

Accenture Technology Vision 2016

People First: the Primacy of People in a Digital Age

Malaysian Perspective

High performance. Delivered.



Introduction

We are in the midst of a digital revolution – and the pace has been staggering.

Like other parts of the world, in Malaysia, there has been a constant stream of new technology to ingest, new ways to scale products and services, new channels to engage with customers and connect with partners, and the list goes on.

In our global technology survey of more than 3,200 IT and business executives, 86 percent said they expected the pace of technology change to increase rapidly or at an unprecedented rate in their industry over the next three years. By 2020, digital is expected to account for a quarter of the world's economy, from 15 percent in 2005.

But even with technology as an integral part of organisations and their strategy, it is people that will underpin their success as businesses reinvent themselves again and again. Which is why the theme of Technology Vision 2016 is "People First: The Primacy of People in a Digital Age".

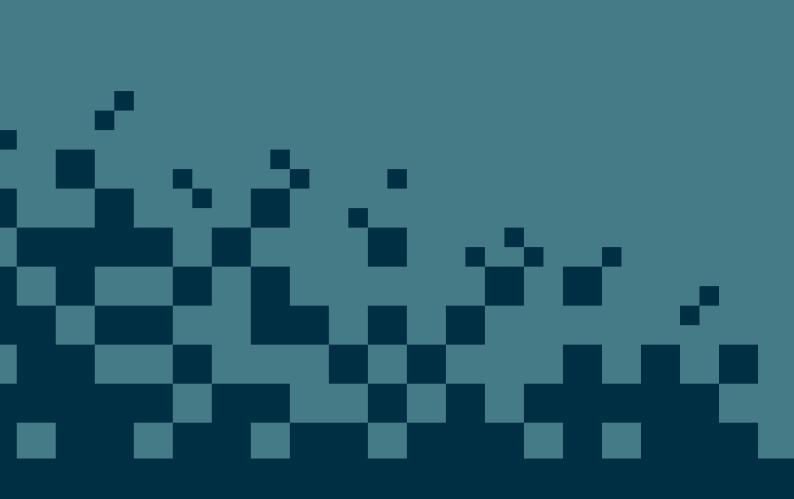
TechVision 2016 looks at five emerging technological trends – Intelligent Automation, Liquid Workforce, Platform Economy, Predictable Disruption and Digital Trust – that will change how businesses operate and compete in the next three to five years. More importantly, it looks at the competitive

advantage for companies that focus on enabling their people – consumers, employees and ecosystem partners – to accomplish more with technology. These companies use technology to empower people to evolve and adapt, create new solutions, drive change – and disrupt the status quo.

The critical message from TechVision 2016 is counterintuitive. While technology is the driver, it is people, not just technology, that will transform organisations for the future. And those companies that put people first will emerge winners in the digital age.

In our report, we put the five trends we expect to have a profound impact in the immediate future into the Malaysian context. In this way, we hope to provide businesses operating here with relevant ideas and guidance as they transform themselves – and their people – for digital success.







In the US, a new cancer-fighting drug is on schedule to hit the market in half the time – and at half the cost – cancer drugs typically take. Pharmaceutical start-up Berg Health used a supercomputer to analyse tissue samples from cancer patients and cancer-free individuals, and then collate the 14 trillion data points from each sample into meaningful categories. With this information – the sheer quantity of which would have been impossible for humans to process – scientists have been able to create a new and sophisticated response to a devastating disease, and within a time-frame that was previously impossible to contemplate.

This is Intelligent Automation in action, where man and machine combine their strengths to reinvent the possible. As seen in Berg Health's lab, smart machines offer scale, speed, and the ability to cut through complexity – skills that are different from, but complementary to what human workers are capable of. Together, they are pushing the boundaries of what can be achieved. And by changing what can be achieved, Intelligent Automation is reshaping entire industries.

We are seeing this happen globally, and here in Malaysia, where companies like Hong Leong Bank, Tenaga Nasional Berhad and Royal Malaysia Police have successfully deployed Intelligent Automation. Malaysian Prime Minister Datuk Seri Najib Tun Razak has noted the potential of such technology to allow for more effective and cost-efficient delivery of healthcare and traffic management, among other things, as the country readies itself for the digital economy.

The Automation Advantage

Despite common misconceptions that we may be innovating ourselves out of our jobs, Intelligent Automation is not about replacing human workers in the workplace. At Siemens' fully automated "lights-out" manufacturing plant, for example, machines organise themselves, supply chains automatically link together, and orders are directly converted into manufacturing information. But the company will still employ 1,150 workers, whose focus will be on higher skilled jobs like programming, monitoring and machine maintenance.

Intelligent Automation is about collaboration, not replacement, and about empowering customers, partners and employees to achieve more with technology. We anticipate that current and future advances will deliver at least 30 to 40 percent in productivity gains in just three to five years, even in functions that are already automated.

In our survey of 3,200 IT and business executives, 70 percent said they were making significantly more investments in Intelligent Automation-related technologies than they did in 2013, and 43 percent had realised cost savings greater than 15 percent from intelligent process automation in the past two years.

And this is just the start. It is estimated that between 2015 and 2018, as many as 152,400 units of professional service robots worth US\$19.6 billion will be sold.

For companies and organisations, Intelligent Automation offers advantages that should not be ignored, particularly in an age of digital disruption.

Leaders who embrace automation will hold a competitive advantage as machines and software intelligence become the newest recruits in their workforces, bringing new skills to help people do new jobs, reinventing what's possible.

Intelligent Automation in Malaysia

There are several examples of Intelligent Automation being successfully adopted and incorporated in Malaysia, for example the Royal Malaysia Police's SMART Lock–Up and Tenaga Nasional Berhad's smart meters (see case studies below). However, on the whole, the scale of adoption remains small. Rolling out on a large scale requires substantial investment, and the scale of that investment is something most businesses worry about, especially in the current economic climate. Talent scarcity in these highly demanded skill sets is another factor in the way of large–scale rollouts. The current mindset tends to be one of caution. This is a new frontier for everyone. But if Malaysia wants to be a leader, and to become more competitive in ASEAN and the world, we cannot be about low–cost manufacturing. We have to be about productivity and higher value services. Intelligent Automation feeds into both these ambitions.

Royal Malaysia Police

Following a successful 15-month pilot at Jinjang Police Station in Kuala Lumpur, the SMART (Self-Monitoring Analytics Reporting Technology) Lock-Up system will soon help prison guards prevent jail breaks, fights, suicides and custodial deaths in lock-up facilities across Malaysia. The system uses wide-angle surveillance cameras and gait analysis to capture and detect suspicious behaviour by inmates in real time. Security personnel at the control centre and officers-in-charge are alerted to any incidents via a surveillance screen with a 3D location marker, allowing them to move in on and manage situations before they escalate. Events captured can be shared, with a time stamp, with other authorised personnel.

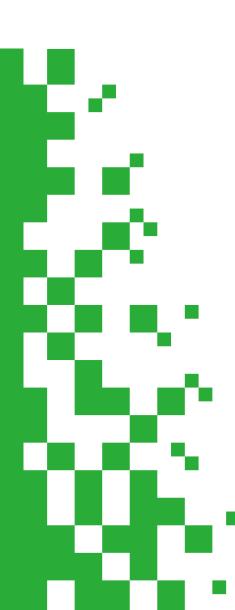
Hong Leong Bank

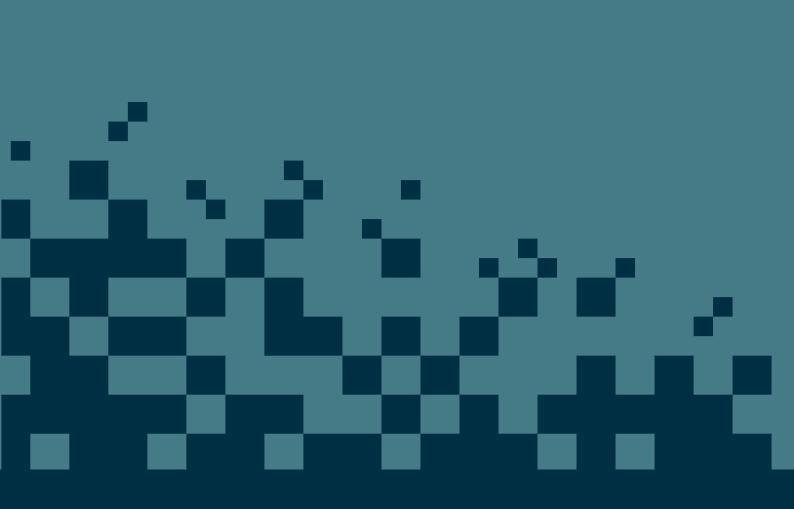
Since January 2016, Hong Leong Bank has had a new employee, IBM Watson, who is available around the clock to respond to queries from its credit card holders and offer advice on the card best suited to their lifestyle needs. The open cognitive computing technology platform continuously learns from its "live" chats, analysing content, tone of voice and emotion to gain in value and knowledge for future interactions. Watson also supports its human colleagues with rapid analyses of vast volumes of data – including research reports, product information and customer profiles – to identify the connections between customers' needs, and find a match from among the various financial options available to them. With this information, the bank's staff can deliver better service faster, and ensure greater consistency and accuracy of information. Hong Leong was the first organisation in Malaysia to adopt IBM Watson to transform its customer engagement model.

Tenaga Nasional Berhad

Malaysia's main energy provider Tenaga Nasional Berhad is putting the power to control electricity consumption into the hands of its customers. Over the next decade, it will install "smart meters" in 8.5 million households around the country. Using Smart Grid technologies, these smart meters record consumption of electric energy at intervals of an hour or less. That means a customer can monitor the amount of electricity used, know when it was used, and how much it cost. Combined with real-time pricing, this will allow customers to cut down on their power consumption when electricity is most expensive, saving money. A customer can, for example, set his or her washing machine to run during non-peak hours. Beyond helping customers to manage their electricity use, the smart grid also presents benefits with regard to Malaysia's economic, national security and renewable energy goals.

- Take a 'People-First' approach by adapting the organisation's culture, skills, and experience to adopt new skillsets.
- Intelligent Automation will give organisations newfound power to drive change.
- Intelligent Automation will become a core competence a pervasive capability for every aspect of your business.







In January 2013, GE Appliances put together a small crossfunctional team, gave them a limited budget, and challenged them to create a refrigerator for its high-end Monogram range. Less than a year later, the team delivered their product, built twice as fast and at half the cost – and it is selling twice as well as previous models. The US-based electronics giant attributes the team's success to FastWorks, an approach that involves doing away with rigid processes and allowing employees to make rapid changes to their projects, even switching directions when necessary. GE supports its employees by providing access to smart data and continuous training that enables them to keep up with the evolving demands of the project.

GE is not alone in embedding lean start-up practices into its workforce, allowing it to change faster and make smarter decisions. To keep up with the breakneck pace of technological advances, leaders around the globe are building workforces that can flex just as rapidly – in other words, a Liquid Workforce.

Employees in this nimble workforce are organised in working groups, moving easily from project to project, training on the go by tapping resources both within and outside the company. Some 80 percent of employers in this year's survey believe that such a workforce will be a key competitive advantage for companies in the digital age, where disruption is a way of life.

To build this Liquid Workforce, companies must use digital technology to enable agility at three levels: skills, projects and the organisation as a whole.

Skills Development

To access the continuous stream of new technologies, continual training must become a core competency. Fortunately, there are a growing number of scalable training solutions to choose from including massive online open courses (MOOCs), boot camps, and even virtual reality training. Forward-thinking organisations are also developing in-house programmes and units to fill skills gaps. According to one study, companies that invest US\$1,500 annually in training per employee will see average profit margins that are 24 percent higher than those that don't.

Project Planning

At the project level, digital businesses need to leverage collaboration tools and cloud-based workflows to connect their workforce and empower anytime, anywhere working. They also need to be able to assemble the right people from inside and outside the organisation into optimal teams.

TechVision 2016 found that 'deep expertise for the specialised task at hand' was only the fifth most important thing that digital employers looked for, with 'ability to quickly learn', 'ability to multitask' and 'willingness to embrace change' ranking higher. As such, companies will need to source deep skills as needed, including contractors, freelancers, alliance partners and startups and assemble them into optimal teams for different projects.

Organisational Structure

A skilled workforce and flexible project model will only flourish in an equally flexible organisation. This means more horizontal leadership structures, like at GE, where front-line employees, exposed to continual training and with data at their finger-tips, are empowered to make decisions.

As we move forward, a growing proportion of employees will be made up of Millennials, talent that has grown up as digital natives, and who adapt easily to the furious pace of technological change. This generation seeks more flexibility, less hierarchy, are keen to shape their own career paths, and are comfortable using digital tools to work anytime, from anywhere. In other words, a perfect fit for your Liquid Workforce.

Asia is in excellent stead to benefit from this trend – by 2020, the region will have 60 percent of the world's millennial population.

The Liquid Workforce in Malaysia

When it comes to creating a Liquid Workforce in Malaysia, there has been uneven progress. At the skills level, large companies that have their own internal learning centres, and tertiary institutions are updating their curriculums to reflect the new capabilities and competencies needed, especially in the areas of data science and analytics. Several companies in Malaysia are experimenting with "reverse mentoring", or roping in younger employees to mentor senior leadership, including CEOs, on digital trends. The government has also been supportive with its Human Resources Development Fund that covers employee training costs, and other initiatives such as MaGIC, which runs free data science courses. However, on the projects level, the external or freelance market is not yet fully tapped due to concerns about data privacy and preserving competitive advantages. On the other hand, the uncertain economy means that many Millennials are seeking the security of full-time rather than freelance jobs. Organisational structures also remain largely hierarchical, although MNCs are leading the way in flattening their structures. We anticipate the move towards a more liquid workforce will gain momentum in the

next 12 to 18 months as the economy improves, and also as the demand for talent outstrips supply. It will, we hope, be accompanied with the requisite cultural shift that will make innovation a part of organisational DNA, allowing great ideas to come to life. Technology alone will not propel organisations towards their new strategic objectives. People – empowered by technology to evolve, adapt and drive change – will.

Freelancer.com/oDesk

A growing number of job seekers in Malaysia are seeking more flexibility in their work life. Between 2009, when Malaysians started using Freelancer.com, and 2014, over 27,000 freelance jobs have been posted on the website, and over US\$851,000 earned by its freelancers. Job seekers bid for jobs posted by employers, who then decide which candidate best meets their needs. A system built into the process ensures that the freelancer is paid for the job, with a team on hand to review disputes and award funds at "payment milestones". Malaysia is also one of the fastest growing markets for global online marketplace oDesk.

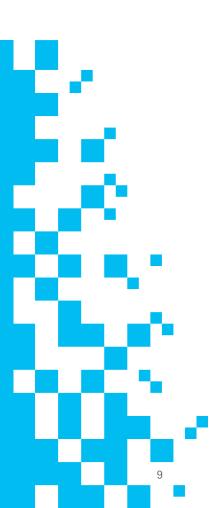
WOBB

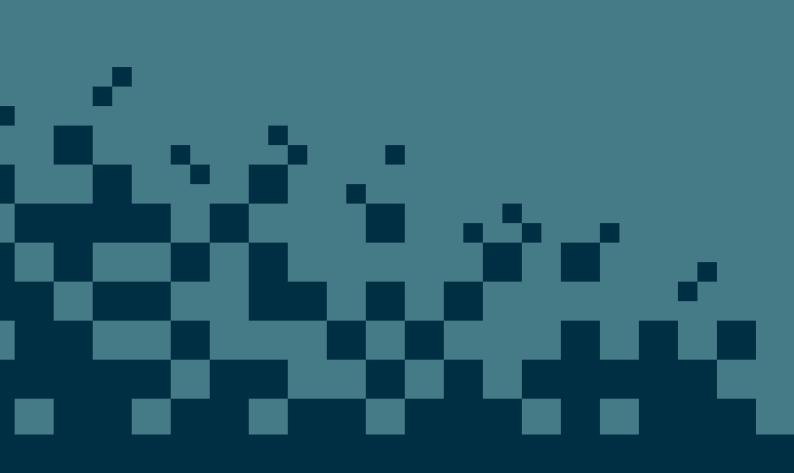
The last few years has seen the launch of a number of job hunting platforms targeted at Millennials, linking them with employers that share similar ideas in terms of working culture, office environment, team building, and other millennial priorities. Among them is WOBB, or Working On Bean Bags, launched in 2014. Job hunters logging onto wobb.my can find pictures of prospective workplaces, and get a closer look at the people they will be working with and an idea of the working culture before sending in their applications. Every three months, the WOBB team picks between 15 and 20 job seekers across Malaysia, based on their CVs and video cover letters, for an 'Awesome Tour'. To date, candidates have been taken to visit the offices and meet staff of Google, Maxis, Quintiq, Paypal, KFIT, Mind Valley and Nuffnang. A mobile app allows users to apply for jobs anywhere, anytime.

TribeHired

TribeHired is a social recruitment platform that curates a list of the top IT talents available for hire in the city each week, and presents them to the companies on its database. These companies view videos of the talents curated, and then compete to hire them by placing their bids and setting up three potential "dates". At the end of the week, the talents decide on which three interview offers to accept. A new element at TribeHired is a "bootcamp", essentially a stand-off between participants who present themselves and compete to be recognised among the top 10 talents of the week.

- Address workforce disruptions today
- Agile workforce = Agile business
- Start your transformation in five key ways
 - Make training a core competency
 - Become more project oriented and agile
 - Empower collaboration and new ideas
 - Manage a distributed workforce
 - Create an organisation that is built to facilitate, not impede







Late last year, a group of patients with Type 1 Diabetes began tracking their blood sugar levels, insulin doses, food intake, physical activity, mood, and stress levels on a healthcare app on their mobile devices. The prototype, the first to be built on the Philips Healthcare digital platform, collects, integrates and analyses electronic medical records, personal health data, and information from connected consumer and medical devices like wireless glucose meters and activity monitors, and presents it on smartphones and tablets. Diabetes patients use this information to make up to 180 decisions each day to manage their disease. By also connecting patients to their health care providers, the platform allows continuous, collaborative care at home, potentially reducing health deterioration, hospital readmissions, and mortality.

While patients enjoy higher quality healthcare at lower costs, for Philips and its three cloud partners, the app is the tip of a very large iceberg. The healthcare giant's goal is to use the platform business model to grow its market share across the continuum of healthcare needs, from healthy living, prevention and diagnosis, to treatment, recovery and home care — a market whose combined value exceeds US\$100 billion.

Once the premise of tech and born-digital organisations like Google and Amazon, platform strategies are increasingly being adopted by digital leaders across industries. The attraction of this new, agile mode of operation is clear – by combining the capacities of multiple players in an ecosystem, companies can tap into resources they don't need to own to open up new paths of growth. And the rewards are rich. The top 15 companies within the platform space have a staggering market capitalisation of US\$2.6 trillion.

As cities become smart, healthcare becomes digital, and cars and homes become connected, businesses will need to be able to operate within these ecosystems. By 2018, IDC predicts that more than 50 percent of large companies — and more than 80 percent of companies with advanced digital transformation strategies — will create and/or partner with industry platforms.

Indeed, 81 percent of the 3,200 business and IT executives we surveyed for TechVision 2016 said that platform-based business models will be core to their growth strategy within three years.

Whether they own a platform or plug into ecosystems driven by other companies, what is clear is that every company must have a platform strategy and the know-how to operate it.

The Platform Economy in Malaysia

There is a good grasp of the platform economy in Malaysia, and many examples of companies either becoming platform providers or plugging in to existing platforms, which is evening out the playing field for businesses, big and small. iFlix, the ASEAN version of Netflix, for example, used the Amazon Web Services (AWS) platform to shorten time to market. Access to Amazon's platform lowered a significant barrier to entry for iFlix, removing the need for substantial CAPEX investment in infrastructure and connectivity.

In Malaysia, the shift is still being led by Business-to-Consumer platforms like services marketplace kaodim.com and transport-on-demand provider Grab, as well as food delivery providers like Food Panda. Business-to-Business platforms lag behind, perhaps reflecting the lower scale of current B2B interactions.

Malaysia understands that being part of the global digital economy is essential if it is to become a developed country and remain competitive. This includes removing barriers to entry to allow for the growth of platform economies, which it has most noticeably done in the transport (Uber, Grab) and banking industries.

Crowdo

Regional FinTech Crowdo is one of the largest and fastest growing equity crowdfunding platforms in Southeast Asia. This community-driven online platform was officially launched in Malaysia in January this year, after it became the first country in Asia Pacific to legislate equity crowdfunding, and connects up and coming start-ups with the global community of investors. In its first fundraising offer in Malaysia in early March, its issuer, The Parenthood, achieved the largest equity crowdfunding offer to date in the region, raising close to US\$665,000, and surpassing its target by 250 percent. There are close to 650,000 SMEs in Malaysia – 97 percent of all businesses in the country – and equity crowdfunding is widely seen as a powerful enabler that will help start-ups grow and further develop their innovations.

Grab

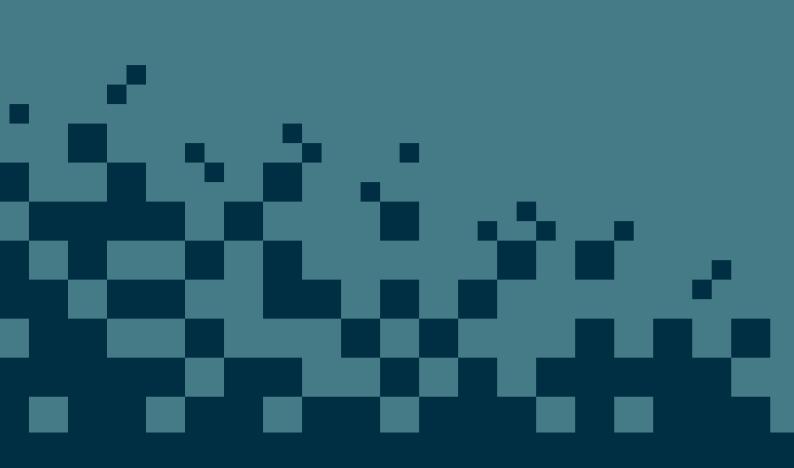
First launched in 2012 as MyTeksi, Grab was a response to the lack of adequate and reliable public transport during peak hours. The smartphone booking and dispatch platform assigns nearby available cabs to commuters using mapping and location–sharing technology. In the four years it has been in business, the platform has grown to encompass not just taxis (GrabTaxi), but also private car services (GrabCar), motorcycle taxis (GrabBike), social carpooling (GrabHitch), and last mile delivery (GrabExpress). For customers, the app provides automated retries which minimises repeat bookings, and live driver tracking for a better customer experience. Drivers who are active on GrabTaxi's platform, meanwhile, have seen their income increase by between 30 and 300 percent. The Malaysian e-hailing app has since been successfully launched in Singapore, Thailand, Vietnam, Indonesia and the Philippines.

HappyFresh

Launched in Kuala Lumpur in 2015, HappyFresh is a one-hour online grocery delivery service marketed as a way to save customers in large cities from getting stuck in debilitating traffic on the way to and from grocery stores. Consumers select their preferred supermarket/s on their mobile or web platform, then shop from a range of more than 40,000 items available across the different stores before selecting their delivery slot and making payment. Personal shoppers based at the different supermarkets take over from there, picking out the selected groceries which are then delivered by drivers on motorbikes fitted with insulated boxes. Meanwhile, customers are updated through in-app notifications on the progress of their order. An early mover in the food marketplace industry in Southeast Asia, HappyFresh successfully raised US\$12 million in a series A funding round last September to expand its footprint across the region. Besides Malaysia, HappyFresh also operates in Indonesia (where it is headquartered), Thailand and Taiwan.

- Driven by the new rules of business, platform business models represent the most profound disruptive change in the global macroeconomic environment since the Industrial Revolution.
- While tech and born-digital organisations have been dominating the digital economy with record high market caps, non-tech digital leaders across all industries are now developing platform strategies.
- The strategic use of technologies to create platform business models is driving unprecedented growth opportunities in the rapidly expanding digital economy.







Frustrated by their inability to hail a taxi on a snowy evening in 2008, two friends brainstormed an idea that would eventually become known as Uber – a digital platform that has profoundly disrupted the taxi industry in 449 cities worldwide. With a few taps on their smartphones, passengers can now e-hail a car when and where needed, and follow the Uber driver's journey in real time. But the story does not end there. Just a handful of years later, Uber is using its platform and ecosystem to push disruption into a completely unrelated sector – healthcare. Last November, people across 36 US cities could tap on the UberHEALTH option on their apps for a US\$10 flu care package and a house call from a registered nurse with enough flu vaccines for 10 people. In April 2016, Uber launched a similar service in five cities in South Africa. Until then, neither hospitals nor pharmacy chains had considered Uber a potential competitor. Today, the term "uberisation" has to come mean the data-driven utilisation of otherwise untapped or idling resources.

Anticipating Change

Conventional wisdom says that disruption is unexpected, upsetting and unwelcome. But as much as "Predictable Disruption" may seem a contradiction in terms, it is not.

More and more, businesses are investing in digital platforms, connecting with new partners and reimagining industries. New ecosystems are being formed. But these new ecosystems don't emerge overnight – they start out small and develop slowly. To attract partners and build consumer demand, the companies developing them are vocal about their plans. And this gives those who are watching not just a line of sight into these digital ecosystems, but an opportunity to anticipate the trajectories and impact with a fairly high level of certainty. Smart companies map out ecosystem scenarios — and unveil disruptive opportunities.

In other words, the ecosystems that are emerging across the globe provide the foundation for the next major disruption.

As seen in the case of UberHEALTH, the disruptive nature of these new digital ecosystems is not bound by traditional industry barriers. As every industry becomes digital, an ecosystem forming in one sector can very quickly become the foundation for disruptions in another.

Some 82 percent of the 3,200 IT and business executives we surveyed for TechVision 2016 say industry boundaries are being erased, and new paradigms are emerging for every industry. This means that beyond looking at digital ecosystems for the next waves of change, businesses must develop ecosystem strategies to participate in entirely new markets.

The threat of unexpected new competitors seizing the advantage is balanced by the immense opportunities offered by this business model. Unlike previous technology disruptions that were often unpredictable, forward thinking leaders can get ahead of the game, develop their ecosystem strategies, and ride the results into new markets. We believe that strategy teams of the future will use gamification to play out and predict disruptions.

Ecosystem disruptions won't happen across all industries at the same time. But they will inevitably arrive and those that watch will see them coming.

Predictable Disruption in Malaysia

Generally, companies have not yet adopted digital technologies at scale simply because beyond technology, true digital transformation requires the entire organisation to be ready – from legal and risk management, to IP protection and having the right talent and ecosystem. We believe that mainstream adoption will take place in the next 12 to 18 months, driven by a shrinking local market and the need to innovate to compete with early adopters. In Malaysia, this has been especially so in the telecommunications and financial services industries, both of which are already feeling the impact of disruption by adjacent players.

Most major telcos here have seen Average Revenue Per User (ARPU) fall due to the arrival of digital channels and collaboration apps like WeChat, LINE and Whatsapp. The same challenges are being faced by banks, with the growth of FinTechs and, like telcos, apps like WeChat and LINE. A number of companies are experimenting or developing strategies to anticipate and be able to move quickly with change. The main challenge for Malaysian companies now is to see how they can create or plug into ecosystems that will allow them to take advantages of opportunities that come with the inevitability of disruption.

Maybank

As technology companies surface new and novel ways for consumers to sidestep traditional banking practices, Malaysia's biggest lender has boarded the innovation train. In 2015, Maybank partnered one of the country's largest accelerators, venture capital firm 1337 Ventures, to kick off MaybankFintech, an annual boot camp to draw promising FinTech ideas from around the world. It ran a second edition earlier this year. By harnessing the start-up ecosystem, Maybank hopes to adopt and scale ideas that will allow it to break free from banking's legacy technologies, become more nimble, and sharpen its customer focus.

Samsung

By the end of this year, Samsung's flagship mobile payment service, Samsung Pay, will be rolled out in Malaysia. The South Korean giant's answer to Apple Pay uses proprietary technology called Magnetic Secure Transmission, as well as Near Field Communications (NFC) and bar code readers. This means it will work with virtually any payment terminal that supports physical credit cards, and that stores can use their existing

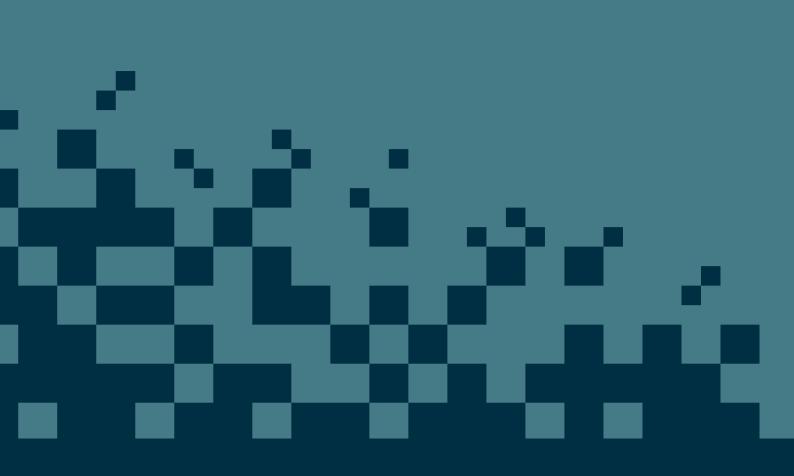
machines for Samsung Pay. Samsung is still in talks with local banks to get the payment service off the ground, but the company is confident of its success. The service is currently used by some 5 million people in the US and South Korea, and has also been launched in Singapore and China, among others.

Celcom

Even as growth rates in the telecommunications industry hovers in the low teens, Celcom has remained ever-relevant, pivoting into areas such as digital commerce, and providing far more than just a network. In 2015, Celcom tied up with SK Telecom's e-commerce subsidiary to launch South Korea's largest online marketplace, 11 street, in Malaysia. Celcom has been able to use the online mall to grow its digital sales and distribution, and effectively reach younger customers. This allows it to move beyond the dealer-based sales telecommunications companies traditionally rely on. Celcom hopes for digital sales to expand by 30 percent in the next three years. It has also partnered New York-based Yonder Music to bring digital music to its subscribers, and signed a deal with video-on-demand service iFlix.

- Digital ecosystems are becoming the foundation for the next wave of enterprise disruption.
- Industry boundaries are already blurring, shifting market power to newcomers.
- Companies can gain visibility into the disruptive forces of ecosystems and take action now by developing strategies to forge new roles and new paths.







In August last year, two cybersecurity researchers identified six flaws in US carmaker Tesla's Model S, one of which allowed them to take control of the car and shut it down. They acknowledged that the hack required them to physically dismantle the vehicle's dashboard and connect to an exposed Ethernet port, and that the model remained among the most secure available. Still, within two weeks of being notified, Tesla pushed an over-theair (OTA) update to every single Model S, addressing a number of the vulnerabilities and increasing the overall security of the system. The makers of the world's most connected car also wooed hackers at the Def Con Hacking Conference to help uncover issues that made its cars vulnerable to cyberattacks. The digital age has opened the door to incredible opportunities for businesses - never before has it been possible to scale new products and services so rapidly, acquire information from hundreds of millions of Internet of Things (IoT) devices, and personalise customer interactions in real time. However, with these opportunities come increased exposure to systemic risks. And as every digital advancement creates a new vector for risk, trust has become the cornerstone of the digital economy.

Of the 3,200 business and IT executives we surveyed, 80 percent said that trust was a key differentiator in the digital economy. Digital businesses need to maintain trust to use and share big data. They need it to develop ecosystem connections to a range of business partners. They need it to satisfy regulators and cybersecurity insurers. And most importantly, they need to build trust at every engagement point of the customer journey to sustain long-term relationships.

This trust is built on two major components – security and ethics.

To gain the trust of individuals, ecosystems and regulators in the digital economy, businesses must be strong in both these components. New products and services must also be designed to be both ethical and secure.

Tesla's swift and comprehensive response to the security threat can be seen in this light.

Security and Ethics

Recognition of new risks from digital transformation has already driven security investments across all industries. According to US-based IT research and advisory firm Gartner, global information security spend is set to exceed US\$100 billion by 2019.

Next-generation security mechanisms are following data and extending well beyond the usual perimeters. Wherever data goes, security must go with it – as such, solutions like security-aware application design, integrated database security, dynamic access controls, and runtime application protection are increasingly being integrated into new products.

But better security is just half the story. Companies must also have very high data and digital ethics. Most companies have policies related to data privacy, which is part of data ethics. Digital ethics is much broader than that. It's about determining the right actions based on the information available and the capabilities of the business. It's about acting in accordance with corporate values in order to sustain trust with customers, investors and partners.

When the FBI asked Apple for access to the locked iPhone 5c owned by San Bernardino shooter Syed Farook who killed 14 people, the company told a federal court that "forcing Apple to extract data [from mobile devices] ...could threaten the trust between Apple and its customers and substantially tarnish the Apple brand."

The FBI eventually found a third-party to unlock the iPhone 5c, but the company's response exemplified the important role that trust plays in its ability to do business.

In fact, 82 percent of our survey respondents agree that a lack of security and ethical controls on data could exclude them from participating in digital platforms and in broader ecosystems — an increasingly critical go-to-market strategy.

Clearly, it is simply no longer enough that companies in the digital playing field ensure cybersecurity. They also need to put into place comprehensive policies, training, incentives and consequences for data and digital ethics. Beyond reducing their exposure to risk and adverse outcomes, this will allow them to maintain trust, and retain customers, market share and company valuation.

Digital Trust in Malaysia

Especially in the last three years, there has been significant focus on cyber security by companies as well as the Malaysian government, working through CyberSecurity Malaysia, the national cyber security specialist agency under the Ministry of Science, Technology and Innovation (MOSTI). However, cyberattacks remain a very real risk in Malaysia. According to CyberSecurity Malaysia, we are among the top ten countries in the world most vulnerable to security attacks, with 65 percent of Malaysian companies at risk of such attacks. There are cases of systems being compromised for years at a time without being discovered. From a digital ethics perspective, there is a lack of specific – or publicised – policies among the majority of Malaysian companies beyond what has been mandated by the government, for example in the Personal Data Protection Act which came into force in November 2013. For Malaysian companies to successfully pivot to digital business models, they must have a solid cyber security foundation, and have built digital trust among employees, partners and customers. Organisations must bring security and digital trust out of IT departments and make it a board-level issue, and collaborate, share and jointly innovate with others in their industry to out-smart their adversaries.

Where do you start?

TechVision 2016 offers some guidelines. In the short-term, businesses should understand the current state of digital risk they're exposed to and benchmark data points that can be improved by doing the following:

- Survey stakeholders in an effort to quantify the level of trust across your offering portfolio
- Search customer service logs for the word 'trust' and run sentiment analysis against the results to gain an understanding of how customers perceive your offerings and brand; make a top-five list of the least trustworthy offerings
- Take an inventory of data-driven business processes; describe the current and potential opportunities for enhanced security and data ethics for each

- Identify the executive(s) responsible for building and maintaining trust, digital ethics, and security with vendors, partners and customers
- Research what your competitors do to build customer trust.
 Record what builds and erodes trust. Brainstorm opportunities for improvement within your own operations
- Partner with an academic institution, non-profit or industry group to dive deeper into one aspect of digital ethics. Publish findings/advice for others
- Compile a list of opportunities for security to move closer to data

- Ethics and security must be primary considerations in any digital transformation.
- Exposure to risk scales in proportion to digital business operations.
- To protect against downside risk, businesses must foster strong ethical decisions, effectively use security to protect against external threats and build trusting relationships with ecosystem stakeholders.
- In procuring new technologies, security must be among the key evaluation criteria.
- Look for opportunities to build trust at every engagement point along the customer journey.



Conclusion

In this report, we have looked at five trends we believe will have a profound impact on how business is done in the next three to five years, and tried to understand where Malaysian businesses and organisations stand in each of these emerging areas. Doing so is important given that the old rules of competition have changed.

Digital technology is connecting the world in new and unexpected ways, driving fundamental change in the status quo – whether in the way companies operate, in the industries they compete in, or the talent they employ.

There has been a strong call for the country to leverage the transformative power of science and technology, and for a spirit of innovation and creativity among entrepreneurs to further energize the domestic economy. "We want to prepare the nation for a digital future and make sure that we are able to unlock the opportunities of digital innovation to drive the digital economy as a core economic pillar of the country," Malaysia Digital Economy Corp Sdn Bhd (MDEC) CEO, Datuk Yasmin Mahmood, has said.

Capitalising on the digital and sharing economy will strengthen Malaysia's growth and ready it for when the global economy fully recovers.

We believe that this recovery will take place in the next 12 to 18 months, and that Malaysian companies need to start laying the foundation for this now. The market is changing rapidly and Malaysia needs to move up the value chain. Malaysian companies also have ASEAN and global ambitions, and need to be able to differentiate themselves. Add to that the country's ambition to become a developed nation by 2020, and it becomes even clearer that companies must scale up and embrace a new level of boldness.

While Malaysia has come a long way, there is further to go.

Intelligent Automation remains more popular among multinationals that are adopting practices from their headquarters and pushing it out to companies here. It is time for us to see more innovation from within.

Companies also need to work with a more liquid workforce to address talent gaps as they emerge, and be able to crowdsource skill sets that are missing. They need to adopt and incorporate digital transformation in a significant manner, and there is much work to be done in the area of cybersecurity and digital ethics to balance risks and exposure in this new model.

Because this is a new frontier for all of us – whether in the East or the West – it is an opportunity for the region not just to follow, but to lead in the adoption of digital strategies. Companies just need to develop the risk appetite. This isn't a call for massive investment — organisations can start small, following the lead of companies like American Express, which has carved out units and empowered them to act more like start-ups, turning quick action into quick results.

What must also be kept in mind is that leveraging the power of a digital business is not simply about incorporating new technologies into the organisation. It is about reinventing the organisation — and the culture within it — to drive innovation and change. Technology alone cannot propel companies towards their new strategic objectives. It will be the companies that put people first, and that use technology to empower people to evolve, adapt, and drive change that will be the winners.

Malaysia has a relatively young, multi-lingual and multicultural workforce as well as the necessary infrastructure, commitment at government level, and strategic plan in place to support a strong digital economy.

With the right digital and people strategies in places, Malaysian companies can leapfrog the competition and drive the country into its next phase of growth.

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About the Accenture Technology Vision

Every year, the Technology Vision team collaborates with Accenture Research to identify the emerging IT developments that will have the greatest impact on organisations in the next three to five years. The process in 2016 started by gathering inputs from the Technology Vision External Advisory Board, a group comprising more than two dozen executives and entrepreneurs from the public and private sectors, academia, venture capital, and start-up companies.

The Tech Vision team also conducted interviews with technology luminaries, industry experts, and Accenture business leaders.

For the second year running, Accenture conducted a global survey of more than 3,000 business and IT executives in order to understand their perspectives on key technology challenges they face, and identify their priority investments over the next few years.

About Accenture

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions—underpinned by the world's largest delivery network—Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With approximately 384,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Visit us at www.accenture.com.

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