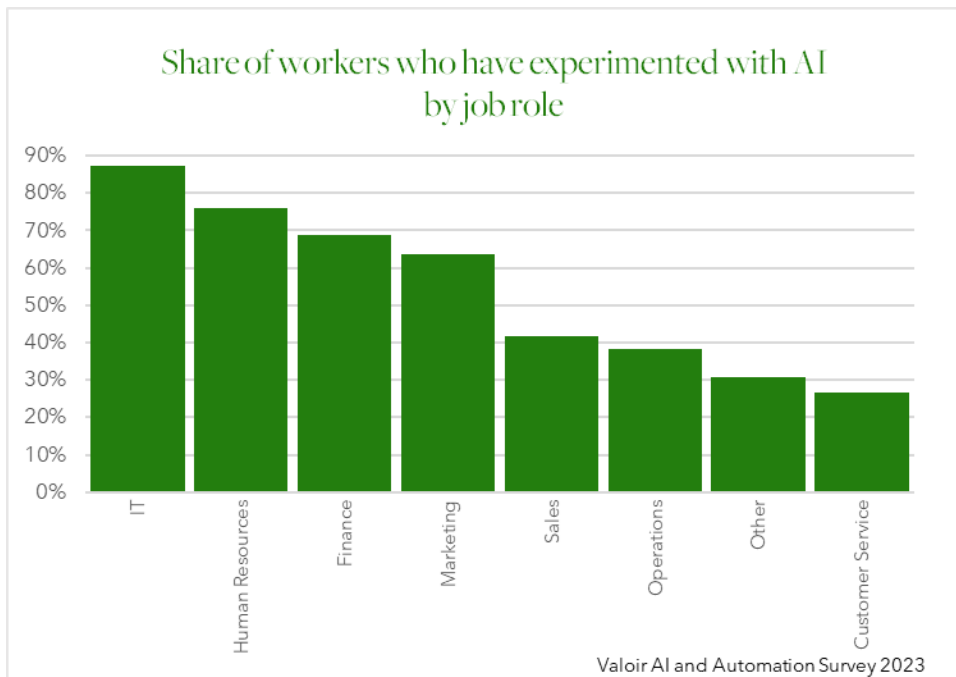


More than half of all workers have experimented with generative AI.



What was somewhat surprising, however, was the adoption and experimentation with AI relative to job role. Although employees in IT led the pack, with nearly 90 percent having tried generative AI, they were followed by employees in human resources (HR), finance, and marketing,

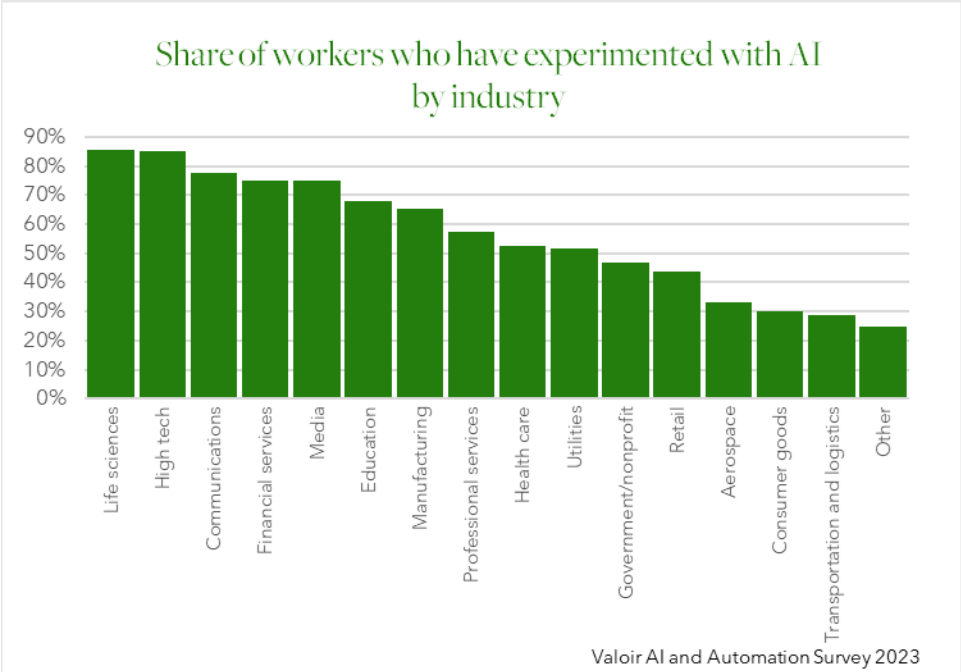
with 76, 69, and 64 percent (respectively) of those employees having experimented with the technology. Beyond those employees, there is a



significant adoption gap: only 42 percent of sales employees had experimented with the technology, and those in operations, customer service, and other roles were even less likely to have tried it.

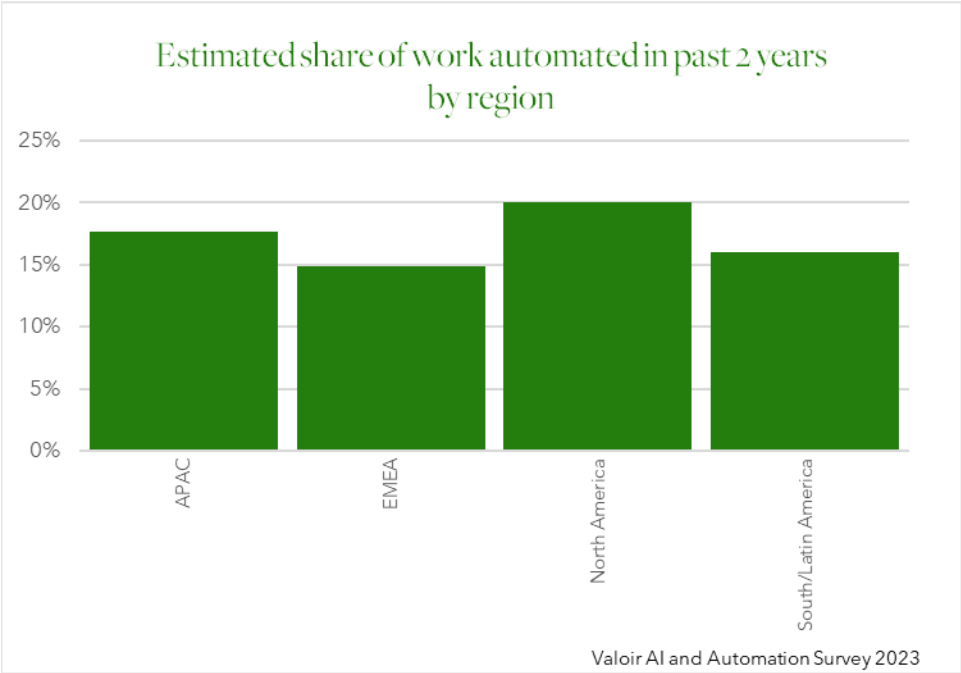
It is not surprising that marketers ranked high as early adopters of the technology, as an obvious application of generative AI is to create content in different styles for different audiences. However, early adoption in human resources and finance – areas where employees have experience dealing with sensitive or confidential data – suggests that more data-savvy employees find such technologies more accessible. It also highlights the potential risks of exposing confidential data to large language models. Although there may be limited risk in asking AI models to generate job descriptions, for example, and HR vendors have been quick to announce capabilities in this area, the application of AI to analyze HR or financial data is obviously inherently more risky.

From an industry perspective, those in life sciences and high tech were the most likely to have experimented with AI, reinforcing the notion that those most comfortable with data analysis and coding are more likely to be early AI adopters. Aerospace, consumer goods, and transportation and logistics ranked the lowest.

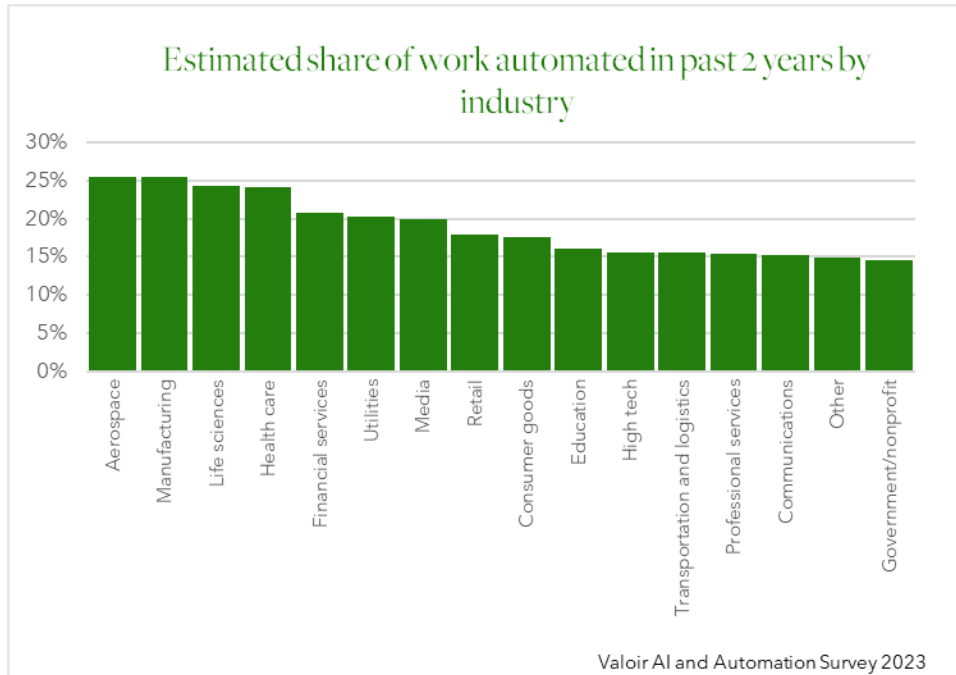


ADOPTION OF AUTOMATION

The recent buzz around Chat GPT and other LLMs and their potential to automate work processes and increase productivity (on the positive side) has also raised concerns about AI and automation replacing human jobs.



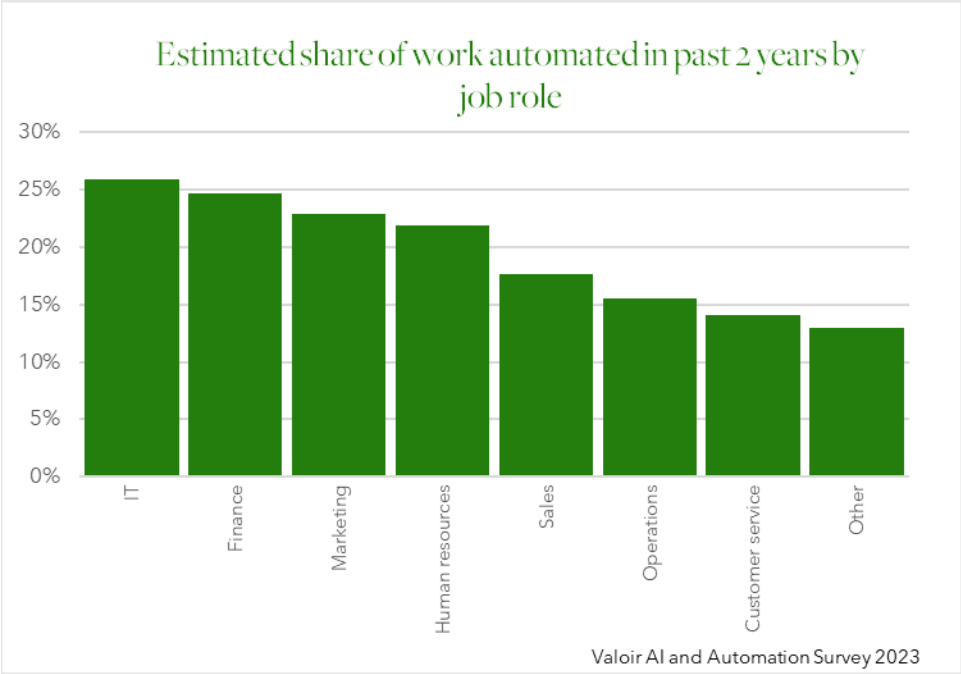
However, the adoption of automation technology to increase productivity is not new, and advances in low-code and no-code tools and robotic process automation in the past few years have enabled many workers to automate a significant portion of work practices already.



In fact, we found that the average employee had automated 20 percent of previously manual tasks in the past two years, with aerospace, manufacturing, life sciences, and health care adopting the greatest level of automation. Not surprisingly, the employees adopting the lowest levels of automation were those in transportation and logistics, professional services, communications, and the government and non profit sectors.

Also not particularly surprising was the automation of existing work in the past two years by job role. IT and finance workers led the pack in automating manual tasks. IT led because of employees taking advantage of tools and technologies such as low-code and no-code capabilities that enable developers to build applications with limited manual coding and the advances in automated application diagnostics, maintenance, and support.

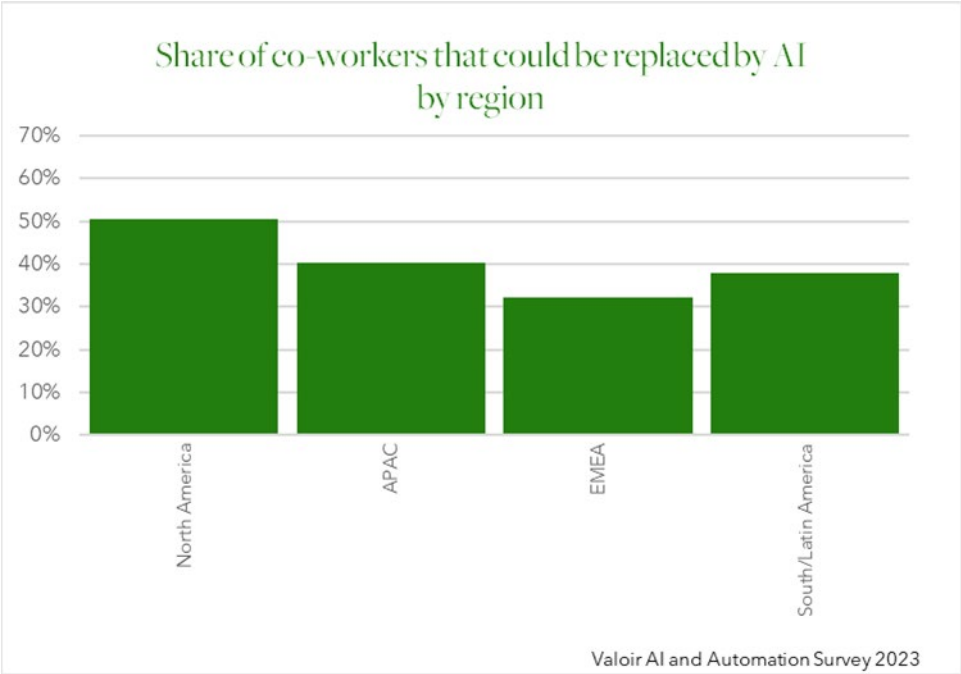
From the finance perspective, advances in Microsoft Excel that have accelerated financial analysis, the broader availability of low-code data visualization tools that enable non-data scientists to build reports and data visualizations, and the adoption of financial applications with embedded analytics and rule or AI-based prompts have already enabled a significant level of automation. Marketing followed, supported by the broad adoption of cloud-based marketing automation tools and pre-built analytics and dashboards.



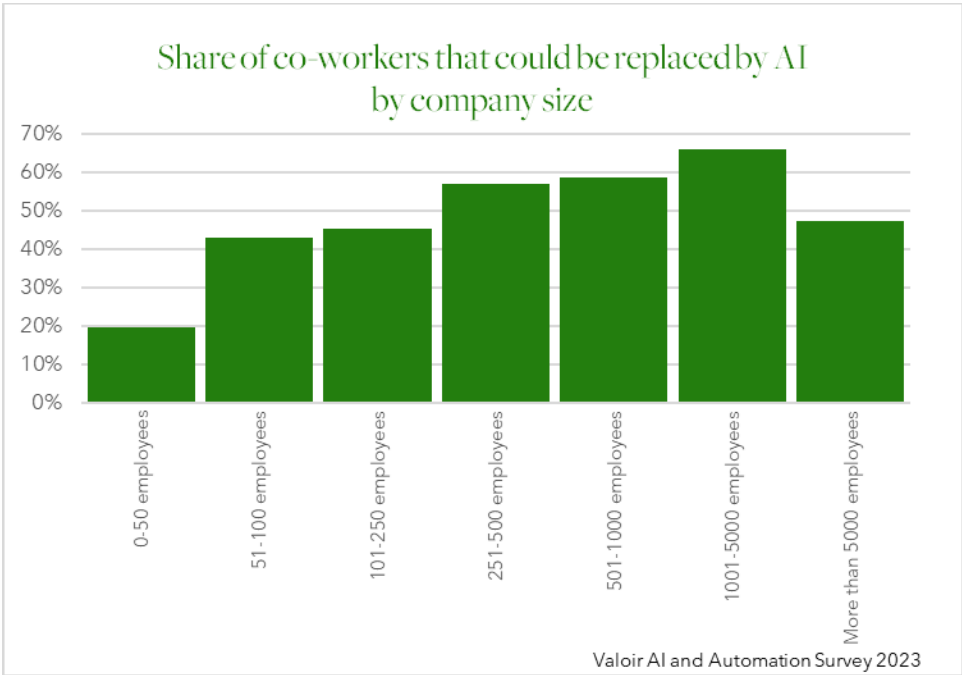
Employees in sales, operations, and customer service were the least likely to have automated significant portions of their work.

EMPLOYEE EXPECTATIONS OF JOB REPLACEMENT

The willingness of individual employees and teams to adopt AI is also dependent on whether they view AI as a potential boost to their productivity and value to an organization or as a potential replacement.

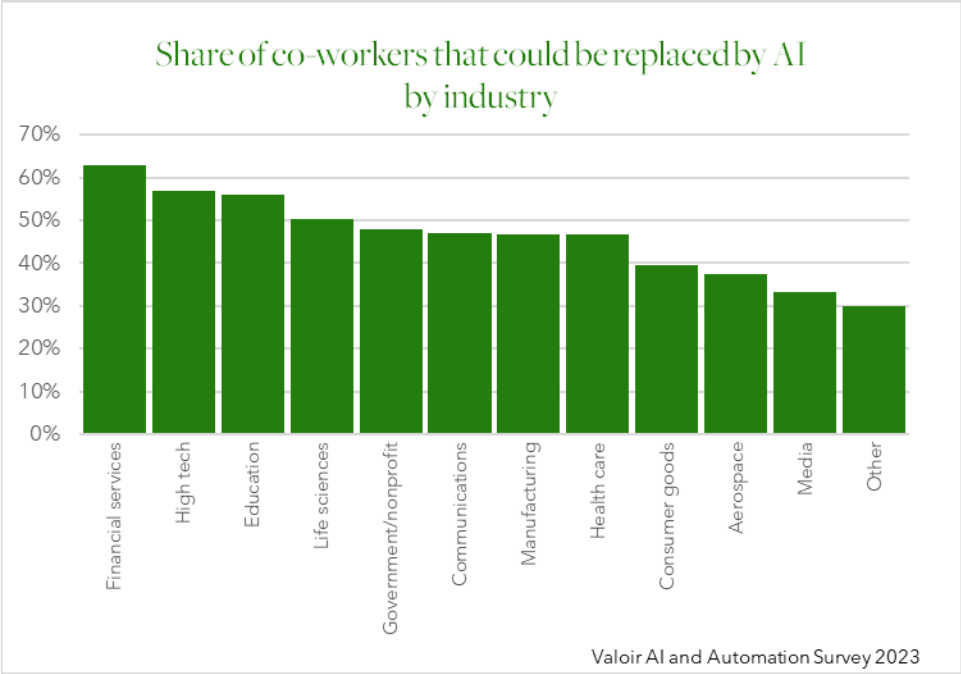


Valoir asked employees to estimate what percentage of their co-workers could be replaced by AI and found that, not surprisingly, there a significant difference between geographies, with North Americans at the high end (believing 50 percent of their co-workers could be replaced) and EMEA at the low end (believing that 32 percent of their co-workers could be replaced). This reflects the relative flexibility of hiring and firing practices in North American as compared with EMEA.

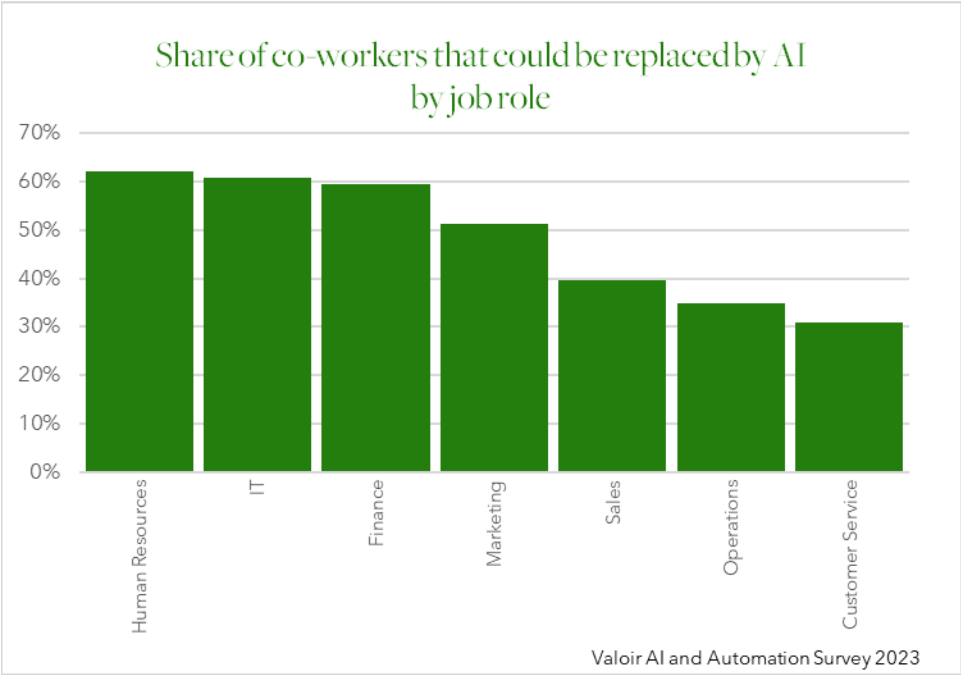


Also not surprising was the variance between employee expectations for co-worker replacement and company size, with those in smaller organizations estimating that fewer of their co-workers could be replaced by AI technology. As the size of organization grew, the potential for replacement increased until we reached organizations with more than 5000 employees. The drop off is likely because of the need for more layers of management in larger organizations that are less ripe for automation, and that many larger organizations have already made investments in automation.

When it came to industries, employees in the financial services, high tech, and education sectors saw the greatest opportunity for co-worker replacement, while those in consumer goods, aerospace and media had the least opportunity.



In terms of job role, employees saw the greatest opportunity for co-workers' replacement by AI in human resources, IT, and finance, where a significant portion of daily work tasks are ripe for intelligent automation in areas such as data entry and analysis, coding, and revising of reports and documents. Interestingly, workers believe the least opportunity for job replacement is in customer service.



Although AI technology may deflect some calls from the contact center and shorten the time of those calls, humans will still be needed for in-person engagement with customers employees believed there was still the potential for 31 percent of coworkers in customer service to be replaced).

FEARS AND CONCERNS ABOUT AI

The other human factor impacting the potential value of AI for organizations is fears about AI technology and its implications:

- Valoir found that one in four workers are very worried that their job will be replaced by AI in the next year; those most concerned about being replaced were workers in the 26 to 41 age group and those in finance and IT roles.
- Four out of 10 believe AI developments should be paused until better policies and regulations can be developed to manage the potential risks of AI. Many employees believe those risks are real:
 - Three out of 10 workers are very worried that AI will “take over.”
 - One in four are very worried that AI will start a world war.
 - Three out of 10 workers are also very worried that AI will commit a crime or support criminal activity.
 - Other concerns include data privacy and security, such as the risk of data breaches when internal data is exposed to outside models, the misuse of data, potential model bias, and other unexpected outcomes.



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Looking ahead

As generative AI becomes more prevalent as both a standalone tool and an embedded capabilities in enterprise applications and development platforms, employers and employees alike will need to develop strategies that maximize its benefit and minimize its risks. This means:

- Leaders will need to navigate the difficult conversations of technology and job replacement, culture and employee-employer relationships, and the value of autonomy (versus replaceability) within the organization.
- IT will need to ensure that the expertise, data hygiene, governance, and guiderails are in place to enable employees and processes to get maximum value from AI and automation. IT will also need to rethink its development and staffing strategies to redesign work within its own department.
- HR will need to work with legal and executive leadership to define new strategies and policies for the ethical use of data, new training plans for job replacement and upskilling, and updated employee

experiences that ensure thoughtful leverage of AI at the departmental and individual level.

- Employees will need to re-evaluate their current roles and skills and take advantage of opportunities to leverage AI as a digital assistant, or risk being replaced.

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