

# Creating business insights using data

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Many organisations in Bangladesh are going through a transformation prompted by information technology. Several large organisations embarked on this transformation journey a couple of years ago, with others now catching up. The transformation involved the set-up of enterprise applications to digitise business processes and improve the visibility of business activities. These organisations have started generating a lot of data through the newly implemented IT-enabled processes. The availability of this data in digital formats has opened up new opportunities for business leaders to create business insights and to take big decisions based on them.

Business leaders in Bangladesh have been taking high-stake decisions to grow, diversify and internationalise their businesses. They can now rely on the data available in digital formats to take big decisions rather than just their experience and intuition. This does not mean that intuition and experience are to be disregarded. In fact, they remain as valuable factors today. Data can help scientifically prove or disprove these intuitions, thereby increasing confidence in the decision-making process.

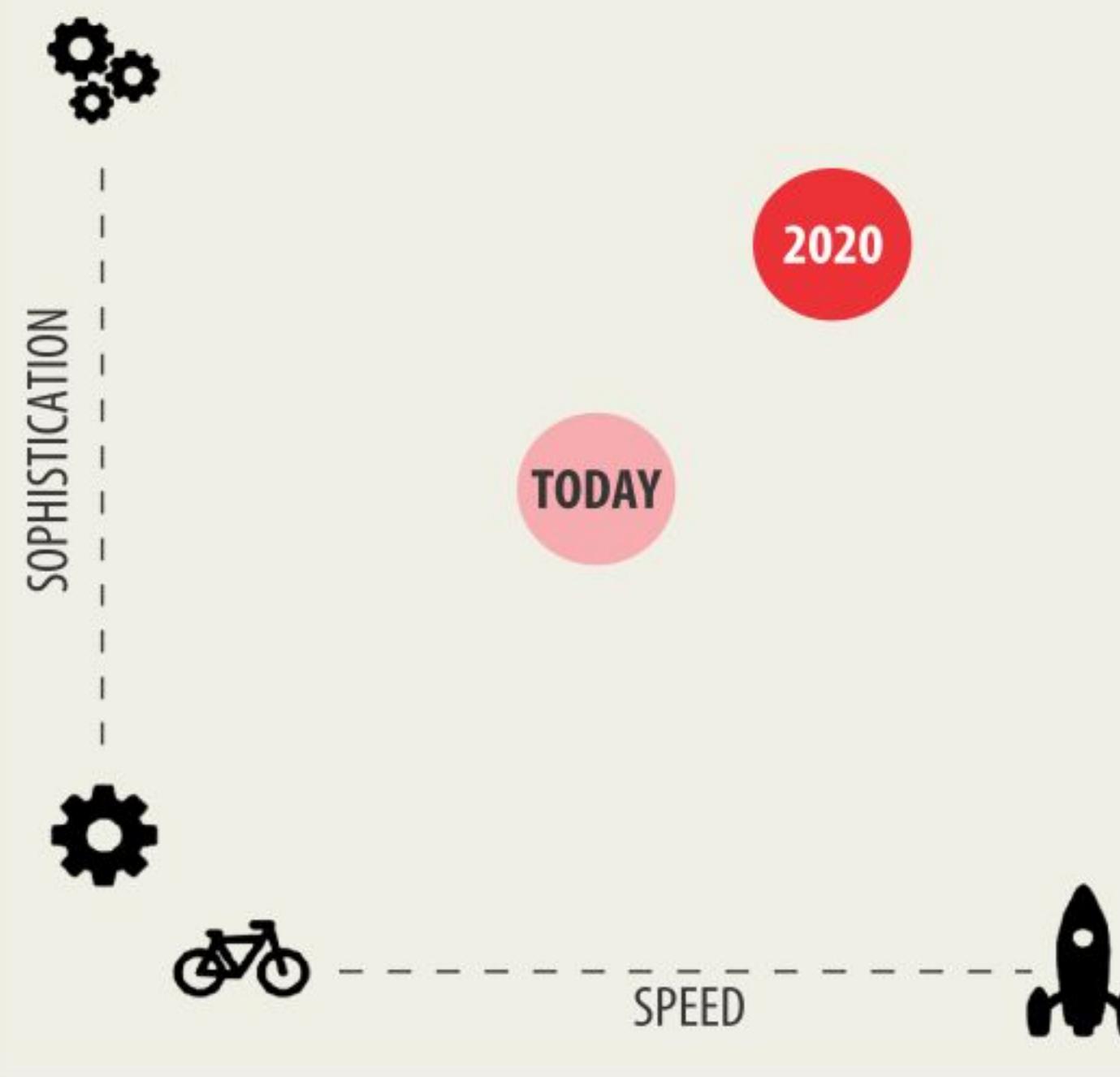
Globally, three significant changes have influenced the shift from intuition-based big decisions to data-driven big decisions. The foremost among these changes is the greater use of specialised analytics tools and techniques.

The other two changes are the reliance on enhanced analysis of data and setting up of specialised teams to create insights from data analysis. Across the globe, data and analytics are making deep inroads into business, with boardroom decisions today increasingly relying on data-driven analysis.

According to a worldwide survey conducted by Economist Intelligence Unit in 2014, 64 percent of the business leaders

The speed and sophistication of making business decisions will increase in the coming years

SOURCE: PWC ANALYSIS



responded that they have changed the way they make big decisions. Another 25 percent of the business leaders stated that they have a plan to change their decision making process to a more data-driven process.

Leading organisations in Bangladesh have already started implementing business intelligence tools and platforms and will be using them more frequently to get information about their business performance. As they mature in their use of data to understand their performance, these organisations will feel the need to enhance data analysis further. Such enhanced data analysis will require specialised analytics tools and techniques, and data scientists who have the expertise to perform this work.

In the coming years, business leaders in Bangladesh will need to upgrade the art and science of decision making with the emergence of this new paradigm. They

will require more data scientists to help them develop insights into their business. They will also need to test their business intuitions using data scientifically before taking big decisions.

One of the biggest and early benefits that businesses will derive from the use of data is the opportunity to modify their products using certain types of A/B testing. This is a testing process through which two variants of a product can be tested to find out the one best suited for the market. In the absence of enough data, such testing will be time consuming and prone to errors. However, increased availability of data, analytics tools and the application of the right techniques for analysis will result in more effective product testing.

Enhanced data analysis will require specialised analytical skills such as sophisticated mathematical modelling and statistical analysis of data through these models. A deep understanding of the busi-

ness is also necessary. This will create opportunities for young professionals in Bangladesh to pursue a career in a whole new field called data science. Accordingly, large business organisations can build dedicated teams of data scientists. Relatively smaller business organisations, on the other hand, will need to rely on specialised service providers.

The volume of data available to organisations in Bangladesh is going to grow significantly in the coming years with the digitisation of their business processes. The implementation of sensors and the Internet of Things (IoT) will result in more data in various formats. Additionally, a lot of unstructured data will get created through digital content and social media sites. Such ubiquity of data will create opportunities to develop breakthrough insights for the business.

Business leaders need to understand that breakthrough business insights can be developed from such a diverse set of data. However, these data may not necessarily be clean or obtained only from their internal data repositories. Business organisations will increasingly use externally sourced data, data available from public repositories, and unstructured data from social media websites.

Analysis of all the data will require sophisticated data models and advanced algorithms, and leading business organisations will need to build such assets for themselves. Such activities will also transform them to data-driven organisations.

Data-driven companies will be able to take big decisions faster than other organisations. The availability of the right set of tools, advanced techniques and rightly skilled people who can use data to create meaningful insights will drive the success of organisations in the near future.

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

## Samsung on track to take Intel's chip crown

REUTERS, Seoul

**S**AMSUNG Electronics Co Ltd is expected to report its best-ever quarterly profit in the second quarter, with soaring memory chip sales pushing it past Intel Corp as the biggest semiconductor maker by revenue for the first time.

The world's largest memory chip maker is the among the biggest beneficiaries of soaring demand for processing firepower on smartphones and servers, which has fuelled an industry super-cycle amid limited supply growth.

Underscoring its dominant position, Samsung said on Tuesday it plans to invest some \$18.6 billion in South Korea as it seeks to extend its lead in memory chips and next-generation displays for smartphones.

The South Korean tech giant, Asia's third-largest company by market capitalisation, is now poised to knock Intel off the top of the global semiconductor market-share rankings for the first time since 1991.

"From the second quarter, Samsung will become No. 1 in market share due to the recent increase in data centres and demand for solid-state drives," NH Investment & Securities analyst Peter Lee wrote in a note to clients.

Samsung's April-June operating profit is expected to leap 67 percent from a year earlier to 13.1 trillion won (\$11.4 billion), a new high, according to the average forecast from a Thomson Reuters

survey of 18 analysts. The same survey expects July-September profit to be even higher at 13.8 trillion won.

Solid sales of the Galaxy S8 smartphone launched in April likely provided an additional boost, keeping the firm ahead of rival Apple Inc as the world's top smartphone maker.

The S8's performance has reassured investors whose nerves were shaken last year by the costly withdrawal of Samsung's premium Galaxy Note 7 due to fire-prone batteries.

Samsung shares are trading at a near-record high of 2.35 million won each as of Tuesday. They have gained 30 percent so far this year on top of a 43 percent surge in 2016.

"The Galaxy S8 series has been out for more than 2 months now and we see similar traction as the Galaxy S7 series," Counterpoint analyst Tom Kang said.

Samsung would sell about 49 million S8s by the end of its first full-year release, in line with first-year sales of the Galaxy S7, he said. Samsung is also preparing to unveil the Galaxy Note 8 in August, a source told Reuters, restoring the company's schedule of market-moving gadget releases after the interruption of the Note 7 debacle.

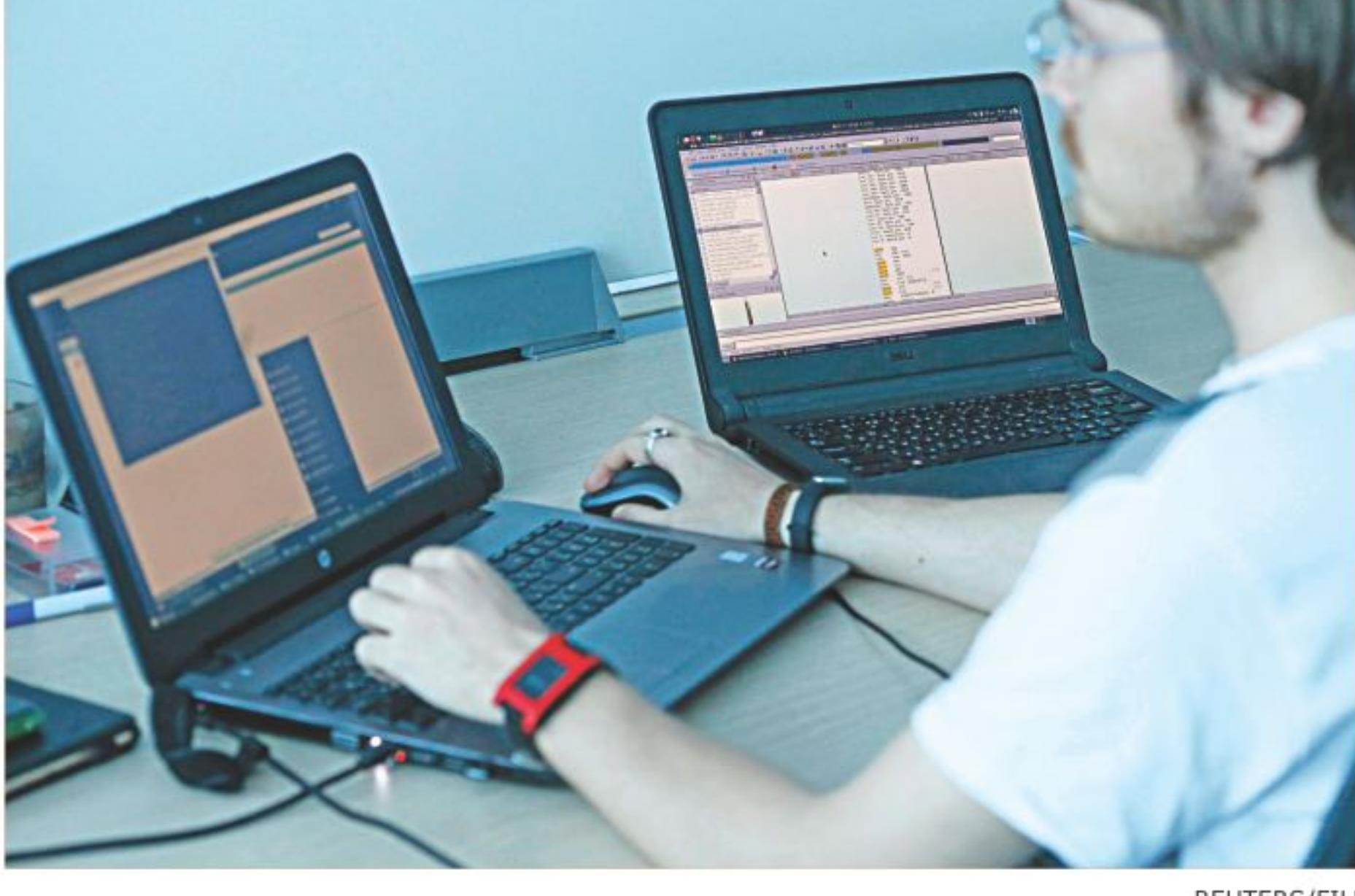
The company will issue earnings guidance early on Friday but will not disclose details on its performance until late July.

Nomura has predicted DRAM chip prices will continue to rise in the second half of 2017 due to limited supply and strong demand driven by servers.



A woman stands in front of an advertisement promoting Samsung Galaxy S8 at its office building in Seoul.

## UN survey finds cybersecurity gaps everywhere except Singapore



REUTERS/FILE

A man works on laptops that show parts of a code of a computer virus.

REUTERS, Geneva

**S**INGAPORE has a near-perfect approach to cybersecurity, but many other rich countries have holes in their defences and some poorer countries are showing them how it should be done, a U.N. survey showed on Wednesday.

Wealth breeds cybercrime, but it does not automatically generate cybersecurity, so governments need to make sure that they are prepared, the survey by the U.N. International Telecommunication Union (ITU) said.

"There is still an evident gap between countries in terms of awareness, understanding, knowledge and finally capacity to deploy the proper strategies, capabilities and programmes," the survey said.

The United States came second in the ITU's Global Cybersecurity Index, but many of the other highly rated countries were small or developing economies.

The rest of the top 10 were Malaysia, Oman, Estonia, Mauritius, Australia, Georgia, France and Canada. Russia ranked 11th. India was 25th, one place ahead of Germany, and China was 34th.

The ranking was based on countries' legal, technical and organisational institu-

tions, their educational and research capabilities, and their cooperation in information-sharing networks.

"Cybersecurity is an ecosystem where laws, organizations, skills, cooperation and technical implementation need to be in harmony to be most effective," the survey said.

"The degree of interconnectivity of networks implies that anything and everything can be exposed, and everything from national critical infrastructure to our basic human rights can be compromised."

The crucial first step was to adopt a national security strategy, but 50 percent of countries have none, the survey said.

Among the countries that ranked higher than their economic development was 57th-placed North Korea, which was let down by its "cooperation" score but still ranked three spots ahead of much richer Spain.

The smallest rich countries also scored badly - Andorra, Liechtenstein, Monaco and San Marino were all well down the second half of the table. The Vatican ranked 186th out of 195 countries in the survey.

But no country did worse than Equatorial Guinea, which scored zero.

## Japan Inc scrambles for job-hoppers to cope with labour shortages

REUTERS, Tokyo

**J**APAN'S labour shortage has pushed job-hopping to its highest since the global financial crisis, as companies scramble for workers with experience in the rapidly-ageing economy.

Job-hopping goes against the grain of Japan's work culture, where many companies hire graduates and employ them until they retire. But the country's jobs-for-life system is slowly giving way as firms curb labour costs and society shifts. Switching jobs for better conditions is no longer taboo amid a tightening labour market, and the trend is being led by mid-career workers.

"There's always a risk of failure. But you can't get what you want if you don't try," said Hiromichi Itakura, 44, head of a medical job placement department at Saint Media Inc in Tokyo, who changed jobs in January.

"I took up this job because it gives me a more responsible post. As a salary man, I also wanted a higher salary," he said, adding that his pay is now 20 percent higher than previously.

The number of job-hoppers rose for the seventh straight year to 3.06 million in 2016, the highest since 2009, though it still accounts for just 4.8 percent of the labour market.

Older workers have more opportunities because of demographics: a fast-ageing society, low birth rate and falling working-age population. The jobless rate has stood at a near two-decade low while the jobs-to-applicants ratio is at a 43-year high. Big firms say the labour market is at its tightest since 1992, according to the Bank of Japan's latest "tankan" survey published this week.

Though job turnover is still low relative to other major economies - the change should be welcome news to Prime Minister Shinzo Abe, who has been championing labour flexibility and merit-based pay - with little success so far.

Enhancing labour mobility is expected to help raise low productivity and boost wages, getting Japan convincingly out of a deflationary rut.

Competition for Workers

Companies facing labour shortages are willing to pay for battle-tested workers who don't need as much training.

Electric motor maker Nidec Corp is actively hiring mid-career engineers and remunerating them for their experience.

"Competition is tough for tried-and-true

personnel," a company spokesman said on condition of anonymity. "We are doing our best to persuade talented people to join our company."

Job-hoppers aged between mid-40s and 65 or older are on the rise, hitting their highest, according to comparable data going back to 2002. "The mid-career job market is booming," said Hirofumi Amano of en-japan inc, a job placement agency.

People older than 35 used to be considered past their prime in the mid-career market but these workers are now sought after. Companies are seeking experienced managers and engi-



A man works at a factory in Kawasaki, Japan.

neers and offering higher pay, Amano said.

Workers who secured higher salaries from changing jobs outnumbered those whose paychecks shrank, labour ministry data from 2015 showed. A quarter of job-hoppers saw their salaries rise by 10 percent or more.

In comparison, average base wages in April rose just 0.4 percent from a year earlier.

The International Monetary Fund has urged Japan to enhance worker mobility to strengthen productivity and wage pressures.

"Low labour mobility, a strong preference for job security, and wage setting based on past inflation constitute the main bottlenecks for

yourself to earn stable income, and I'm doing just that by changing jobs."

Japanese firms have curbed labour costs by replacing full-time jobs with part-time positions since the asset-inflated bubble burst in the early 1990s.

Now a rising rank of non-regular workers - including part-timers and contract workers - account for nearly 40 percent of the workforce.

Hiroaki Okutani, a 57-year-old contract worker at a logistics company Ueda Co Ltd, who left his job at a food processing firm two years ago, said his decision was partly due to anxiety about life after retirement.