BUSINESS SENTIMENT
2018

A PERSPECTIVE FROM
MALAYSIAN EXECUTIVES

MONASH
MALAYSIA
R&D SDN BHD

CPA
AUSTRALIA
Understanding the prevailing sentiment and mood of business leaders and managers provides an important compass point of the strength and capability of Malaysian firms to tackle emerging challenges and opportunities, be they local, regional or global.

The Malaysian Business Sentiment Survey covers a wide range of issues that define current competitive conditions and future trajectories of development. It elucidates and assesses the impact of emerging technologies on the nature and pattern of competition, evaluates the regulatory environment and teases out implications for trade. It identifies key aspects of the national ecosystem as well as the range of capabilities needed for Malaysian firms to strengthen their competitive positioning, build firm-level innovation-led vibrancy as key enabler of the Malaysia’s aspiration to become a developed high value-add economy.

Global Asia in the 21st Century (GA21) of Monash University Malaysia working in partnership with CPA Australia is proud to present the Malaysian Business Sentiment Survey. We are grateful to CPA Australia and other partners for their continued support and commitment in this endeavor. Thanks are also due to the respondents of the survey for their time and valuable insights. Last but not least my heartfelt gratitude to the research team from Monash University Malaysia and CPA Australia who worked tirelessly in the production of this report, which I hope will serve as a mechanism to galvanize debate and action for Malaysia’s future success.

**Professor Pervaiz Ahmed**
Co-Director of Global Asia in the 21st Century
Deputy Head of School (Research)
School of Business
Monash University Malaysia
CPA Australia’s connection with Monash University Malaysia continues to deepen as we collaborate once again on the Malaysian Business Sentiment Survey that provides a valuable repository of data gleaned from the senior business community. The survey has enabled senior leaders to reflect on key strategies and issues that have an impact on their businesses’ ability to create value over the short, medium and long term. In turn, the report recognises the impact of the external environment on companies and gives us a window into decision making in a way that is both compelling and accessible and allows us to clearly see both the challenges and opportunities that businesses face.

As a global membership organisation with more than 160,000 members across 125 countries, we recognise the size and influence of CPA Australia benefit our members by increasing the relevance and profile of their designation in the market place. Our heritage straddles over 130 years of experience and influence across diverse markets and our membership includes Monash alumni playing influential roles in both public and private sectors.

CPA Australia is proud of its longstanding relationship with Monash University Malaysia as part of its public presence in the Asia Pacific region. This is our fourth collaboration with the University on the Malaysian Business Sentiment that initially started as the Malaysian CEO Survey. We see this as an opportunity to engage with the University and connect with the business community in a meaningful way to add value.

We foresee the Malaysian Business Sentiment going from strength to strength with each passing year and I’d like to take this opportunity to thank Monash University Malaysia for giving us the opportunity to work alongside the University to provide tangible input into the report.

Priya Terumalay FCPA
Country Head – Malaysia
CPA Australia
EXECUTIVE SUMMARY

Monash University Malaysia’s Business Sentiment Survey 2018 found that CEOs and senior managers are of the view that the global economic environment is moving forward to greater stability with many of the developed economies posting better economic growth over the last 12 months. However, increasing rhetoric of a trade war between the United States and its leading trading partners is a cause for concern among firms in Malaysia.

A full-scale trade war will dampen global growth and business sentiment in the region and Malaysia.

Despite this global backdrop, firms in Malaysia are optimistic of the business environment and the nation’s economic prospects. This is attributed to the various government policies and strategies to increase disposable income of consumers via lower taxes, removal of tolls on road use and increased spending on major infrastructure development. Strong performance of firms is also attributed to greater adoption of digital technology and the transition towards business models underpinned by Industry 4.0.

CEOs and senior managers opined that to enhance the competitiveness of Malaysian firms, there must be concerted efforts from all stakeholders to nurture and sustain a sound, agile and resilient national innovation ecosystem. This will entail undertaking the following initiatives:

● Intensify the digitisation of the economy and adoption of Industry 4.0 technologies across all sectors of the economy, enabling firms to be part of the global supply network.

● Increase the supply of creative talent to enable firms to enhance process improvements, product development and expand market reach.

● Strengthen the “triple-helix” engagement between universities, industry and government so as to ensure educational programs, training initiatives and R&D activities continuously raise the innovative capacity of firms.

● Greater incentives need to be provided to SMEs to access technology, expertise, R&D and other business support to facilitate their move up the innovation value chain; and form strong supplier networks to support a knowledge-intensive and well diversified economy.

● Intensify corporate governance, transparency and accountability to ensure investors get better return on investment; and the “Rakyat” obtain affordable, yet high quality products and services.

● Government practices, policies, regulations, enforcements and incentives must be made more effective and comprehensive to ensure sustainable development of the national Green-economy agenda.
RESEARCH THEMES

1. STRONG ECONOMIC GROWTH IN THE DEVELOPED COUNTRIES AND DOMESTIC CONSUMER CONFIDENCE MAY BE HINDERED BY A LOOMING TRADE WAR

Over the past 12 months, the global markets have become more stabilized and economic growth numbers in many of the economies are on an upward trend. This has had a positive impact on the Malaysian economy. The positive external factors are further reinforced by increasing consumer confidence with increasing disposable income in Malaysia. The increase in disposable income due to continued cash transfers for the lower income group, reduction in taxes and removal of toll charges in many highways have had a positive impact on business confidence in Malaysia. However, a potential full-blown trade war between the US and its trading partners may adversely impact the growth trajectories of the major economies in the world, business sentiment across the globe and growth potential of firms in Malaysia. To mitigate these economic risks, firms are intensifying their market opportunities within the domestic economy and expanding their operations in ASEAN and other Asia-Pacific markets.

2. OPENING OF MARKETS IN THE REGION – NEW OPPORTUNITIES AND CHALLENGES

Over the past 12 months, there has been greater liberalization of the regional and domestic markets. These have had positive impacts on firms expanding their market reach in the ASEAN region and key countries in the Asia-Pacific region. The downside to a more open and robust economic environment is increasing competition from regional players with more sophisticated level of technology, larger talent pool and stronger innovative capabilities. Increased competition has forced firms operating in Malaysia to adopt new technologies and intensify R&D activities. These innovative endeavours have enabled firms to improve their operational efficiency, intensify new process and product development, seek new markets and intensify their brand presence in the region.

3. INCREASED INVESTMENT IN THE DIGITAL ECONOMY IS NEUTRALIZING COST OF DOING BUSINESS AND INTENSIVE COMPETITION

Increasing cost of doing business and increasing competition are forcing firms to embrace new digital technology that support the Industry 4.0 ecosystem. These new technological developments provide firms opportunities to improve their operational efficiency, process improvement, product development, market reach, product richness and service quality. Interestingly, small and medium sized firms are embracing these technological developments quicker than large firms. Hence, these technologies are enabling the small and medium sized firms to be more agile and adaptive to the changes taking place in the global economy.
4. **STRENGTHEN THE “TRIPLE-HELIX’ TO NURTURE CREATIVE TALENT**

Innovation is a key driver of the new economy; and ‘creative talent’ is the ‘life-blood’ of an innovation-driven economy. Firms are of the view that the key functions of universities are to work closely and collaboratively with industry to develop educational programs, industrial training and R&D activities that will enable them to move up the innovation value chain. The top three competencies identified by the senior managers that new graduates should possess are: critical thinking skills; ability to be confident and independent in undertaking their duties; and self-motivated.

5. **INTENSIFYING CORPORATE GOVERNANCE**

With increasing media attention on financial scandals by both the local and international media, senior managers expressed concern regarding governance, transparency and accountability in the country. They also raised some concerns regarding the increasing trade deficit of the country. Many of them are of the view that these negative externalities should be addressed quickly before they impact investor and consumer confidence. To mitigate the negative externalities of weak corporate governance, firms have intensified good governance, ethical best practices and adherence to global standards across the organization, starting with the leadership team.

6. **GOVERNMENT LEADING THE GREEN-ECONOMY**

Green is the new gold! Firms across the globe are increasingly paying attention to environmentally friendly products and services as there is greater awareness among firms and consumers on the adverse impact of poor environmental practices by the corporate sector on global warming, health of people and cost to society. Firms and countries across the globe are giving greater attention to adherence to global environmental best practices; and in many of the developed markets, environmental standards are seen as important non-tariff barriers. Senior managers are of the view that for the sustainable development of a Green-economy, there must be strong commitment from the government for green initiatives. These include stricter enforcement of environmental laws and introduction of more effective incentives for industry and consumers to shift towards renewable energy and environmentally-friendly products.

7. **SME DEVELOPMENT**

SMEs are key drivers of any economy; and in the context of Malaysia, many of them are gearing up for intensive competition as trade barriers in the region decline. These firms are embracing new digital technologies to enable them to extend their reach for resources and markets. New technologies also enable them to enhance quality and richness of the products and services. Many SMEs experience challenge in acquiring appropriate talent, expertise and R&D facilities to enable them to improve their competitiveness. To address these issues, SMEs are keen to work closely with universities to improve graduate employability, develop training programs to meet the needs of industry and align R&D activities to solve industry-based problems. Sound policies to foster these linkages will go a long way to enable SMEs to not only move up the innovation value chain but also form strong supplier networks that are a foundation of a knowledge-intensive industrial economy.
A sample of 416 questionnaires were completed by CEOs and senior managers from companies operating in Malaysia.

**RESPONDENT’S PROFILES**

**N = 416**

**OCCUPATION**

- **Proprietor/ Business Owner/ Company Owner**: 53.846%
- **Senior Management**: 46.154%

The sample was taken from all the states in Malaysia, with Selangor and Kuala Lumpur making up 51% of the total sample. Further, 54% of the respondents were part of senior management in firms (CEOs, MDs, GM, Directors CFOs and Vice-Presidents). The remaining 46% were proprietors or owners of businesses or company owners.

**SIZE OF FIRM**

- **Medium**: 25%
- **Large**: 70%
- **Small**: 5%

Approximately, 70% of the firms are medium sized firms; 25% large firms; and 5% small firms. Around 43% indicated their revenue to be below RM 20 million. Approximately 14% stated it to be between RM20 million and RM 50 million; 7% between RM50 million and RM 75 million; 6% between RM100 million and RM 250 million; another 6% between RM 50 million and RM 75 million; 4% between RM250 million and RM 500 million; and 5% more than RM 500 million. Around 16% of respondents preferred not to disclose their revenue information.

**GENDER**

- **Female**: 49%
- **Male**: 51%

**NUMBER OF EMPLOYEES**

- **< 75**: 6%
- **76 - 200**: 7%
- **201 - 500**: 10%
- **501 - 1000**: 17%
- **> 1000**: 60%
Senior management from 12 industry groupings participated in the survey; with hospitality industry & services comprising the highest number of sample respondents. This is followed by education, retail industry, manufacturing & related industries; and business services & related industries. Industries with the lowest sample size were transportation and agriculture.

STATE OF RESIDENCE
SNAPSHOT OF SURVEY DATA

Optimism

- 67% felt business environment would be better over the next 12 months

- 71% are confident in company prospects for the next 12 months

Business Concerns

- The Top 5 concerns of businesses were cost of doing business, weakening of the ringgit, global economy, increasing competition, and political uncertainty

- 59% reported that the government was at least somewhat significant as a buyer

- 53% of respondents reported higher expected revenue over the next 12 months

Technology Readiness

- 64% of respondents reported at least taking some steps to implement Industry 4.0

- Manufacturing & Related industries have the highest number of fully implemented ‘Industry 4.0’ companies at 23%

- Top 3 important technologies to remain competitive are mobile tech for customer engagement, digital payment, and socially enabled business processes

Future Skills

- Critical thinking was the top skill that companies expected graduates to possess

- However, teamwork capability scored the highest in the business-related industries, pushing critical thinking down to #4

- Industry Collaboration was the top suggested development that Malaysian Universities should focus on

- Top 3 capabilities CEOs should develop in their company are Good Governance, Efficiency, and Adaptability

- Concerns of corruption affecting businesses increased by 17% from 2017

- While concerns of fiscal budget deficit increased by 10%

- Digital technologies mostly create value through operational efficiency, customer experience, and branding
RESEARCH FINDINGS

1 Icons by Eucalyp Studio
IN YOUR OPINION, DO YOU THINK THE BUSINESS ENVIRONMENT OVER THE NEXT 12 MONTHS WILL:

Comparison between 2017/2018:

2017 2018

Change to be much better 36% 31%
Change to be a little better 15% 14%
Change to be a little worse 12% 11%
Remain unchanged 6% 6%
Change to be much worse Don't know

By Firm Size:

**LARGE**

<table>
<thead>
<tr>
<th>Change to be much better</th>
<th>Change to be a little better</th>
<th>Change to be a little worse</th>
<th>Remain unchanged</th>
<th>Don't know</th>
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<tbody>
<tr>
<td>18%</td>
<td>30%</td>
<td>13%</td>
<td>9%</td>
<td>6%</td>
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**MEDIUM**

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<tr>
<th>Change to be much better</th>
<th>Change to be a little better</th>
<th>Change to be a little worse</th>
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<tr>
<td>38%</td>
<td>38%</td>
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<td>10%</td>
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**SMALL**

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<tr>
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<th>Change to be a little worse</th>
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<tr>
<td>38%</td>
<td>38%</td>
<td>14%</td>
<td>10%</td>
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By Industry:

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<th>Change to a little worse</th>
<th>Remain unchanged</th>
<th>Change to a little better</th>
<th>Change to much better</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale</td>
<td>6%</td>
<td>35%</td>
<td>59%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitality Industry &amp; Services</td>
<td>4%</td>
<td>6%</td>
<td>6%</td>
<td>33%</td>
<td>46%</td>
</tr>
<tr>
<td>Transportation</td>
<td>13%</td>
<td>7%</td>
<td>27%</td>
<td>47%</td>
<td></td>
</tr>
<tr>
<td>Financial Services</td>
<td>5%</td>
<td>9%</td>
<td>14%</td>
<td>45%</td>
<td>27%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>13%</td>
<td>13%</td>
<td>6%</td>
<td>46%</td>
<td>25%</td>
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<tr>
<td>IT Industries</td>
<td>9%</td>
<td>9%</td>
<td>13%</td>
<td>57%</td>
<td>13%</td>
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<tr>
<td>Manufacturing &amp; Related Industries</td>
<td>11%</td>
<td>20%</td>
<td>25%</td>
<td>57%</td>
<td>43%</td>
</tr>
<tr>
<td>Education</td>
<td>9%</td>
<td>18%</td>
<td>9%</td>
<td>29%</td>
<td>36%</td>
</tr>
<tr>
<td>Business Services &amp; Related Industries</td>
<td>7%</td>
<td>29%</td>
<td>3%</td>
<td>32%</td>
<td>32%</td>
</tr>
<tr>
<td>Retail Industry</td>
<td>7%</td>
<td>23%</td>
<td>7%</td>
<td>33%</td>
<td>29%</td>
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<tr>
<td>Agriculture</td>
<td>15%</td>
<td>23%</td>
<td>13%</td>
<td>57%</td>
<td>38%</td>
</tr>
<tr>
<td>Construction &amp; Real Estate Industries</td>
<td>6%</td>
<td>25%</td>
<td>17%</td>
<td>37%</td>
<td>33%</td>
</tr>
</tbody>
</table>

STRONGER ECONOMIC GROWTH IN DEVELOPED ECONOMIES AND LOOMING TRADE WARS IMPACT BUSINESS SENTIMENTS

A comparison with respect to the overall business environment showed that 36% of the respondents in 2018 indicated that there is a change for the better in the overall business environment as compared to 6% in 2017. In a similar fashion, 31% of the respondents indicated that the business environment in 2018 will be a little better as compared to only 12% in 2017. The percentage of respondents who were neutral and pessimistic declined significantly. Growing optimism in the business environment is attributed to following reasons:

- Improvement in global economic environment with the revival of economic growth in many of the developed economies;
- Increased interest among regional players such as China and India in the economic development in Malaysia and the ASEAN region; and
- Greater diffusion of technology that is giving firms a wider market reach and richness of products & services.

While the firms were relatively positive with the business environment in 2018 as compared to 2017; they also expressed concerns regarding the looming trade war between US and its major trading partners. They were of the view that a full-scale trade war between US and its trading partners will adversely impact global economic growth.
COMPANY PROSPECTS

HOW CONFIDENT ARE YOU ABOUT YOUR COMPANY’S PROSPECT FOR THE NEXT 12 MONTHS?

Comparison between 2017/2018:

By Firm Size:

- **LARGE**
  - Somewhat confident: 45%
  - Very confident: 10%
  - Neither confident nor unconfident: 32%
  - Somewhat unconfident: 9%
  - Very unconfident: 3%

- **MEDIUM**
  - Somewhat confident: 41%
  - Very confident: 36%
  - Neither confident nor unconfident: 16%
  - Somewhat unconfident: 7%
  - Very unconfident: 1%

- **SMALL**
  - Somewhat confident: 43%
  - Very confident: 29%
  - Neither confident nor unconfident: 14%
  - Somewhat unconfident: 14%
SENTIMENTS GROWING OPTIMISM IN DEVELOPED ECONOMIES AND DOMESTIC CONSUMER CONFIDENCE IS BEING DAMPENED BY LOOMING GLOBAL TRADE WAR

With an improving global economic climate in many of the developed economies, senior managers appear to be optimistic of their business prospects in 2018 compared to 2017. Around 30% of the senior managers indicated that they were very confident of the business environment in 2018; compared to only 16% who said similarly in 2017.

The optimism in the business prospects among the senior managers can be attributed to government fiscal policies to increase the disposable income of consumers and measures being taken to stimulate the domestic economy. Key measures include increase in cash transfer program for the lower income groups, removal of toll charges and other initiatives to improve the purchasing power of consumers and improving global economic climate in many developed economies.

The senior managers also expressed some concern about the possibilities of full-blown trade wars between US and its major trading partners; which may curtail the upward economic growth trajectories of many of the developed economies. This may adversely impact firms’ business prospects over the next 12 months.
Managing Cost, Increasing Corruption and Fiscal Budget Deficit Are Major Concerns

The 2018 survey results show that the top five concerns for firms remain the same as 2017. The main concerns were: cost of doing business (38%); weakening of the Ringgit (33%); global economic uncertainty (27%); increasing competition (26%); and political uncertainty (23%).

Two major concerns that have increased from 2017 to 2018 are corruption and budget deficit of the country, with corruption increasing from 10th spot on the list of major concerns in 2017 to 6th position in 2018. This is attributed to greater media coverage both locally and globally on alleged incidents of corruption and financial scandals in the country.

The survey results show that concern about the country’s fiscal deficit position has increased from 17th spot to 9th spot. Senior managers expressed that increasing deficit and national debt may have a long-term impact on the economic prospects of the country if effective measures are not in place to address the deficit problem.
The senior managers informed that the top three factors that will have a positive impact on their business prospects over the next 12 months include:

- strengthening of the Ringgit
- expansion to new markets; and
- lower cost of business.

The three factors are inter-related in that many of the firms import materials, technology and other resources for their production processes. Hence, strengthening the Ringgit should reduce import costs. On the other hand, expansion to new markets will give firms opportunities to pursue greater economies of scale, reduce market risks (especially in the context of a possible trade war), and expose the business to new ideas and competition. All of these, will reduce the operational cost of firms over the next 12 months.
Senior managers noted that over the next 12 months that managing cost, expanding to new markets and improving on business processes will be their top three strategic priority areas. These strategies will enable firms to focus operational efficiencies and improvements; strengthen their market capabilities and capacities; and allow them to operationalize cost strategies that will contribute to growth in resources, talent and markets.
IN YOUR OPINION, ARE THERE MORE GROWTH OPPORTUNITIES/THREATS FOR YOUR COMPANY NOW THAN THERE WERE THREE YEARS AGO?

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
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<tbody>
<tr>
<td>Balance</td>
<td>44%</td>
<td>39%</td>
</tr>
<tr>
<td>More major</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td>More minor</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>More major</td>
<td>10%</td>
<td>15%</td>
</tr>
<tr>
<td>More minor</td>
<td>23%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Comparison between 2017/2018:

By Firm Size:

**LARGE**

- Balance: Both more opportunities and more threats: 44%
- More major opportunities: 13%
- More minor opportunities: 23%
- More major threats: 10%
- More minor threats: 10%

**MEDIUM**

- Balance: Both more opportunities and more threats: 37%
- More major opportunities: 19%
- More minor opportunities: 29%
- More major threats: 9%
- More minor threats: 5%

**SMALL**

- Balance: Both more opportunities and more threats: 38%
- More major opportunities: 24%
- More minor opportunities: 29%
- More major threats: 5%
- More minor threats: 5%
Strong Growth Opportunities on the Back of Increasing Consumer Confidence and Stronger Global Economic Growth

The percentage of firms that state that there are major growth opportunities now compared to three years ago has increased from 11% in 2017 to 25% in 2018; the percentage that state that there are minor growth opportunities increased from 13% to 20%. Meanwhile, the percentage of respondents who were neutral or view that there is a higher threat to growth opportunities have declined significantly from 2017 to 2018.

Positive perceptions of prospects are due to increasing disposable income in Malaysia due to the various fiscal policy measures undertaken by the government. Strong growth is also attributed to a depreciated Ringgit that makes local products and services price competitive; higher utilization of new technology and innovation that enables firms to be more productive; and increasing economic growth prospects in developed economies.
## Market Expansion Strategy

<table>
<thead>
<tr>
<th>Region</th>
<th>Market Expansion Strategy</th>
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<tbody>
<tr>
<td>South East Asia (e.g., Indonesia, Thailand, Vietnam, Philippines)</td>
<td>45%</td>
</tr>
<tr>
<td>Domestic</td>
<td>43%</td>
</tr>
<tr>
<td>East Asia (e.g., China, HK, Japan, Korea)</td>
<td>38%</td>
</tr>
<tr>
<td>Do Not Operate in International Markets</td>
<td>16%</td>
</tr>
<tr>
<td>Southern Asia (e.g., India, Pakistan, Sri Lanka, Bangladesh)</td>
<td>15%</td>
</tr>
<tr>
<td>Western Europe (e.g., UK, France, Germany, Spain, Portugal)</td>
<td>15%</td>
</tr>
<tr>
<td>Middle East and Northern Africa (e.g., UAE, Saudi Arabia, Egypt, Algeria)</td>
<td>14%</td>
</tr>
<tr>
<td>Northern America (e.g., US, Canada)</td>
<td>12%</td>
</tr>
<tr>
<td>Oceania (e.g., Australia, New Zealand, Fiji, Samoa)</td>
<td>11%</td>
</tr>
<tr>
<td>Central Asia (e.g., Kazakhstan, Tajikistan, Uzbekistan)</td>
<td>8%</td>
</tr>
<tr>
<td>Eastern Europe (e.g., Russia, Poland, Czech Republic, Hungary)</td>
<td>7%</td>
</tr>
<tr>
<td>Latin America and Caribbean (e.g., Brazil, Argentina, Mexico, Trinidad and Tobago)</td>
<td>6%</td>
</tr>
<tr>
<td>Africa (e.g., South Africa, Kenya, Cameroon, Nigeria)</td>
<td>5%</td>
</tr>
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</table>

The survey results show that a majority of the firms are focused on their business operations in the domestic economy, ASEAN and key Asia-Pacific markets. Close to 45% of the senior managers informed that they will focus on the ASEAN market; 43% will focus on the domestic market and 38% on the East Asia market. Some firms are extending their reach to other markets such as South Asia, the Middle East, Europe and North America.
The top three areas of focus for firms over the next 12 months are to improve operational efficiencies, followed by developing new growth strategies (for both products and new markets) and enhancing the quality of products and services by undertaking research and development and innovation.
The role of government as a significant buyer has increased from 14% in 2017 to 32% in 2018. The percentage of respondents indicating government is somewhat a significant buyer has increased from 25% in 2017 to 27% in 2018. The analysis suggests that the government is a dominant player in the domestic economy. If the government is to take action in the future to reduce the rising deficit through reducing spending, this is likely to have negative impacts to many businesses.

Senior managers are of the view that continuous transformation of the global economic landscape will take place due to technological innovations, demographic changes and a shift in economic power to East Asian economies. These trends will open new opportunities and intensify competition for firms operating in Malaysia.

Some firms may respond to increasing global competition by moving into new industry sectors in the next three years. The percentage of respondents that said that their businesses will very likely compete in the new industry sectors has more than doubled from 10% in 2017 to 23% in 2018. Those who stated that their businesses are somewhat likely to compete in new industry sectors increased from 38% to 40%. Respondents who stated their firms are somewhat unlikely and very unlikely to expand into new industry sectors declined in 2018 from 2017.
THE DIGITAL ECONOMY WILL OPEN NEW COMPETITION

Converging technology platforms have opened up new opportunities for firms, whilst at the same time pose some challenges. Senior managers are of the view that competition from players outside their own industries will intensify competition. The top three industries from which competition will emerge are: professional and businesses services, retail and wholesale industry, and ICT.

These results are not surprising given the increasing adoption of e-commerce, block-chain technology and Industry 4.0 technologies among firms. Such technology better enables some firms to provide ‘holistic solutions’, from upstream to downstream services. These new businesses adopt vertically and horizontally integrated business models that assist firms to reduce operational costs, expand market reach and enhance richness of products and services. These developments will continue to replace intermediary industries within the value chain. Firms that provide intermediary services will continue to experience intensive competition from technology-savvy firms.
MOBILE COMMUNICATION AND SOCIAL NETWORKING TECHNOLOGY DRIVING COMPETITIVENESS

Senior managers are of the view that the top three technologies that are most important for raising their competitiveness are: mobile technology for customer engagement, followed by digital payment system and socially enabled business processes (28%). These technologies are an integral part of the Industry 4.0 (Smart Manufacturing) technology platform, which has the capacity to enable firms to expand their reach to new markets and enhance richness of products and services. These technologies are also seen as key drivers for firms to pursue economies of scale and economies of scope.

Around 11% of the senior managers stated that robotics can play a major role in raising the competitiveness of their firms. On the other hand, 10% of respondents informed that “blockchain” is the most important technology for enhancing their competitive position. The low values for these technologies may be due to a lack of understanding among CEOs and senior managers about these technologies; particularly how they can value-add to their business models. Businesses should therefore be looking to increase their understanding of these and other emerging technologies.
The survey results show that the top three ways digital technology is creating value for firms are: improving operational efficiency, enhancing customer experience, and raising the brand and reputation of the firms (31%).

The above results suggest that firms are able to leverage on digital technology to enhance the reach for new resources and markets to pursue greater economies of scale; and enhance quality and variety of products for a wider segment of the market. Hence, these new digital technologies enable firms to enhance operational efficiency and improve quality of service and customer experience. All of which builds strong brand and reputation globally.
KEY CAPABILITIES OF THE FUTURE

IN YOUR OPINION, WHAT ARE THE MOST IMPORTANT CAPABILITIES THAT TOMORROW’S CEOS MUST CULTIVATE IN THEIR COMPANIES?

<table>
<thead>
<tr>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proactively managing the business environment through strategic foresight</td>
<td>Good governance, transparency and accountability</td>
</tr>
<tr>
<td>Ability to deal with change by creating an agile and adaptive organization</td>
<td>Highly competitive, focused and highly efficient organization</td>
</tr>
<tr>
<td>Highly competitive, focused and highly efficient organization</td>
<td>Ability to deal with change by creating an agile and adaptive organization</td>
</tr>
<tr>
<td>Personal qualities of honesty and integrity in the leadership team</td>
<td>Personal qualities of honesty and integrity in the leadership team</td>
</tr>
<tr>
<td>Creating a culture of innovation</td>
<td>Ethical business</td>
</tr>
<tr>
<td>Acquisition and retention of talent with deep specialist skills and knowledge</td>
<td>Proactively managing the business environment through strategic foresight</td>
</tr>
<tr>
<td>Creating a customer centric organization</td>
<td>Knowledge and experience with digital technology</td>
</tr>
<tr>
<td>Good governance, transparency and accountability</td>
<td>Care of the environment and social responsibility</td>
</tr>
<tr>
<td>Ethical Business</td>
<td>Creating a customer centric organization</td>
</tr>
<tr>
<td>Research partnerships and collaborations</td>
<td>Acquisition and retention of talent with specialist skills</td>
</tr>
<tr>
<td>Care of environment and social responsibility</td>
<td>Creating a culture of innovation</td>
</tr>
<tr>
<td>Digital astuteness</td>
<td>Research partnerships and collaborations</td>
</tr>
</tbody>
</table>

GOOD CORPORATE GOVERNANCE, EFFICIENT PROCESSES AND CHANGE MANAGEMENT

The top ranked capability of the future in 2017, has fallen to 6th most important capability in 2018.

The above analysis suggests that the global economic environment has become more open and competitive over the last 12 months, and to remain competitive, firms will need to invest more resources on corporate governance and put in place efficient processes to enable them to become more agile and adaptable to global shocks, uncertainties and changes.
**KEY PARTNERSHIPS AND NETWORKS DRIVE BUSINESS DEVELOPMENT**

Strategic partnerships are key drivers for a hyper-converged economy. The CEOs and senior managers are of the view that strategic partnerships are critical for firms to enhance their competitiveness in this new economy. The top three types of partnerships that firms establish are with customers; this is followed by partnerships with suppliers, and business networks, clusters or trade associations.
Firms establish joint ventures, strategic alliances and collaborations that are mutually beneficial to themselves and their external stakeholders. In this study, CEOs and senior managers state that the top three reasons for establishing such partnerships are to achieve:

- access to new customers
- strengthen innovative capabilities; and
- access to expertise.
WHICH OF THE FOLLOWING BEST DESCRIBES YOUR COMPANY?

Comparison between 2017/2018:

- Took an existing product/service and made it better
- Took an existing product/service and reduced its price for the end customer
- Delivered a product/service that didn’t exist before
- Took an existing product and reduced its cost of production through efficient manufacturing

By Firm Size:

<table>
<thead>
<tr>
<th></th>
<th>LARGE</th>
<th>MEDIUM</th>
<th>SMALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Took an existing product/service and made it better</td>
<td>36%</td>
<td>46%</td>
<td>43%</td>
</tr>
<tr>
<td>Took an existing product/service and reduced its price for the end customer</td>
<td>29%</td>
<td>23%</td>
<td>10%</td>
</tr>
<tr>
<td>Delivered a product/service that didn’t exist before</td>
<td>13%</td>
<td>21%</td>
<td>11%</td>
</tr>
<tr>
<td>Took an existing product and reduced its cost of production through efficient manufacturing</td>
<td>22%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Took an existing product/service and made it better</td>
<td>29%</td>
<td>22%</td>
<td>38%</td>
</tr>
<tr>
<td>Took an existing product/service and reduced its price for the end customer</td>
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<td>21%</td>
<td>10%</td>
</tr>
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<td>11%</td>
<td>10%</td>
</tr>
</tbody>
</table>
The analysis shows that there has been a “step-up” in process improvement and product development among firms in the country. Many of them embarked on the adoption of new technology that gives firms better network externalities. Key network externalities include leverage in negotiating better terms from suppliers and network partners. The latter is critical for firms to provide competitive prices for customers.
SALES PRIORITY

PLEASE INDICATE BELOW WHAT YOU THINK YOUR SALES PRIORITY WILL BE FOR THE NEXT 12 MONTHS?

Comparison between 2017/2018:

2017 2018

Concentrate on existing products/services but seeking new markets 31% 24%
Develop new products/services for existing markets 14% 23%
Develop new products/services for new markets 23% 22%
Concentrate on existing products/services and servicing existing markets 16% 24%

By Firm Size:

LARGE MEDIUM SMALL

Concentrate on existing products/services but seeking new markets 39% 21% 14%
Develop new products/services for existing markets 23% 23% 22%
Develop new products/services for new markets 14% 26% 24%
Concentrate on existing products/services and servicing existing markets 29% 24% 43%

SALES PRIORITY

Comparison between 2017/2018:

Concentrate on existing products/services but seeking new markets 31% 24%
Develop new products/services for existing markets 14% 23%
Develop new products/services for new markets 23% 22%
Concentrate on existing products/services and servicing existing markets 16% 24%

By Firm Size:

LARGE MEDIUM SMALL

Concentrate on existing products/services but seeking new markets 39% 21% 14%
Develop new products/services for existing markets 23% 23% 22%
Develop new products/services for new markets 14% 26% 24%
Concentrate on existing products/services and servicing existing markets 29% 24% 43%

Please indicate below what you think your sales priority will be for the next 12 months?
The survey results in 2018 show a distinctive difference from the results obtained in 2017. The percentage of firms that stated that they would concentrate on existing product or services but seek new markets decreased from 60% in 2017 to 31% in 2018. However, firms that stated that they will develop new products or services for existing markets increased from 13% in 2017 to 24% in 2018. Similarly, firms that state they will develop new products or services for new markets increased from 11% in 2017 to 23% in 2018. Further, firms stated that they would concentrate on existing products or services and servicing existing markets increased from 16% in 2017 to 22% in 2018.

The results suggest that a majority of firms in 2018 will focus on defending their existing market share. They also stated that they will diversify their market risk by venturing into new product development and new markets. This is increasingly important as the competition in the existing product or service markets have become intense. To mitigate this risk, a significant number of firms are investing in developing new products for existing and new markets. These strategies will enable not only firms to defend their existing product market; but also expand their market share and ameliorate potential risks from a trade war. This suggests that the level of innovation among these firms is expected to increase over the next 12 months.
**Key Drivers of Innovation**

<table>
<thead>
<tr>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowing customers' problems through customer relationships and feedback</td>
<td>Knowing customers’ problems through customer relationships and feedback</td>
</tr>
<tr>
<td>Depth of specialist knowledge and skills of people</td>
<td>Understanding customer needs through market research</td>
</tr>
<tr>
<td>Leadership vision and drive to innovate</td>
<td>Use of digital technology and media to build relationships with end customers for improved understanding of consumer needs</td>
</tr>
<tr>
<td>Quality control and continuous improvement ethos</td>
<td>Quality control and continuous improvement methods</td>
</tr>
<tr>
<td>Understanding customer needs through traditional market research</td>
<td>Possession of adequate financial resources to drive innovation</td>
</tr>
<tr>
<td>Recognising and rewarding people who innovate</td>
<td>Leadership vision and drive to innovate</td>
</tr>
<tr>
<td>Use of digital technology and media to build relationships with end customers for improved understanding of consumer needs</td>
<td>Structured processes to select good ideas and speed them to market commercialization</td>
</tr>
<tr>
<td>Structured processes to select good ideas and speed them to market commercialization</td>
<td>Excellent mentoring and supervisor - employee relationships</td>
</tr>
<tr>
<td>Giving people time and space to think about innovation</td>
<td>Depth of specialist knowledge and skills of people</td>
</tr>
<tr>
<td>Excellent mentoring and supervisor-employee relationships</td>
<td>Access to external financing for Innovation, Research and Development</td>
</tr>
</tbody>
</table>

**Managing Customer Expectation Using The Best Technology**

Innovation is the “life-blood” of any firm in an innovation-driven economy. The survey results in 2017 and 2018 show that the top contributor for a firm’s ability to innovate is to be able to gauge their customers’ problems via strong customer relationships and feedback.

The second and third most important contributors to innovation among firms in 2017 were depth in specialist knowledge skills of people and leadership vision drive to innovate. However, these drivers of innovation dropped to the 9th and 6th position respectively in 2018.

In essence, firms regard the use of new digital technology as critical in enhancing their reach to the customer base and to ensure they meet needs of their customers.
The last 12 months saw major initiatives by government and industry associations to promote greater adoption of Industry 4.0. The survey shows that close to 28% of the firms are starting to take steps for the implementation of Industry 4.0, while 23% have partially implemented; and 13% have fully implemented the model.

However, close to 36% of firms do not have a plan to adopt Industry 4.0 technology as part of their business model as a means to adapt to an increasingly hyper-converged economy. This suggests that there remain opportunities for government and industry to continue to provide information on what is Industry 4.0 and to showcase the benefits through examples of firms that have successfully implemented Industry 4.0.
CHALLENGES OF INDUSTRY 4.0

WHAT ARE THE CHALLENGES IN IMPLEMENTING INDUSTRY 4.0?

(Note: Industry 4.0 refers to the trend of automation and data exchange in manufacturing technologies. It is described as the fourth industrial revolution, smart manufacturing or digital factories.)

Financial constraints: 33%
Lack of training and capabilities program: 32%
Lack of industrial planning, coordination and direction by the industry bodies: 28%
Unclear on how to implement within the organization: 27%
Weak technological infrastructure and support systems: 26%
Lack of industrial planning, coordination and direction by the government agencies: 24%
The right talent: 19%
Lack of business friendly public sector: 19%
Disrupting current operations: 17%
Rigid regulatory environment: 14%
Not applicable: 12%
Don’t know: 8%

KEY FACTORS HINDERING THE ADOPTION OF INDUSTRY 4.0

While awareness of the benefits of Industry 4.0 technology in enhancing the competitive advantage has increased over the last 12 months, many firms indicate that they face challenges in implementing these new technology initiatives. The top three challenges encountered by firms in the implementation of Industry 4.0 are:

• financial constraints
• lack of training and capability programs; and
• a lack of industrial planning, coordination and direction by industry bodies.

Key strategies to overcome these constraints include the following:

• Key government agencies work with industry associations, local training institutes and ministries to provide Industry 4.0 training that are reliable for the industries.
• Ensure the programs are affordable and covered by the Human Resource Development Fund (HRDF).
• Incorporate elements of Industry 4.0 in all programs provided by institutions, colleges, universities, polytechnics, vocational training schools and colleges; and government ministries.
Environmental sustainability is increasingly becoming an integral part of a competitive economy and used as a competitive strategy by firms. Adherence to global environmental best practices is also seen as becoming an important non-tariff barrier.

One major change between the surveys is the large increase in the percentage of senior managers that selected ‘stricter environmental laws and enforcement’ – reinforcing the important role firms believe governments have in achieving a green and sustainable environment.

In summary, for environmental initiatives to gain traction in Malaysia, the government needs to lead the development of sound and effective regulations, commit to implement environmental practices in the public sector and introduce incentives to transition the economy toward renewable energy resources.
University-industry collaboration is critical for universities to produce graduates that meet the talent and R&D needs of industry. Strong university-industry collaboration enables firms to move up the global innovation value chain.

The results suggest that the senior managers are of the view that universities are a key enabler within an industrial ecosystem to meet the labour needs of firms, assisting them to undertake R&D initiatives that help solve their industrial challenges and provide training for staff to continuously keep abreast with technological developments and innovations.
WHAT ARE THE TOP SKILLS UNIVERSITY GRADUATES SHOULD POSSESS? IN OTHER WORDS, WHAT ARE THE EDUCATIONALLY BASED REQUIREMENTS TO ENHANCE BUSINESS DEVELOPMENT AND COMPETITIVENESS INTO THE FUTURE?

TALENT COMPETENCIES FOR BUSINESS DEVELOPMENT

KEY GRADUATE ATTRIBUTES FOR AN INNOVATION-DRIVEN ECONOMY

Talent is critical for firms to move up the innovation value chain and enhance competitive advantage. Senior managers identified the following as the top graduate competencies required to enhance business development and competitiveness into the future:

- Critical thinking skills as these can assist enhance business development and competitiveness.
- Personal confidence so individuals can be confident and independent in executing duties.
- Initiative and self-motivation. This will help firms not only improve the quality of their products and services but also enhance their innovative capacity to produce new products and services.
- Universities and industry should collaborate more closely on curriculum design, teaching methodologies and programs to ensure university graduates meet the needs and demands of the industry.
PRODUCT DEVELOPMENT IS A KEY CATALYST FOR BUSINESS GROWTH

The survey results show that new products or services are important drivers of revenue growth with 72% of firms stating that products or services introduced in the past three years contributed 25% or more to their revenue.

The results suggest that a large proportion of firms introduced new products or services in the last three years to keep pace with their competitors and to cater for changing and increasing consumer demand and declining product life cycles due to increasing technological development and innovation.

OPTIMISTIC PROSPECTS OF REVENUE OVER THE NEXT 12 MONTHS

The survey results show that close to 53% of the CEOs and senior managers expected their gross revenue to increase over the next 12 months. Approximately, 26% stated that there will not be any changes in their gross revenue; while 16% expect it to be much lower than the last 12 months.
DISAGGREGATE ANALYSIS: FIRM SIZES

- SMALL
- MEDIUM
- LARGE
A majority of the senior managers of small firms are optimistic about the business environment (76%). They are also positive with their firm’s business prospects (71%), growth (52%) and estimated revenue (95%) over the next 12 months.

Some of the key challenges encountered by small firms include the following: increasing cost of doing business; global economic uncertainty that impact their exports; and increasing competition in the markets they operate in.

Many small firms recognize that digital technology is important to assist them to develop their businesses. Among the key technologies that are important for these small firms include cyber-security system, mobile technology for effective customer management and artificial intelligent systems. The latter technology is critical for firms that automate their production processes to overcome shortages of skilled personnel and improve operational efficiency.
Senior managers are of the view that the top three capabilities, small firms must cultivate within the organisation to remain competitive are: care of the environment and social responsibility; high competitive, focused and highly efficient organisation; and good governance, transparency and accountability. The respondents also state that the top three factors that contributes to innovation in the organisation are: knowing customers’ problems through customer relationship and feedback; quality control and continuous improvement methods; and creativity training for staff.

Small firms were also asked on their preparedness in the adoption of Industry 4.0 technology. Approximately, 29% informed that they have fully implemented this technology. Another 29% stated that they have partially implemented it and 24% stated that they are taking steps to implement it. Around 10% found the technology not applicable to their businesses; and another 10% are not ready for Industry 4.0 technology. Key factors that hinder the adoption of Industry 4.0 initiatives are: lack of adequate training and capability for Industry 4.0; lack of strategic planning and coordination by government agencies; and lack of clarity in ways to incorporate Industry 4.0 in the current business models.
On talent development, small firms require a workforce that has strong leadership skills, teamwork culture and critical thinking. Small firms are keen to work closely with universities to enhance graduate employability and align their R&D activities to meet the needs of small firms in the respective industries.

Key strategies in which small firms plan to invest their resources over the next 12 months include the following:

- seeking new markets;
- enhancing business process improvements; and
- adopting effective cost management strategies.

These investments will enable small firms to focus on improving their operational efficiency and market growth strategies.
A majority of the senior managers of medium sized firms are optimistic about the business environment (73%). They are also positive about their firm’s business prospects (76%) and estimated revenue (69%) over the next 12 months. However, only 48% of the firms were optimistic that they expect their revenue to increase over the next 12 months.

Key challenges encountered by medium sized firms include the following: increasing cost of doing business; weakening of the Ringgit and increasing competition in the markets they operate in.

Medium size firms also informed that they used digital technology to expand their market reach and enhance their product richness and service quality for customers. The key digital technologies used by these firms include mobile technology for effective customer management; digital payment technologies; and socially enabled business processes.

Key factors that hinder the adoption of Industry 4.0 among these medium size firms include the following: lack of training and capability development programs; financial constraints; and lack of industrial planning and direction by industry bodies.
Senior managers from the medium sized firms are of the view that CEOs should cultivate the top three capabilities in the firms: good governance, transparent policies and accountability; ethical business practices; operating a highly competitive, focused and efficient organisation. The respondents also state that key contributors for innovation are: knowing customers’ problems and need through customer relationship feedback systems, market research and the use of digital technology.

On preparedness of medium size firms for Industry 4.0 technology, around 30% are taking steps to implement this technology; 23% have partially implemented it; 13% have fully implemented; 14% stated that it is not applicable to their businesses; 11% were not ready for this technology; and 9% don’t know about Industry 4.0 technology.

In terms of skills development for the industry, the medium sized firms will require talent that possess strong critical thinking skills, confident in undertaking their tasks and are able to work in teams for the mutual benefit of the firms. To ensure there is adequate supply of talent for the industry, the firms are willing to work in partnership with universities to develop training programs that meet the needs of a fast-changing industry. Medium size firms are also keen to establish strong R&D collaborations with universities, which will enable them to enhance improve their innovative capacity and competitiveness.
FUTURE STRATEGIES

Among the key strategies that medium sized firms will invest resources over the next 12 months are:

- cost management;
- seeking new market opportunities; and,
- building their brand.

These investments will enable firms to focus on improving their:

- operational efficiency;
- pursue targeted new growth strategies, both introducing products or services and penetrating new markets; and investing in new innovative and technology.

A focused strategic approach will enable these firms to differentiate themselves from the competition and build their own brands to gain traction in Malaysia and in the Asia Pacific region.
Senior managers of large firms take a more pessimistic view of the business environment compared to their counterparts in medium and small firms. The percentage that are optimistic of the business environment is only 49%; while 54% are confident about the prospect of the company over the next 12 months. Further, only 35% of the firms are of the view that there will be more opportunities over the next 12 months. None of the large firms expect their revenue to increase over the next 12 months.

Key challenges encountered by firms include the following: weakening of the Ringgit; increasing cost of doing business; and, global economic uncertainty leading to damped demand for goods and services.

Key factors that hinder the adoption of Industry 4.0 among the large firms are: financial constraints; lack of industrial planning and direction by industry bodies; and weak infrastructure and support systems.
For large firms, to remain competitive, CEOs need to cultivate the following capabilities in the firm: good governance, transparency and accountability; ability to lead a highly competitive, focused and efficient organisation; ability to adapt to change and be agile and be ready for global shocks and uncertainties. The senior managers stated that the top contributors for innovation are the use of customer centric methods (market research and digital technology) to ensure firms meet the needs of their clientele.

For many large firms, digital technology is critical for enhancing productivity and economic competitiveness. These firms informed that they have invested in the following technologies: mobile technology for customer engagement; digital payment systems; and internet of things.

Over the last 12 months there have been major initiatives to encourage large firms to implement Industry 4.0 (I4.0) technology. Around 23% have begun taking steps to implement I4.0 technology; 21% are in partial implementation stage; and 8% have fully implement I4.0 in their firms. Around 18% of the large firms stated that I4.0 is not applicable to their business operations; 17% are not ready; and 13% don’t know about this technology.

One of the key areas that is critical for the development of these large firms is access to skilled workforce. Senior managers of these firms state that the talent needed will require the following graduate attributes: personal confidence; self-motivation and willingness to take the initiative to lead new developments; and critical thinking skills. To meet the manpower needs of the industry, large firms are keen to collaborate with universities in developing suitable training programs for the industry and to keep abreast with the technological developments; enhance graduate employability and align the R&D initiatives of the universities with that of the industry.
Among the strategies that large firms plan to invest in over the next 12 months are:

- managing their costs;
- seek new markets – both new products and services; and
- develop new customer base in the region and globally.

They also plan to undertake business process improvement and new product development. These investments will enable large firms to focus on their market growth plans and improve operational efficiency and innovative capability.

All of which, will enable large firms to enhance their brand and market positioning in Malaysia and the Asia-Pacific region.
DISAGGREGATE ANALYSIS: FIRMS IN KEY SECTORS OF THE ECONOMY

- AGRICULTURAL INDUSTRY
- BUSINESS SERVICES & RELATED INDUSTRY
- CONSTRUCTION AND REAL ESTATE INDUSTRY
- EDUCATION INDUSTRY
- FINANCIAL SERVICES INDUSTRY
- HEALTHCARE INDUSTRY
- HOSPITALITY INDUSTRY
- IT INDUSTRY
- MANUFACTURING AND RELATED INDUSTRY
- RETAIL INDUSTRY
- TRANSPORTATION INDUSTRY
- WHOLESALE INDUSTRY
AGRICULTURAL INDUSTRY

OPTIMISM

Business environment
Change for the better
54%

Company prospect
Confident
69%

Company growth
More Opportunities
23%

Estimated Revenue Next Year
Higher
54%

CHALLENGES

PRESSING ISSUES

Political uncertainties
48%

Weakening of the Ringgit
42%

Global economy uncertainty
40%

INDUSTRY 4.0 IMPLEMENTATION

Lack of industrial planning coordination and direction by industry bodies
46%

Financial constraints
31%

The right talent
31%

KEY ENABLERS

TECHNOLOGIES

Digital payment technologies
37%

Data mining and analysis
32%

Internet of Things
25%

CEO SKILLS AND CAPABILITIES

Ethical business
38%

The business environment through strategic foresight and thinking
38%

Good governance, transparency and accountability
32%

CONTRIBUTORS TO INNOVATION

Understanding customer needs through market research
31%

Structured process to select good ideas and speed them to market commercialization
26%

Access to the appropriate infrastructure, such as specialist research labs and IT systems
22%

INDUSTRY 4.0 STATUS

Fully implemented
8%

Partial implementation
31%

Starting to take steps to implement
15%

Not ready
8%

Don't know
15%

Not applicable
23%
FOCUS AREAS

- Innovation, R&D: 38%
- Growth: 31%
- Operational efficiencies: 15%
- Branding and differentiation: 15%

MALAYSIAN UNIVERSITIES

- Aligning their R&D activities with the needs of business: 35%
- Collaborate with industry: 35%
- Fostering strategic partnership with government to address national issues: 34%

RESOURCE ALLOCATION

- Seeking new markets: 54%
- Cost management: 38%
- Customer acquisition: 23%

UNIVERSITY GRADUATES

- Critical thinking skills: 49%
- Teamwork capability: 45%
- Initiative and self-motivation: 38%
BUSINESS SERVICES & RELATED INDUSTRY

OPTIMISM

Company’s Growth
More Opportunities
42%

Company’s Prospect
Confident
76%

Business Environment
Change for the better
63%

Estimated Revenue Next Year
Higher
53%

CHALLENGES

PRESSING ISSUES

Cost of doing business
44%

Weakening of Ringgit
32%

Global economy uncertainty
29%

INDUSTRY 4.0 IMPLEMENTATION

Lack of training and capabilities program
37%

Financial constraints
34%

Unclear on how to implement within the organization
34%

KEY ENABLERS

TECHNOLOGIES

Digital payment technologies
37%

Data mining and analysis
32%

Internet of things
25%

CEO SKILLS AND CAPABILITIES

Ethical Business
38%

Understanding customer needs through market research
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Access to the appropriate infrastructure, such as specialist research labs and IT systems
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CONTRIBUTORS TO INNOVATION

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32%

Understanding customer needs through market research
31%

Structured processes to select good ideas and speed them to market commercialization
26%

Access to the appropriate infrastructure, such as specialist research labs and IT systems
22%

INDUSTRY 4.0 STATUS

Partial implementation
31%

Not applicable
23%

Don’t know
15%

Stating to take steps to implement
15%

Fully implemented
3%

Not ready
3%
### FOCUS AREAS

- Innovation, R&D: 33%
- Growth: 22%
- Operational efficiencies: 16%
- Branding and differentiation: 29%

### MALAYSIAN UNIVERSITIES

- Aligning their R&D activities with the needs of business: 35%
- Collaborate with industry: 35%
- Fostering strategic partnerships with government to address national issues: 34%

### RESOURCE ALLOCATION

- Seeking new markets: 54%
- Cost management: 38%
- Customer acquisition: 23%

### UNIVERSITY GRADUATES

- Initiative and self-motivation: 38%
- Teamwork capability: 45%
- Critical thinking skills: 49%
CONSTRUCTION AND REAL ESTATE INDUSTRY

OPTIMISM

- Business environment: 50% 
  - Change for the better

- Company prospect: 64% 
  - Confident

- Company growth: 53% 
  - More Opportunities

- Estimated Revenue Next Year: 36% 
  - Higher

CHALLENGES

PRESSING ISSUES

- Corruption: 34%
- Cost of doing business: 32%
- Weakening of Ringgit: 28%

INDUSTRY 4.0 IMPLEMENTATION

- Lack of training and capabilities program: 42%
- Lack of industrial planning coordination and direction by industry bodies: 36%
- Unclear on how to implement within the organization: 33%

KEY ENABLERS

TECHNOLOGIES

- Mobile technologies for customer engagement: 34%
- Digital payment technologies: 33%
- Cyber security: 32%

CEO SKILLS AND CAPABILITIES

- Good governance, transparency and accountability: 42%
- Ethical business: 31%
- Highly competitive, focused and highly efficient organization: 31%

CONTRIBUTORS TO INNOVATION

- Possession of adequate financial resources to drive innovation: 28%
- Knowing customers’ problem through customer relationships and feedback: 27%
- Quality control and continuous improvement methods: 26%

INDUSTRY 4.0 STATUS

- Fully implemented: 11%
- Partial implementation: 31%
- Starting to take steps to implement: 39%
- Not ready: 8%
- Don’t know: 8%
- Not applicable: 3%
**FOCUS AREAS**

- **Innovation, R&D**: 42%
- **Growth**: 19%
- **Operational efficiencies**: 25%
- **Branding and differentiation**: 14%

**MALAYSIAN UNIVERSITIES**

- Collaborate with industry: 37%
- Aligning their R&D activities with the needs of business: 31%
- Developing Industry 4.0 capabilities among graduates: 30%

**RESOURCE ALLOCATION**

- Seeking new markets: 42%
- Cost management: 33%
- Business process improvement: 28%

**UNIVERSITY GRADUATES**

- Initiative and self-motivation: 37%
- ICT (Computing and technology) know-how: 32%
- Critical thinking skills: 31%
EDUCATION INDUSTRY

OPTIMISM

- Business environment: Change for the better (64%)
- Company prospect: Confident (67%)
- Company growth: More Opportunities (42%)
- Estimated Revenue Next Year: Higher (53%)

CHALLENGES

PRESSING ISSUES
- Weakening of Ringgit (34%)
- Cost of doing business (28%)
- Political uncertainties (28%)

INDUSTRY 4.0 IMPLEMENTATION
- Unclear on how to implement within the organization (36%)
- Weak technological infrastructure and support systems (33%)
- Financial constraints (31%)

KEY ENABLERS

TECHNOLOGIES
- Cloud computing (36%)
- Mobile technologies for customer engagement (35%)
- Internet of Things (33%)

CEO SKILLS AND CAPABILITIES
- Good governance, transparency and accountability (48%)
- Highly competitive, focused and highly efficient organization (35%)
- Personal qualities of honesty and integrity in the leadership team (30%)

CONTRIBUTORS TO INNOVATION
- Knowing customers' problems through customer relationships and feedback (24%)
- Leadership vision and drive to innovate (23%)
- Excellence mentoring and supervisor-employee relationships (21%)

INDUSTRY 4.0 STATUS
- Fully implemented (22%)
- Partial implementation (16%)
- Starting to take steps to implement (18%)
- Not ready (22%)
- Don't know (9%)
- Not applicable (13%)
FOCUS AREAS

- Innovation, R&D: 33%
- Growth: 29%
- Operational efficiencies: 22%
- Branding and differentiation: 16%

Focus Areas:
- Innovation, R&D
- Growth
- Operational efficiencies
- Branding and differentiation

MALAYSIAN UNIVERSITIES

- Collaborate with industry: 33%
- Enhancing graduates' employability: 31%
- Aligning their R&D activities with the needs of business: 30%

RESOURCES ALLOCATION

- Cost management: 38%
- Staff training: 36%
- Human resource management: 30%

UNIVERSITY GRADUATES

- Critical thinking skills: 45%
- Initiative and self-motivation: 35%
- English proficiency (written and spoken): 31%
FINANCIAL SERVICES INDUSTRY

OPTIMISM

- Business environment: Change for the better, 73%
- Company prospect: Confident, 77%
- Company growth: More Opportunities, 50%
- Estimated Revenue Next Year: Higher, 82%

CHALLENGES

- Cost of doing business, 35%
- Global economy uncertainty, 31%
- Political uncertainties, 30%

PRESSING ISSUES

- Lack of industrial planning coordination and direction by industry bodies, 41%
- Financial constraints, 32%
- Lack of training and capabilities program, 32%

INDUSTRY 4.0 IMPLEMENTATION

KEY ENABLERS

TECHNOLOGIES

- Digital payment technologies, 52%
- Cyber security, 34%
- Mobile technologies for customer engagement, 32%

CEO SKILLS AND CAPABILITIES

- Ability to deal with change by creating an agile and adaptive... 41%
- Good governance, transparency and accountability, 38%
- Personal qualities of honestly and integrity in the leadership team, 26%

CONTRIBUTORS TO INNOVATION

- Use of digital technology and media to build relationships with end customers for improved..., 35%
- Knowing customers’ problems through customer relationships and feedback, 31%
- Access to the appropriate infrastructure, such as specialist research labs and IT systems, 28%

INDUSTRY 4.0 STATUS

- Fully implemented, 18%
- Partial implementation, 14%
- Starting to take steps to implement, 36%
- Not ready, 9%
- Don’t know, 18%
- Not applicable, 5%
### Focus Areas

- **Innovation, R&D**: 32%
- **Growth**: 18%
- **Operational efficiencies**: 27%
- **Branding and differentiation**: 23%

### Malaysian Universities

- **Enhancing graduates employability**: 35%
- **Collaborate with industry**: 34%
- **Developing Industry 4.0 capabilities among firms**: 34%

### Resource Allocation

- **Information and computer technology**: 41%
- **Financial and tax management**: 27%
- **Mobile technology**: 27%

### University Graduates

- **Critical thinking skills**: 54%
- **ICT (Computer and technology) know-how**: 43%
- **Personal confidence**: 38%
HEALTHCARE INDUSTRY

OPTIMISM

- Business environment: Change for the better
  - 71%
- Company prospect: Confident
  - 67%
- Company growth: More Opportunities
  - 46%
- Estimated Revenue Next Year: Higher
  - 33%

CHALLENGES

PRESSING ISSUES

- Global economy uncertainty
  - 43%
- Weakening of the Ringgit
  - 41%
- Cost of doing business
  - 40%

INDUSTRY 4.0 IMPLEMENTATION

- Lack of industrial planning coordination and direction by industry bodies
  - 46%
- Financial constraints
  - 42%
- Unclear on how to implement within the organization
  - 29%

KEY ENABLERS

TECHNOLOGIES

- Digital payment technologies
  - 43%
- Mobile technologies for customer engagement
  - 42%
- Internet of Things
  - 33%

CEO SKILLS AND CAPABILITIES

- Highly competitive, focused and highly efficient organization
  - 42%
- Good governance, transparency and accountability
  - 31%
- Ability to deal with change by creating an agile and adaptive organization
  - 31%

CONTRIBUTORS TO INNOVATION

- Knowing customers' problems through customer relationships and feedback
  - 47%
- Quality control and continuous improvement methods
  - 30%
- Use of digital technology and media to build relationships with end customers for improved understanding of consumer needs
  - 28%

INDUSTRY 4.0 STATUS

- Fully implemented
  - 13%
- Partial implementation
  - 8%
- Starting to take steps to implement
  - 38%
- Not ready
  - 4%
- Don't know
  - 13%
- Not applicable
  - 25%
FOCUS AREAS

- Innovation, R&D: 33%
- Growth: 29%
- Operational efficiencies: 21%
- Branding and differentiation: 17%

MALAYSIAN UNIVERSITIES

- Developing Industry 4.0 capabilities among graduates: 36%
- Develop training programs for industry: 35%
- Collaborate with industry: 33%

RESOURCE ALLOCATION

- Marketing and branding: 42%
- Business process improvement: 38%
- Cost management: 33%

UNIVERSITY GRADUATES

- Critical thinking skills: 50%
- Personal confidence: 44%
- Leadership skills: 31%
**HOSPITALITY INDUSTRY**

### OPTIMISM

- **Business environment**
  - Change for the better: 79%
- **Company prospect**
  - Confident: 77%
- **Company growth**
  - More Opportunities: 44%
- **Estimated Revenue Next Year**
  - Higher: 56%

### CHALLENGES

#### PRESSING ISSUES

- Cost of doing business: 58%
- Weakening of Ringgit: 35%
- Increasing competition: 31%

#### INDUSTRY 4.0 IMPLEMENTATION

- Lack of industrial planning coordination and direction by industry bodies: 31%
- Lack of training and capabilities program: 29%
- Financial constraints: 27%

### KEY ENABLERS

#### TECHNOLOGIES

- Mobile technologies for customer engagement: 44%
- Socially enabled business processes: 30%
- Digital payment technologies: 27%

#### CEO SKILLS AND CAPABILITIES

- Good governance, transparency and accountability: 44%
- Ability to deal with change by creating an agile and adaptive...: 34%
- Personal qualities of honestly and integrity in the leadership team: 33%

#### CONTRIBUTORS TO INNOVATION

- Knowing customers’ problems through customer relationships and feedback: 32%
- Quality control and continuous improvement methods: 30%
- Possession of adequate financial resources to drive innovation: 28%

#### INDUSTRY 4.0 STATUS

- Fully implemented: 13%
- Partial implementation: 21%
- Starting to take steps to implement: 27%
- Not ready: 4%
- Don’t know: 6%
- Not applicable: 29%
Innovation, R&D: 38%
Growth: 29%
Operational efficiencies: 17%
Branding and differentiation: 17%

**FOCUS AREAS**

**MALAYSIAN UNIVERSITIES**
- Developing Industry 4.0 capabilities among graduates: 33%
- Developing global R&D network: 32%
- Develop training programs for industry: 30%

**RESOURCE ALLOCATION**
- Cost management: 44%
- Business process improvement: 31%
- Seeking new markets: 31%

**UNIVERSITY GRADUATES**
- Personal confidence: 43%
- Critical thinking skills: 36%
- Entrepreneurial flair: 36%
**IT INDUSTRY**

**OPTIMISM**

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business environment - Change for the better</td>
<td>70%</td>
</tr>
<tr>
<td>Company prospect - Confident</td>
<td>61%</td>
</tr>
<tr>
<td>Company growth - More Opportunities</td>
<td>48%</td>
</tr>
<tr>
<td>Estimated Revenue Next Year - Higher</td>
<td>57%</td>
</tr>
</tbody>
</table>

**CHALLENGES**

**PRESSING ISSUES**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weakening of Ringgit</td>
<td>33%</td>
</tr>
<tr>
<td>Cost of doing business</td>
<td>29%</td>
</tr>
<tr>
<td>Increasing competition</td>
<td>27%</td>
</tr>
</tbody>
</table>

**INDUSTRY 4.0 IMPLEMENTATION**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial constraints</td>
<td>43%</td>
</tr>
<tr>
<td>Weak technological infrastructure and support systems</td>
<td>35%</td>
</tr>
<tr>
<td>Lack of industrial planning coordination and direction by industry bodies</td>
<td>30%</td>
</tr>
</tbody>
</table>

**KEY ENABLERS**

**TECHNOLOGIES**

<table>
<thead>
<tr>
<th>Technology</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital payment technologies</td>
<td>46%</td>
</tr>
<tr>
<td>Mobile technologies for customer engagement</td>
<td>41%</td>
</tr>
<tr>
<td>Cyber security</td>
<td>37%</td>
</tr>
</tbody>
</table>

**CEO SKILLS AND CAPABILITIES**

<table>
<thead>
<tr>
<th>Skill/Capability</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to deal with change by creating an agile and adaptive…</td>
<td>36%</td>
</tr>
<tr>
<td>Good governance, transparency and accountability</td>
<td>31%</td>
</tr>
<tr>
<td>Care of the environment and social responsibility</td>
<td>30%</td>
</tr>
</tbody>
</table>

**CONTRIBUTORS TO INNOVATION**

<table>
<thead>
<tr>
<th>Contribution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding customer needs through market research</td>
<td>24%</td>
</tr>
<tr>
<td>Depth of specialist knowledge and skills of people</td>
<td>23%</td>
</tr>
<tr>
<td>Access to the appropriate infrastructure, such as specialist research labs and IT systems</td>
<td>21%</td>
</tr>
</tbody>
</table>

**INDUSTRY 4.0 STATUS**

<table>
<thead>
<tr>
<th>Status</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully implemented</td>
<td>17%</td>
</tr>
<tr>
<td>Partial implementation</td>
<td>35%</td>
</tr>
<tr>
<td>Starting to take steps to implement</td>
<td>22%</td>
</tr>
<tr>
<td>Not ready</td>
<td>9%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>9%</td>
</tr>
<tr>
<td>Not applicable</td>
<td>9%</td>
</tr>
</tbody>
</table>
FOCUS AREAS

- Innovation, R&D: 35%
- Growth: 22%
- Operational efficiencies: 13%
- Branding and differentiation: 30%

MALAYSIAN UNIVERSITIES

- Enhancing graduates' employability: 37%
- Collaborate with industry: 36%
- Aligning their R&D activities with the needs of business: 31%

RESOURCE ALLOCATION

- New product development: 48%
- Seeking new markets: 39%
- Information and computer technology: 35%

UNIVERSITY GRADUATES

- Critical thinking skills: 44%
- Up to date industry relevant curriculum in educational institutions: 42%
- ICT (Computing and technology) know-how: 38%
MANUFACTURING AND RELATED INDUSTRY

OPTIMISM

Business environment: Change for the better - 68%
Company prospect: Confident - 73%
Company growth: More Opportunities - 43%
Estimated Revenue Next Year: Higher - 66%

CHALLENGES

PRESSING ISSUES

Global economy uncertainty - 39%
Cost of doing business - 35%
Political uncertainties - 33%

INDUSTRY 4.0 IMPLEMENTATION

Lack of training and capabilities program - 45%
Financial constraints - 39%
Weak technological infrastructure and support systems - 32%

KEY ENABLERS

TECHNOLOGIES

Cyber security - 40%
Mobile technologies for customer engagement - 37%
Internet of Things - 34%

CEO SKILLS AND CAPABILITIES

Highly competitive, focused and highly efficient organization - 39%
Good governance, transparency and accountability - 31%
Care of the environment and social responsibility - 30%

CONTRIBUTORS TO INNOVATION

Knowing customers' problems through customer relationships and feedback - 30%
Quality control and continuous improvement methods - 30%
Leadership vision and drive to innovate - 29%

INDUSTRY 4.0 STATUS

Fully implemented - 23%
Partial implementation - 30%
Starting to take steps to implement - 20%
Not ready - 18%
Don't know - 0%
Not applicable - 9%
FOCUS AREAS

- Innovation, R&D: 36%
- Growth: 27%
- Operational efficiencies: 27%
- Branding and differentiation: 9%

MALAYSIAN UNIVERSITIES

- Collaborate with industry: 34%
- Aligning their R&D activities with the needs of business: 33%
- Enhancing graduates' employability: 33%

RESOURCE ALLOCATION

- Seeking new markets: 41%
- Business process improvement: 30%
- Cost management: 30%

UNIVERSITY GRADUATES

- Critical thinking skills: 38%
- Leadership skills: 37%
- Teamwork capability: 36%
RETAIL INDUSTRY

OPTIMISM

- Business environment: Change for the better, 62%
- Company prospect: Confident, 64%
- Company growth: More Opportunities, 40%
- Estimated Revenue Next Year: Higher, 47%

CHALLENGES

PRESSING ISSUES
- Cost of doing business: 34%
- Weakening of Ringgit: 33%
- Political uncertainties: 31%

INDUSTRY 4.0 IMPLEMENTATION
- Financial constraints: 33%
- Lack of industrial planning coordination and direction by industry bodies: 33%
- Weak technological infrastructure and support systems: 31%

KEY ENABLERS

TECHNOLOGIES
- Mobile technologies for customer engagement: 44%
- Digital payment technologies: 41%
- Internet of Things: 34%

CEO SKILLS AND CAPABILITIES
- Good governance, transparency and accountability: 41%
- Personal qualities of honestly and integrity in the leadership team: 36%
- Ethical business: 34%

CONTRIBUTORS TO INNOVATION
- Knowing customers’ problems through customer relationships and feedback: 32%
- Understanding customer needs through market research: 31%
- Quality control and continuous improvement methods: 29%

INDUSTRY 4.0 STATUS
- Fully implemented: 7%
- Partial implementation: 22%
- Starting to take steps to implement: 31%
- Not ready: 18%
- Don’t know: 11%
- Not applicable: 11%

Business Sentiment 2018 | 69
### FOCUS AREAS

- Innovation, R&D: 24%
- Growth: 18%
- Operational efficiencies: 24%
- Branding and differentiation: 33%

### MALAYSIAN UNIVERSITIES

- Collaborate with industry: 37%
- Commercializing R&D activities: 34%
- Fostering strategic partnerships with government to address national issues: 28%

### RESOURCE ALLOCATION

- Cost management: 47%
- Marketing and branding: 33%
- Seeking new markets: 33%

### UNIVERSITY GRADUATES

- Critical thinking skills: 39%
- Personal confidence: 34%
- Initiative and self-motivation: 33%
TRANSPORTATION INDUSTRY

**OPTIMISM**

- Business environment: Change for the better (73%)
- Company prospect: Confident (87%)
- Company growth: More Opportunities (47%)
- Estimated Revenue Next Year: Higher (33%)

**CHALLENGES**

- Increasing competition: 36%
- Corruption: 32%
- Weakening of Ringgit: 32%

**PRESSING ISSUES**

- Weak technological infrastructure and support systems: 40%
- Disrupting current operations: 27%
- Lack of industrial planning coordination and direction by industry bodies: 27%

**KEY ENABLERS**

**TECHNOLOGIES**

- Mobile technologies for customer engagement: 51%
- Cyber security: 37%
- Digital payment technologies: 37%

**CEO SKILLS AND CAPABILITIES**

- Ethical business: 53%
- Knowledge and experience with digital technology: 44%
- Good governance, transparency and accountability: 43%

**CONTRIBUTORS TO INNOVATION**

- Use of digital technology and media to build relationships with end customers for improved understanding of consumer needs: 45%
- Understanding customer needs through market research: 41%
- Possession of adequate financial resources to drive innovation: 25%

**INDUSTRY 4.0 STATUS**

- Fully implemented: 13%
- Partial implementation: 33%
- Starting to take steps to implement: 13%
- Not ready: 7%
- Don’t know: 13%
- Not applicable: 20%
FOCUS AREAS

- Innovation, R&D: 53%
- Growth: 33%
- Operational efficiencies: 13%
- Branding and differentiation: 33%

MALAYSIAN UNIVERSITIES

- Collaborate with industry R&D labs: 37%
- Aligning their R&D activities with the needs of business: 36%
- Assisting firms to implement Industry 4.0: 33%

RESOURCE ALLOCATION

- Cost management: 47%
- Business process improvement: 33%
- Customer acquisition: 33%

UNIVERSITY GRADUATES

- Personal confidence: 44%
- Critical thinking skills: 39%
- Up to date industry relevant curriculum in educational institutions: 31%
WHOLESALE INDUSTRY

**OPTIMISM**

- Business environment: Change for the better, 94%
- Company prospect: Confident, 88%
- Company growth: More Opportunities, 59%
- Estimated Revenue Next Year: Higher, 71%

**CHALLENGES**

- Cost of doing business, 48%
- Weakening of Ringgit, 46%
- Global economy uncertainty, 29%

**PRESSING ISSUES**

- Lack of training and capabilities program, 47%
- Financial constraints, 29%
- Lack of industrial planning coordination and direction by industry bodies, 24%

**KEY ENABLERS**

**TECHNOLOGIES**

- Digital payment technologies, 59%
- Mobile technologies for customer engagement, 33%
- Socially enabled business processes, 28%

**CEO SKILLS AND CAPABILITIES**

- Personal qualities of honesty and integrity in the leadership team, 40%
- Proactively managing the business environment through strategic foresight and thinking, 38%
- Good governance, transparency and accountability, 36%

**CONTRIBUTORS TO INNOVATION**

- Understanding customer needs through market research, 40%
- Knowing customers’ problems through customer relationships and feedback, 36%
- Quality control and continuous improvement methods, 35%

**INDUSTRY 4.0 STATUS**

- Fully implemented, 6%
- Partial implementation, 18%
- Starting to take steps to implement, 29%
- Not ready, 12%
- Don’t know, 18%
- Not applicable, 18%
FOCUS AREAS

- Innovation, R&D: 29%
- Growth: 31%
- Operational efficiencies: 37%
- Branding and differentiation: 12%

MALAYSIAN UNIVERSITIES

- Develop training programs for industry: 45%
- Aligning their R&D activities with the needs of business: 35%
- Collaborate with industry R&D labs: 33%

RESOURCE ALLOCATION

- Cost management: 41%
- Developing business relationships: 41%
- Seeking new markets: 41%

UNIVERSITY GRADUATES

- Teamwork capability: 46%
- Leadership skills: 40%
- Personal confidence: 36%
RESEARCH METHODOLOGY

This stage employs scoping and content analysis involving sourcing secondary data from press releases, media reports and commentaries from other stakeholders. While the themes identified were neither comprehensive nor definitive; they however, assisted the researchers in identifying relevant, contemporary and contextual themes. These themes are captured in the Appendix.

PHASE 2  FACE-TO-FACE INTERVIEWS

This stage involves face-to-face interviews with industry captains from diverse industry groupings. From the interviews, an inductive interpretative analysis was undertaken to obtain key insights on the business environment and strategies undertaken by firms in their respective industries to navigate the business environment. These interviews provided the basis for the development of the questionnaire.

PHASE 3  ONLINE SURVEY

An online survey was undertaken using a questionnaire designed by the research team. The questionnaire was administered by GreenZebras (a market research consultancy company). Respondents were chosen from a wide range of industries, covering top level employees. The respondents include managers, Chief Executive Officers/Presidents, Chief Financial Officers, Chief Operation Officers and Managing Directors/Managing Partners.

The questionnaires were administered in both English and Bahasa Malaysia. Items in the questions were randomized (i.e., items did not appear in the same sequence) to minimize response bias.

PHASE 4  VALIDATION OF SURVEY RESULTS

The findings of the survey results were validated with industry captains via roundtable discussions. The responses from these industry captains were very valuable in providing the context and insights to the various trends and patterns in the data.
## BUSINESSES IN 2018

### CUSTOMER SENTIMENT
- Growing global demand
- Increase in domestic consumption

### ECONOMY
- Weaker Ringgit
- Increasing cost of doing business
- Economic recovery in developed countries
- Digital economy and Industry 4.0
- Increase in foreign direct investment
- Elections (political uncertainties) leading to economic uncertainties

### INTERNATIONAL TRADE
- Global Trade War
- ASEAN economic cooperation and free trade
- Strong presence of China in Malaysia and ASEAN region

### NATURE AND ENVIRONMENT
- Constraints on non-renewable energy and resource
- Policies to promote renewable energy are patchy and not effective
- Global warming and regional haze

### PUBLIC POLICY
- Mega Infrastructure Projects
- Increasing Deficit and National Debt
- Large migrant work force
- Machines replacing workers – massive unemployment
- Inclusive Economic Development

### GOVERNANCE
- Breaches in corporate and public-sector governances
- Independence of governance institutions from the executive
- Lack of transparency in government procurement

### TALENT
- Strong “triple-helix”
- Stock of creative talent
- Graduate employability – industry relevant skills
- ICT and Industry 4.0 savvy workforce
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Monash University Malaysia

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Monash Malaysia R&D Sdn Bhd

and

CPA Australia

August 2018

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