

Automation and the Future of Business (January 2019)

Have you ever thought: “If I just didn’t have to spend so much time on (insert dull, routine tasks here), I’d have time to really excel at my job”? Soon, many of those mundane activities will become automated. Automation saves time, effort, and money. The ability to automate tasks and processes is increasingly important to businesses’ efficiency and competitiveness. Plus, with advances in technology, it’s becoming much easier to do so.

What does automation look like?

The level of automation varies, depending on technology and the complexity of the tasks. It could be as simple as setting automatic replies to emails, or as complex as programming robotic process automation software to analyze data. About half of the activities that workers do today have the potential to be automated. Current technologies are best suited for routine tasks that require little creativity or higher level thinking. These include physical labor, data processing, and data collection.

Who does it affect?

The first fully-automated businesses have emerged—businesses that have no human employees at all. Read more about these businesses here: <https://sloanreview.mit.edu/article/how-organizations-will-produce-in-an-autonomous-future/>. While this isn’t possible for most companies, automation has affected or will affect most occupations and industries. Financial services, customer service, manufacturing, and health care will be particularly impacted. Employees at all levels, even at the highest levels, will see their jobs change due to automation.

In a recent focus group with executives from the financial industry in Kentucky, a debate broke out about the future of bank tellers. Some in the group felt the job would become fully automated; others saw an even more important role for tellers beyond automation. *The Wall Street Journal* frames the issue by identifying a trend in which some bank tellers are getting raises as they deal with higher level consumer issues. OceanFirst now has a “certified digital banker” course to help tellers become more comfortable with automation and prepare themselves to help customers address increasingly complex financial issues.

The idea that jobs will be replaced by automation has sparked fear. It is true that 15% of the global workforce could be displaced by 2030 due to automation. However, only about 5% of occupations could be fully automated with current technology. It is much more likely that certain tasks will become automated, freeing up workers’ time to be more creative and strategic. Less than half of all companies expect to decrease their workforces due to automation in the next five years. Furthermore, many new jobs and industries will be created, leading to labor demand growth of 21–33% of the workforce. The growth will presumably offset any jobs lost. Around 3% of the workforce will need to change their occupations by 2030 to fill the opportunities created by automation.

Benefits of automation

- Improved efficiency
- Reduction of errors
- Better understanding and use of data
- Reduced costs
- Ability to focus on higher level tasks, creativity, and innovation

Challenges to implementing automation

- Mastering the technology
- Retraining workforce
- Cost
- Integration with existing processes and systems
- Resistance to change

What should businesses do to prepare?

- Fully understand the processes that are being automated
- Involve everyone who will be affected
- Plan ahead
- Focus on biggest opportunities for ROI
- Consider security risks
- Stay dynamic and promote growth
- Invest in education, learning, and retraining employees
- Develop employees' higher cognitive skills, social and emotional intelligence, and technological abilities

For more: <https://www.mckinsey.com/featured-insights/future-of-work/ai-automation-and-the-future-of-work-ten-things-to-solve-for>.

Classroom Implications

Students should understand the ways that jobs are going to change with widespread automation. This will help them focus on developing the skills that will become even

more important in the workforce. These include creativity, interpersonal communication, emotional intelligence, and strategic thinking—as well as the technological skills to work with automation.

Links for further learning:

<https://www.forbes.com/sites/forbestechcouncil/2017/05/15/15-smart-tips-for-introducing-automation-to-your-business/#3c2f18e02c71>

<https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/four-fundamentals-of-workplace-automation>

<https://www.sage.com/en-gb/blog/ai-and-automation-business/>

<https://www.entrepreneur.com/article/307286>

Rusty Poeppelmeier, A Bond Manager with Liberty Mutual Surety in Cincinnati, Ohio shared the comments below in relation to this Action Brief. Do you have other thoughts, or questions for Rusty? Let us know—we'll keep the conversation going!

Automation will continue to move into different areas of the economy. It is important students understand it isn't all bad. Some areas of the economy have historical labor shortages that are ripe for the investment of more automation. I have seen it move into areas such as a farming and customer service.

There are other areas where automation may create significant cost savings that ultimately could be passed on to the consumer. The more complex the task the longer it will take to implement but the payoffs could also be larger. Picking fruit in a variety of conditions is going to be more challenging than painting the same object over and over again in a controlled environment.

We also have a demographic issue with the baby boomers headed into retirement creating a labor shortage. So there will likely be job opportunities in this area, as the need for this technology will increase during the coming years. That said, there is a cost to implementing this technology and one of the items difficult to overcome is change. It takes the average industry a long time to adapt and change partly due to the cost of development and implementation. Sometimes implementation does not work out as planned. Customer service being one example. Some things are not quite ready for AI but with time and resources those challenges can be overcome.

I think the biggest piece of advice I have would be don't let the pursuit of automation or process efficiency undermine the success of whatever business you are in. It is very easy to start down this path and compromise too much ultimately putting the business itself at risk. Change is hard but blind change is deadly.

A supposed great system with a dwindling customer base has the same probability of failure as a poorly managed business. So don't let the pursuit of automation or a

“better” process cause you to lose sight of the business itself. If it is truly a great idea, you won’t have to sell it. People like to finish things and claim success but don’t be blind to the reality of the actual needs of your customers. Remember, you need the customer, the customer doesn’t need you!