

Operations Practice

Making healthcare more affordable through scalable automation

As more healthcare companies start to implement automation technologies, the ability to coordinate across the organization in achieving scale will be a major determinant of success.

by Brandon Carrus, Sameer Chowdhary, and Rob Whiteman



Automation technologies, such as robotic-process-automation bots, machine-learning algorithms, and physical robots, have the potential to reshape work for everyone: from miners to commercial bankers, and from welders to fashion designers—and even CEOs.

Our colleagues' research on the future of work estimates that, using currently demonstrated technologies, almost half of the activities that people are now paid to do in the global economy could feasibly be automated. Certain types of repetitive and routine activities, such as data collection and processing, thus show a high automation potential. By contrast, certain tasks that are customer-facing or that involve innately human

skills—such as creativity, problem-solving, and effective people management and development—are more resistant to automation (Exhibit 1).

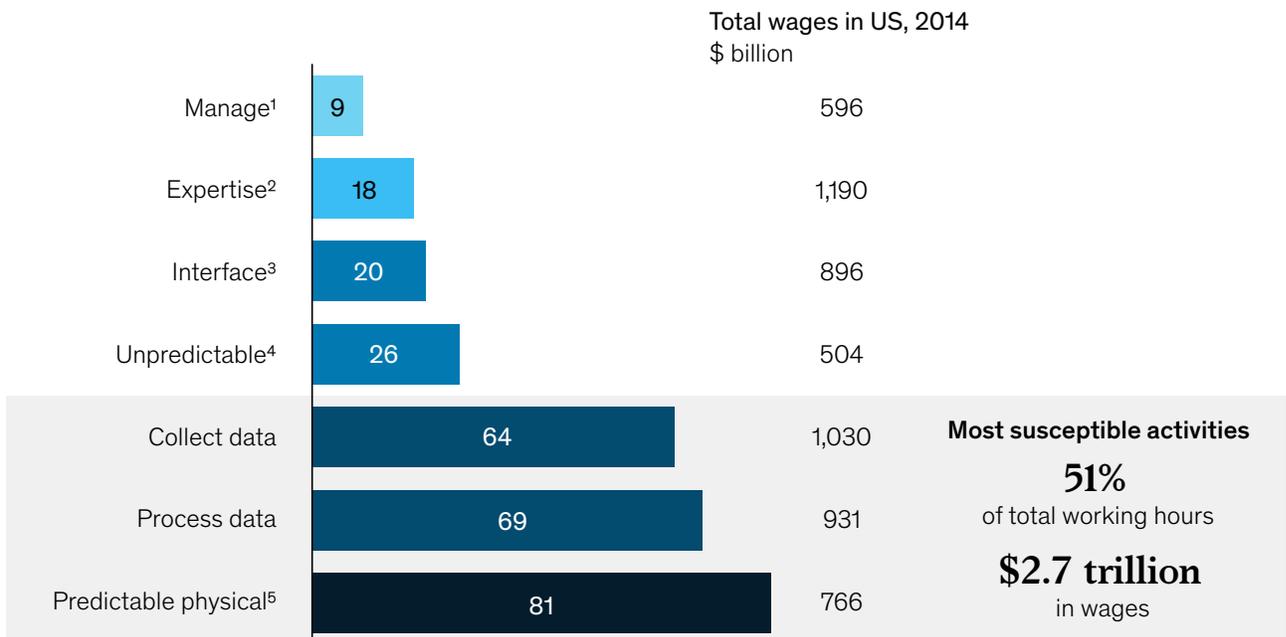
Partly because of task-level differences in automation potential, sectors' automation potential varies widely, ranging from 26 percent in educational services to 60 percent in manufacturing. Healthcare is bifurcated between payers and providers. Payer work, reflected in Exhibit 2 as part of "finance and insurance," is fairly automatable: about 43 percent of tasks show technical automation potential, as activity such as administering claims or enrolling members primarily involves collecting and processing data in a controlled environment.

Exhibit 1

Three categories of work activities have significantly higher technical automation potential.

Time spent on activities that can be automated by adapting currently demonstrated technology

%



¹Managing and developing people.

²Applying expertise to decision making, planning, and creative tasks.

³Interfacing with stakeholders.

⁴Performing physical activities and operating machinery in unpredictable environments.

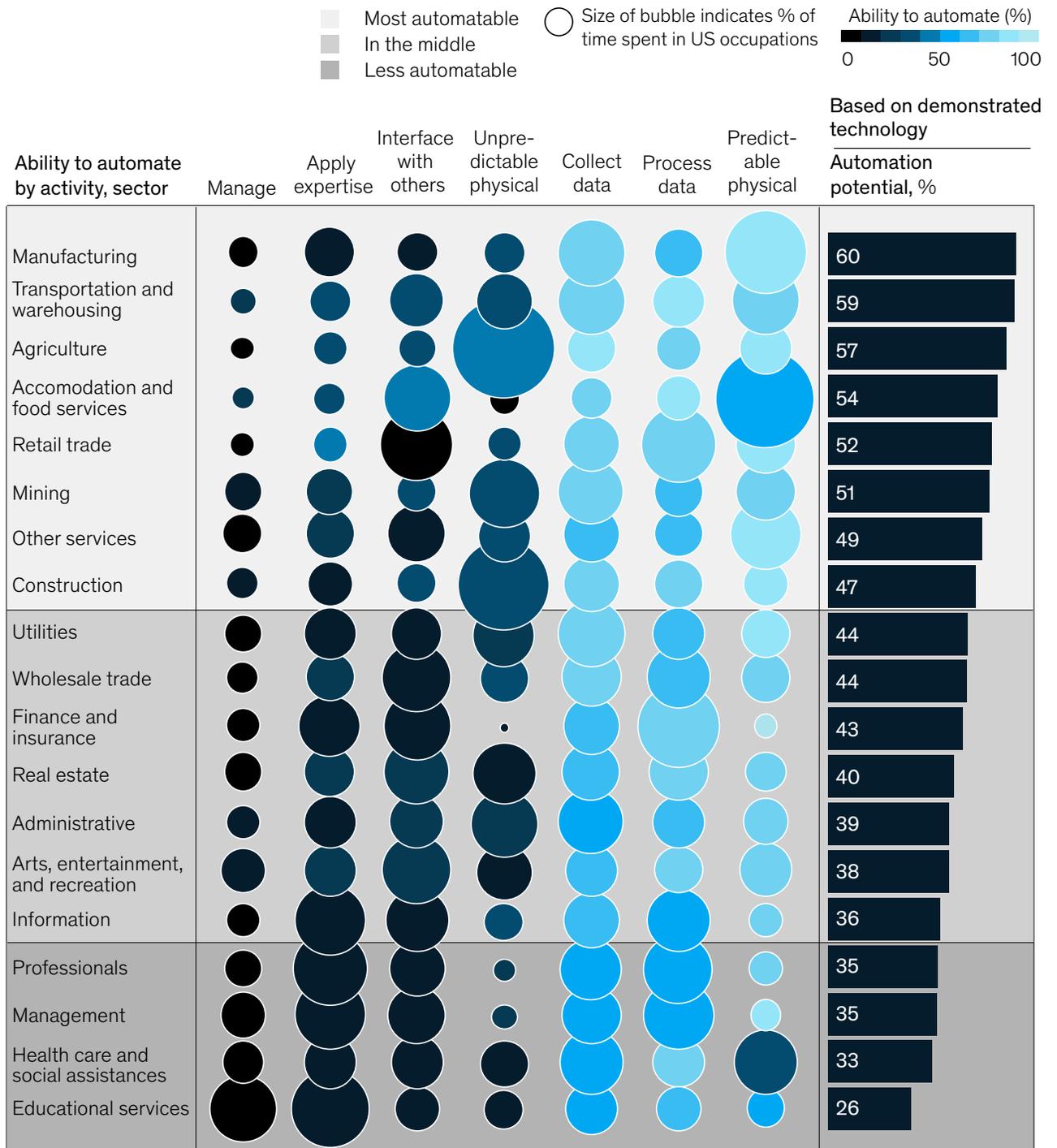
⁵Performing physical activities and operating machinery in predictable environments.

NOTE: Numbers may not sum due to rounding.

Source: US Bureau of Labor Statistics; McKinsey Global Institute analysis

Exhibit 2

The impact of automation will vary by sector and type of work.



Provider work is somewhat less automatable because its activities occur primarily in a clinical setting, such as patient consultation and surgical procedures. Still, an estimated 33 percent of the tasks in this area are likely to be automatable. The net result is that if automation's full potential were achieved, it could have a significant impact on reducing costs and improving affordability of healthcare.

The healthcare industry is in the middle of a multidecade shift attributable to multiple forces, including technology, national and state regulatory changes, and consumer-centric trends. Automation has the potential to reshape the industry, but many players are only beginning to capitalize on the opportunity. The success of these efforts is dependent on the ability to scale and coordinate automation activities across the enterprise.

Automation stands to transform payers

Automation represents an estimated \$150 billion opportunity¹ for operational improvement, including reduction in administrative cost, improvement in quality control, and strengthened insights to achieve strategic objectives. Payers appear to have the most to gain from automation programs in healthcare, given the large portion of their work that is based on collecting and processing data.

The importance of automation was frequently cited in a recent survey that our colleagues conducted, which found that 85 percent of the 25 largest US payers ranked automation among the highest administrative cost-reduction levers (Exhibit 3). While 72 percent of respondents agreed that claims processing is the single

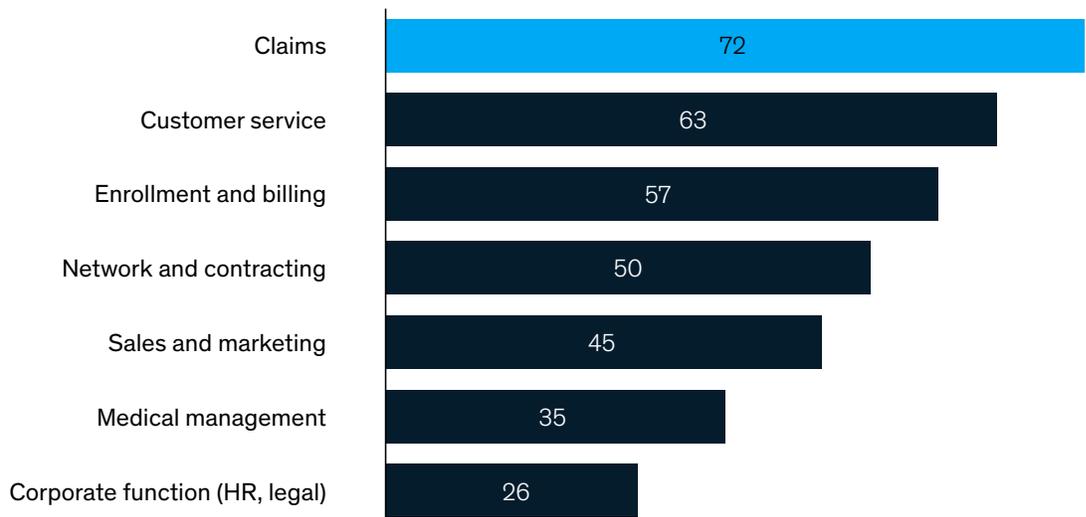
¹Based on total healthcare spending in the US \$3 trillion, out of which approximately 15 percent is administrative cost, of which 40 percent could be automated.

Exhibit 3

Automation can yield significant impact for payers—starting with claims.

Survey of healthcare payers (n=500), %

Where could automation yield its greatest cost impact for your organization?



area where automation could create the greatest impact, the survey confirmed that opportunities are available throughout the payer value chain, and across a broad range of automation technologies. Example areas of potential success include improving data quality through auto-validation algorithms, strengthening customer-agent relationships using portals and smart workflows, and simplifying the enrollment and onboarding process using bots.

Moreover, automation can deliver benefits beyond cost savings. Enhanced customer experience and satisfaction, improved data to drive decision-making, and improvements to organizational health can all help support long-term sustainability.

Three success factors for automation

Our research finds that while most payers have launched automation efforts, many are struggling to build capabilities and generate bottom-line impact. According to a recent survey from our colleagues, each of the largest 25 healthcare payers in the US have started an automation program—but only half are beginning to scale. Pitfalls include lack of implementation expertise, lack of proper governance, and lack of funding. For example, at one healthcare company, a lack of coordination across business units meant that after spending more than \$25 million on automation, the company has seen less than \$5 million in realized annual benefits.

Our experience shows that across industries, successful automation programs do a few things differently:

- **Take a top-down, strategic approach.** While many companies begin by deploying technologies in a bottom-up way, often involving many “proof of concepts” in a thousand-flowers-bloom approach, successful organizations make automation a strategic initiative. That means doing the up-front work to understand the size of the opportunity, thoughtfully evaluating where to invest resources (is the opportunity greater in enrollment or billing?), and assessing what new capabilities may be required. By creating a roadmap early, successful companies better deploy financial and human capabilities in a systematic way across the enterprise.
- **Focus on people to capture value.** Focusing more on technology itself rather than the people charged with using it can lead to wasted potential, such as when companies undertake only passive reinvestment of the extra capacity automation generates. For example, automating a portion of a person’s workload without rethinking the role that person fills can leave that person only partly occupied, reducing the value automation could have produced. Successful companies instead are methodical in assessing which types of work are to be automated, which organizational structures and roles could be redesigned to fill gaps in people’s capacity and capture full value, and how to sustain the impact over time. They further strengthen this focus by incorporating it into targets and individual performance evaluations to increase accountability.
- **Design a deployment model to support scale.** Deploying automation technologies using a centralized, “factory” model can be a good way to build early capabilities. However, companies often find that this type of broad and shallow deployment model can sputter after capturing the easy opportunities. Successful organizations create structures capable of deploying multiple technologies in sequence—such as digitizing member forms, orchestrating workflows, and then launching bots and algorithms—across specific domains, whether processes, functions, or locations. Often, this means using cross-functional labs or pods that fundamentally redesign work in an area before moving on to the next part of the business. In effect, many organizations start with a centralized model but shift to a federated model in order to scale.

The healthcare sector, and particularly payers, stands to gain meaningfully from automation technologies. To capture the opportunity, companies will want to be more thoughtful and organized around orchestrating and scaling automation programs.

This will require strengthening buy-in across the organization, creating a scalable deployment model, establishing a repeatable process for converting activity into impact, and finding innovative ways to reskill and redeploy employees.

Brandon Carrus is a senior partner in McKinsey's Cleveland office, **Sameer Chowdhary** is a partner in the Dallas office, and **Rob Whiteman** is a partner in the Chicago office.

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