The future of manufacturing

Data, analytics and technology are driving the rise of digital factories. Are manufacturers ready for Industry 4.0?

Digital dangers
Build digital trust
Protect data privacy
Think human first

Industry disruptions
Tech for fashion
Banking on robots
Is customer loyalty dead?

Capital strategies
Manage the tax bite
Post-merger integration matters
In today’s rapidly changing world, having an informed view of tomorrow is vital. That’s where we come in. Spotlight on Business offers you global perspectives and insights into business issues that matter to you. Knowledge that can help you take your business forward with confidence.
Welcome

Is “smart” the new “human”?

In the age of “smart” machines, is digital transformation the new measurement of human progress?

It appears to be so, judging from the ubiquity of digital disruptions happening across sectors from manufacturing to banking to retail. Non-digital native businesses are playing catch-up, with many only partially utilizing robotics to automate routine processes, skimming the surface of big data to build customer loyalty, and struggling to digitize supply chains to be truly on-demand and responsive.

Yet, digital enlightenment goes beyond adopting technology. The human element must be at the core of why, how and what we do to “be digital”.

As countries like Singapore strive towards a vision of a Smart Nation, are we – from governments to businesses to citizens – fully aware of the risks and the need to protect the digital assets created? Breaches in personal data protection, whether as a result of ignorance, negligence or corruption, have grave repercussions for corporations, and will eventually erode consumer trust in the digital economy.

Equally important to building a resilient digital economy is the ability of individuals, be it the man-on-the-street or professional talent, to adapt and learn to keep pace with change. Finance professionals in Singapore admitting to gaps in technology-related skills and a lack of readiness for future jobs is a grim reminder.

Technology rewards those willing to seize its upside. Entrepreneurs offer some of the most compelling examples of how digital agility can help overcome limitations in size and scale in growing their business.

At the same time, effective working capital management remains key to profitable growth. To that end, astute tax planning and deal strategies continue to be instrumental in creating value for the existing business, as with investing into developing economies.

Data and algorithms can provide you with acute insights to make such business decisions with confidence. But will you leave the judgment to machines alone?

Max Loh
Managing Partner, EY Asean and Singapore
Ernst & Young LLP
Data, analytics and technology are driving the rise of digital factories. Are manufacturers ready for Industry 4.0?

“Smart” is being more human

Building a Smart Nation requires more than just technologies. To fully reap the benefits of a smart economy and society, focus on the human element.

Rising to the data protection challenge

Operating in a borderless digital economy requires companies to keep pace with local and international regulatory developments in data privacy and protection.
Future finance: the skills struggle
Strategic thinking and technology skills are highly valued in the finance function but gaps exist today between current capabilities and future job demands.

Accelerating entrepreneurship in the age of disruption
In a technologically disrupted environment, size and scale matter no more than resilience and agility – for better or worse, depending on whether you are the disruptor or the disrupted.

Achieving zero corruption: beware the petty cases
To tackle corruption, all stakeholders from individual employees to the management must be clean. No corruption is too small to ignore.

Creating M&A value: not a done deal
Creating value from deals does not happen by chance. Coordinated efforts – both strategically and operationally – across the deal process are needed in order to succeed.

Make tax part of growth strategy
Tax strategies are integral to working capital management as companies seek to minimize the tax bite on funds that can be better used for tapping into opportunities for growth.

Building a Smart Nation starts with trust
Technology is a crucial enabler in building a Smart Nation, but a fundamental success factor is the ability to create and embed digital trust in daily digital interactions.

Rise of the robots
The benefits of robotic process automation in financial services and corporate treasury are clear, yet implementation is key to unleashing its potential.

Is consumer loyalty dead?
With consumer loyalty becoming more elusive than ever, companies need a “living” strategy that is personalized and omni-channel to rebuild loyalty.

Future of fashion: digital by design
With technology, the future of fashion is boundless. Yet, it is only by fully integrating digital into the business model that retailers can see real and long-term impact on growth and profitability.

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Contributors

Karambir Anand  
Partner, Transaction Advisory Services  
Ernst & Young Solutions LLP  
+65 6309 8089  
karambir.anand@sg.ey.com

Manik Bhandari  
EY Asean Analytics Leader  
Ernst & Young Advisory Pte. Ltd.  
+65 6309 8107  
manik.bhandari@sg.ey.com

Saket Bhartia  
Executive Director  
Fraud Investigation & Dispute Services  
Ernst & Young Advisory Pte. Ltd.  
+65 6309 6758  
saket.bhartia@sg.ey.com

Reuben Khoo  
EY Asean Fraud Investigation and Dispute Services Leader  
Head of Forensic Technology and Discovery Services, Asia-Pacific  
Ernst & Young Advisory Pte. Ltd.  
+6309 8099  
reuben.khoo@sg.ey.com

Liew Nam Soon  
EY Asean Markets Managing Partner  
Ernst & Young Advisory Pte. Ltd.  
nam-soon.liew@sg.ey.com

Max Loh  
Managing Partner  
EY Asean and Singapore  
Ernst & Young LLP  
+65 6309 8828  
max.loh@sg.ey.com

Karambir leads the capital strategy and transformation practice in Singapore. He works with clients to plan and develop their growth strategy, merger integration, commercial due diligence and operational improvements. Karambir has in-depth knowledge and experience in the oil and gas, and energy sectors.

Manik is highly experienced in analytics and his advisory experience cuts across a wide breadth of sectors ranging from government, communications, financial services, health care, agribusiness, and oil and gas in both Asia and North America. He has in-depth knowledge in the application of analytics across multiple business functions.

Saket is well-versed in forensic investigations, code of conduct violation investigations, anti-bribery compliance framework setups, anti-fraud controls reviews, brand integrity and supply chain leakage reviews. Saket has worked with large organizations and has experience delivering projects across 16 countries.

Jennifer Chih  
Director  
PK Wong & Associates LLC  
+65 6827 5552  
jennifer.chih@ey.com

Gerry Chng  
EY Asean Cybersecurity Leader  
Ernst & Young Advisory Pte. Ltd.  
+65 6309 8594  
gerry.chng@sg.ey.com

Chung-Sim Siew Moon  
Head of Tax Services  
Singapore  
Ernst & Young Solutions LLP  
+65 6309 8807  
siew-moon.sim@sg.ey.com

Jennifer is a senior lawyer with extensive experience in corporate and compliance matters, including privacy and data protection, joint ventures and employment. She has represented public and private companies, venture capital firms and multinational corporations in roles ranging from principal external counsel to local counsel for M&As and corporate governance-related projects.

Gerry has extensive information security experience. He provides advisory services to clients for their information security initiatives including governance, policies, operations, risk management, as well as assessment of the security of a technological environment.

Siew Moon has over 30 years of experience providing tax compliance, controversy and advisory services to her clients. She provides advice on structuring, cross-border and M&A transactions, and is experienced in negotiating and applying tax incentives, advanced tax rulings, tax clarifications and remissions.

Reuben’s experience of over 30 years spans management consulting and systems integration, business transformation, risk, digital forensics, data analytics and cyber breach management. He is focused on the financial sector particularly in business and IT transformation, anti-money laundering, big data, anti-fraud, risk, and cybersecurity.

Nam Soon has a wide breadth of consulting and industry experience in large-scale business and technology transformation, as well as risk management and compliance. He has worked extensively in retail, private, commercial and investment banking, asset management, insurance and private equity across countries in Asia-Pacific, the US and the UK.

Max has overall responsibilities for the operations of the Singapore member firms’ practice and Asean Region. He has extensive experience in providing audit practice and business advisory services, having been involved as an audit partner with various listed companies, responsible for their financial statement audits and internal control reviews.
Jonathan Rees
EY Asean Digital Leader
Partner, Advisory Services
Ernst & Young Advisory Pte. Ltd.
+65 6309 6680
jonathan.rees@sg.ey.com

Jonathan has extensive experience working in high-growth technology arenas, systems integration and digital media. He is focused on areas including customer experience, service design, analytics, mobility, digital media, and digital risk and governance to help businesses plan and deliver their digital strategy.

Chai Wai Fook
Partner, Tax Services
Ernst & Young Solutions LLP
+65 6309 8775
wai-fook.chai@sg.ey.com

Wai Fook leads the tax accounting and risk advisory services in Asean and Singapore. He is experienced in corporate tax compliance, negotiating with the Singapore tax authority for tax rulings, advising clients on international and corporate tax planning for outbound and inbound investments, and assisting clients on tax accounting.

Kuntha Chevanathan
Partner, Advisory Services
Ernst & Young Advisory Pte. Ltd.
+65 6309 8272
kuntha.chelvanathan@sg.ey.com

Kuntha leads the supply chain team in Singapore and the procurement team in Asean. She is highly experienced in multiyear supply chain transformation and operational strategy, and has worked on projects across Europe and Asia-Pacific. Kuntha has industry experience in developing and executing global strategies for a leading telecommunications company in Europe.

Dilys Boey
EY Asean People Advisory Services Leader
Ernst & Young Advisory Pte. Ltd.
+65 6309 6246
dilys.boey@sg.ey.com

Dilys has significant experience in people strategy and organization development work. She leads assignments including industry and market feasibility studies, organization structuring, people strategies and corporate governance across sectors including public, education and retail.

Chandan Joshi
EY Global Emerging Markets
Consumer Products & Retail Leader
Ernst & Young Solutions LLP
+65 6309 8097
chandan.joshi@sg.ey.com

Chandan has two decades of global consumer industry and strategy consulting experience, working with world-leading consumer goods companies and global consulting firms. At EY, he leads the Consumer Products & Retail practice across all service lines in over 100 emerging markets globally.

Mehul Kain
Associate Director, Transaction Advisory Services
Ernst & Young Solutions LLP
+65 6340 2116
mehul.kain@sg.ey.com

Mehul is part of the strategy and transformation practice in Singapore. He has led and delivered projects across strategy, merger integration and operational improvements. He has extensive experience working with clients in multiple industrial products segments.

John Ho Chi
Partner, Advisory Services
Ernst & Young Advisory Pte. Ltd.
+65 6309 6956
john.ho-chi@sg.ey.com

John has worked with clients in the area of data protection to review their information controls, compliance to regulatory requirements and business continuity. He has a strong understanding of the concepts, terminology, capabilities and applications of technology, security, risks and controls associated with various information technology architectures.

Nathan Roost
Partner, Advisory Services
Ernst & Young Advisory Pte. Ltd.
+65 6309 8589
nathan.c.roost@sg.ey.com

Nathan leads EY’s Asia-Pacific Manufacturing practice. He has extensive experience across all aspects of supply chain management and operations, including digital supply chain innovation. He has consulting experience across the consumer goods, industrial products, natural resources and life science industries.

Joongshik Wang
Partner, Transaction Advisory Services
Ernst & Young Corporate Finance Pte Ltd
+65 6309 2918
joongshik.wang@sg.ey.com

Joongshik has successfully delivered over a hundred M&A deals for private equity funds, multinationals and local corporations. He has decades of experience as a management consultant at global strategy consulting houses where he previously led strategy and consumer technology practices that span across Southeast Asia, China and Korea.
The EY Global Information Security Survey found that many organizations continue to increase their cybersecurity spend, and the discovery of a breach that caused damage would likely see greater resources allocated.

- **87%** of respondents say they need up to 50% more cybersecurity budget.
- **77%** of respondents consider a careless member of staff as the most likely source of attack.
- **48%** do not have a Security Operation Center, even though they are becoming increasingly common.
- **32%** of boards have sufficient cybersecurity knowledge for effective oversight of cyber risks.
- **12%** feel it is very likely they would detect a sophisticated cyber attack.
- **63%** of organizations still keep cybersecurity reporting mostly within the IT function.
- **57%** do not have, or only have an informal, threat intelligence program.
- **89%** say their cybersecurity function does not fully meet their organization’s needs.

### Disruptive forces to watch

While technology is one of the biggest disruptive forces impacting business, middle-market leaders believe harnessing it can improve productivity.

#### Disruptive forces with the biggest impact on business

<table>
<thead>
<tr>
<th>Shifts in working patterns (including gig economy)</th>
<th>Singapore</th>
<th>Rest of world</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic shifts</td>
<td>33%</td>
<td>34%</td>
</tr>
<tr>
<td>Technology</td>
<td>26%</td>
<td>23%</td>
</tr>
<tr>
<td>Globalization</td>
<td>18%</td>
<td>24%</td>
</tr>
</tbody>
</table>

### Logistics players in transformation

Robust technological platforms have opened up an ocean of opportunities, giving rise to a wave of start-ups and new entrants in the transportation and logistics industry globally.

- **25%** of the transportation executives believe implementing and enabling a digital innovation culture is the most critical bottleneck in digital transformation.
- **US$1.5t** Worth of logistics opportunity as a result of digital transformation by 2025.
- **50+b** Number of objects connected to the internet by 2020.

### Corporate brief

#### Leader in technology consulting

Gartner Inc., has ranked EY number one for IT services consulting for banking, securities and insurance, based on 2016 revenue and market share.

#### New EY Tax Agenda app

The new application-based platform helps organizations anticipate the impact of the latest technological, regulatory and talent issues on the tax function.

#### World’s first marine insurance blockchain platform

The platform by EY and Guardtime connects clients, brokers, insurers and third parties to distributed common ledgers that capture data, and integrates such information with insurance contracts.

#### EY Lease Reviewer to support accounting changes

The new lease accounting tool suite helps organizations understand the outcomes, compliance requirements, costs and risks associated with adopting the new standards.

#### Delivering robotic process automation benefits worldwide

EY is licensing UiPath’s software to help companies develop new services or connect existing systems to robot-aware digital technologies, so as to improve speed and efficiency.
M&A: a strong feature in corporate growth strategy
Disruptive forces around the world, such as changing customer behaviors and digitally enabled competitors, are playing a fundamental role in a more active M&A market in Asia-Pacific (APAC).

M&A outlook
- 57% of APAC companies expect to actively pursue acquisitions in the next 12 months
- 56% expect the number of deal completions will increase compared with the past 12 months
- 52% expect the local M&A market to improve

Macroeconomic environment
- 67% see the local economy as improving
- 74% expect corporate earnings to improve
- 44% expect an increase in the number of companies affected by shareholder activism, indicating the highest jump in Asia

Growth and portfolio strategy
- 63% are actively reviewing their portfolio more often than once a year
- 62% have developed or plan to develop Corporate Venture Capital arms as a faster route to market, not limited by internal governance
- 53% recognize the need to ensure they have a broader narrative to engage all stakeholders

New competencies needed for audit committees
Audit committee members must develop new competencies to respond to the increasing focus on technology and data. In Singapore, adapting procedures to audit data consolidated from different platforms is key.

Cyber resilience a priority for banks
With digitization, what are the top-of-mind cybersecurity and data-related risks for Chief Risk Officers (CROs) and boards?

Hedge funds join digital innovation wave
Hedge fund managers are embracing innovation and business-altering technologies amid industry challenges and increased competition, according to the EY 2017 Global Hedge Fund and Investor Survey.

Hedge funds
- The areas that something “innovative” has been implemented
  - Operational efficiency: 57%
  - Attracting capital/assets under management: 36%
  - Attracting/retaining talent: 28%
  - Front office/investing: 25%

Investors
- The areas that you would most like to see become more “innovative”
  - Front office/investing: 30%
  - Operational efficiency: 28%
  - Attracting capital/assets under management: 10%
  - Attracting/retaining talent: 2%

Cyber resilience a priority for banks
With digitization, what are the top-of-mind cybersecurity and data-related risks for Chief Risk Officers (CROs) and boards?

CRO
- Change since 2016
- Cybersecurity: 77% to 57%
- Regulatory implementation: 58% to 39%
- Conduct risk: 41% to 29% **
- Operational risk*: 34% to 26%
- Culture and behavior: 32% to 26%
- Risk-technology architecture: 31% to 21%

Board of directors
- Change since 2016
- Cybersecurity: 57% to 57%
- Regulatory implementation: 39% to 29%
- Business model risk: 29% to 29% **
- Risk appetite: 26% to 26%
- Credit risk: 24% to 24%
- Culture and behavior: 21% to 21%

*Excluding cybersecurity
**Not in 2016 survey
What makes a company in superfluid markets?

With the arrival of the internet, things began to change. Old frictions were reduced; markets became more fluid. A new breed of digital company emerged, disrupting the existing competitive landscape across industries. Traditional companies began to unbundle in response. The world is now at another inflection point. New technologies – artificial intelligence, robotics, blockchain, virtual reality and more – are converging to eliminate more inefficiencies and frictions from markets. As organizations enter more deeply into the age of superfluid markets, what will frictionless commerce mean for companies whose traditional role has been to coordinate the activities and reduce the costs of participating in markets? Will companies be needed at all?
The future of manufacturing
Factories of the future will be “lights out” and “hands off”, according to Kuntha Chelvanathan, Advisory Partner at EY, describing a vision of smart robots working on the plant floor, freeing humans to focus on decision-making from the control room based on real-time insights that are sent straight from factories.

“These new digital factory systems will be interconnected, generating an unprecedented amount of data from within the factory and externally from suppliers. A completely different data ecosystem is being created,” added Manik Bhandari, EY Asean Analytics Leader.

Indeed, the rise of digital factories, which characterizes manufacturing in Industry 4.0, is powered by a combination of big data, analytics and physical technology. Neither just a step-up in automation nor deployment of new disparate technologies, manufacturers will need to transform their business models or risk becoming obsolete.

Yet, one of the greatest challenges for manufacturers is in coordinating the end-to-end digital transformation across entire value chains that are often scattered across the globe. “Companies should guard against taking a fragmented rather than an enterprise-wide approach in their transformation journeys,” said Nathan Roost, Advisory Partner at EY.

With Singapore’s continued economic reliance on the manufacturing sector, how can the nation and manufacturers ready themselves for the future?

The persons interviewed are Partners at Ernst & Young Advisory Pte. Ltd.
The business of manufacturing has evolved tremendously. What are the biggest challenges manufacturers face?

**Nathan Roost (NR):** “Manufacturing is arguably one of the most resilient sectors, having gone through three industrial revolutions. In this current era of Industry 4.0, where we are seeing increasing levels of innovative technology applications and business model disruptions, companies must recognize that change is needed and ask how they can take Industry 4.0 thinking from concept to application.

At the same time, supply chain and commercial professionals continue to have to manage service, cost and risk across a global manufacturing network. The complication is that customer expectations are increasing and the need to enter new markets is heightening amid an unrelenting focus on productivity. These issues are not new. However, the rate of change is compounding.”

**Kuntha Chelvanathan (KC):** “Indeed, customers today expect supply chains to be on-demand, responsive and customized to their needs. To deliver faster innovation and better products, for example in the mobile phone industry, R&D cycles are shortening and upgrades are being released at breakneck speed to consumers.

An agile and flexible manufacturing system is needed to incorporate and deliver these upgrades on a timely basis, and labor-intensive operating models of the past will struggle to be as responsive as digitally enabled ones.”
Is digital technology the answer to all manufacturing woes?

KC: “In developed countries where the cost of labor is high, manufacturers had to leverage technology and automation to achieve cost efficiencies. The same impetus does not apply to manufacturers based in Asia, where the cost of labor is relatively low.

However, manufacturers in Asia are realizing that their current business models are not able to service customers effectively and are recognizing the growth opportunities that digital brings.

The greater focus on service does not mean that cost is no longer a factor. Cost savings are simply no longer a differentiating one. With most factory business processes operating at optimal levels, inefficiencies are no longer tolerated.”

NR: “While digital innovation can help to address some of the challenges in manufacturing, the focus must be on the customer. Any new technology adopted must improve or positively change the customer usage experience.

Even where technology can help, its adoption and application to business processes could be stalled by resistance, especially in some parts of Asia where factories are still labor-intensive.

Given the potential impact of automation on livelihoods, leaders will need to deftly handle change management and develop training and transition plans, or risk employee disengagement.”

Nathan Roost
Advisory Partner
Ernst & Young Advisory Pte. Ltd.
nathan-c.roost@sg.ey.com
linkedin.com/in/nathan-roost
The point raised around data is interesting.

Are manufacturers recognizing its value?

Manik Bhandari (MB): “Companies can only be truly customer-centric and responsive if they are able to properly manage and utilize their data assets. However, many manufacturers today fail to unlock the value of their data.

There are three main challenges that they face. Firstly, the level of instrumentation and digitization of manufacturing assets is not pervasive, thus there are still gaps in data related to asset performance and operating conditions.

Secondly, while manufacturing companies have always been strong in fact-based decision-making due to the precise nature of their operations, they will need to deal with constant streams of data in digital factories. The explosion in big data requires platforms that can process and analyze data in real time.”

MB: “Advanced predictive analytics has also expanded the potential for data to help manufacturing companies in forward-planning for their entire value chain. Many companies may be reluctant to invest in these new platforms and technologies due to the significant investment required.

The last issue to tackle is the capability gap in the industry. Supply chain professionals today may understand the manufacturing and engineering aspects of running a factory but are unlikely to be equipped with the advanced data science capabilities needed to translate data insights into actions to improve reliability and yield.”
Given the capability gaps that companies could face, how are you helping them?

KC: “We have been actively building out our EY Asia-Pacific Centers of Excellence by investing in supply chain and manufacturing capabilities locally. We are also leveraging the insights and projects developed in mature markets like Europe and the US to help companies in Asia-Pacific to transform. With that, clients are benefiting from having access to innovations with a proven track record, instead of starting from scratch.”

NR: “Companies are realizing that successful digital enablement requires total business transformation right through the value chain from innovation to end customer distribution, which is further complicated by the global nature of many manufacturing operations.

We are helping our clients through the use of new innovative technologies and cloud-based operational excellence solutions such as the EY Smart Factory solution.

This tool assists manufacturing executives to develop, implement and drive global operational excellence programs in a connected and centrally controlled system, and offers access to an extensive database of leading practices, methodologies, tools, training and analytics. It helps clients to track and sustain performance improvement given its strong focus on capability building, where the entire workforce knows why improvements are needed, what to do by when, and by whom.”

From a broader economic perspective, Singapore aims to be the leading hub for manufacturing in the region.

Is this achievable?

KC: “Singapore’s potential as a regional hub is already recognized by many large manufacturing companies that have set up their Asia-Pacific headquarters in the country. With decision-making power residing here, Singapore becomes the most natural location to import and test innovations from leading-edge manufacturers in the US or Europe. To that end, we have worked with several Singapore clients to build on proof-of-concepts that were well-received in the US and test more advanced iterations locally.”

MB: “The application of data and analytics to the manufacturing sector is increasingly being recognized. Although this is still a relatively new and evolving area, manufacturers will be keen to pilot these applications in a conducive environment to seize first-mover advantage.

With Singapore offering a good mix of data talent as well as business adoption, it is well-positioned as a leader in the analytics space. To sustain this advantage, the Singapore government will need to continue to push towards its Smart Nation vision, invest in education, and encourage students to specialize in data and analytics, so that we have a steady stream of analytics-trained resources for the manufacturing sector.”

NR: “Singapore should continue to promote its competitive strength in manufacturing, including existing industrial capability, access to human capital, the availability of investment and rigorous intellectual property (IP) protection laws.

Having rigorous IP and data protection laws does make the checklist longer but this can be managed by enhancing transparency on the regulatory requirements. This is important to achieving breakthroughs in manufacturing innovations. If the nation is not able to protect innovators’ rights, it would be tough to convince creators to share ideas. If the nation cannot safeguard data, manufacturers would lack the confidence to go fully digital.

Stepping up on these measures will help Singapore thrive as a supply chain and manufacturing hub for both Southeast Asia and globally.”
Unfortunately, the growing economic value of data has also resulted in the increased frequency and intensity of cybercrime.”
The vision for Singapore to become a Smart Nation has topped the national agenda since its introduction in 2014. Its strategic importance was once again highlighted at key events in 2017 such as the National Day Rally 2017 by Prime Minister Lee Hsien Loong and at the launch of the infocomm and media industry transformation map by Minister Yaacob Ibrahim.

Indeed, over the last few years, the world has seen the progressive digital transformation of business and personal interactions with the physical world through apps, accessibility to data and insights, and sensor networks combined with smart algorithms that serve to optimize decision-making.

The digital future holds the promise of a better working world for many generations to come.

Whether it is for business or personal interactions, trust is the crucial foundation that determines the depth and richness of such daily interactions. This principle holds true for the digital world too. Technology is a crucial enabler in building a Smart Nation, but a fundamental success factor is the ability to create and embed digital trust in daily digital interactions just as organizations and individuals have come to expect in the physical world.
The various aspects that make up a Smart Nation can only be successful if it is consumer-driven, i.e., demand must reach a critical mass to be of meaningful value. By successfully embedding digital trust in the ecosystem, it can accelerate the adoption of new capabilities by consumers, and in doing so, further catalyze the creation of better digital innovation.

Yet, digital threats exist to erode this much-needed trust.

In the digital economy, data is the “new oil”, enabling businesses and governments to achieve scale, agility and efficiency to deliver greater economic value. High-quality data also allows new industries to be born where insights can be derived from data to further enhance consumer experience, and allow spontaneous interactions with businesses.

Unfortunately, the growing economic value of data has also resulted in the increased frequency and intensity of cybercrime. An increase in global cyber attacks is a wakeup call that cybercrime is a very real threat.

These threats can be expected to be an inherent part of the digital future. The thriving nature of the “dark web”, an underground ecosystem for cyber criminals, has resulted in information asymmetry where attackers possess more information about weaknesses in technological implementations than people charged with the near-impossible task of keeping all attacks at bay.

Building digital trust
There are three imperatives that are necessary to uphold digital trust amid these challenges.

Firstly, digital trust is dependent on the entire business ecosystem and network of consumers leveraging the technology enablement. Larger enterprises, especially those in regulated industries, have had a head-start in maturing their digital defense capabilities over the years. However, smaller businesses or industries, may not have access to the same levels of budgets and resources to build and operate such defenses.

Truly the chain is only as strong as the weakest link. In a digital economy, hackers can still target the smaller businesses as they provide services or interactions with larger businesses that may be the ultimate target.

To address this risk, businesses and national agencies are pooling resources to strengthen the cybersecurity ecosystem, for example by setting up shared security centers, training cybersecurity professionals and developing cybersecurity best practices toolkits, so as to uplift the awareness and basic capabilities among smaller businesses in the ecosystem.

Technology has also outpaced most consumers’ ability to understand the implications of their online behaviors, which offers hackers the opportunity to target the unaware consumer. Thus, more educational outreach by governments and organizations is needed to strengthen citizens’ and employees’ awareness of the risks and what one can do to avoid being a victim.

Secondly, the data we face in the digital future will be of high volume, velocity, variety, and veracity. Relying on human efforts alone to make sense of such data to establish trust and accuracy is near impossible. While there are maturing disciplines around digital, data science, and data visualization, these skill sets need to be effectively brought together to draw insights or make new discoveries of previously unknown facts.

Thirdly, digital defenses have traditionally been focusing solely on implementing preventive controls. While these remain as hygiene elements that must still exist, companies should also strive for a balance between being able to sense that an abnormal or malicious incident is happening, and being prepared to respond swiftly when the inevitable attack happens.

Partnering for success
Achieving progress on each of these fronts will require a multipronged approach.

The government needs to provide the necessary support and partner with businesses to strengthen and build up the cybersecurity ecosystem. Corporates – both big and small – must partake in the opportunities that the digital economy brings, while adopting a balanced set of cybersecurity capabilities that is able to both sense and respond to cyber threats. These will help to bolster efforts in achieving the active buy-in and participation of citizens in a climate where they can trust that any personal information shared is protected and materials that are obtained from the digital system is trustworthy.

Clearly, every organization and individual needs to play their part for Singapore’s Smart Nation masterplan to become a reality. Whether Singapore will succeed in building digital trust in its data, systems and infrastructure will depend not just on technological muscle alone but the efforts of all.
“Smart” is being more human

by Dilys Boey
✉ dilys.boey@sg.ey.com | ⚡ linkedin.com/in/dilys-boey

In his 2017 National Day Rally, Prime Minister Lee Hsien Loong underlined Singapore’s vision to be a Smart Nation.

The Smart Nation masterplan favorably positions the country economically and socially for the future, where being “smart” defines most, if not all, aspects of life from the home to the workplace.

What does it take for the workforce, businesses and citizens to thrive in a Smart Nation? Is there a risk that the implementation of smart technologies will outpace the population’s ability to learn and adapt?

Bring the “human” to technology

With more smart projects identified across different domains, it is expected that the country’s workforce landscape will shift. The development and implementation of smart projects will require more talent in the likes of engineers, programmers, data analysts and technicians.

The imperative to build deep skills in programming, coding, computational thinking, engineering, software development, data science or machine learning is evident. The government is encouraging students to take up engineering and computer science. SkillsFuture and Professional Conversion Programs also encourage technical skills development and career conversions for such roles.

Yet, for businesses to be smart and drive a competitive edge, it requires more than technical know-how and new technologies. Technologies must be augmented by behavioral insights and the understanding of patterns that drive consumer or societal behavior. Particularly, behavioral economics will become a growing resource as businesses seek to understand biases or the impact of social norms on consumer behavior.
Continual learning to adapt to the smart-enabled living environment is essential so as to consume and leverage technology effectively, safely and responsibly.”
While technologies like robots and artificial intelligence can enable improved productivity through automation, human capabilities such as empathy, connectivity and creativity will be needed to make sense of data and information to extract insights, develop solutions and drive innovation.

Embrace the future of work now
Notwithstanding this, increased automation is expected to transform the future of work. The World Economic Forum estimates that 5.1m jobs across 14 major economies will be displaced by 2020.

Displacement of labor is hardly new as mechanization has been reshaping work since the Industrial Revolution. What is different in the smart economy is the unprecedented impact of technologies on both blue- and white-collar jobs, and the speed of potential displacement.

At the same time, the smart economy is set to grow new businesses, generate new jobs and possibly even create new sectors. For example, the advent of digital apps has fueled the rise of the sharing economy along with new economic and job opportunities like private car-for-hire drivers, food or grocery delivery service providers, and micro-retailers.

The idea of performing “gigs” on a contractor or freelance basis will also become more commonplace as the notion of having a “job for life” becomes outmoded. Catalyzed by technological enablement, jobs could well be unbundled into tasks that are skills- and knowledge-based, and as businesses take a modular approach to work, workers will have “roles”, not “jobs”.

In such a reshaped job economy, education qualifications and grades may become less reliable predictors of success than human qualities such as perserverance to see things through, openness to collaborate, and the ability to energize a diverse team.

Never stop learning
Having said that, education is important insofar that learning must never stop.

It is said that 50% of what a university student learns in their first year will be outdated by the third year of their study. Perhaps then the formal education years should focus on shaping the mindsets of continual learning, embracing change and creative problem-solving.

Formal education institutes can also take a more “bite-size” modular approach to learning, and emphasize the application of skills rather than acquisition of knowledge. Continuing education centers or adult learning institutes should forge stronger partnerships with businesses to offer learning scenarios relevant to current and pressing business issues.

At the workplace, organizations will need to evolve their learning strategies and provide regular, accessible, practical and applicable skills development. Such skills development must be tied to specific talent shortages and needs of the businesses.

Organizations and individuals can further tap technology to enable lifelong learning. E-learning, massive open online courses, podcasts or micro-learning courses have already liberalized access to abundant learning resources. But technology can do more than allow ease of access. It is also a means to connect learners with experts, coaches and mentors to bring learning to life.

Business networking powered by technology can also be a learning enabler. LinkedIn, for example, has “democratized” the workforce, giving opportunities for networking across borders, companies and job levels. These business networks are opportunities to learn informally from peers.

At an individual level, from the youth to retirees, continual learning to adapt to the smart-enabled living environment is essential so as to consume and leverage technology effectively, safely and responsibly.

As John B. Horrigan said in his article titled Lifelong learning and Technology, it is when people learn for “personal life enrichment” that they will seek out more opportunities for self-directed learning and voluntarily deepen their knowledge and skills, with or without external financial support.

As the world becomes increasingly connected and competitive, Singapore’s vision of being a smart nation must be more than an aspiration. The country’s success will rest in its collective ability to shift mindsets, embrace lifelong learning and prepare for the future of work.

Future finance: the skills struggle

Accounting and finance professionals not prepared for future job demands

A survey of 150 Singapore-based accounting and finance professionals revealed that an alarming 8 in 10 (79%) are not equipped with the skills to meet future job demands. They cited strategic thinking, business acumen, leadership, communication and influencing, and analysis and advisory, as the top skills they need to be equipped with in 10 years’ time.

Technology skills, such as information technology and digital skills, and information management skills such as statistical analysis and data mining, are also gaining prominence.

Vincent Toong, Assurance Partner at Ernst & Young LLP, observed that accounting professionals are increasingly being asked to be business advisors to other functions in their organizations, and the evolving role of the accounting professional calls for new skill sets beyond technical skills.

“Further, as more companies recognize the value of data and analytics, these professionals need to be able to harness technology to extract insights so that they can support better decision-making,” he added.

Interestingly, risk management skills did not feature prominently. “Larger organizations typically have a separate risk function while in smaller firms, the responsibility often rests with the owner-management or is outsourced to professionals. Hence many finance and accounting professionals do not see risk management as core to their role,” Toong explained.

According to the survey, the spread of digital technologies and business model disruptions; increased regulation and governance; and increasing globalization are seen as drivers of change with the greatest impact.

Toong cautioned that against the fast pace of change, a new skill may become irrelevant or obsolete sooner rather than later. “Accounting professionals have to remain nimble and be flexible with their skill sets, adopt the mindset of a lifelong learner to keep abreast of industry trends and developments, and acquire the skills needed as the economy evolves,” he said.

Shared responsibility for progress

The top inhibitors to acquiring new skills included a lack of time (73%), financial resources (45%) and employer support (37%).

Six in 10 surveyed had that found the current curriculum offered by education and professional bodies are insufficient to develop future-ready skills. A similar number that said their organizations are not helping them do so.
The respondents also shared that professional bodies, educational institutions and the government can help by infusing technology into accounting curriculum or by introducing courses on adjacent skills so they can upskill.

Melvin Yong, Singapore Country Head at CPA Australia commented that individuals must take personal ownership too. “While organizations, educators and professional bodies can help, individuals may wish to look into how they can continually invest in their future, leverage advancements in technology, and ensure that they continue to enhance their relevance to their organizations and are never left behind in the disruptive era,” he said.

Toong shared that collaboration and partnership hold the key to overcoming many of the challenges in today’s disrupted environment. “For the finance function, and by extension, the accounting profession to be future-ready, it will take all stakeholders – whether individuals, corporates, education providers or professional bodies – to actively evolve their roles and capabilities to partake in the opportunities in the future economy,” he said.

The report suggested that individuals must see change as an enablement and not an impediment, and embrace lifelong learning and emerging technologies.

Professional bodies and educators should keep their curriculum and courses relevant and fit for real-world readiness, catering to current needs while projecting the demands of the future. Employers should support skills development both in terms of time and financial resources, including allocating annual budgets for training and upskilling of organizational finance capabilities.

This joint survey by EY and CPA Australia for the report, Future-proof your finance capability, was conducted between August and September 2017. ☛
Robotic process automation (RPA), or robotics as it is commonly referred to, is the automation of business processes using software to replicate human interaction with various systems and applications. Generally, RPA allows financial institutions to achieve cost and time savings by automating high-frequency and repetitive tasks, and eliminating the possibility of human error while improving accuracy.

In the EY Global Banking Outlook 2017 study, more than half of the banks surveyed indicated plans to invest in new technologies and integrate robotics into their current interfaces to reduce costs of existing, high-frequency manual operations by 40% or more in the next 12 months.

Indeed, the financial services industry has been quick to adopt RPA and artificial intelligence (AI). In wealth and investment management functions, there has been a steady adoption of RPA in the form of self-serve robo-advisory, partly attributable to the rising digital-savviness of the high net worth population globally.

Robo-advisory incorporates big data and AI to reduce the need for face-to-face interaction with customers. Not only do robo-advisors support the provision of automated advice and more detailed portfolio review, and enhance the overall client experience and service delivery, they also significantly reduce the time that a typical wealth advisor would spend on administrative and back-office activities.

In back-end functions, robotics is making headway in risk and compliance areas like know your client (KYC) and anti-money laundering (AML) prevention processes. An EY survey found that 87% of the financial institutions thought that their KYC...
operations were not cost-efficient, and the majority were considering technology investments to address this concern.

Additionally, time and costs spent on onshore or offshore services involving manual data entry, fact-checking, status monitoring, or liquidity ratio aggregation can be channeled to more strategic roles requiring human intervention. This includes planning, defining frameworks, governance, evaluation, implementation, training and operational management of the robotics process and robots.

RPA also gives financial institutions the option for data to remain in-country to address concerns around data governance and control. This in turn creates opportunities for financial institutions to potentially bring some of these previously offshore activities back onshore, providing a higher degree of compliance and alignment with their internal controls framework.

In the long term, RPA can better enable compliance and operations to be more agile and responsive to regulatory and market changes.

RPA in corporate treasury
The corporate treasury and finance function is known to involve a lot of routine, repetitive and manual tasks where robotics can make a positive difference through automation, particularly in rules-based work such as processing of transactions and structured data. The areas of application include cash management reconciliation and simple cash accounting.

There are also more scenarios where robotics is combined with machine learning, which can help to automate certain complex decisions that cannot be performed using straightforward rules-based automation. Such decisions revolve around self-learning detection of cash forecasting, payment fraud detection and mitigation of cash-flow related risks.

In addition, cognitive RPA is used to extract and combine data from various sources, including external data providers, social networks and shared drives. Cognitive RPA can help institutions to provide an initial analysis and conclusion based on pre-determined boundaries.

Notwithstanding the potential capabilities of robotics to substitute or augment the role of humans, human intervention remains important given the nature and complexities of the corporate treasury function where robotics alone cannot rise to the task. This includes managing sanctions, responding to changing regulations and making strategic decisions in areas that are less predictive and require more than just historical data to make the right deductions.

That said, it is imperative that corporate finance and treasury talent upskill themselves to understand how RPA works in order to stay relevant and agile in the automated environment.

Implementing RPA successfully
Even as the benefits of RPA are clear, implementation is key to fully reaping its potential.

One of the common implementation pitfalls is in seeing an RPA program as an IT-led initiative, rather than a business-led one. Just as critical is the failure to involve other functions like cyber, security, risk, human resource, and other enterprise units.

Another issue that can lead to failed implementation is treating RPA as a series of automations, rather than an end-to-end change program, and underestimating what happens after processes have been automated. Considering issues such as who manages the robot workforce and subsequent processes after the go-live is just as, if not more, crucial than getting an RPA program mobilized, targeted and delivered at pace.

Ironically, over-automating can also backfire. Sometimes, organizations totally eliminate the human input in a process, which results in a significant automation effort and cost but little additional benefit. Yet, there is often no effort in changing existing processes to allow RPA to work across as much of a process as possible, therefore reducing the possible savings.

Lastly, companies may risk neglecting their IT infrastructure when implementing RPA. Most RPA tools work best on a virtual desktop environment, with appropriate scaling up and a business continuity setup. Yet, RPA processes can be delivered so quickly that IT has not had the time to create a production infrastructure for successful automation.

In many RPA projects, more than one of the above issues are present or linked, creating a significant multiplier effect.

No doubt, RPA shows great promise in transforming the financial services industry and corporate treasury functions. Yet, its full benefits can only be realized if the various robotics processes co-exist and communicate with one another effectively across different platforms, and that any RPA program is considered holistically from the business, IT, people and change management perspectives.
Rising to the data protection challenge

by John Ho Chi and Jennifer Chih
john.ho-chi@sg.ey.com | linkedin.com/in/john-ho-chi
jennifer.chih@ey.com | linkedin.com/in/jennifer-chih
The surging adoption of all things digital, including social media and cloud services, has led to an exponential growth in the amount of personal data shared and processed online. To promote ease of use, software applications are frequently designed to seamlessly enable and automate data exchanges across multiple platforms without requiring individual input or separate logins.

This presents clear risks for individuals. Few users pause to consider these risks when accepting terms of service that allow applications and services to share or access personal data on their mobile devices. If access extends to a device’s contact list, even personal data belonging to others might be disclosed.

Businesses are similarly exposed to risks arising from such volumes of data. These data stockpiles are tempting targets for attackers of varying sophistication and companies must bolster their cyber defenses or face the consequences if such defenses are breached, as some will inevitably be. This struggle will be relentless, and so must efforts for security awareness and investments.

Companies should also consider the risks of breaches emanating from third parties such as cloud service providers. Ensuring that such providers are worthy of the trust placed on them can often be challenging.

The latest findings of the *EY Global Information Security Survey* (GISS) are telling of the challenges that companies face. Only 18% of respondents have data protection policies and procedures defined at the group level with corporate oversight and communicated through the business.

Yet, 60% of respondents indicated privacy protection is a high to medium priority for their organization over the coming 12 months.

Local regulations are tightening
While many organizations now understand that data protection and privacy is obligatory and not optional, the levels of compliance can be improved. There remains a pressing need to continually review and strengthen cyber and data protection laws.

In Singapore, companies are expected to comply with the Personal Data Protection Act (PDPA). Those that breach the data protection provisions in the PDPA risk financial penalties of up to S$1m. There is also the risk of reputational damage.

Take for example how several organizations would have experienced a perceived loss of trust by customers and stakeholders after being named in the inaugural 2017 issue of Singapore’s Personal Data Protection Commission (PDPC) Personal Data Protection Digest. These organizations had failed to adequately comply with their data protection obligations, particularly the requirement to protect personal data by making reasonable security arrangements.
The PDPC has also sought to restrict the pervasive use of the National Registration Identity Card (NRIC) numbers, which is a sensitive, personal and irreplaceable type of data. New guidelines have been proposed on how companies handle NRIC numbers, collect NRIC cards or make copies of such cards. A public consultation has been launched to solicit feedback on the proposed guidelines. If the proposals are accepted, companies will have 12 months to adopt alternate solutions and implement the changes.

International standards are rising
The blurring of geographical boundaries will also see an increase in cross-border transfers of personal data. Organizations that conduct these transfers will however have to consider both the PDPA’s provisions on such transfers as well as any other applicable foreign laws that might also apply.

For example, transactions that involve data belonging to European Union (EU) businesses, residents or citizens will have to comply with the EU’s General Data Protection Regulation (GDPR), which will come into force on 25 May 2018.

The scope of the GDPR is arguably more extensive than the PDPA as it requires companies to even provide built-in data protection safeguards. This higher level of protection could also set a new benchmark and influence laws in other countries.

Every business should take prompt action to evaluate, streamline and standardize their data processes and procedures in order to ensure that their risk management postures are primed for the increasing regulatory requirements expected to come.

Where organizations have to comply with multiple sets of rules, they may opt to comply on a per-country basis i.e., a decentralized approach, or to have a global organization-wide data protection program to comprehensively prevent, detect and respond to data privacy issues. The latter approach requires more dedicated resources but allows a business to better assess the effectiveness of its program, identify root causes of incidents and apply remediation to minimize the risk of data protection incidents recurring elsewhere.

Regardless of the chosen approach, reviewing the business’ compliance and control posture early will help management and board members in having complete and useful information to fulfill their oversight role.

Some of the key questions that businesses need to ask themselves are: Have they established inventory processes to collect, store and use personal data? Are they collecting more data than they need? Are they retaining data longer than they should? Do they have reasonable data protection mechanisms and are these operating effectively? Do they have qualified and sufficient resources in their lines of defense? Do their business continuity strategies and plans cover data protection and breach incidents?

The goals for digital innovation and data protection are not mutually exclusive. As the speed of change in today’s digital business environment accelerates, appropriate data safety and protection mechanisms must exist as a foundation for businesses to operate effectively, minimize risks and seize opportunities for growth.

18% of respondents have data protection policies and procedures defined at the group level with corporate oversight and communicated through the business.

60% of respondents indicated privacy protection is a high to medium priority for their organization over the coming 12 months.

Companies in Singapore that breach the data protection provisions in the Personal Data Protection Act risk financial penalties of up to S$1m.
Is consumer loyalty dead?

by Chandan Joshi

chandan.joshi@sg.ey.com

linkedin.com/in/chandanjoshisg

@IamChandanJoshi

Photo credit: Singapore Tourism Board
Consumer loyalty is becoming elusive. In a 2017 EY retail loyalty study, a vast majority of the 130 C-Suite global retail executives surveyed said that consumers are no longer loyal and companies have to focus their efforts on winning the customer every time. Further, only 27% are confident that their current loyalty initiatives have a positive effect.

The power of consumer loyalty cannot be underestimated, considering past research showing that 80% of a company’s future revenues can potentially be derived from just 20% of its existing consumers, and attracting new consumers will typically cost a company five times more than keeping existing ones.

Despite allocating huge funds to loyalty programs, many retailers continue to struggle in gaining consumer loyalty.

Is consumer loyalty dying? Or is the paradigm shifting?

The reality is that with the rise of omni-channel retail, few retailers are able to provide a seamless experience in terms of loyalty programs across all channels. While price, value and product assortment remain important differentiators of loyalty for the retail industry, consumer experience – both online and offline – is growing in importance as a driver of loyalty.

Multichannel consumer engagement

With consumers transacting across multiple devices, it is imperative for companies to build a consistent brand experience. By 2020, there will be over 50 billion connected devices globally, with mobile being the primary internet device for most individuals.

Consumer engagement requires brands to think differently – from channel presence to articulating their value proposition and brand personality – while at the same time delivering personalized and consistent experiences across all channels.

Take for example a leading Philippines retailer who has invested in continually tailoring its loyalty program based on data analytics, and now gives members relevant offers through the most effective channels, including online, in-store, email, and mobile.

In addition, successful multichannel loyalty solutions not only reward consumers for transactions but also for digital activities that promote the brand to their network. This includes rewarding consumers for engaging with the brand through tweets (brand hashtags), blog posts, and in-store events.

Power of analytics

Consumers today have more information than ever to rationalize their choices and buying decisions. The digitally savvy shopper is looking for a retailer who is able to deliver a rich, unique and personalized multichannel customer experience, and to that end, retailers must recognize the power of data in generating insights that can help them enhance the consumer experience.

According to the abovementioned EY study, less than a fifth of the retailers surveyed felt confident in their ability to leverage their data and systems to understand individual consumer needs, while just 30% are able to personalize the offer and experience for a consumer every time.

Even as companies recognize the power of data and analytics for personalization and higher consumer engagement, it is not that simple in reality. Many companies may be proficient in using analytics to capture and understand what has happened in the past but a lot of ground needs to be covered on what they could be doing to look to the future.

A sophisticated approach to analytics can lead to rich insights for effective consumer segmentation and targeting. Companies need to leverage real-time data and analytics to enable them to be predictive – to know what the consumer wants even before they do it.
Less than a fifth of the retailers surveyed feel confident in their ability to leverage their data and systems to understand individual consumer needs.

Only 27% are confident that their current loyalty initiatives have a positive effect.

Only 30% are able to personalize the offer and experience for a consumer every time.

In Singapore, a leading operator of shopping malls has launched the nation’s first cardless loyalty program that combines purchase history with contextual and locational data to provide personalized rewards and member offers when they are in or near a participating mall. Smart programs like these that are able to provide relevant offers in real time will increasingly become the new normal.

From loyalty to advocacy
Creating loyal consumers that drive sales and profitability through repeat purchases is at the heart of every business strategy. But there is an even more desirable and profitable consumer base – “advocates” – that companies should actively pursue. These consumers not only love and consequently buy particular brands; they also vocalize and share their passion with others.

Companies need to encourage these advocates or brand ambassadors to generate buzz through social media-based viral campaigns, or help them host community-based events with their personal networks and reward them for these behaviors. Referrals, product reviews and social media posts can translate into huge revenues as advocates share positive experiences and influence their networks.

An example is a leading beauty retailer in the US who has launched an omni-channel referral program that rewards both members and the people they refer. Within a year of the launch of the program, it has seen 10% of all online sign-ups for the existing loyalty program now coming from referrals.

A “living” customer strategy
Retail loyalty solutions have historically focused primarily on rewarding transactions, which is proving to be inadequate in today’s changing consumer landscape.

Consumer loyalty in the future will not come from simply implementing points-based rewards system, as it did in the past. Instead, it will be driven by rich and unique multichannel customer experiences, insight-driven personalization, and appropriate and timely purchase stimuli, so as to create that special, long-term customer relationship.

Rather than lamenting that consumer loyalty is dead, it is more crucial to keep the customer strategy “alive”.

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Fashion retailers who have classified the digital challenge as a marketing problem have vastly underestimated its far-reaching impact. Just as streaming platforms have opened doors for musicians, could technology do the same for designers? In the future, do designers still need to rely on global fashion labels to manufacture, market, sell and deliver their creations to the market?

Today, take a walk down any shopping belt and it won’t be long before one experiences brand déjà vu, evidence of the global takeover of SPA-brands (or specialized store retailer of private apparels-brands). SPA-brands have successfully seized market share by using the integrated value chain business model to compete on price and location.

However, the rules of the fashion game are changing, particularly for a digitally connected city like Singapore with a 100% mobile penetration rate.
Changes in the playing field

In recent years, pure play e-commerce platforms have emerged and have gained scale rapidly. Leveraging digital marketing and customer analytics has allowed these e-commerce players to be more effective in targeting consumers, enabling them to enjoy a much stronger growth than existing SPA-brands, as they are free from dealing with the baggage of legacy systems, real estate and processes.

Indeed, technology has allowed local designers and brands a new outreach avenue. Undeniably, the fashion industry is at a pivotal point, and the organizers of the Singapore Fashion Week 2017 are certainly recognizing this with the launch of the inaugural two-day Fashion Tech summit, ZIPCODE, which brought leaders in both fashion and digital industries together to discuss the technological revolution in fashion.

Consider how "modest fashion" — a clothing range, which provides women with more coverage, has now become mainstream. The State of the Global Islamic Economy Report 2015/20161 by Thomson Reuters and DinarStandard highlighted that modest fashion purchases were estimated at US$44b in 2015. Notably, social media deserves to be credited in helping to drive its growth, where the hashtag #modestfashion has garnered 800k posts alone, and major e-commerce sites have profiled this category.

The rise of “shoppable” social media platforms and “conversational commerce” using chatbots that have changed the concept of consumer engagement, has further disrupted the fashion and retail landscape. Technological innovation can allow designers to cut out intermediaries, not just at the marketing stage, but at every step of the value chain. Cloud technologies have made business services affordable through software-as-a-service solutions. As robotics and sensors transform factories into automated smart factories, manufacturing-as-a-service could soon be within reach.

It appears that technological disruption has finally created a chance for local brands to make a comeback.

But SPA-brands are making efforts to go digital too, leveraging their existing assets and brand portfolios to compete as online retailers and selling on e-commerce platforms. As they “go digital”, the important question to ask: Is this merely a shape-shifting exercise for these SPA-brand retailers, in moving from a physical to digital platform?

With their established brands, market presence and access to more resources, global SPA-brands do stand a chance to future-proof their business – only if they innovate through self-disruption.

Physical assets, which many fear can be liabilities in the future, if unbundled and digitized, can generate entirely new revenue streams. Retail space can be transformed into experience and event venues, or factories can be outsourced to provide smart manufacturing facilities.

R&D in emerging technologies can also help brands build key differentiators. Some examples are the usage of augmented and virtual reality to improve the customer experience such as allowing consumers the opportunity to be on the “front row” of a fashion catwalk, or developing smart fabrics that could multitask as health and performance trackers.

Technology can create entirely new services, and in the process change the fashion ecosystem. Advancements in predictive analytics may lead to a shift from the pay-per-product to a subscription-based model, where retailers may know consumers better than they know themselves, and pre-emptively ship clothing recommendations to subscribers. With the lowering costs of 3D printing, consumers may one day purchase design blueprints to 3D print at home.

Indeed, with technology, the future of fashion is boundless. Yet, it is only by fully integrating digital into the business model can a retailer – be they local or SPA-brands – see any real and long-term impact.

The cliché that change is the only certainty used to apply only to the effervescent nature of fashion trends. But going forward, boundaries are being challenged on all fronts. Even failed innovations could trigger a rise in consumer expectations or inspire the next “fashion-preneur”.

In a disruptive environment, will it be the designer, manufacturer, retailer, influencer or consumer who will set in motion the next wave of change? It will be the one that embraces and not fear digital.

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Accelerating entrepreneurship in the age of disruption

by Max Loh

The EY Entrepreneur Of The Year™ 2017 awards program, now in its 16th year, was launched in Singapore in 2002 to honor entrepreneurs who have created and sustained successful business ventures, as well as to coincide with the government’s focus on fostering entrepreneurship.

Singapore has been relentless in driving entrepreneurship since more than two decades ago. This is not surprising, given the socio-economic impact of entrepreneurs in bettering lives, creating jobs and driving the economy.

According to the 2017 EY Growth Barometer survey, almost one in five Singapore companies in the middle market, compared to just 6% of their global peers, plan to grow their revenues by more than 26% in the coming year. These ambitions are highly encouraging, even as uncertainty and disruption continue to define the new normal in business today.

The bullishness among the country’s middle market is underpinned by careful control of costs, entrepreneurial innovation and early adoption of new technology.

Take PBA International for example. The CEO, Derrick Yap, winner of the 2017 EY Entrepreneur Of The Year – Diversified Engineering award, shares that his company is always mindful of fast-changing technology and customer preferences. “We build our core team to invest in and research in fundamental technology, while simultaneously exploring upcoming technology.”

In fact, the survey found that local companies, more so than their global counterparts, viewed technology as having a greater impact on them.

Technology is seen as both a problem and a solution. In a technologically disrupted environment, size and scale matter no more than resilience and agility – for better or worse, depending on whether you are the disruptor or the disrupted.

“Technology gives small companies the chance to disrupt the market, scale within a short time and challenge big global corporations in the same space, which was almost impossible to do in the past,” said Lennon Tan, Group Chairman of JK Tech Group, also winner of the 2017 EY Entrepreneur Of The Year – Financial Services Technology Enablement.
Yet, technology often offers only part of the solution. The right mindset to challenge the status quo is just as critical.

“Entrepreneurs and companies have to constantly think and rethink everything they do,” said Chia Yoong Hui and Sia Teck Chong, both co-founders of Ascenz Pte Ltd, and winners of the 2017 EY Entrepreneur Of The Year for Maritime Technology Solutions. To that end, they have to be always ready for any radical shift in the business, and review processes and structures as well as the way they interact with customers.

“Disruption means opportunities; there are no breakthroughs without disruptions,” added Dr. Shi Xu, CEO of Nanofilm Technologies International Pte Ltd, who clinched the 2017 EY Entrepreneur Of The Year – Advanced Manufacturing award.

According to Dr. Shi, Nanofilm believes in encouraging its people to look into new methodologies, options, innovations and creations that can benefit customers, stakeholders and even the industry at large. Their focus is to form a working community for their people and customers to interact and collaborate to create new solutions.

His views underline collaboration as one of the key drivers of innovation in the entrepreneurship ecosystem.

Connecting like-minded entrepreneurs is a powerful way to enable collaboration to flourish. The annual World Entrepreneur Of The Year award is one such platform that profiles local entrepreneurs among the world’s best business leaders; and at the EY Strategic Growth Forums held across the world, EY brings together communities of entrepreneurs, investors, corporates and policymakers to ignite ideas and opportunities.

Apart from supporting collaboration, EY also hopes to help address some of the other common barriers such as insufficient capital, limited resources and knowledge gaps, through complementary platforms that drive a common agenda.

For one, the EY Entrepreneurial Winning Women™ Asia-Pacific program benefits high-potential women entrepreneurs through executive leadership training to help them scale their business. Furthermore, through the EY Accelerating Entrepreneur Asia-Pacific program, EY provides mentorship to promising technology start-ups to help them grow and solve their business challenges.

In the current age of disruption where technology is available to most, if not all, an unstinting focus on purpose- and talent-centered growth may well be the most powerful competitive differentiator.
Based on EY’s extensive experience working with entrepreneurs, there are seven major growth drivers that can make a high-impact difference. Building customer loyalty, harnessing the power of digital technologies, aligning operating models to business strategy, using sound financial management strategies, seeking successful partnerships and acquisitions, performing active risk management, and nurturing an inclusive culture are all vital elements to sustainable long-term growth.

The significance of fostering an inclusive culture is perhaps best exemplified by family businesses that have endured generational leadership changes. As Mohan Vaswani, Chairman of the conglomerate Tolaram Group, said upon receiving this year’s EY-Standard Chartered Family Business Award of Excellence, “Investing in good people and aligning the organization to its core values, are critical for success.”

Indeed, in the current age of disruption where technology is available to most, if not all, an unstinting focus on purpose- and talent-centered growth may well be the most powerful competitive differentiator.

On 13 October 2017, EY and distinguished guests celebrated the spirit of innovation embodied by Singapore’s top entrepreneurs at the annual EY Entrepreneur Of The Year™ awards gala.

Dr. Shi Xu, Chief Executive Officer, Nanofilm Technologies International Pte Ltd, clinched the top honor – the EY Entrepreneur Of The Year 2017 Singapore.

Chairman of the judging panel, Dr. Robert Yap, also Executive Chairman of YCH Group Pte Ltd commented that Dr. Shi had impressed with his ability to combine astute business leadership with his scientific background to deliver on innovation.

“Dr. Shi had spotted existing limitations, invented a new technology, and had the strong business acumen to take it from ideation to commercialization. His belief in innovation continues to drive his investments in research and development. To date, his company has filed over 50 patents and his technology is now applied across a wide range of industries,” he said.

Dr. Shi, who was also named EY Entrepreneur Of The Year – Advanced Manufacturing, will represent Singapore to compete with more than 60 other country winners for the title of EY World Entrepreneur Of The Year (WEOY) in Monte Carlo, Monaco in June 2018.

Four other leading entrepreneurs were honored at the gala. Chia Yoong Hui, Founder, Chairman and Chief Executive Officer, and Sia Teck Chong, Co-founder, Director and Chief Technical Officer, of Ascenz Pte Ltd received the EY Entrepreneur Of The Year – Maritime Technology Solutions award.

Lennon Tan, Group Chairman, JK Tech Group was named EY Entrepreneur Of The Year – Financial Services Technology Enablement, while Derrick Yap, Chief Executive Officer, PBA International Pte Ltd was named EY Entrepreneur Of The Year – Diversified Engineering.

At the same event, EY and Standard Chartered also presented the honorary EY-Standard Chartered Family Business Award of Excellence to Mohan Vaswani, Chairman, Tolaram Group.
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Achieving zero corruption: beware the petty cases

by Reuben Khoo and Saket Bhartia
reuben.khoo@sg.ey.com
saket.bhartia@sg.ey.com | linkedin.com/in/saket-bhartia
As a country known for its zero tolerance towards corruption, Singapore has constantly sought to enhance the maturity level of fighting corruption and bribery in companies.

In April 2017, the Corrupt Practices Investigation Bureau (CPIB) and SPRING Singapore collaboratively launched the new Singapore Standard, SS ISO 37001:2016 Anti-Bribery Management Systems, a certification program that aims to help Singapore companies strengthen their anti-bribery compliance systems and processes.

Singapore’s efforts to stem corruption over the past decades have seemingly paid off so far. The country saw a boost in public confidence when CPIB revealed that the number of local corruption cases fell to a 32-year record low in 2016. The EY APAC Fraud Survey 2017 also revealed a perception among respondents that Singapore was considered to be 3.5 times less vulnerable to corruption and bribery compared to other Asia-Pacific countries.

Yet, several petty corruption cases have been heard in the courts in recent months, including an ex-cop sharing confidential photos for cash payments, and an Immigration and Checkpoint Authority (ICA) officer accepting bribes from an intermediary in exchange for granting social visit passes, among others.

What is also noteworthy is that the ICA officer, aged 26-year-old, belongs to the millennial generation – which, among other age groups, was found to be most susceptible to bribery practices such as offering cash payments, according to the 2017 EY APAC Fraud Survey.

The survey also revealed that the millennial generation feels more justified to conduct such practices due to confusion of what constitutes ethical behaviors, when they see unethical practices of others ignored in order to achieve business results during tough times. It is also a wake-up call to organizations who need to ensure that compliance policies are clearly understood and consistently applied.

Are such corrupt incidents one-off malpractices by individuals with personal risk-taking abilities or does it show that individuals have not yet fully understood anti-corruption practices and consequences? This is concerning as the ethical reputation of the country and the organization rests on the incorruptibility of every individual.

Motivations for petty corruption

As petty corruption offences mostly involve small amounts of money, which is sometimes referred to as “grease money”, it is easily misunderstood by individuals that such personal indiscretions are insignificant and has little wider impact, or worse, justifiable.

Such a mindset could be due to several reasons. For one, the regulator has in recent years executed a series of enforcement actions against
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Senior civil service officers and white collar employees of companies for committing high-value corruption and bribery acts. However, petty corruption may slip out of the public’s attention and be perceived to be receiving less enforcement attention due to the immateriality of the amount of money involved.

Another reason could be that frequent exposure to malpractices overseas, including neighboring countries that are rated poorly on the Corruption Perceptions Index 2016, could desensitize individuals to the moral ills, leading them to view petty corruption as a norm rather than an exception.

The act of taking bribes by individuals could be both on account of need or greed. Based on the theory of the fraud triangle, “need or pressure” is one of the driving reasons for unethical behaviors.

According to the last available information from the Singapore Household Expenditure Survey 2012/2013 (conducted every five years), the first 20th quintile of household members are earning an average of S$2,000 as compared to their average expenditure of S$2,200. Although no statistics in particular suggests correlations between financial position and unethical behavior, such inequity in income and expenditure may create the “need or pressure”, putting individuals in a vulnerable position to take the risk to pursue “quick money” and subsequently try to rationalize their unethical behaviors.

Awareness and vigilance

It is important that the public is constantly reminded that individual corruption and bribery act is a serious crime regardless of the value of the assets involved. Continuous education and targeted awareness is key.

One may recall that a few years back, the regulators came up with the unique idea of playing a short anti-bribery video clip in cinemas as part of in-theatre advertising. Resuming such public awareness campaigns, such as showing anti-corruption advertisements at the train stations, bus stations and airports, and on major television channels, is one of the ways to deliver a strong message to locals and visiting tourists that the government is unrelenting on stopping corruption and bribery regardless of the magnitude of the offence.

Since petty corruption offences have always involved personal risk-taking, driving personal awareness is one of the best defense mechanism. Private sector companies can continue its efforts in raising personal awareness via consistent training on bribery incidents. Also, companies should take visible actions in the event that an employee or third party is identified in illegal acts so as to serve as a deterrence to others.

Fixing a reward scheme for the successful prosecution of petty corruption cases resulting from whistle-blowing could be another mechanism to incentivize locals to speak up against unethical behaviors. Such schemes should be widely publicized, including presenting annual statistics on the total corruption and bribery cases, a breakdown of the number of cases received through whistle-blowing mechanism, and the monetary value of the offence and rewards awarded.

To tackle corruption, all stakeholders from individual employees to the management must be clean. No corruption is too small to ignore. The further strengthening of public integrity in combating petty corruption will require more persistent efforts and innovative schemes and mechanisms by governments, regulators, and companies to mitigate this potentially escalating risk.

A zero-corruption reputation may not be easy to attain but is certainly an aspirational goal that will take the effort of an entire nation to achieve.
Creating M&A value: not a done deal

by Karambir Anand and Mehul Kain

karambir.anand@sg.ey.com | linkedin.com/in/karambir-anand
mehul.kain@sg.ey.com | linkedin.com/in/mehulkain
Dealmaking looks set to become a permanent feature of corporate growth strategy for Asia-Pacific companies, judging by the EY 17th Global Capital Confidence Barometer.

The half-yearly survey of nearly 3,000 senior corporate executives globally revealed that companies are encouraged by the growth prospects in Asia-Pacific and greater access to capital, with more than half of those surveyed in Asia-Pacific intending to actively pursue deals within the next 12 months.

For many, if not all, of these companies that enter into deals, the hope is to realize the synergies between the two parties once they integrate. Synergies typically relate to cost and revenue – where the deal will allow the two companies to reduce cost or increase revenue.

Yet, against the expectations of access to new markets and capabilities, and improving performance and generating higher shareholder value, many deals do not deliver on their expected value. The main reason: failure in integration.

Barriers to integration
Across the deal process, there are several points for potential inefficiencies or failure.

For a start, a key stumbling block is the lack of clear leadership. During an M&A, it is natural that the two companies will bring forth respective leader for each function. Placating both companies with a dual-head organizational structure or delay in selecting a strong and inspirational leader to rally the new organization can be confounding and counterproductive.

Another issue is cultural differences. Even within the same organization, the ways of working among different teams can differ. Cultural differences are particularly pronounced and relevant in cross-border acquisitions. Companies need to be careful not to impose their “normal” on an acquired company without understanding the dynamics and operating environment. Pushing to replace, rather than integrate, can lead to unforeseen challenges.

Another stumbling block is to operate the business as usual, without a focus on integration. While it is necessary to continue to run the business, it is equally important to drive effective integration. For companies that do not set up dedicated inhouse integration teams and expect employees to stretch beyond their day jobs to work on integration activities, the result is often a delay in integration as individuals get caught up with daily activities.

The absence of material incentives to motivate teams can also curtail effective integration. When companies do not outline the real incentives for achieving the synergistic goals, which should be aligned with the organization’s key performance indicators and synergy parameters, they are missing the opportunity to motivate the teams to work together.

Boosting the chances of success
Coordinated efforts – both strategically and operationally – in following a structured approach across the deal process are needed in order to succeed.

To do so, companies need to plan early, align on strategic rationale and decide the order of importance of integration activities.

At the pre-deal stage, companies should identify, validate and quantify synergies. This includes getting a clear understanding of where to play, how to win and the numbers that signal deal success.
Translating the high-level deal strategy to actual success parameters helps to set expectations and rhythm for the integration early.

Subsequently, companies need to obtain buy-in from internal teams. While it is important to get business teams aligned and onboard with numbers, it is also necessary to have internal audit teams agree with the baseline and synergy calculation methodology adopted. This helps to bring a unified view on size of the prize.

As well, companies need to identify integration leaders early. Strong management push and a shared and consistent vision cascaded from respected leaders play a significant part in motivating employees. At the same time, it is important to secure the commitment of the leaders so that they are actively involved.

Post-deal, the integration process does not stop. Instead, it is critical at this point to create dedicated integration teams, made up of high-potential cross-functional individuals who focus on developing a momentum for integration and synergy.

At this stage, companies should also seek to align incentives with outcomes. These incentives, consistent with the organization’s strategy, must reinforce the desired objectives. Sometimes, a simple initiative like moving annual incentive payouts to a quarterly frequency, or after achieving a milestone, can energize teams. Specifically, incentives should not be perceived as inadequate – generous incentives that significantly reward top performers are effective.

Even as immediate synergy targets – potentially with a plethora of associated incentives – are top of mind in the short term, to unlock long-term value, teams need to maintain momentum even after incentives are withdrawn. This requires long-term focus on everyone’s part.

To that end, companies must have a robust synergy tracking mechanism and communicate success. It is important to track, measure and report progress regularly, so as to identify pain-points early and quickly resolve the barriers to realizing synergy. Yet, companies should acknowledge that revenue and cost-tracking systems are heavily customized for business as usual. This makes the capturing of disparate information and validating synergy to report progress to management complicated, time-consuming and error-prone.

Lastly, companies must strive for speedy execution. Most synergies are realized within three years of the deal – or not at all. Swift execution with the aim to normalize synergy initiatives as soon as possible is key.

Creating value from deals does not happen by chance. By having a robust implementation framework while keeping an eye on common stumbling blocks, companies can take some randomness out of achieving deal synergies and create the value that an M&A promises.

Against the expectations of access to new markets and capabilities, and improving performance and generating higher shareholder value, many deals do not deliver on their expected value. **The main reason: failure in integration.**
The EY Growth Barometer 2017 found that Singapore’s middle-market companies are very bullish about growth. Fifteen percent of Singapore respondents expect growth of 26% or more in the coming year, and 70% forecast a revenue rise of 6% or more.

However, the same survey also highlighted cost management concerns: Singapore middle-market leaders are intent on controlling costs and staying lean, with 14% saying increased production costs are a challenge to growth.

Clearly, working capital management is an area that local companies grapple with. Without sound working capital management, a company can find itself in a cash crunch or even thrown off tracks in its growth journey by the lack of funds.

Surprisingly, tax is an option that companies can turn to as they manage their working capital, as tax payment can chip away at their bottom line and funds. Further, there may be tax opportunities to optimize cash flow if companies look hard enough.

Borrowing costs
Borrowing to fund the working capital needs of the company is a common and often viable option. However it is accompanied by an interest expense burden. Companies that choose to borrow should thus make sure that such funding arrangements can meet tax deductibility requirements for interest expenses.

To claim deduction on interest costs incurred on a loan, a Singapore company must demonstrate that the loan was used to fund a specific asset that is income-producing or employed in acquiring income. If the company is unable to do so and has non-income producing assets, it may end up losing part of the interest expense deduction under the total asset method (TAM), which is adopted by the Inland Revenue Authority of Singapore (IRAS) to apportion interest expense to non-income producing assets.

The e-Tax guide issued by IRAS in December 2016 sets out the application of the TAM of attributing common interest expense to income-producing and non-income producing assets and clarified common practices. One clarification is the strict application of the TAM. Where direct identification and tracking of the interest-bearing loan to the company’s income producing asset cannot be established, the TAM must be applied to the interest costs incurred on the loan.

Thus, companies that look to take this option should plan and put in place supporting documentation to substantiate that borrowed funds are meant for purchase of inventories or specific income producing usage of its business carried on in Singapore. These are essential steps and will go towards managing any potential tax disputes over the application of the TAM.

Repatriation of cash flow from subsidiaries
Another common option to fund working capital is through repatriation of moneys from subsidiaries. This may include dividends, interest charges on loans and service fees on services rendered to subsidiaries.
Clearly, tax considerations are an integral part of the strategy to optimize the repatriation of cash flow, especially from overseas subsidiaries. It is vital to understand the tax laws in foreign jurisdictions such as local withholding tax rules, foreign exchange controls, applicable exemption or reliefs available under Singapore’s network of tax treaties, and tax implications of the money receipt in the hands of the Singapore company.

Transfer pricing (TP) will also likely come into play. Tax authorities are becoming more aggressive in ensuring proper and fair TP practices. Hence, proper economic and business substance should be built into the plans for repatriation of cash flow from subsidiaries.

Tax incentives
Singapore provides an array of tax incentives designed to incentivize companies to anchor substantive activities or strengthen capabilities based here.

One of them is the Finance and Treasury Center (FTC) incentive aimed at encouraging companies to use Singapore as a base for conducting treasury management activities for related companies in the region. Under the FTC incentive, income from the provision of qualifying services to approved network companies and carrying-on of qualifying activities on own account is subject to tax at 8% instead of the prevailing rate of 17%. In addition, companies may enjoy exemption from Singapore withholding tax on qualifying interest payments under the FTC incentive.

Therefore it may be worthwhile for companies planning to centralize their group’s cash management activities in Singapore to tap on the FTC incentive.

Unnecessary tax costs
Often, corporate leaders do not appreciate the significance of tax risk due to its technical nature. Yet, tax risk has the potential to expose the company to financial and reputational consequences if not managed properly.

To preserve precious cash flow from being eroded away by unnecessary tax costs such as penalties that may be imposed by tax authorities for errors in the tax filing or non-compliance with filing obligations, corporate leaders should consider implementing a comprehensive tax risk framework within their organizations.

Fundamentally, companies should consider implementing standard tax function controls that are critical in managing tax compliance and controversy risks. These include identifying what could go wrong in existing tax processes or controls, establishing a robust documentation framework for proper retention of records and performing tax health checks to spot risks in their tax filings.

Getting ahead
Tax strategies are integral in a company’s working capital management to minimize the tax bite on funds that can be better used for operations as it expands or deals with competitive threats. Singapore companies that go beyond the reactive to align their tax strategies with working capital needs will certainly reap the benefits of their working capital policies and stay ahead of the game.
New technologies create immense opportunities, and consequences. Artificial intelligence and automation are poised to displace labor in blue- and white-collar jobs to a higher level, creating a disconnect for the workforce. This disconnect is manageable today: the labor market catches up as the workforce reskils and upskills laterally and vertically. But the pace of disconnect will only accelerate, resulting in growing backlash from those who are left behind. Organizations need to drive their businesses forward inclusively with a purpose beyond profit, and make the shift from automation-or-human to automation-and-human. It is not all doom and gloom though. Just as digital disruption created jobs for app developers that few foresaw in the early computing days, new technologies may spin off new jobs, companies and even entire sectors that most are unable to envision today.
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For more information on how we can help you, contact:

Managing Partner
EY Asean and Singapore
Ernst & Young LLP
Max Loh
+65 6309 8828
max.loh@sg.ey.com

Head of Assurance, Singapore
Ernst & Young LLP
Christopher Wong
+65 6309 6935
christopher.wong@sg.ey.com

Head of Tax, Singapore
Ernst & Young Solutions LLP
Sim Siew Moon
+65 6309 8807
siew-moon.sim@sg.ey.com

Head of Transactions, Singapore
Ernst & Young Solutions LLP
Purandar Rao
+65 6309 6560
purandar.rao@sg.ey.com

Head of Advisory, Singapore
Ernst & Young Advisory Pte. Ltd.
Cheang Wai Keat
+65 6309 8860
wai-keat.cheang@sg.ey.com
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