

# Making sense of Industry 4.0



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processes are integrated in a way that the whole enterprise enhances the value of its final output to a large extent.

Industry 4.0 seeks to digitise the integration of such value chains. Digitised integration of such value chains will provide more transparency to the production process of each unit. It will also provide faster and accurate visibility to production quality such as the number of bags produced in the bag-making unit vis-à-vis the number of cement bags used by the cement manufacturing unit from that lot. Finally, it will help making the integrated value chains far more efficient. Many companies in Bangladesh have already embarked on this journey of value chain integration through enterprise resource planning (ERP) and business intelligence (BI) implementation.

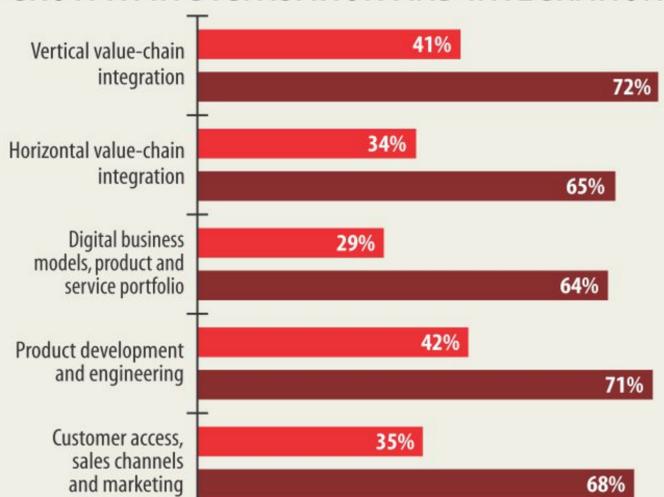
The next step in the Industry 4.0 journey will be the digitisation of products and services. An enterprise may have some successful products and services in the market. The fourth industrial revolution is expected to disrupt them in a significant way. The enterprise, in such a situation, will have two choices to make -- either disrupt the market proactively or wait to get disrupted by an emerging enterprise. Leaders in a particular sector are also first movers in such situations to transform themselves for a digitised world.

Digitisation of an existing product or service is not a familiar path of product development. It requires innovation and customer-centric design thinking. An enterprise that actively fosters a culture of innovation is likely to show results faster than its counterparts.

Finally, Industry 4.0 seeks to digitise existing business models and create new ones in a completely digitised manner. We are seeing several such examples in both developed and developing countries today.

Mobile app-based ride sharing services have been disrupting the traditional taxi-based transportation business significantly. It took less than five years to start this business and spread to more than 80 countries. This particular business model has also changed the demographic profile of cab drivers in some large cities. What used to be a male majority population before has now become a multi-racial, gender-balanced, technology-reliant population of cab drivers. Thus, Industry 4.0 is not only going to impact society but human lives too.

## GROWTH IN DIGITISATION AND INTEGRATION



SOURCE: PWC ANALYSIS

Technological advancements are going to enable the journey of Industry 4.0 faster than the earlier industrial revolutions. Technologies such as mobile devices, sensors, IoT platforms, cloud computing, augmented reality, robots, artificial intelligence and the blockchain are going to play critical roles in this journey of enablement. In fact, there are about 150 distinct technologies that are used in various industries today and each of these technologies will make an impact in accelerating this revolution.

Analytics will be a critical capability for an enterprise to process data generated by these new technological devices and create new insights for the business. In fact, enterprises which will invest to become virtuosos of analytics faster will lead the journey among their peers. This will also require the workforce to become capable of using analytics for creating insights. For the younger population of Bangladesh, this is going to be a new career opportunity with rewarding growth prospects.

Changes towards digitisation are happening fast across the world. According to

a global survey conducted by PwC on Industry 4.0 in 2016, 47 percent of the companies surveyed are digitising their existing products or services. About 44 percent of the companies are working to introduce a new digital product or service, and 72 percent of the companies are building customer relationships digitally. A good number of them believe that these initiatives will help them in growing their revenues in the coming years. They also believe that Industry 4.0 is going to globalise their enterprise significantly.

Industry 4.0 is expected to influence enterprises in Bangladesh in the coming years. Manufacturing, transportation and logistics, construction, and packaging industries are going to experience this revolution sooner than others. Early adoption of the enabling technologies will help these enterprises create new products, compete globally and grow their business. Their collective growth will also accelerate Bangladesh's national economic growth.

The writer is partner at PwC. The views expressed here are personal.

# Trump signs tax, gov't spending bills into law

REUTERS, Washington

US President Donald Trump signed Republicans' massive \$1.5 trillion tax overhaul into law on Friday, cementing the biggest legislative victory of his first year in office, and also approved a short-term spending bill that averts a possible government shutdown.

Trump said he wanted to sign the tax bill before leaving Washington on Friday for his Mar-a-Lago estate in Florida, rather than stage a more formal ceremony in January, so he could keep his promise to finish work before Christmas.

"I didn't want you folks to say I wasn't keeping my promise. I'm keeping my promise," he told reporters in the White House.

The two pieces of legislation represent Trump's most significant accomplishment with Congress since taking office in January, as well as a sign of what awaits when he returns from Florida after the Christmas holiday.

The tax package, the largest such overhaul since the 1980s, slashes the corporate rate from 35 percent to 21 percent and temporarily reduces the tax burden for most individuals as well.

Trump praised several companies that have announced employee bonuses in the wake of the bill's passage, naming AT&T, Boeing, Wells Fargo, Comcast and Sinclair Broadcast Group.

"Corporations are literally going wild over this," he said. Democrats had opposed the bill as a giveaway to the wealthy that would add \$1.5 trillion to the \$20 trillion national debt during the next decade.

# US tax reform promises big income boost for German carmakers

AFP, Berlin

German carmakers Daimler and BMW said Friday a new sweeping US tax reform giving major breaks to corporations will add hundreds of millions of euros to their 2017 earnings.

The controversial tax overhaul signed into law Friday by billionaire President Donald Trump will slash the US corporate tax rate from 35 percent to 21 percent.

As a result, Daimler projected its net income to grow by around 1.7 billion euros (\$2 billion) this year.

"The reduction of the federal corporate income tax rate... results in an income tax benefit increasing the net income of the group for the year 2017 by approximately 1.7 billion euros," the company announced in a statement.

BMW also said it expected the tax changes to have a "positive impact" on its 2017 net profit, boosting it by between 950 million and 1.55 billion euros.

Trump this week celebrated his first major legislative victory since taking office a year ago as Congress passed the \$1.5 trillion overhaul, set to impact every corner of the economy.

Advertorial

# Ethics and Trust in a Digital Age

Roundtable on

The Association of Chartered Certified Accountants (ACCA) organised a discussion at The Westin in Dhaka on Wednesday (20 December 2017) on its report titled "Ethics and Trust in a Digital Age" based on surveys carried out earlier this year.

The survey took into account opinions of over 10,000 professional accountants (including trainees), and among over 500 senior ('C-suite') managers around the world.

Masud Ahmed, comptroller and auditor general, The People's Republic of Bangladesh, was the chief guest at the programme where top management and officials of reputed private and public organisations were also present.

Presenting the welcome address, Ahsanul Hoque Bashar, Head of ACCA Bangladesh, gave a summary of the report which emphasises that ethical behaviour is a core attribute of professional accountants.

### Some of Report's Key Findings:

- Over 8 in 10 of professional accountants opined that strong ethical principles and behaviour will become even more important in the evolving digital age.
- Moreover, 9 in 10 professional accountants agree that ethical behaviour helps to build trust in the digital age.
- The fundamental principles for accountants, established by the International Ethics Standards Board for Accountants (IESBA), still apply and remain relevant in the digital age, according to 94% of respondents.
- Professional accountants most frequently cited upholding their own professional code as a way of contributing to the organisation's ability to uphold ethics, with more than three out of four respondents choosing this option - a view that "ethics begins with me".
- Embedding ethics into the strategy or business plans was picked by fewer respondents, with only about half of those employed seeing this as a way to contribute.
- On support needed to promote ethical behaviour in the organisation, strong leadership was cited as the top factor, chosen by about two-thirds of respondents.
- The second most commonly cited factor, by just over half of respondents, was for support in creating, implementing and managing a code of ethics for the organisation (including organisational values).
- Rated next in importance were training support and establishing evaluation procedures to assess whether behaviour aligns with fundamental ethical principles.



impeccable. Though it is frustrating to see people disregard rules, it is better to have a system than have nothing at all. Whenever non-compliance is punished, the effect reverberates through society. We need to truly understand the benefits of abiding by rules and regulations.

**CQK Mustaq Ahmed,** Chairman, Financial Reporting Council, The People's Republic of Bangladesh

When it comes to comprehending ethics, it is actually something beyond the rule of law. The prerequisite of trust makes society reliant on accountancy. There was a time when bureaucracy, academia, armed forces and civil society were all role models. But now apparently all are interested in power. However, the Bangladesh University of Engineering and Technology has maintained its standard.

**Ahsanul Hoque Bashar,** Head of ACCA Bangladesh

I am happy to announce today the launch of an "ethics and professional skills" module, open for all ACCA students, based on discussions on the report. Made available worldwide on October, the interactive module comprises six units, including ethics and professionalism,

innovation and scepticisms and communication and interpersonal skills. We are working on finding ways to roll it out on a mass scale both for the public and private sector.

**Jamal Ahmed Choudhury, FCMA,** President of the Institute of Cost and Management Accountants of Bangladesh

Professional accountants are bound by the code of ethics where human values needed to be embedded in. Ethics need to exist irrespective of what the digital age brings forth. We need to reward and support those individuals who respect society and the law.

**Matul Islam Nowshad,** Chief Corporate and People Officer, Robi Axiata Limited

The 4th industrial revolution is upon us, giving rise to the need for understanding the necessity and importance of data. There should be a growing culture of ethical governance throughout the world to the point that people live and breathe ethics and recognise standards and punish violations both as a nation and a civilisation.

**Suraiya Zannat FCA,** Lead Financial Management Specialist, The

### World Bank

We need to put emphasis on the need for incorporating ethics as a subject matter or program in every organisation. Ethics uniquely positions an institute and top leaders of any organisation should act as role models for it has a trickle down effect. There must be willingness to expand the effects of ethics and ACCA needs to reach out to society to disseminate its practices.

**Thomas Liam Barry,** Finance Director, ICCDR, B

People are increasingly becoming dependent on virtual systems. The concept of hacking is worrisome and the future will not be easy. Nowadays we have put complete trust in the system although even the simplest of errors can lead to jail time. There needs to be physical interventions through sample checks and checkpoints to ensure foolproof results.

**Rana Mohammad Masud,** Chief Financial Officer, Standard Chartered Bank

Maintaining ethics largely depends on the management of organisations. If they want to uphold ethics, the environment needs to be there.

**Masud Khan, Group CEO, Crown Cement**

Accountants are bound by professional ethics. Ethics is the basis for generating trust and confidence. Here comes the responsibility of ensuring fairness in financial reporting. Conflict of interest is endemic in nearly every institution. Digitisation is also giving rise to negative aspects of society. We need to educate and change ourselves to be flexible and adapt to the changing environment.

**Akhtar Sanjida, Partner, A Quasem & Co Chartered Accountants**

Ethics comes from family practices. Small things make up the fabric of ethics. What

Rabindranath Tagore possessed did not matter even when he was mingling with monarchs, rather it was his intellect that garnered attention. This is what should be passed down to our children. The digital age made us powerful and vulnerable at the same time. So care should be taken in dealing with it.

**Sarwar Uddin Ahmed,** Professor of Finance and Dean, School of Business, Independent University, Bangladesh

Today's generation do not know what is right and wrong. Most students are willing to give bribes to get a good job. Values should come from family and society. Ethics should be cultured through a social campaign. Those at the top level of society should understand that their primary role is to serve people. When it comes to digitisation, we should never trust technology 100 percent. There should be some accounts maintained manually. Even when we embrace technology, persons running it should also be equally trained.

**Md Arif-AI Islam FCCA, MD & CEO, Summit Communications Ltd**

Our company comprises primarily youths and penalising them for rule violations does not work. They make use of WhatsApp and Viber groups and observing their activities gives an insight into how their psyche works. Though it takes a lot of investment, we are trying to enable tech people into becoming auditors.

**Md Kausar Alam, FCCA, FCMA, CFO & Company Secretary, Shun Shing Group Bangladesh Operations**

Banks were once deemed to represent "clean" industries but the increasing influence of families in the business is apparently clouding the reputation.