



GLORY

# People and Technology

Will robots replace human beings?





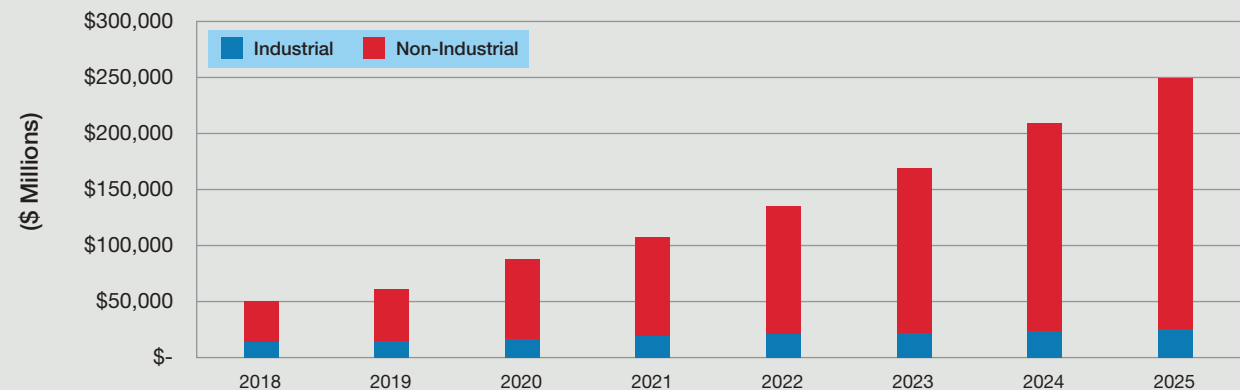
# PEOPLE AND TECHNOLOGY

**In recent years, robots have been entering the market at a quick rate and for some, that can be enough to be put in a state of panic. What does this mean for jobs?**

Robots are seen in various segments of the market and obtaining credible information on market growth is increasingly difficult – are we talking about industrial robots? Or robots like Pepper? What about those robotic vacuum cleaners or agricultural robots?

Tractica predicts that the Global Robotics industry will reach \$248.5 billion by 2025, which include both industrial and non-industrial robots. The highest growth coming from the non-industrial robots.

**Total Industrial and Non-Industrial Robotics Revenue, World Markets: 2018-2025**



Source Tractica

# AUTOMATION IS MUCH MORE THAN ROBOTS

Automation is much more than robots, in fact, it is far beyond just robots. For example, how many individuals now can turn on their home's lights with a touch of their smartphone – and that's just one of the many examples. From smart thermostats, automatically adjusting temperatures, to drones that deliver packages to autonomous vehicles, technology is much different than it was 10 years ago.

**What about voice assistants?** Speaking directly into your smartphones and computers that listen to you was once science fiction. Then there's cash automation – kiosks and other devices that are changing the way people transact and pay. Technology is developing quickly, automation right alongside it.

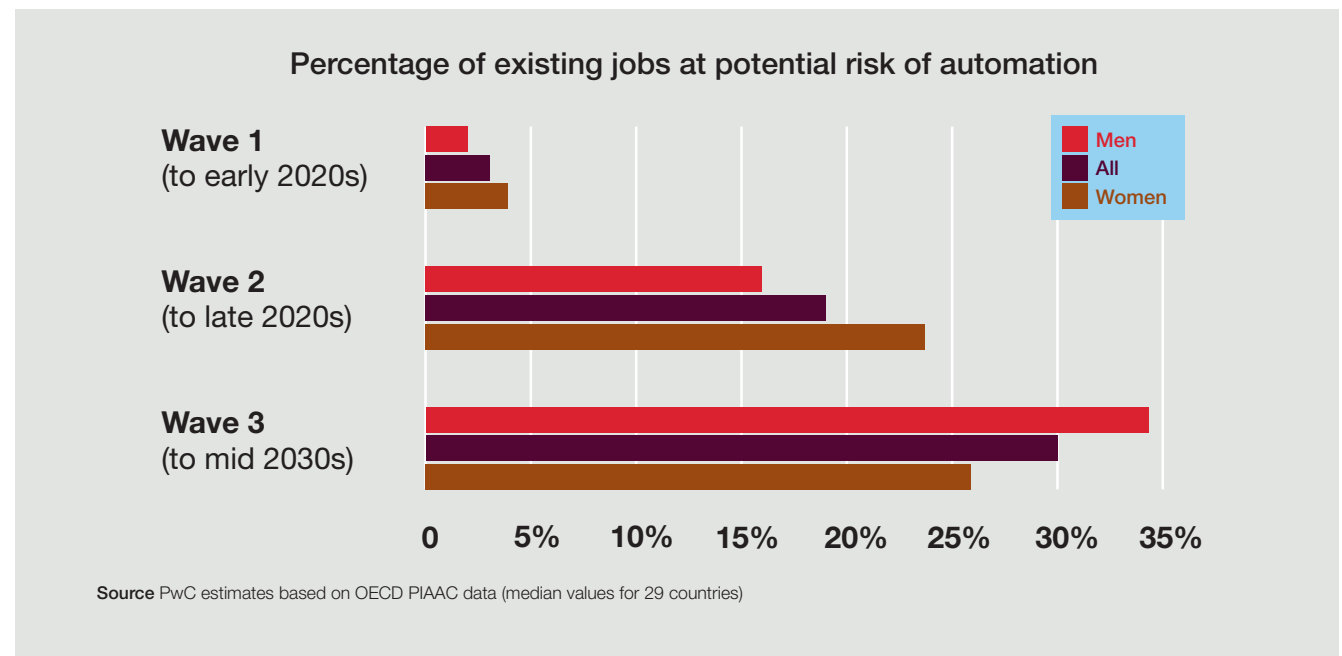


# ARE JOBS AT RISK FROM AUTOMATION?

PWC assessed the tasks associated with over 200,000 existing jobs in 29 countries to see what the potential risk of loss is over the next 20 years. Visualized here, they've distinguished between three waves of automation.

PWC predicts that by early 2020s, only 3% of jobs will be at a potential risk by automation, with the risk increasing over time. By mid-2030s, it is predicted that 30% of jobs will be at risk, 44% for workers with low education. Automation, on the other hand is projecting immense growth in GDP by 2030, about \$15 trillion worth. However, this growth not only will increase demand for jobs but also displace jobs.

In the next decade, women workers could be more affected, but male jobs may be more at risk in the longer term. Short term, job security is very high, but as technologies continue to mature and shift toward automation, jobs will become increasingly more at risk.

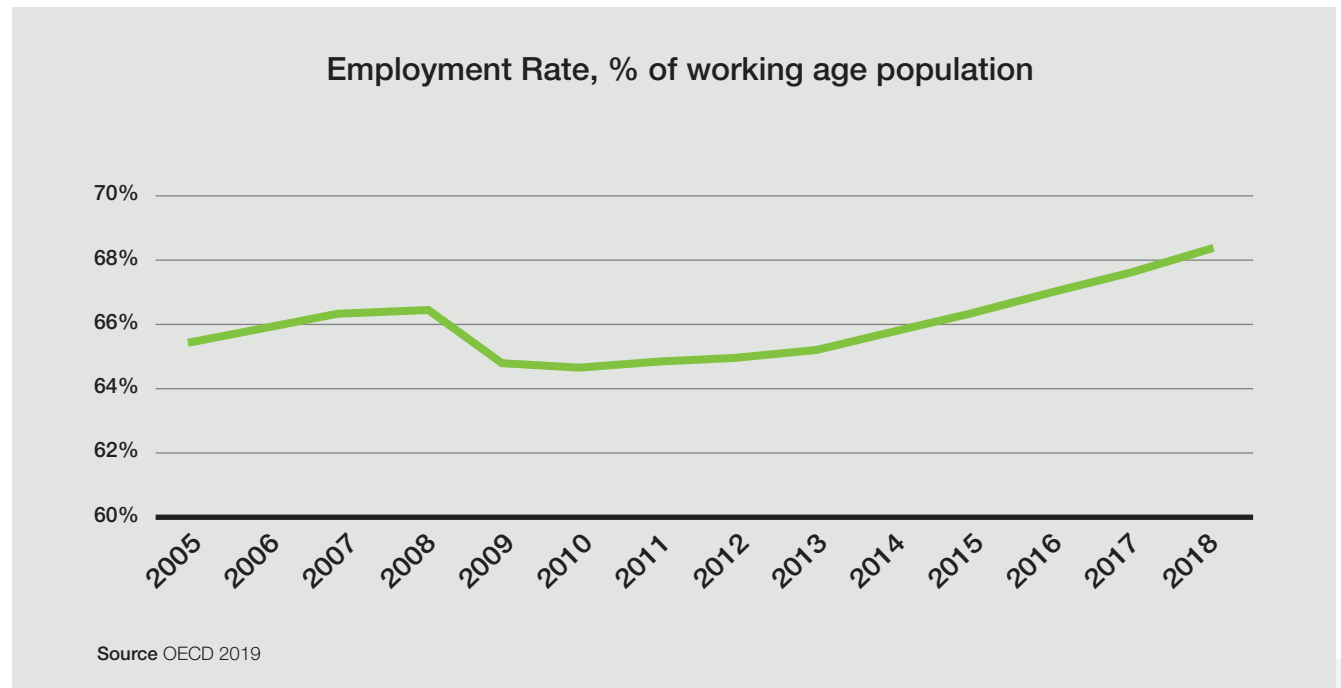


# DESPITE INCREASED AUTOMATION, EMPLOYMENT CONTINUES TO RISE...

Founder and Executive Chairman of the World Economic Forum, Klaus Schwab introduced the idea of the “Fourth Industrial Revolution” to describe the effect of that new technologies and automation will have on society.

Although this 4th revolution will have the potential for large economic growth and supply chain efficiency and productivity, it also has the potential to greatly impact the labour market. With the growth of automation, it is safe to assume that robots will eventually take over certain jobs. However, technology also increases demand for goods, services, new ways to consume and transact. This demand will prompt the creation of new jobs, new businesses and industries that currently don't exist yet. Although technology could replace jobs, it can also create new ones.

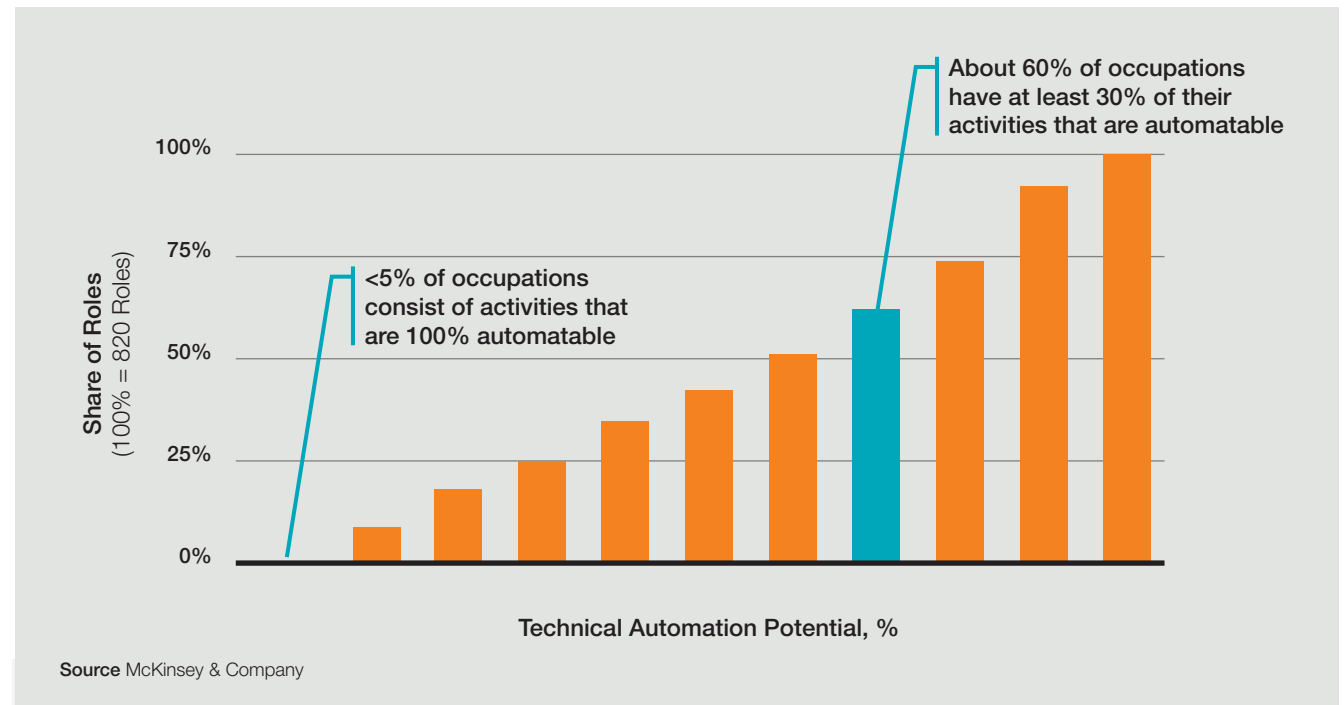
According to OECD research, employment rates have been steadily increasing (regarding 2008 during the financial crisis) year on year since 2005 and can be assumed to apply to today.



# BUT NOT ALL JOBS CAN BE AUTOMATED...

Certainly, humans cannot avoid automation. Technology will continue to evolve and provide greater solutions than ever before. But can automation always provide a replacement for the tasks that humans do?

According to McKinsey & Company, only 4% of occupations consist of activities that are 100% automatable. Moreover, about 60% of occupations have tasks that are around 30% automatable. Given these statistics, it is evident that humans remain essential to business and it is important for businesses to understand where exactly automation works well and can be implemented.





# THE MOST IMPORTANT ASSET: PEOPLE

Many senior executives report their most important asset of the business are the employees.

In a recent survey conducted by the Conference Board, CEOs from all over the world ranked talent acquisition and retention as their number one internal objective.

There is a strong emphasis on the human factors, the people. Some examples may include what kind of employment packages need to be offered, to working environments, to what truly constitutes a great place to work.

Another thing senior executive need to consider is having the right people, with the right skills and training. Many job recruiters are looking for candidates that can adapt to new tasks and different types of work that best fit the business. Changing job roles and tasks is happening everywhere.



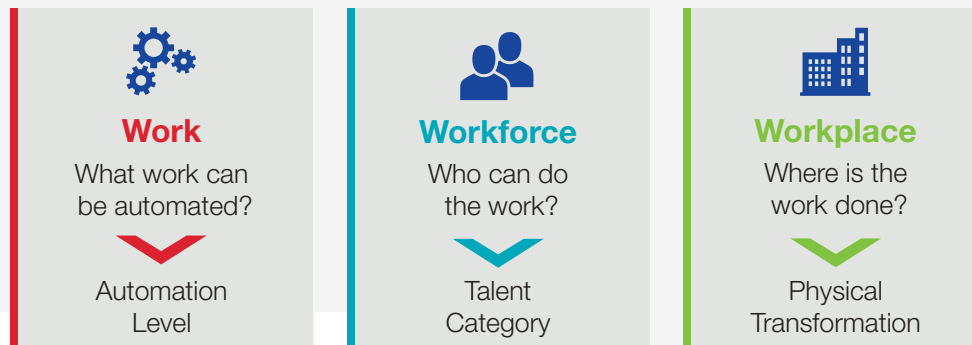
**70%** of leaders believe they need to recruit  
**new talent and skills** for their company.

Source Deloitte with MIT

# ALL OF THESE CHALLENGES COULD BE SOLVED IF WE APPROACH THEM WITH A THREE-PILLARED MODEL

It's comparable to an invisible dance between the work that needs to be done and what can be automated; the workforce and who can do the work; and the workplace and where the work is done.

The three pillars in a sense are all interrelated. Firstly, “the work” pillar signifies what work can be automated. From the McKinsey research, it is apparent that every task has a certain level of automation. While some jobs can be taken over entirely by automation, there are some occupations which in fact cannot.



Source Deloitte

As previously stated, not all tasks can be automated, but it is important to know which tasks can be and how automation can be implemented. Certain tasks that are predictable, repetitive manual tasks, routine tasks, computations, number crunching or certain AI types are just examples of where implementing automation may be greatly beneficial and efficient. Specifically, using robots to assemble the body parts of a car or using robots to pick and pack items in an assembly line at a warehouse are two examples of manual tasks.

Automation can also be used in the form of assisting with purchasing decisions. For example, chatbots or virtual assistants that suggest other items a customer may want or need.

Although the implementation of robotics and AI can increase the efficiency of routine and predictable tasks, a high percentage of tasks cannot be automated fully.

These tasks typically are unpredictable, requiring management, creativity and social skills that cannot be obtained with a robot. For example, a robot cannot perform a whole surgery process and tend to patients with compassion.



- Predictable manual tasks
- Routine tasks
- Computational tasks
- Dangerous tasks



- Unpredictable manual tasks
- Management
- Creative tasks
- Social skills



# FROM THE COUNTER TO THE TABLE

McDonalds is one great example of how automation and technology has driven change. For the most part, McDonalds is a massively automated worked environment – from the kitchen to the checkout. Recently, the business implemented the use of self-service kiosks that customers can use to order their food and pay without needing to speak to an employee. Instead, the employees fulfil those orders and deliver the food directly to the table. The most important aspect of this transformation is the fact that the employees' roles have changed, rather than replaced by automation. The implementation of automated services has allowed McDonalds to shift the perception of traditional fast food dining through offering table service.

Other businesses such as the Sheng Siong supermarket in Singapore have retitled their employees to “Customer Service Officers” to better reflect their changed roles. Instead of being regular cashiers, thanks to the implementation of Self-Checkouts, these employees can now focus in the customers needs at the store.

Further, the rise of convenience and online shopping has allowed supermarkets to implement grocery pick-up and delivery services. Now, employees are shopping right alongside customers, picking, packing and preparing online orders. The rise of convenience shopping continues to change traditional roles of employees.

Alongside changing roles is also changing work environments.

Some of this physical change in the workplace may be due to the need for employers to offer better environments for their staff, but a lot of the physical transformation is driven by the demands of the consumer.



*from* **Counter Service**  
*to* **Table Service**



**SHENG SIONG**

*from* **Cashier**  
*to* **Customer Service Officer**



*from* **Checkout Assistant**  
*to* **Customer Assistant**

# BANKING WITH A TWIST

## Capital One Café

The boundaries are beginning to blur as businesses begin to look at how they can remain relevant, or be more embedded in to the day-to-day lives of their customers. Not many people will hang out in a bank branch – but they would happily spend an hour in a coffee shop. Banks such as Capital One have combined these two ideas and created the Capital One Café. All the transactional activities are now managed by branch automation technology, which has transformed the role of the traditional teller into “ambassadors”.

Capital One ambassadors are not financial planners or bankers, but they are trained to assist customers with basic banking needs like setting up a Capital One account, paying their bills online, and applying for a credit card. They don't have sales targets. Can you imagine a bank branch where the staff don't have sales targets? It changes the rules of the game and their mindset so they can focus on one thing: customer experience.

This is just one example of the experience economy at work.

Consumers demand and expect more. Providing an enhanced level of experience can lead to higher profitability, as people are prepared to pay more. Often, though, the focus on customer experience is required to just stay in business, and level – if not ahead – of competitors.

As the roles change, the physical locations – where people are working – are changing too.



Capital One Café:  
**Coffee Shop or Bank?**

# THE ULTIMATE MOVIE THEATRE EXPERIENCE

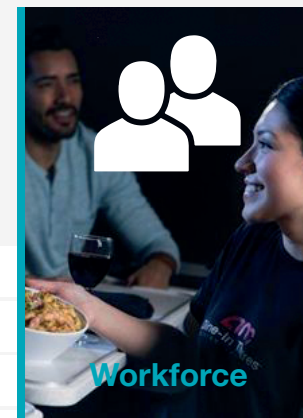
Other businesses have chosen to focus on changing the experience. Consumers have higher expectations and are willing to pay more for this perceived value. And that's what cinemas like AMC have done.

It all starts with the physical environment itself. One example is the spacious recliners, "business class" style. The physical transformation is so great, it is barely recognizable as the same establishment. The food is changing too. The movie theatre is beginning to offer full-service dining, providing gourmet burgers, sandwiches, pizza, beer, prosecco and more and deliver it right to your seat. One important thing to consider is for the staff to deliver this level of service, the role of the staff needs to change. The jobs that the staff are expected to do are changing. The workforce in turn, needs to evolve to meet the demands of customers.

For the staff to deliver this exceptional customer service, they needed to come out of the ticket counters. With the help of automation – taking care of selling the tickets – employees can focus more on tending to customer needs. AMC Theatres® transformed their Box Office with GLORY's Cash Automation Solution. The Glory cash automation solution allows the AMC box office kiosks to accept cash payment, resulting in less guest time spent waiting to purchase tickets. The solution increases convenience and choice for guests while driving efficiency for theatre box office operations. The Glory solution is an integral component of the guest experience plans moving forward.

"The cash automation solution will enable guests to use a kiosk for virtually any ticket purchase transaction, which provides theatre teams more time to focus on delivering an exceptional experience by engaging with guests, answering questions, providing assistance, and less time selling tickets," said Mark Garcia, AMC Director of Operation Systems

Successful business transformation requires technology and people working together, for that reason we strongly recommend the three-pillared model. First analyse the work that needs to be done and what can be automated; second focus on the workforce, discovering what kind of new roles they can play now thanks to automation; and finally what kind of new workplace we can design and create to deliver the best customer experience possible.





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