Keeping up with robots

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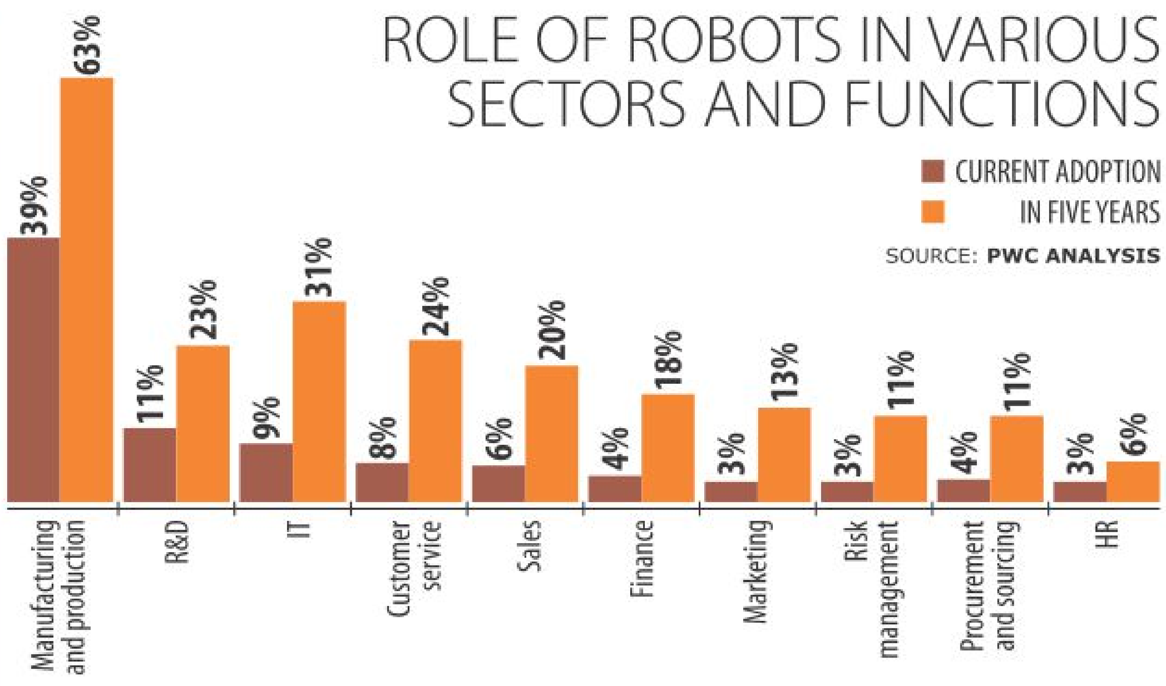
STAR/FILE

Apparel manufacturers may require fewer workers to produce the same quantity of garments after deploying robots in their factories.



THE first industrial robot was deployed more than 50 years ago: a 4,000-pound robotic arm meant for moving heavy materials, a task considered hazardous for human workers.

Over the years, robots have evolved significantly and their use proliferated in the manufacturing industry. Today, robots are more intelligent and can handle more sophisticated tasks. They can also accelerate automation and improve quality and safety.

An estimated 1.5 million robots are deployed in the assembly lines all over the world today, and this number is growing steadily.

Moreover, the use of robots is set to extend beyond the manufacturing sector and move into areas such as research and development, customer service, sales, and even healthcare delivery.

With such proliferation, the employment debate will intensify. Business leaders will have to check their readiness to adopt robots and improve business performance, while the society at large will have to examine its preparedness to live in a new world with fewer traditional jobs and more new opportunities.

Business leaders around the world are optimistic that the deployment of robots will improve the productivity of their businesses. Today, global markets are driven by a need to achieve high productivity.

Bangladeshi manufacturing companies that wish to remain competitive and continue to grow in the global market will face the need to adopt robot-driven productivity improvements sooner than other companies.

For example, apparel manufacturing companies in Bangladesh will have to adopt robots to transform their manufacturing processes and compete against their global peers.

The next group to adopt robots in Bangladesh will be manufacturers who rely on imported equipment made by the world's leading companies.

Most of these international manufacturers have started embedding robotics in their new line of products.

For example, steel plants in Bangladesh import furnaces for their plants. A good number of these foreign furnace makers have started making robots to automate the sampling process of steel bath analysis and other testing activities.

Steel manufacturers in Bangladesh will gradually adopt such equipment and smarter manufacturing processes and include robots in their processes.

While businesses continue to adopt robots, they will gain complete benefit only by innovating and creating new business models.

These new business models and process designs will have robots at the centre of each innovation and subsequent decision.

Business leaders worldwide believe that the true impact of robots will be felt only when new business models emerge and begin to transform businesses.

Thus, apparel manufacturing in Bangladesh may be revolutionised in the future.

Robot-driven transformation may lead to a situation where one-fifth of the workforce tasks include an element of robotics, according to a study of the PricewaterhouseCoopers.

In certain industries, human workers will be replaced by robots. In other cases, new tasks where production of the output entails collaboration between robot and human workers will emerge. The former case will spark a debate around employment, while the latter will encourage the hiring of workers with new skills.

Business leaders and governments need to be ready to address both types of situations in Bangladesh.

For example, apparel manufacturers may require fewer workers to produce the same quantity of garments after deploying robots in their factories.

At the same time, their newly acquired competitive advantage may help them to win more orders from different parts of the world, thereby growing their production.

Higher production will require more human workers but with different kinds of skills.

While the first part of this transformation will substitute human workers with robots, the second part of transformation-led growth will create more employment opportunities.

The workforce of the future should have the requisite skills to cohabit and collaborate with robots to deliver outputs as enhanced productivity will be the new normal for workers in Bangladesh.

The ministries, divisions and councils in Bangladesh responsible for skills development will need to introduce trainings on robotics in their curriculum to develop the workforce of the future.

Furthermore, business leaders of Bangladesh will need to prepare themselves for the challenge of mitigating accidents.

There have been instances of fatal accidents due to a lack of coordination between human workers and robots working on the same or adjacent production line.

Although the number of such accidents has been minuscule, almost all of them made international news.

Such accidents may trigger resentment within a society already grappling with the issue of workforce substitution and unemployment.

Businesses must prepare themselves to manage such risks and should also be ready to invest in robot substitution -- that is, replacing existing robots with more advanced ones.

Many stakeholders are still unable to fully grasp the transformative power of robots. This technology will soon become a part of our everyday life.

Robots will transform the workplace of future too. The success of the new workplace will depend on the success of human-robot collaboration.

The writer is an executive director at PwC. The views expressed here are personal.

India to launch GST on July 1

REUTERS

Traders shout slogans during a day-long strike in Ahmedabad, India against Goods and Services Tax set to be launched from July 1.

REUTERS, *New Delhi*

INDIA is ready to launch the Goods and Services Tax (GST) on July 1, the official steering the process told Reuters, saying the technology that will drive it is robust and dismissing fears the tax is too complicated.

Hasmukh Adhia, revenue secretary at the Finance Ministry, also said rules would be issued "soon" to deter unscrupulous businesses from exploiting the tax reform to gouge customers.

The biggest tax reform in India's 70-year history as an independent nation would, overnight, unify its $2-trillion economy and 1.3 billion people into a single market, tearing down trade barriers between more than 30 states and territories.

It would also require firms to file at least three online tax returns monthly into the GST Network, a massive IT back-end that will process up to 5 billion invoices a month. The compliance burden and the tax's complex structure - it has four main rates ranging from 5 to 28 percent - have sparked fears of initial chaos.

In particular, businesses worry that they will struggle to reconcile invoices, blocking the flow of tax credits down supply chains, forcing them to commit time and effort to resolving disputes and reworking budgets.

Adhia, viewed as close to Prime Minister Narendra Modi, dismissed those fears outright and ruled out a delay to a reform that has been more than a decade in the making.

"Everything is ready. We will roll out on July 1," he said in an interview at his office in North Block, a sandstone edifice in the heart of New Delhi dating from the British colonial era.

The reform represents an unprecedented exercise in fiscal federalism. A GST Council that brings together the federal and state governments has met 16 times to thrash out how the tax will work. It meets again on Sunday.

The tax rates for goods and services were only worked out in recent weeks and, at the council's meeting last weekend, several were amended following complaints by businesses.

Still, Adhia said, the multi-rate structure is far simpler than India's existing federal and state taxes - even if he would have preferred a flatter structure.

"This is a great step for simplification - although not the ideal GST that we should have," he said. "It is a technological marvel, as well as a fiscal marvel."

The multi-rate structure of the GST exempts or imposes a low rate of tax on essential items, while the top rate of 28 percent applies to items such as consumer durables.

Adhia said the GST would be reviewed on an ongoing basis, adding that he would like to see the top rate reduced in future.

"I'm not at all happy with my 28 percent slab. It's a very odd number. One should try to bring it down," he said.

Where the headline rate of tax goes up under GST, the government will be vigilant in seeking to prevent profiteering. "We will come out with our anti-profiteering rules soon," Adhia said, without elaborating.

He dismissed speculation that the GST Network might crash, or data security be compromised, after launch.

"We have a contingency plan for everything - don't worry," he said. "Every angle is secure. It is the best system."

Adhia said he expected the GST to overcome initial hiccoughs and help businesses become more efficient over time, by cutting logistics and inventory costs, freeing them to invest and grow.

Amazon to buy Whole Foods for $13.7b

REUTERS

AMAZON.COM Inc said on Friday it would buy Whole Foods Market Inc for $13.7 billion, in an embrace of brick-and-mortar stores that could turn the high-end grocer into a mass-market merchant and upend the already struggling U.S. retail industry.

Amazon used aggressive pricing to become an e-commerce retail juggernaut and has recently been experimenting with brick-and-mortar outlets. It will take over a natural and organic grocer pioneer with 456 stores, a mecca for young, high-end shoppers, that has been struggling to rein in prices and integrate technology.

The deal represents a dramatic turn in strategy for Amazon, which has offered food delivery through its Fresh service for a decade but has not made a major dent in the $700 billion grocery market.

"The ramifications for all of retail are seismic – not just retailers that sell grocery, but for everyone," Gordon Haskett analyst Chuck Grom said.

Shares of dozens of supermarkets, food producers, payment processors and shopping malls collectively lost at least $35 billion in U.S. market value on Friday as the news reverberated across financial markets.

Shares of grocer Kroger Co swooned 9.2 percent, while Wal-Mart Stores Inc fell 4.7 percent, signaling fears that Amazon could broaden Whole Foods' product mix and cut prices. Amazon's shares rose 2.4 percent to $987.71, adding $11 billion to its market capitalization, which in one sense makes the acquisition nearly free for Amazon shareholders.

"Supermarkets will now have to contend with not only competition with each other and non-traditional grocers like Wal-Mart Stores Inc and Target Corp, but with a retailer like Amazon which has the financial capacity to price aggressively," said Mickey Chadha, vice president and senior credit officer at Moody's Investors Service.

AFP

A man walks past an Amazon Fresh Pickup location in Seattle, Washington.

Amazon agreed to pay $42 per share in cash for Whole Foods, a 27 percent premium on the Austin, Texas-based grocer's closing share price on Thursday.

But in a sign that investors believe a rival bid is likely, Whole Foods shares rose above the offer price to close at $42.68.

A former grocery expert at Amazon predicted that the chain, nicknamed "Whole Paycheck", would add a selection of discounted food and build out non-grocery areas within stores, particularly for pharmacy and Amazon devices.

"There's no value in Amazon keeping the status quo at Whole Foods. Whole Foods was losing market share to Kroger," said Brittain Ladd, who until earlier this year was a senior manager working to roll out AmazonFresh globally.

"It's pharmacy. It's having the ability to put stores that are similar to Apple stores inside Whole Foods," he said.

Amazon has been looking at shop layouts that could allow traditional in-store purchase, online ordering with on-site pickup, and home delivery, using store warehouse space as a distribution point, Ladd said.

Despite Amazon's reputation for harnessing technology, a prototype store inside its corporate office in Seattle, called Amazon Go, which uses sensors and tech-savvy cameras to detect shoppers' selections and then charge their Amazon accounts, has rolled out more slowly than planned, a person familiar with the matter said.

And while some analysts expect Amazon to bring vast buying power to Whole Foods, Amazon's heft in the food market is far smaller than in other areas, and high demand for organic products gives farmers unusual bargaining power.

Amazon spokesman Drew Herdener said plans do not include reducing jobs as the result of the deal and that the company does not plan to automate Whole Foods cashiers jobs with Amazon Go technology.

Boeing, Airbus take dogfight to Paris Air Show

AFP, *Paris*

THE aircraft industry descends on Paris Monday for the world's biggest airshow, a prime battleground for bitter rivals Boeing and Airbus, but also a chance for new kids on the block to snap at the heels of the two giants.

Single-aisle planes for short and medium distances are the hottest ticket in the world's civil aviation industry, with airline demand for models in the Airbus A320 family giving the European company an edge, for now, over its American opponent which is racing to return in force to the mid-range segment.

But the duopoly is not without challengers: Competition is looming, notably from Russia and China who have each been test-flying their own mid-range models.

The airshow comes a little too early for either Russia's Irkut, with its MC-21, or China's Comac, with the much-flagged C919, to be able to showcase their aircraft there, but both will leave little doubt that they expect to win a big slice of the aviation pie in the future.

Boeing, meanwhile, is to showcase the 737 Max 9 model as its anti-Airbus weapon in a market segment where the capacity to squeeze a few more seats into a narrow-body cabin while eking out increased fuel efficiency over greater ranges is key.

Airbus's biggest-capacity member of the mid-range family, the brand new A321neo, is able to fit in 236 seats in an all-economy class version. Low-cost airlines are eyeing the aircraft to break into transatlantic routes.

Coming up next from Boeing is the 737 Max 10 which is to match that capacity, while also being lighter and cheaper, the plane maker has said. Test flights have been completed and Boeing is now talking to customers about ordering the Max 10.

"This airplane would give airlines increased capacity and the lowest seat costs ever for a single-aisle airplane," said Randy Tinseth, vice president for Boeing Commercial Airplanes.

"Simply put, the 737 MAX 10X would be the most profitable single-aisle airplane the industry has ever seen," he wrote in a blog entry.

Airbus will also showcase its new long-haul model A350-1000 and Boeing its 787-10 Dreamliner while Ukraine's Antonov will present its 132 D.