



Both industry and the government need to deepen collaborations to ensure SMEs benefit from digitalisation in Singapore's new economy.
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Budget 2019: Time to boost digitalisation

Small firms are still slow to digitalise despite numerous business grants. The upcoming Budget should help more companies to prepare for Industry 4.0. **BY FAIZAL BIN YAHYA AND SHAZLY ZAIN**

THE 2016 Budget announcement was a watershed moment for Singapore's businesses. This was the first time that the Budget introduced the concept of digitalisation in Singapore's private sector. E-payment systems, data analytics and using digital software to improve productivity in the workplace and increase revenues are all examples of this digitalisation process.

Subsequent Budgets reinforced the importance of digitalisation for businesses. Notably, the announcement of the Industry Transformation Maps (ITMs) and the Industry Digital Plans (IDPs) provided a roadmap to digitalise the various industries and businesses involved. Grants and online platforms were also developed following the Budget announcements to facilitate the adoption of digital solutions among Singaporean businesses.

DIGITALISATION EFFORTS IN PAST BUDGETS

Budget 2016 was unique as it introduced the notion of Industrialisation 4.0 or Industry 4.0. The concept is similar to Germany's Industrie 4.0 where technological advancements, especially in robotics, automation, artificial intelligence (AI) and ICT, are disrupting business models across all sectors.

With concerns over manpower growth and an ageing population, it was pivotal that considerations be made to increase productivity of businesses via digitalisation by increasing efficiency and reducing costs.

In addition, the timely introduction of the ITMs in Budget 2016 provided pathways for the digitalisation process of Singapore's businesses covered by the ITM in the 23 sectors and the package to transform industry costs S\$4.5 billion.

Budget 2017 meanwhile built upon 2016's foundations and sought to deepen Singapore's innovative capabilities. The SMEs Go Digital Programme was introduced to help SMEs build digital capabilities.

A*Star assumed a leading role in helping businesses to innovate, scale up and internationalise. In addition, the Operation and Technology Road-mapping initiative was established to assist local firms develop strategic technology roadmaps that are aligned to their business goals and strategies.

Other efforts included the Tech Access Initiative which support companies in the use of advanced machine tools for prototyping and testing by providing businesses access to a base set of specialised equipment and training.

Budget 2018 created greater impetus for businesses to digitalise by initiating the Open Innovation Platform (OIP) which aimed to facilitate innovation and narrow the gap between research and commercialisation of intellectual property (IP) such as industrial patents.

By matching businesses and solution providers across sectors, the OIP aims to facilitate co-creation of innovative digital products by both businesses and solution providers. The release of the Aviation (2017) and Maritime (2018) ITMs also provided businesses in these two industries a roadmap to plot their digitalisation journeys.

SLOW ADOPTION OF DIGITAL SOLUTIONS

However, despite the numerous financial grants provided and the emphasis on digitalisation, the rate of adoption of digital solutions remains worrisome, especially among small companies.

In the Association of Small and Medium Enterprises (Asme)'s survey last year, only 57 per cent of SMEs polled are aware of "digital transformation" solutions and only 56 per cent of SMEs have strategies in place for digital transformation.

In a similar survey by the Singapore Chinese Chamber of Commerce and Industry (SCCCI) in 2018, 36.1 per cent of SMEs surveyed have not started to digitalise their businesses.

Larger businesses do not fare any better. In a recent survey by the Singapore Business Federation (SBF), only 36 per cent of businesses have consulted the ITMs to plot their digitalisation plans. With only 12 per cent of businesses investing in better training for their staff in 2018, a key concern would be the inability for employees to use the technologies acquired by businesses.

However, when initiating their digitalisation strategies, large companies usually have more resources including funding compared to SMEs to undertake digitalisation of their respective business models. Some of the digital solutions costs hundreds of thousands of dollars and despite subsidies from the government, will still

comprise a large portion of any SME's operating budget. These costs will also mount when newer digital solutions have to be purchased as upgrades of older solutions and additional costs have to be incurred to integrate all these digital solutions into their business model which is the ultimate purpose of business transformation.

WHAT CAN BUDGET 2019 OFFER?

Many countries have begun adapting their economies to Industry 4.0 and Singapore must take full advantage of its initial head start or lose out its "first mover" advantage.

However, both industry and the government need to deepen their collaborations to ensure the resources available are channelled into programmes that companies and especially SMEs can access easily to promote effective digitalisation in Singapore's economy.

In a digital economy, business tools such as market intelligence and data analytics should also be considered as critical technologies which businesses should leverage on.

Quick adaptation of these advanced technologies could provide Singaporean businesses the means to thrive in the Industry 4.0 paradigm. This would mean that access to grants and information regarding these new technologies need to be prompt. Enhancing the usage of the Business Grant Portal (BGP) and SME Portal would be imperative to quicken the adoption of digital solutions by SMEs.

R&D, particularly basic research, remains pivotal in advancing the technological capacity of industries in Singapore.

One possibility to promote R&D in potential growth sectors would be to provide a framework and funding for partnerships between businesses and Public Research Institutions (PRIs). These partnerships could facilitate the development of newer products and services or new ways to streamline business operations or provide greater conveniences to employees within the company.

With these potential new collaborations and initiatives, Budget 2019 could realise the ambitions of its predecessors to maintain a Singapore which is at the forefront of digital capabilities and a business environment that is digital, dynamic and robust.

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