Reference

Workplace Automation Is Everywhere, and It's Not Just About Robots

Workplace automation is widely available, often taking the form of software tools in commonly used programs.
There's scope for greater automation in almost any business, across all industries.
Automation won't replace people, but it will free them from performing mundane and repetitive tasks.
This article is for business owners keen to know how workplace automation could benefit their business by freeing up resources and improving consistency.
There was a time when the term "automation" was synonymous with advanced manufacturing plants full of robotics. While replacing human labor with machine labor is a prime example of workplace automation, it's far from the only example. Automation is present in modern businesses of all sizes – including subtle features in common software applications, and more obvious implementations like self-driving vehicles or autonomous robots.

There is much debate about where workplace automation will lead the economy, but observers tend to agree that the trend is gaining momentum. Every business process is on the table for automation, especially as technology becomes more sophisticated. Automation will undoubtedly change the workplace and the wider economy. The only question is: To what extent?

What is workplace automation?
There's a common misconception that automation involves towering robotics, but it can be as simple as a set of tools housed within common business software programs. At its core, automation is about implementing a system to complete repetitive and easily replicated tasks without the need for human labor.

"Automation takes a lot of forms," said Fred Townes, chief product officer at READY Education. "For small businesses, the most important thing is [repetition]. When you find something you do more than once that adds value … you want to look into automation."

Historically, automation required expensive servers and a team of experts to maintain them. For many small businesses, this was a cost-prohibitive measure that put automation out of reach. With the development of cloud-based platforms, however, automation tools are now accessible to even the smallest companies, Townes said.

Examples of common workplace automation
According to Townes, by automating repetitive business processes, employees are freed up for tasks that are more valuable than those that can be completed by machines. However, more advanced forms of automation – like machine learning – can now be used to complete higher-order tasks that require a bit more adaptability. The ability of

these software programs to learn over time means they pore through massive troves of data quickly and effectively, before contextualizing that information in a useful way to support internal decision-making.

These are some of the ways in which workplace automation is already being adopted by forward-thinking companies:

1. Email marketing

Many small business owners already use at least one form of automation: email marketing. Companies like Zoho and Constant Contact offer software that allows users to tailor the parameters of their email marketing campaign to their liking and then set it to run automatically. You can learn more about these platforms' automation abilities in our Zoho CRM review and our review of Constant Contact.

An introductory email can be uploaded into the software and sent as soon as a contact is added. The software is configured to send a follow-up email a few days later, but only to those who opened the original email.

2. Talent acquisition and hiring

Machine learning automation is making inroads in talent acquisition and employee recruitment, said Kriti Sharma, vice president of bots and artificial intelligence at accounting and payroll software company Sage. For human resources departments, automating processes like tracking down potential candidates and scheduling interviews frees up time for workers to determine who is the best fit for their organization. [Read related article: Guide to Choosing a Payroll Service]

"It is a big pain to hire the right people," Sharma said. "A lot is happening in recruitment systems, using AI to match the right people to the right team for the right projects."

3. Customer service

Customer service departments are also getting an automation makeover with the introduction of tools like chatbots and automated text message marketing solutions. These consumer-facing tools automate typical customer service interactions by answering common enquiries immediately. They only refer customers to a representative when the chatbot is insufficient for handling their needs.

4. Sales

An algorithm will never be able to take a client out for coffee or negotiate a deal as effectively as a trained salesperson. Yet automation can free up time for these human-centric interactions, since McKinsey estimates that a third of all sales tasks can be automated. Here are some examples of those tasks.

Searching leads: Predicting when customers might benefit from being contacted
Invoicing: Checking credit, and invoicing new and existing clients

Processing orders: Order processing, stock management and upselling queries
Tracking shipments: Dispatch, delivery, and return notifications; payment and refund acknowledgments
Managing clients: Account management, including regular check-in emails
5. Human resources
Given the predictable and repetitive nature of HR duties – like payroll and timesheets – digitization can transform the efficiency of a department. By reducing mistakes caused by human error, such as an HR employee forgetting to update submitted timesheets, it's possible to automate performance management, paid holidays and absenteeism record keeping.

Software can raise flags if quotas are reached or missed, while maintaining accurate records updated in real time. There are even utilities that automate onboarding using Google forms, including prewritten emails, event scheduling and the distribution of training materials.

Automatic for the people
Opportunities to automate common workplace processes are everywhere, which is why automation is becoming a common element of every business. This includes providing good customer service, streamlining the hiring process or managing marketing campaigns more efficiently. As technology improves, more tasks will become suitable for automation.

Machine learning as a driver of more sophisticated automation
Machine learning and artificial intelligence enable new forms of "smart" automation. As the software learns, the more adaptable it becomes. These technologies open the door for the automation of higher-order tasks in addition to the basic, repetitive tasks.

"I think there's a lot of focus at the moment on these tasks that humans don't want to do," Sharma said. "But what's going to happen in the future is … automation will not just be about automating those tasks humans are doing today, but it will be about realizing potential opportunities."

As data sets become more thorough and available, and as software draws on more sources and synthesizes more data points, contextual information in human decision-making will only improve. Machine learning will serve as a supplement to – or perhaps even an enhancement to – human knowledge. Combine AI capabilities with improved data retention through the Internet of Things (IoT), and the possibilities are endless.

Deus ex machina
Townes proposed that a shift toward more attractive user experiences with machine learning programs is already underway. To make interacting with these tools more natural and intuitive, he said companies will begin tailoring AI and automated

technologies for a more organic, human experience.

To make customer service chatbots appear more human, Sage has intentionally built imperfections into its AI. For example, the answer to a user's question might already be queued up by a chatbot, but Sage built a slight "thinking" delay into its system to simulate a more human customer service interaction. An ellipsis in the chat box indicates that the bot is preparing a response, even though it immediately pulled up the queried information. Initial user feedback to the feature was highly positive, reflecting a desire for a more human interactive experience.

"Things will get more and more accessible," Sharma said. "These technologies will never replace the human being, but they will relieve the human being of the things that are less valuable, relatively speaking. [Humans] will be able to instead focus on those things that require creativity and touch. We'll see more accessible, better experiences, and we'll see human beings move to their highest and best use."

For personnel, the shock of an increasingly automated world can be difficult to process. According to Sharma, successfully integrating automation into human life starts with a comprehensive effort to educate people about what automation is. This also extends to what it isn't, and what it means for them.

"Users are often initially surprised [by the capabilities of automation]," Sharma added. "The first time they see something automatically there's a bit of delight, and it's also a bit scary until you show them the process the software went through. It's more of an educational challenge, not so much a tech problem."

Easing the pain of transition

The steady march of workplace automation has prompted discussion about the future of a fully automated economy. Efficiency, convenience and profitability top the list, but so too do concerns about the fate of workers whose jobs are automated out of existence. There are several proposals to support those displaced in an increasingly automated world, such as retraining programs or a universal basic income.

When it comes to supporting those left behind in an automated economy, there are more questions than answers, with many competing perspectives. Some observers, like Jobcase CEO Fred Goff, anticipate that expanded access to educational and networking opportunities will offer workers the opportunity to remake their careers. They will find a way in the new economy to support themselves and their families.

"The same kind of tech that displaces certain workers also opens up new opportunities," Goff said. "Work life has changed to the point where everyone is essentially their own free agent. Managing yourself has become the theme in the last 10 years, and so we're trying to empower people through tools and open-ended community."

Jobcase is a community of 70 million people, including experts and professionals in various industries. In terms of education, Goff pointed to resources like Khan Academy, which offers free courses on various topics, such as economics and coding. Certifying the skills learned on these platforms will likely come increasingly from completing freelance tasks, rather than from academic institutions.

“The rise of platforms for gigs and 1099 labor are increasingly breaking down the notion of skill certification,” Goff said. “It might still be difficult to get that full-time job, but building on contracted experience is a way to give that competency verification. In the education and training world, it means decoupling the certification of your education from the delivery of your education.”

A new model of working

James Wallace, co-founder of Exponential Ventures, sees an automated future that eschews the conventional notion of jobs altogether. Wallace said that by embracing automation and high tech, individuals could be empowered to create incomes on their own. This would negate the need for a traditional, hierarchical company.

“We’re living through unfortunate but necessary pain,” Wallace said. “The conversation should be how to reduce those growing pains. The reality is the ultimate effect of automation is something very positive for everyone.”

He said the economic insecurity displaced workers feel is very real, but automation is not the enemy. Instead, Wallace hopes to educate people about leveraging this powerful technology to create their own incomes – essentially establishing a society of entrepreneurs and small companies.

“If we can establish a way to make sure we all have enough food, clothing and shelter to survive … and allow people to repurpose their gifts, unique abilities, and enable them to proliferate that and sell it as a good or a service, then we’re adding income,” Wallace said. “We can create an opportunity to generate income for next to nothing, so why not teach people to leverage the tech that disrupted the marketplace in the first place to embrace it and use it for something more in line with who they are, as an expression of their unique abilities?”

Automation for efficiency and profitability

Ironically, the bottom line of business process automation is the bottom line. Automating processes saves time and allows resources to be diverted elsewhere. It means companies can remain smaller and more agile.

Increased efficiency, productivity and lower costs all translate to healthier profit margins for businesses – both small and large. The extent to which automation transforms the economy at large remains to be seen, but it appears inevitable that we’re headed toward a future of more automation. [Learn more about the best marketing automation products

in our buyer's guide.]

What this means for businesses, workers and consumers will be the subject of huge debate moving forward. One thing seems certain, however: If it can be automated, it will be.

Neil Cumins contributed to the writing and reporting in this article. Source interviews were conducted for a previous version of this article.