



Digitalisation:

**Driving Force of SME
Internationalisation**

Executive Summary

Digital transformation is an evolutionary endeavour.

This report examines how digitalisation can strengthen companies' internationalisation strategies and help them transition to become more digitally ready.

Transformation requires a “digital first” mindset as well as a longer-term perspective on resource investments. To produce digitally enabled products, services and systems, companies must harness new tools, collaborations, and digital talents. SMEs must manage new dimensions of business partnerships that produce synergies, conduct digitalisation risk assessments, and put in place governance to address emerging risks. These risks necessarily involve personal data protection and data security complexities in the likes of cyber threats and system vulnerabilities associated with digital adoption.

To assist digital transformation and adoption, the Singapore Government has set aside S\$600 million in its Budget 2022 to help SMEs increase efficiency by digitalising and automating business operations and processes, providing greater impetus for deeper investments into digital technologies.

For this report, focus group discussions were conducted to understand how digitalisation can be a driving force for companies' internationalisation efforts. Business leaders were invited to these focus group sessions to share on the opportunities and challenges their companies faced as they embarked on their digital transformation journeys, particularly during a period of pandemic.

Companies that went “digital first” pushed ahead to prepare for what may sometimes take years to change or overcome in traditional structures and launched systems in a matter of weeks or months. This agility ensured business continuity and greater resilience during the pandemic. Though the accelerated transformation may have been driven by corporate survival, i.e., business continuity, particularly during the pandemic, it has since evolved. Companies are increasingly relying on their digitalised systems to expand into new frontiers to help grow sales and market presence while lowering production and operational costs. In spite of the cost of transformation, the steep learning curve, and skills scarcity, businesses have indicated their commitment to digital transformation.



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1. Introduction

1.1. Background

Small and medium-sized enterprises (SMEs) are the engines of economic growth, creating jobs and playing an important role in the economy. Broadly, SMEs have fewer legacy systems than larger corporations. SMEs are adaptive and given the appropriate advice, tools, and funding, they can digitally convert and transform effectively.

The COVID-19 pandemic has provided a rare opportunity for businesses to accelerate their transformation efforts, with most being cognizant of how the pandemic has impacted their markets and way of doing business.

1.2. Research Methodology

Six focus groups were conducted between April and September 2021. These sessions were held virtually due to the COVID-19 social restrictions.

Senior stakeholders, such as company founders and C-suite executives, discussed the difficulties and offered insights based on experiences. These findings were used to enable recommendations on how SMEs might better prepare for the digital economy.

The findings were curated across a range of industries, including, among others, Food and Beverage (F&B), Manufacturing (Food Manufacturing), Information and Communications Technology (ICT), Professional Services (Education and Healthcare), and Retail Trade.

This study also included the perspectives of diverse entities, such as representatives of Singapore companies, foreign company branch offices in Singapore, and Exempt Private Companies (EPCs) located in Singapore with dual incorporation in Singapore and another country.

All responses were anonymised and reported in aggregate.

1.3. Research Objectives

The areas examined in this study:

- a) Successful early adopters on their digital transformation experiences.
- b) Identification of major obstacles to a company's digital transformation process.
- c) Lessons gleaned from early adopters as well as best practises.
- d) Key areas of digitalisation support.

2. Business Challenges

2.1. Coping with the COVID-19 Crisis

2.1.1. Challenges in Sustaining Sales

Most business deals rely on face-to-face meetings. While overseas partner/client data and monitoring could still be reviewed and validated remotely, managing from a distance still hampered international sales somewhat.

“Due to the pandemic, we were unable to acquire new customers through physical tradeshow and exhibitions overseas, we were unsure how to continue to acquire new customers. Main access channels to customers in key markets were shut down as a result of the pandemic.” (F&B Manufacturer)

Domestic consumption fell due to the tight safe-distancing rules, which hurt local foot-traffic dependent businesses, especially so for the retail and food services.

Construction and real estate, as well as companies that relied on international travel, were hit the hardest. Manufacturing and wholesale trade suffered a decline in overseas demand, alongside disrupted supply chains.

2.1.2. Digital-First Movers

The disruption has had an uneven impact across industries.

Along the same vein, companies enjoyed varying degrees of success in transforming digitally. Those which embraced the “digital first” strategy went head-on to prepare and put in place systems within weeks or months for what would typically take years, thereby ensuring sustainable growth and ultimately, company survival, in this difficult period.



3. Succeeding in the Digital World

3.1. Digitalise or Become Obsolete

According to a survey conducted by Microsoft and IDC Asia in 2020¹, COVID-19 prompted 30% of SMEs to digitalise. Similarly, in a recent annual SBF National Business Survey (NBS) 2020/2021², 39% of respondents indicated that their IT budgets increased, by an average of 29%. In the same survey, 40% of respondents also mentioned that they either increased or would increase their investment in new technology, up from 33% the year before.

3.2. The Impact of Digitalisation on Internationalisation

Companies that prioritised “digital first” in their transformation strategy made significant progress.

These included a company's ability to:



Adapt to shifting business landscapes and market conditions with agility and boldness.



Modernise the company, increase efficiency and scalability, and boost revenue from operations.



Reduce costs and risks by making data driven informed decisions.



Deliver personalised and engaging client experiences. Successful businesses leverage the relationships they built prior to the pandemic to carry them forward into the digital age, giving them a competitive advantage over other businesses.



Develop digital-focused products, services, and operating systems to generate new revenue sources.

¹ <https://news.microsoft.com/en-sg/2020/10/22/over-80-of-singapore-smes-embrace-digital-transformation-more-than-half-report-slowdowns-due-to-covid-19-asme-microsoft-study-2020/>

² https://www.sbf.org.sg/images/2021/SBF_National_Business_Survey_20-21_Infographics_Final.pdf

3.3. Early Wins

3.3.1. Business Outcome Focused on Digitalisation

Companies that have adopted the “digital first” strategy have digitalised mission-critical systems, ensuring the continuity of business operations.

Pandemic related border restrictions and flight cancellations had a significant impact on overseas sales



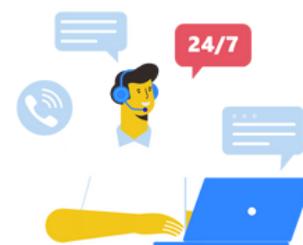
One example provided was the use of technology to conduct virtual “live” product demonstrations. Clients not only saw the manufacturing process in action, but also discovered how suppliers would match their requirements in a simulated factory setting.

“Our product demo is conducted in real-time, transmitted remotely to allow live manufacturing demo based on client specifications. Clients do not only see the production process but also experience how the supplier can meet the specifications in a simulated factory setting. The digital sales tool brings the factory to the client’s doorsteps, a transparent sales and demo process that inspire client confidence.” (Manufacturing Company)

To boost process efficiency, digital tools were also introduced.

Safe management measures hampered companies' capacity to recruit people during the pandemic

One multinational concierge services company that supplied remote customer services on behalf of financial institutions shared how they seized the opportunity presented by the pandemic and transformed their Human Resource (HR) systems which were traditionally driven by manual processes and required a large number of face-to-face interactions.



“We developed a digitalised customer care agent HR evaluation technology that allows remote agent assessment anytime, anywhere in the world, and that can simulate assessment scenarios such as agent language capabilities and agent responses to diverse client servicing conditions. Digital technologies may be scaled up globally to save cost and increase efficiency. Our agent training is now mostly done online. Because all call centre agents serve clients remotely, digitalisation has been beneficial to us.” (MNC Call Centre)

3.4. Mission Critical Digital Capabilities

3.4.1. Borderless E-commerce

When physical establishments were forced to close due to lockdown measures, e-commerce and digital alternatives gave a lifeline, enabling businesses to sell their products uninterrupted and continue generating revenue.

The worldwide e-commerce market is estimated to reach US\$5.55 trillion in 2022³, according to Shopify. The figure is expected to rise in the coming years, indicating that borderless e-commerce is becoming a viable business model for online businesses. Only 17.8% of sales were made through online transactions two years ago. In 2022, that percentage is predicted to rise to 21%, representing a 17.9% growth in e-commerce market share in just two years. By 2025, growth is predicted to reach 24.5%, representing a 6.7% point rise in just five years.

Companies took advantage of the opportunity to expand their cross-border brand presence and formed distributor alliances in order to make international sales and delivery easier.

Safe distance measures brought the private education industry, such as enrichment centres, to a halt during the lockdowns



Curriculum digitalisation opened new markets for education content providers, allowing them to stream information over the internet, create cross-border digital curriculum, and enter the Edu-Gamification field.

Companies in the education sector took advantage of the opportunity to pivot into gamification and animation, creating new market segments for content aimed at young children.

Another trend is the establishment of hybrid schools. These institutions provide both online and offline teaching options, allowing students to attend classes in person, via live streaming, or via recorded classes via the learning portal.



The hybrid approach responds to the pace of learning of individual students, in addition to appealing to students with the freedom to learn anywhere on-the-go or in the comfort of their own homes. The hybrid system is future pandemic proof to some extent because of digital streaming capabilities.

³ <https://www.shopify.com.sg/enterprise/global-ecommerce-statistics>

3.4.2. Local and Global e-Marketplaces - The Best of Both Worlds

Businesses now have more options in reaching their overseas target customers, thanks to global e-Marketplaces that offer cross-border fulfilment services, as well as in-country local platforms with a deeper market reach for companies that specialise in niche categories.



3.4.3. Social Media is the New Advertising

The formation of cross-border digital communities that allow customers to connect and share their product experiences is an example of digitalisation for internationalisation. Mobile apps connect target prospects, such as parents, to act as Key Opinion Leaders (KOLs) in their communities, advocating for products. This allows companies that sponsor the items to cut down on travel to international markets for events and fairs, which had been made difficult during the pandemic.



One company considered expanding its implementation in other overseas markets after the successful development and widespread adoption of such apps.

4. Gaps in Digital Transformation

4.1. The Need for Talent

According to a report by AlphaBeta, commissioned by Amazon Web Services (AWS)⁴, Singapore will need 1.2 million additional digital talents by 2025, a 55% increase from what we currently have.

Foreign tech talent was used to fill the vacancies prior to the pandemic. To some extent, SMEs' digitalisation efforts and processes may have been somewhat hampered by the lack of suitable local talent.

"We support hiring locals, though it took us 6 months to find suitable local talent. Before the pandemic, similar talent profiles are mostly filled by foreign hires as the local pool did not offer those profiles." (MNC Call Centre)

One professional services company bemoaned the scarcity of industry-certified personnel to operate new digitally driven technology platforms. Local institutes of higher learning have been particularly short on accredited certification training courses. Due to challenges in foreign recruitment, the company decided to train and develop its own staff. Nonetheless, progress was slow, and training was expensive - while certifications for such roles were largely available in foreign countries, due to the high expense of both training and the process of being certified, a single company could only have a limited number of locally trained staff.

"With more Singapore companies adopting global standards, industry-accredited certifications allow local applicants to immediately qualify for the jobs. There is a shortage of these certified professionals." (Biotech Consultancy Company)

In the short term, poaching has emerged as an avenue for acquiring talent as more companies jump on the digitalisation bandwagon. Smaller businesses found it difficult to compete with their larger competitors, particularly when it came to remuneration packages.

Finally, businesses observed that the time required to upskill non "digital-native" staff in order for them to fully comprehend digital technologies and how these might integrate into their work processes to boost productivity and quality of work, could be protracted.

⁴ <https://www.aboutamazon.sg/news/aws/report-singapore-will-need-1-2-million-more-digital-workers-by-2025-to-remain-competitive>

Despite efforts to innovate, success requires digital skills from both trainers and trainees, as well as up-to-date computer equipment and infrastructure i.e., continuous internet connectivity - some of which may be limited in capacity or unavailable in overseas markets.

4.2. Data Protection Restrictions

When it came to deploying technology, businesses encountered various hurdles.

A multinational company (MNC) stated that data protection restrictions from multiple countries hindered, to some extent, its capacity to harness and integrate data and insights throughout the region, and that it was unable to consolidate big data. The company's quest for a vendor that could supply a compliant solution that satisfied all of Asia Pacific countries' privacy regulations proved futile. The project was placed on hold after a year of searching for a qualified vendor.

In another example, despite the availability of technology, the Personal Data Protection Act (PDPA) also made the digital matching of shipping crew's personal data to local port health regulations somewhat challenging, impacting manpower requirements and shipping schedules, with possible implications on operational costs.



Port A, for example, restricted workers with a specific profile from certain countries from boarding the ship due to health and safety rules. PDPA made it somewhat more challenging to track crew profiles that could efficiently match the right shipping crew for the job. To gather a crew that met the health requirements, the company had to use manual phone calls to review its 2,000+ crew members distributed throughout the globe.

4.3. Intellectual Property Rights

In terms of intellectual property protection, businesses recognised the difficulty in obtaining fully secured protection, particularly in terms of digital content ownership.

Aside from providing on-demand content streaming, the only option available was to “lock” the files to prevent remote download or duplication - though this was not impenetrable. Instead, companies became more open to the option of inviting third-party educators, business partners to co-curate digital content with joint ownership, hence co-sharing the costs and revenue.

4.4. Maintain a “High Touch”

Companies generally rely on client relationships to drive sales, and physical meetings with face-to-face contacts to cultivate trust. According to the latest SBF NBS 2021/2022⁵, the inability to establish a physical presence in overseas markets was the top concern among businesses (61%).

Companies reported that having a physical presence on the ground and being able to oversee business operations and processes were more important than relying entirely on overseas partners.

Travel is essential in instances involving investment decisions. Most companies agreed that they preferred to close agreements in person when travelling abroad. Being physically present on-site would allow for the observation and evaluation of the local partner’s operating environment and sensitive information such as financial statements, which were critical when closing deals.

Companies agreed that transitioning “fully” to digital was less than ideal under certain operational contexts. Nonetheless, without overseas travel, the only choice available during the period of pandemic was to manage offshore business issues remotely. That said, they recognised that on-site, face-to-face meetings for mission-critical decisions cannot be substituted.

Talent Shortage, High Manpower Cost

The customer service industry's landscape has been shifting. Companies are assessing the feasibility of developing technologies that can be integrated into operating systems, such as using Artificial Intelligence (AI) to predict the type of service and to match it with a “client success” advisor with the necessary experience, thus saving costs and increasing productivity.



To off-load human agents and enhance productivity, smart chatbots with natural language processing capabilities are being developed.

⁵ https://www.sbf.org.sg/images/SBF_National_Business_Survey_2021-2022_final.pdf, page 45

5. The DNA of the Future Digital SME

5.1. Creating a Foundation for Digital Success

Transformation starts with strong executive sponsorship, digital technology oversight and the ability to prioritise change according to business and market needs.

The importance of digital talent cannot be overstated.

Data scientists, user experience architects, product designers, trained professionals who can handle new digital platforms, and social media strategists who know how to construct systems that appeal to both domestic and international markets are in high demand. However, such talent is in short supply and will continue to be so in the foreseeable future. SMEs could consider offering incumbent staff career and upskilling possibilities to minimise change resistance, nudging them towards the digital pathway and encouraging positive behaviour, and ultimately redeploying them as viable alternatives given that seeking new digital talents from outside the company would require considerable lead time.

Foster a partnership that provides synergy and a win-win situation for both parties



To digitalise and integrate an education module, an education company cooperated with a telecommunications equipment company. They were able to move swiftly, entered the EdTech industry with the technical support they needed and acquired a competitive advantage.

Companies recognised that, ideally, there is the need to reinvest 20% to 30% of their profits into innovation and technology development; otherwise, they risk sacrificing long-term efficiency. Others felt that building strategic collaborations improved their companies' scalability by leveraging the partnership's capabilities.

5.2. Avoid “Overdoing” Digital and Missing the Big Picture

Businesses observed that before embarking on digitalisation, each company must first identify and define the problems, then design and evaluate appropriate solutions. According to the DBS Digital Readiness Survey conducted in 2021⁶, only 28% of Singapore SMEs stated that they possessed a well-defined digital strategy, while 72% said they needed more work.

Companies must envision the intended outcomes and incorporate “proof of concept” into their feasibility analysis. One example given was how some businesses used a

⁶ <https://www.dbs.com.sg/corporate/research-and-insights/insights/treasuryprism/digitalreadiness/sme/report.html>

number of vendors during their digital transformation journeys to deploy technologies that became obsolete over time.

Even if the costs of doing so are significant, companies have come to realise that establishing an internal team of digital talents would make more commercial sense over the longer run.

5.3. Business Process Re-Engineering

Companies also stressed that digitalisation encompasses more than just automation.

Companies that were hyperconnected could create new value by fully utilising big data. A hyperconnected network collects critical strategic data, such as data on the competitive landscape and customer intelligence. These are typically collected by sales agents and other supply chain touchpoints but stored in a fragmented manner across multiple platforms and sites, making it difficult to retrieve and use in an organised manner for sales forecasting and future product planning and production.

Using big data to centralise and integrate operational data across functions, such as customer order trends, customer requirements, and pricing, would allow businesses to stay ahead of the competition, and deliver cutting-edge products at competitive prices.

6. Multi-Pronged Approach for Digitalisation

According to the SBF NBS 2021/2022⁷, the top three key areas of support needed by companies were: Assistance on Digitalisation (43%), Financial Support (38%) and Human Capital Development (37%). These are encouraging indications on the front of digitalisation and the building of manpower capabilities as businesses seek to build back stronger and better.

Key Support Area (1): Industry Mentors



Select industry experts to serve as change agents, sharing their business knowledge and best practices as they transit digitally.

⁷ https://www.sbf.org.sg/images/SBF_National_Business_Survey_2021-2022_final.pdf, page 35

Key Support Area (2): Micro-Learning Courses



Introduce targeted, bite-sized upskilling courses that employees can access and master at any time and from any location to help them balance their professional and personal lives. Long courses discourage participation and increase staff workload as they try to combine job responsibilities with training programme expectations.

Key Support Area (3): Networking and Partnerships



Encourage the development of industry networking platforms for sector-specific community building, with specific focus such as digitalisation.

Key Support Area (4): Skills Roadmap to Train and Upskill Local Personnel



Develop a skills roadmap for a robust local talent pipeline and to supplement the current shortage of local talent with international talent.

Key Support Area (5): Industry Accreditation Courses



To provide qualified personnel to meet the talent shortage, implement tailored certification programmes for key industries. Provide training subsidies where relevant and appropriate to help defray costs, particularly for courses that need accreditation from another country.

Key Support Area (6): Finance and Funding



Encourage SMEs to integrate into the digital business ecosystem by providing relevant and appropriate support, as well as encouraging private sector funding.

Key Support Area (7): Guidance on Application and Approval of Grants



Simplify grant application procedures and provide guidance on scheme selection and application.

7. Epilogue

Digitalisation has become a critical pillar not just for pandemic survival, but also for businesses seeking to forge ahead with a forward-compatible business system. Businesses and marketplaces have been disrupted in unprecedented ways, requiring SMEs to respond in new and creative ways to keep their businesses thriving in the new digitally-enable climate.

Companies should undertake a competitor analysis to assess their existing digital maturity and set realistic digitalisation objectives. As the digital ecosystem grows, companies should keep a lookout for new technologies, playbooks, and possible partners, as well as re-evaluate current arrangements to ensure that competencies are aligned. In this way, partnerships can then continue to yield mutual advantages.

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