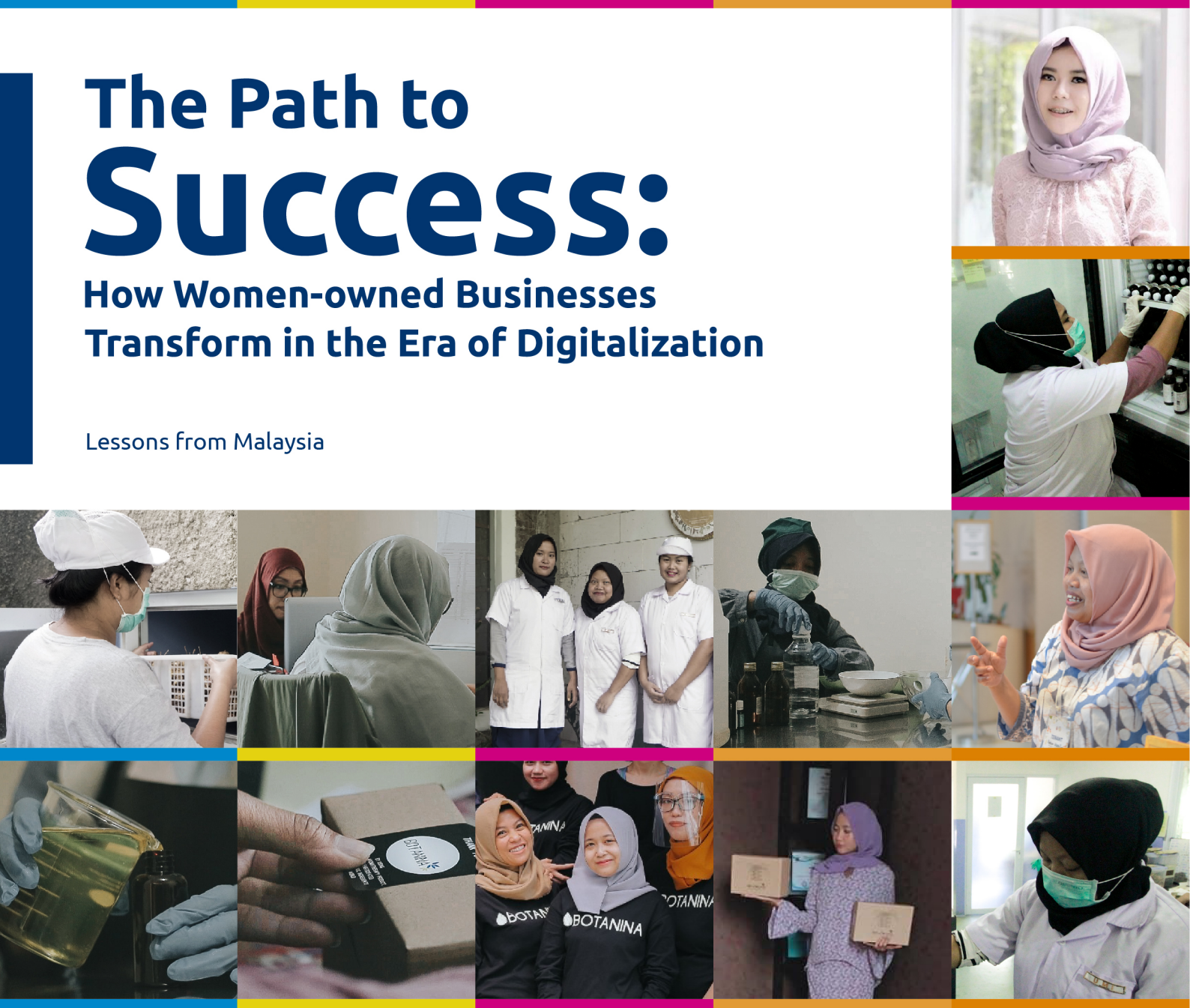# The Path to
Success:

How Women-owned Businesses Transform in the Era of Digitalization

Lessons from Malaysia

woomentum

KONRAD ADENAUER STIFTUNG

Disclaimer

The designated contributions do not necessarily reflect the opinions and views of the editorial team, Woomentum and the Konrad-Adenauer-Stiftung. Hence, assumptions made in the articles are not reflective of any other entity other than the author(s) – and, since we are critically-thinking human beings, these views are always subject to change, revision, and rethinking.

About Konrad-Adenauer-Stiftung

Freedom, justice, and solidarity are the basic principles underlying the work of the Konrad-Adenauer-Stiftung (KAS). The KAS is a political foundation closely associated with the Christian Democratic Union of Germany (CDU).

As co-founder of the CDU and the first Chancellor of the Federal Republic of Germany, Konrad Adenauer (1876-1967) united Christian-social, conservative and liberal traditions. His name is synonymous with the democratic reconstruction of Germany, the firm alignment of foreign policy with the trans-Atlantic community of values, the vision of a unified Europe and an orientation towards the social market economy. His intellectual heritage continues to serve both as our aim as well as our obligation today. In our European and international cooperation efforts, we work for people to be able to live self-determined lives in freedom and dignity. We make a contribution underpinned by values to help Germany meet its growing responsibilities throughout the world.

Foreword from Woomentum

Mouna Aouri

Digital technologies are fundamentally changing the way we live, work, and innovate. Touching every sector, digitalization is not only opening new doors for business growth but transforming the foundations of the way business is run in the twenty-first century. The Covid-19 pandemic has both accelerated adoption of these digital changes and brought their potential into sharp focus.

But the endless possibilities created by digital technologies can present their own challenges for small businesses uncertain about where to begin this transformational journey. What strategy should I adopt? How do I learn about it, and who will help me implement it? Is the technology I want available to me? And if not, are there equivalent technologies in my local context and within my budget? Adopting new technology can be overwhelming as it requires knowledge, an open mindset, and suitable infrastructure. These issues are the focus of this research, which attempts to answer these questions and develop recommendations for key stakeholders to help businesses achieve success.

Why is digitalization so important? Is it a necessity or an optional extra? These are questions we often hear from our respondents and community members. The Southeast Asian digital economy is estimated to hit $300 billion by 2025.* We believe that women entrepreneurs should be equipped to be part of it, keeping their businesses relevant, prepared to scale, and enabled to flourish. Not only that: we firmly believe, in the long run, that this digital revolution can help women entrepreneurs overcome the gender-specific challenges they face, in turn empowering their families, communities, and society as a whole.

How will they do this? Today, in our target countries (and beyond), women entrepreneurs must juggle their business responsibilities alongside traditional family roles, often with no support from their spouses. Women entrepreneurs still cannot network the way their male counterparts can due to social and cultural stigmas. Yet today, there are tools that can help address those issues, providing women with the flexibility they need. From remote team collaboration platforms to e-commerce, digital tools can help women increase the efficiency of their business processes, increase productivity, save costs, and grow their revenues.

I am grateful for the eighty-six women entrepreneurs from Indonesia, Myanmar, Malaysia, and Cambodia, who came forward to share in-depth the successes and struggles they have experienced in running their businesses. We've been blown away by the stories of courage and determination in the face of the Covid-19 pandemic. I am also grateful for the forty-seven industry experts, policymakers, private sector, and professional association leaders who came together both online and offline to contribute to the findings.

I believe that by understanding the challenges facing women entrepreneurs, both as business owners and as women, we can recognize the inhibiting factors to their success. Only once these obstacles are identified can we create solutions. I hope this publication will provide recommendations that will help advance the ecosystems that support women-owned SMEs.

Finally, I hope this publication can reach readers around the world who are interested in the topic and keen to understand it in the context of Southeast Asia. I am also excited to share with our readers that this publication will be translated into Khmer, Burmese, and Bahasa Indonesia so that everyone can benefit from the findings in their native language.

I would like to thank my team at Woomentum and all the country researchers, report writers, editors, and designers, for their tireless work to make this publication come to life.

We are proud to partner with Konrad-Adenauer-Stiftung (KAS), who are big advocates for gender equity in the region and beyond. It has been a incredible journey producing concurrent research in four countries managed from KAS Tokyo office amid the COVID-19 crisis. We couldn't have done it without digital technologies!

Sincerely,

Mouna Aouri
Founder & CEO of Woomentum

*Source: Google/Temasek Holdings/Bain & Company Annual report 2020

Foreword from Konrad-Adenauer-Stiftung

Rabea Brauer   **Cristita Marie Perez**

The main obstacles hindering women from being successful entrepreneurs goes beyond equal opportunities and quotas. Oftentimes, it is as simple as not being granted a bank loan because of unmet requirements. Sometimes, the inability to escape the dependencies of family obligations scales back your business. It is the lack of technical means leading to the disadvantage of digital solutions.

These are some of the main findings of our research project "The Path to Success: How Women-owned Businesses Transform in the Era of Digitalization. Case Studies from Indonesia, Cambodia, Malaysia, and Myanmar".

The entire project is a collaboration between the Konrad-Adenauer-Stiftung (KAS) regional program, Social and Economic Governance in Asia (SOPAS), and Woomentum, a membership-based collaboration platform that connects entrepreneurs, industry experts, corporate leaders, and investors to share knowledge, solve challenges, and access opportunities to grow their businesses. This project is an important component to the SOPAS pillar, advancing women in leadership positions and an additional contribution to the (admittedly scarce) literature on the current state and experiences of digitalization among women-owned small and medium enterprises (WSMEs) in Asia.

One-on-one interviews, expert interviews, and advisory panels with WSMEs, government institutions, and business associations in four Southeast Asian countries were conducted to measure the impact of digitalization, assess its challenges, and demonstrate the new opportunities that are available to women entrepreneurs. The research looks at the effects of digitalization on WSMEs' (1) access to financing, (2) access to mentoring, networking, and skills, (3) business process and management, as well as (4) COVID-19 crisis management.

The common WSME challenges across four countries are highlighted in the introductory chapter. The chapter also discusses a general framework, comprising both policy and practical recommendations that governments and private organizations can take on to encourage women entrepreneurs to take advantage of the opportunities that digitalization offers. The succeeding chapters include country studies on Cambodia, Indonesia, Malaysia, and Myanmar. The country case studies provide a more in-depth analysis of the general findings introduced in the first chapter.

We would like this research to contribute to the much-needed improvement of the policy framework (and, to some extent, to the cultural and social context) that governs women-owned SMEs as they play an increasingly significant role in Southeast Asian economies.

Rabea Brauer
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KAS Japan

Acknowledgments

This report was prepared as a joint effort between the Konrad-Adenauer-Stiftung (KAS) and Woomentum to shed light on the challenges faced and opportunities provided by digitalization to women-owned small and medium enterprises in Southeast Asia, particularly in the backdrop of the COVID-19 global pandemic. This research idea was initiated by Mouna Aouri and Socheata Touch and fully funded by KAS. Mouna Aouri designed and directed the project with the assistance of Juliana Tyan.

Talitha Amalia managed and co-authored this multi-country report production with Anuradha Rao and Suhaila Binte Zainal Shah. The case studies are from 1) Indonesia, whose research was conducted and written by Talitha Amalia, assisted by Farah Aulia and Nenden Sekar Arum, 2) Myanmar, whose research was conducted and written by Su Mon, assisted by Su Lynn Myat, 3) Malaysia, whose research was conducted and written by Tina Leong, assisted by Lim Zhen Hui, Nadhilah Zainal Abidin, and Amani Mohamad Husaini and 4) Cambodia, whose research was conducted by Sophorn Tous, assisted by Sar Senkethya. The Cambodia case study was authored by Anuradha Rao, assisted by Talitha Amalia and Suhaila Binte Zainal Shah.

During the book's preparation, many colleagues at the KAS, Woomentum, and elsewhere made important contributions in the form of invaluable technical advice and comments. The project team would also like to recognize the valued contributions from all the experts and advisory panelists participating in the research through interviews and sharing of experiences, including government officials, investors, entrepreneurs, business associations representatives, academia, and other key stakeholders. Lastly, the team would like to apologize to anyone who may have been overlooked inadvertently in these acknowledgments.

Table of Contents

List of Figures

List of Figures

Acronyms and Abbreviations

ASEAN	Association of Southeast Asian Nation
B2C	Business-to-Consumer
COVID-19	Coronavirus Disease 2019
CRM	Customer Relationship Management
DKN2030	Dasar Keusahawanan Nasional 2030
DOSM	Department of Statistics Malaysia
ECF	Equity Crowdfunding
F&B	Food and Beverage
GDP	Gross Domestic Product
GST	Goods and Services Tax
HR	Human Resources
ICT	Information Communication and Technology
KWSP	Kumpulan Wang Simpanan Pekerja (Employees Provident Fund)
MaGIC	Malaysian Global Innovation and Creativity center
MCO	Movement Control Order
MDeC	Multimedia Development Corporation
ME	Medium Enterprise
MED	Ministry of Entrepreneur Development
MEDAC	Ministry of Entrepreneur Development and Cooperatives
MESTECC	Ministry of Energy, Science, Technology, Environment & Climate Change
MITI	Ministry of International Trade and Industry
MOSTI	Ministry of Science, Technology and Innovation
MSMEs	Micro, Small, Medium Enterprises
MTDC	Malaysian Technology Development Corporation's
MyCIF	Malaysia Co-Investment Fund
P2P Lending	Peer-to-peer Lending

R&D	Research and Development
SC	Securities Commission
SE	Small Enterprise
SME	Small and Medium Enterprise
UPM	Universiti Putra Malaysia
VC	Venture Capital
WSME	Women-owned Small and Medium Enterprise

Executive Summary

Key Issues

Digital technologies, often referred to as computer-based products and solutions, are transforming industries everywhere, and the Southeast Asia region is no exception. In particular, Southeast Asian countries stand to benefit from digitalization embraced by its small and medium enterprises (SMEs), which includes women-owned SMEs (WSMEs).

Catalyzing women's entrepreneurial talent can bring many benefits, such as the advancement of women's economic empowerment and female labor participation, which in turn will fuel the region's socio-economic growth. However, although the rate of self-employment of women in the Southeast Asian region is high, women-owned businesses often lose out in competition, profitability, and size to male-owned enterprises, with little potential for further growth. Moreover, women entrepreneurs face many formidable challenges, especially as gender inequality and underutilization of female talent are deeply ingrained in Asian countries.

Economies and societies around the world, however, have been hit hard by the Novel Coronavirus or COVID-19 outbreak that engulfed the world from early 2020 onwards. COVID-19 has not only caused disruptions in global supply chains and border management but also severely impacted normal day-to-day social interactions, behaviors, and practices. However, the onset of COVID-19 also brought about a new appreciation for digitalization, as companies all over the world were forced to adapt and embrace new digital technologies during lockdowns. This study argues that digitalization can offer new potential for WSMEs to grow and innovate, as well as offset some of the gender-related barriers towards further leveling the playing field. By undertaking a comparative study in real-time and by considering the impacts of COVID-19 on the relationship between digitalization and WSMEs, it is hoped that this report makes a significant contribution to the emerging literature on digitalization and WSMEs in Southeast Asia.

A qualitative approach was adopted for this research, with data collection conducted in four Southeast Asian countries and each consisting of three main components: a series of in-depth interviews with female entrepreneurs, expert interviews with different stakeholders, and an Advisory Panel, involving women in entrepreneurship and experts brought together to formulate practical and workable recommendations and solutions. The interviews with WSMEs, experts, and the advisory panel discussion were structured to gather insights surrounding four pillars as representative of key areas in which digitalization can bring opportunities and challenges: 1) Access to Financing, 2) Access to Mentoring, Networking, and Skills, 3) Business Processes and Management, and 4) Crisis Management (COVID-19).

Key Findings

Pillar 1: Access to Financing

The issues that WSMEs faced concerning access to financing in each of the four countries varied slightly. In Indonesia, the key obstacle in the utilization of digital technology to gain external financing was fear and lack of motivation, as participants mentioned that there was no urgency to do so. For WSMEs in Myanmar, access to financing was the most challenging issue. Aside from the rarity of grants targeted explicitly at WSMEs in Myanmar, there was also a lack of alternative financing options. Meanwhile, in Malaysia, the key issue to emerge was WSMEs doubts over stakeholder protection in the alternative financing sector, especially when compared to established financial institutions. This is likely due to a notable lack of awareness, as expressed through inaccurate perceptions of the mechanisms of alternative financing, as well as specific financing options from the government. In Cambodia, limited financial literacy and tax compliance were cited as key factors that hindered participants' adoption of digital technologies to finance their businesses.

Across all four countries, we found that most WSMEs interviewed utilized internal financing to run their business. Of the fewer number of participants that had gained external sources of funding, the most common type of funding was bank loans in Cambodia and private equity acquired from personal connections in Indonesia. In Malaysia, however, a strong preference for internal financing was found amongst participants, with bank loans rarely used. Utilization of alternative financing through digital financial services (DFS) was found among very few participants, possibly due to lack of awareness and understanding of external funding sources.

Pillar 2: Access to Mentoring, Networking, and Skills

A common theme discovered among the research participants was their limited professional networks, which further limited their access to mentoring and skills development. In Indonesia, many participants believed that as family responsibilities fell on their shoulders, family should come first. Therefore, they often missed opportunities to attend mentoring, networking, or skill-building programs run by the government or private sector, even if they were held online. The limiting factor for WSMEs in Myanmar was found to be more external, in that there were less informal networking opportunities available for women than for men. In Malaysia, there was an existing reluctance to seriously explore global business opportunities—partly owing to the fear of being on the losing end of business deals, particularly in foreign countries. As in the case of Indonesia, WSMEs in Cambodia also found it quite challenging to participate in mentoring events or find time for e-learning opportunities, as they were already struggling to juggle their business and family obligations. They also had limited access to information on mentoring programs both inside and outside Cambodia.

WSMEs across all four countries also generally displayed eagerness in learning, with the increased utilization of digital technology as a means to obtain new knowledge in the face of COVID-19. Digital tools were leveraged to listen to talks and webinars, attend e-learning programs or courses, watch videos on relevant topics, and to connect with mentors and peers within their industries.

Pillar 3: Business Processes and Management

While participants in Indonesia and Cambodia were observed to experience issues with regard to gender-related business processes, this was not the case in Myanmar and Malaysia. The participants in Indonesia and Cambodia mentioned they were struggling to juggle between business and family obligations. As they undertook cultural roles as mothers and daughters while also operating their enterprises, they faced time constraints that restricted them from participating in skills development, as well as social networks and association activities and events. In Myanmar, the main barriers to digital adoption into WSMEs' business processes were language, awareness, skills, and resources.

Here, language was the biggest barrier for many of them to find appropriate digital solutions and acquire new digital skills. Malaysia's main obstacle to wider digitalization of business processes was a mismatch of features in relation to WSME critical business needs, as well as the cost of existing digital tools. Tools and software that may seem affordable to large corporations were seen as a major burden by many WSMEs.

The most popular digital technology used by a large majority of the participants was was to increase sales/ marketing, such as social media and official websites. Several participants had also adopted digital tools for improving internal business processes, such as procurement systems, supply chain management systems, customer relationship management (CRM) systems, and data analytics. In Indonesia, Myanmar, and Malaysia, the decision to digitalize seemed to be market-driven.

Pillar 4: Crisis Management (COVID-19)

In the face of COVID-19, a majority of WSME participants said they had been negatively affected, especially those in the business of tourism and food and beverage (F&B). Most participants were able to adapt with the aid of digital technology— however, this was mostly a reactive response and not the result of anticipatory crisis management. The COVID-19 pandemic forced WSMEs in all four countries to increase digitalization of their business, or begin to adopt digitalization if they hadn't before, to maintain productivity and collaborate while working remotely.

Key Recommendations Specific to Government Institutions

Initiate gender-focused financing schemes, such as investing in and with women entrepreneurs, which can be accessed digitally.

The government can regulate and increase the amount of financing flowing to WSMEs, such as loans or equity financing, through funds that invest with a gender lens. Such intervention will ideally be combined with other capacity-building programs for the WSMEs and financial intermediaries.

Develop business training programs for owners and employees that specifically address the gender-equality agenda.

This can include incentive schemes for women entrepreneurs who innovate with digital technology applications. Education and training targeted at WSMEs should take into account societal and cultural contexts, such as using local language(s), and incorporate practical tips for women to thrive in both business and personal life.

Ensure the accessibility, safety, and transparency of all regulatory compliance that can support the growth of WSMEs.

Make gender-equality policies mainstream across all major SME policy-making agencies, and ensure all regulatory compliance processes are more centralized, transparent, and efficient to reduce gender-based discrimination. E-government initiatives are necessary, but they need to be supported with regulations to protect data privacy and security of WSMEs and all ecosystem stakeholders.

Provide pandemic stabilization and recovery funds, employment wage subsidy schemes, loan relaxations, and tax waivers to WSMEs.

The pandemic aid provided for WSMEs should also be time-limited, targeted, transparent, and non-discriminatory, equally accessible for both small and medium enterprises. In addition, governments can work with the private sector to proactively provide clear requests and guidelines for WSMEs to put measures in place that will prevent the spread of COVID-19 in the workplace while ensuring productivity.

Key Recommendations Specific to Institutions Providing Assistance to WSMEs

Increase public awareness and make the funding gap for WSMEs more visible.

The private sector, including think-tank organizations and nonprofits, can highlight stories about how scarce woman CEOs and woman founders are. Furthermore, they can investigate if funding for WSMEs is widely accessible, e.g. how many venture capital-backed WSMEs, woman investors, and women acting as grant committees exist.

Encourage non-conventional skills development and address gender stereotypes through training and talks in local languages.

A gender stereotype is harmful when it limits women entrepreneurs' capacity to develop their personal and professional abilities. . Moreover, as technologies constantly transform economies, soft-skills education, such as a growth mindset and change management, is needed for WSMEs to thrive.

Popularize success stories of digitally- enabled WSMEs.

Institutions providing assistance to WSMEs can help increase the awareness of data privacy and security in publicly- or privately-organized events. Success stories provide tangible examples to inspire other WSMEs to adopt digitalization.

Promote the benefits of joining business communities and associations so that WSMEs can learn from other experienced entrepreneurs and mentors to prepare for crises strategically.

Business communities and associations can provide more digital networking, skills building, and mentoring opportunities. This will be an important area for the private and public sectors to innovate, given that digitalization will only increase in the post-pandemic environment. Furthermore, consultation and learning opportunities provided by qualified professionals with a proven track record in relevant fields are needed to develop business continuity plans and prepare for unprecedented changes.

Malaysia
Case Study

1

Country Background

Digitalization and Economic Growth

Like its Southeast Asian neighbors, Malaysia has embraced digitalization and continues to plough ahead in its digital technologies adoption. The government has played an important role in developing and implementing policies focused on hastening the digitalization adoption rate and establishing various agencies to promote and drive the digital economy.

2019

Household Internet Access	Household Mobile Phone Access

90.1%   **98.2%**
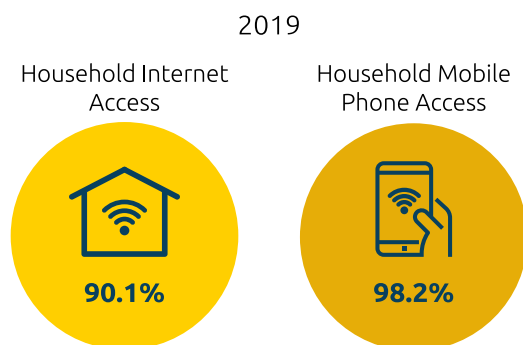
Source: ICT Use and Access by Individuals and Households Survey Report 2019, Dept of Statistic Malaysia, April 2020

Figure 1: Internet & Mobile Phone Penetration

The resultant high internet and mobile phone access in households— 90.1 percent and 98.2 percent respectively in 2019[1]—has had a positive impact on economic growth. In 2018, 18.5 percent or RM267.7 billion (USD 63.7 billion) of Malaysia's GDP was broadly attributed to the 'digital economy', of which 12.6 percent was from the Information and Communication Technologies (ICT) sector and 5.9 percent from e-commerce for non-ICT industries.[2] The trend since 2017 shows that the digital economy has been growing faster than overall GDP.

Contribution of Digital Economy to GDP in 2018

18.5%
US $63.7 billion

Gross Value Added ICT
12.6%

Non-ICT Industry (E-commerce)
5.9%

E-Commerce

2.1%
ICT Industry

5.9%
Non-ICT Industry
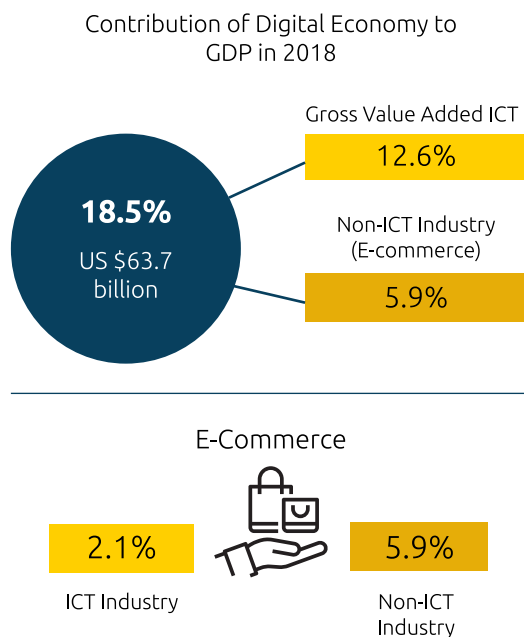
Source: Main Findings, Malaysia Digital Economy 2018, Dept of Statistic Malaysia, Oct 2019

Figure 2: Contribution of Digital Economy to GDP

The government's thrust on improving and streamlining government and business services and activities through digitalization has not gone unnoticed: in 2019, Malaysia was ranked 5th in Asia and 15th globally by the World Bank for ease of doing business ranking.[3]

Despite this, internet access is not uniform throughout the country, with rural areas and East Malaysia experiencing lower adoption rates and slower connectivity, compared to urban Peninsular Malaysia. A 2018 World Bank report noted that Malaysia had slower internet download speeds and higher prices than many advanced economies, including neighboring Singapore.[4]

However, progress is being made in this area: in 2019, Malaysia ranked third within the ASEAN region and 34th in the world in fixed broadband speed and the second-lowest-cost per 1GB of mobile data within ASEAN.[5]

The COVID-19 outbreak in early 2020 and the government's subsequent Movement Control Order (MCO) from 18 March accelerated the adoption of digitalization among both consumers and businesses. According to a Business Impact Survey by Ernst & Young in June, over 30 percent of businesses took steps to expand or upgrade their technology capabilities in response to the pandemic.[6] Similarly, a recent study by Facebook and Bain & Company shows that Malaysia recorded the highest percentage of digital consumers in the region in 2020, viz., 83 percent of its population (aged 15 years and above).[7]

Digitalization and SMEs

Small and Medium Enterprises (SMEs) are a critical engine of growth in Malaysia's economy, contributing 38.3 percent to Malaysia's GDP in 2018, and rising to 38.9 percent in 2019.[8] They also accounted for a significant 66.2 percent of the country's employment in 2018.[9]

Manufacturing

Small
Sales turnover from RM300,000 (USD72,000) to less than RM15 million (USD3,6 million) OR full-tie employees from 5 to less than 75.

Medium
Sales turnover from RM15 million (USD3.6 million) to not exceeding RM50 million (USD12 million) OR full time employees from 75 to not exceeding 200.

Service & Other Sectors

Small
Sales turnover from RM300,000 (USD72,000) to less than RM3 million (USD720,000) OR full-time employees from 5 to less than 30.

Medium
Sales turnover from RM3 million (USD720,000) to not exceeding RM20 million (USD4,8 million) OR full-time employees from 30 to not exceeding 75.

Figure 4: Definition of SMEs

Source: SME Corp Malaysia, 2018
**Source: Dept of Statistics, 2019*

Figure 3: SME Contribution to the Economy

The figure above shows the official definition of Small and Medium Enterprises in Malaysia.[10] To qualify as a small enterprise (SE), Malaysia's criteria is higher, at USD72,000 per year, than Indonesia's USD20,400 and Cambodia's USD50,000. The criteria for medium enterprises (ME) is also higher, at USD720,000, vs Indonesia's USD170,000 and Cambodia's USD250,000. Due to the higher revenue criteria, the rate of adoption of digitalization among Malaysia's SMEs may differ, compared to the other countries.

900K to 1 Million SMEs in Malaysia

- Micro Enterprises
- Small Enterprises
- Medium Enterprises
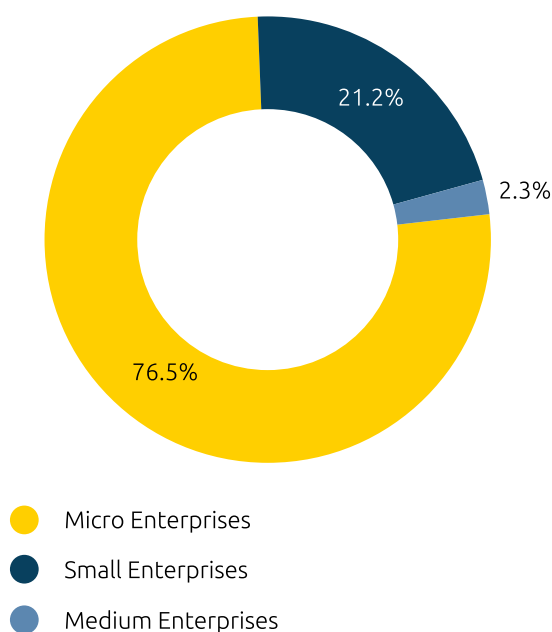
Figure 5: Number of SMEs Including Micros

In the last economic census, published in 2017 by DOSM (Department of Statistics Malaysia), the total number of SMEs amounted to 907,065 or 98.5 percent of total establishments in Malaysia. It is important to note that microenterprises are included in the official definition of SMEs in Malaysia. Majority or 76.5 percent of SMEs in Malaysia were microenterprises, while small and medium-sized enterprises made up only 21.2 percent and 2.3 percent respectively. Services were the largest sector, accounting for 89.2 percent or 809,126 enterprises.[11]

The same report found that excluding microenterprises, there were 213,395 small and medium-sized establishments, with small-sized firms accounting for 90.3 percent, with the remaining 9.7 percent being medium-sized establishments.

>210,000 Small & Medium Enterprises

- Small Enterprises
- Medium Enterprises
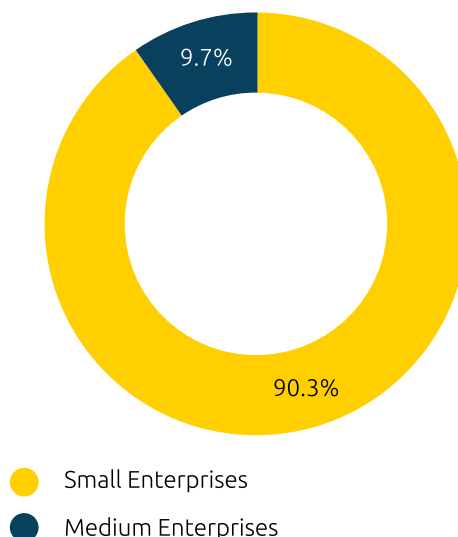
Figure 6: Number of SEs and MEs

As of 2015, women-owned SMEs in Malaysia stood at only 20.6 percent or 186,930 firms (including micro enterprises), with the majority (92.7 percent) highly engaged in the services sector.[11] While there are no updated official figures on WSMEs in Malaysia, the authors estimate that there are probably 30,000 to 40,000 women-owned non-micro SMEs in Malaysia.

21% WSMEs
Inclg. micro-enterprises

40K - 50K
women-owned small & medium enterprises
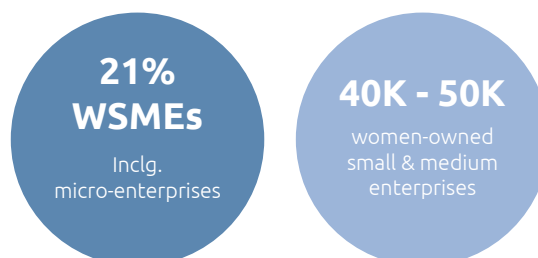
Figure 7: Estimated Number of Women-owned SMEs

Source: "Economic Census 2016", Dept of Statistics Malaysia, Dec 2017, Stratos Estimates.

The government has played a role in driving this sector forward, introducing new policies, such as the Dasar Keusahawanan Nasional 2030 (DKN2030) (National Entrepreneurship Policy 2030), and new entities, such as the Small and Medium Enterprise Corporation Malaysia (known as SME Corp. Malaysia) and the SME Bank, to provide infrastructure, advisory, financial and types of support to SMEs.

It is widely acknowledged that COVID-19 spurred digital adoption among SMEs in Malaysia, and made a strong case for digitalization as a key survival skill during the crisis as well as in the post-pandemic 'new normal'.[12] An LSE article notes that prior to the pandemic, businesses in Malaysia had not adopted digital technologies as readily as the government and citizens, and lagged behind the global average.[13] Faced with the closure of non-essential businesses and travel restrictions, businesses were forced to turn to digital technologies and innovate, spurred on by a series of initiatives by the Malaysian government. However, as the LSE article notes, several problems continue to impact the speed and uptake of digitalization, including cash flow.

For WSMEs, who face financial as well as other gender-specific constraints, COVID-19 presented some unique challenges as well as opportunities. Against this background, the authors take a closer look at the efforts of WSMEs in adopting digital technologies in Malaysia, and the constraints and benefits accrued thereof.

2
Methodology

Given the importance of SMEs and the digital economy, this study examines how and whether digitalization creates new opportunities for WSMEs in Malaysia. The primary objective of the research was to provide policymakers, the private sector and professional associations with recommendations to optimize the adoption of digital technologies among WSMEs.

Research Belief

Empowered women in business equipped with digitalization and innovation capabilities can: i) build more sustainable and profitable businesses, ii) empower more women and communities, and iii) stimulate greater social and digital economic growth.

Research Assumption

Digitalization offers new opportunities for WSMEs to overcome their gender-related challenges. However, this will occur at varying degrees, depending on WSME maturity and size.

Data Collection

The research adopted a qualitative approach, with 3 main components, as shown below. In-depth interviews (using open-ended questions), were carried out with the WSME participants from June 25 to July 22, 2020. WSME interview findings were then used to guide the Expert Interviews, which were conducted from August 6- 24, 2020. These findings were then synthesized, with key insights presented and discussed at an Advisory Panel discussion on August 25, 2020. Due to confidentiality, the names of respondents and panelists are not disclosed, except for those who provided consent in the Case Study.

WSME Interviews		Expert Interviews		Advisory Panel
2 interviews were conducted through Zoom	16 interviews were conducted face-to-face	2 interviews were conducted through Zoom	2 interviews were conducted face-to-face	Advisory panel was conducted face-to-face

Figure 8: Research Methodology

Due to the impact of COVID-19, a few of the interviews were conducted online. However, the majority agreed to be interviewed physically. The Advisory Panel discussion was also held offline due to the subsequent easing of government regulations on physical movement.

Research Challenges

It was challenging to recruit respondents from the agricultural sector due to its male-dominated nature.[14] All respondents were based in Kuala Lumpur and Selangor, and there were challenges with getting respondents outside of the region, due to refusals. The research findings are thus based on an urban, educated sample of WSME participants, who are middle income and above.

Data Analysis

These interviews revolved around 4 pillars:

There were also challenges in obtaining more information on gender-related issues and challenges, as most of the participants dismissed the existence of such problems outright. In a conservative cultural environment,[15] certain gender-related issues might be too personal or sensitive to be revealed. As all the women were educated, and many had supportive family networks (husbands, parents or siblings as business partners), at first glance, they did not appear to face major gender-related challenges.

| Pillar 1 **Access to Financing** | Pillar 2 **Access Mentoring, Networking, and Skills** |
| Pillar 3 **Business Processes and Management** | Pillar 4 **Crisis Management (COVID-19)** |

Figure 9: Research Pillars

These pillars were chosen as they represent important aspects of business digitalization for WSMEs. Remarks by respondents were coded into the relevant codes and pillars, with codes derived from examining the interview transcripts. Each coded remark was then looked in more detail to distinguish whether it corresponded to Pillar 1, 2, 3 or 4. Top challenges and opportunities were also identified using the code-pillar maps. Findings were then analyzed in relation to the research assumptions. Due to the limited sample of MEs in the study, a more inductive approach was adopted by looking at the characteristics of each WSME, with reference to its digital adoption.

Next, expert interviews were conducted with various stakeholders, to achieve a better understanding of the SME and digitalization ecosystem, as well as to identify steps needed to overcome challenges mentioned by the WSMEs, concerning the 4 pillars. Finally, findings from both the WSMEs and experts were brought to an Advisory Panel to formulate practical and workable recommendations and solutions on how women-led SMEs can achieve the maximum potential of digitalization.

About the Respondents

Brief Profile of WSME Participants

18 WSME participants were interviewed from 3 sectors—services, manufacturing and construction. Altogether, 16 sub-sectors were represented. The diversity in sectors was deliberate, to evaluate differences in digitalization adoption by nature of industry, if any.

Services - 14; Manufacturing - 3; Construction -1

Figure 10: Profile (Sectors) of WSMEs Interviewed

Subsectors

F & B - 2	Logistics -2	Tax, audit and accounting - 1	Internal audit & corporate governance - 2
Childcare centre - 1	Autism children's centre - 1	Printing - 1	Property Management - 1
Architecture - 1	Cosmetics retail - 1	Stationery retail - 1	Digital marketing / event management - 1
Building contractor - 1	Organic baby/skincare products manufacture - 1	OEM cosmetics manufacturer - 1	Organic fertilizer and animal feed manufacturer - 1

Figure 11: Profile (Subsectors) of WSMEs Interviewed

16 companies represented SEs, while only 2 were MEs (architecture and 1 F&B company). This is consistent with the national breakdown, where MEs comprise approximately 10 percent of the SME ecosystem. Although two companies had high annual revenues of RM3 million and above, they had to be classified as SEs, rather than MEs, as they had less than 30 workers.

The enterprises had been established from 3 to 31 years and employed 5 to 50 employees. There was a balanced mix in terms of respondents' ages, with 6 in their 30s, 5 in their 40s and 7 in their 50s.

Age of WSME Respondents

Age of Company

In their 30s - 6; In their 40s - 5; In their 50s - 7

Less the 10 - 9; 10 to less than 20 years - 4; 20 years and above - 5

Figure 12: Profile of WSMEs Interviewed (continued)

Brief Profile of Experts Interviewed

Women Associations Expert (1)	SME / Entrepreneurship Expert (1)	Digital Transformation Expert (2)
Women's Entrepreneur Association Representative	Educator / Founder of International Schools	Banker / Organizer of Business Accelerator
		Alternative Financing Operator
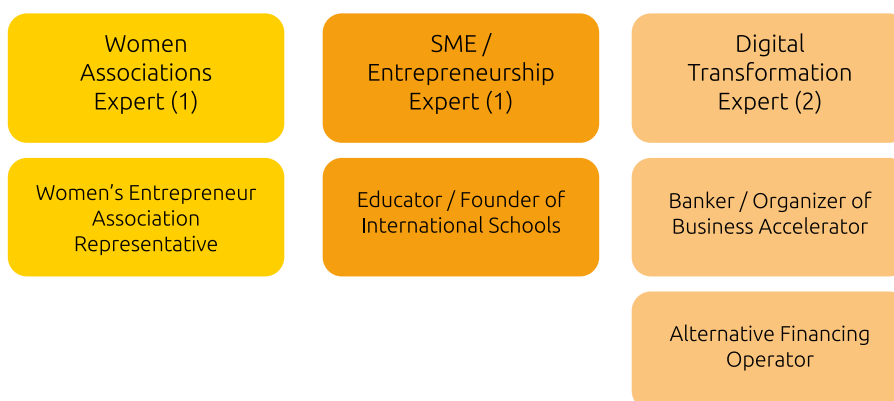
Figure 13: Profile of Experts Interviewed

Four experts were selected for the interviews, as shown in the above figure. They were chosen based on their extensive knowledge and experience in the country's digitalization ecosystem. Expert interviews were conducted to achieve a better understanding of the SME ecosystem and trends in digital adoption, as well as challenges faced by SMEs in general. The experts also identified some strategies to overcome these challenges. The respondents were interviewed on various aspects of the 4 pillars, with a focus on the key findings from the WSME interviews.

3
Interview Findings

Financing: Self-financing Still the Default Choice

Many WSME participants considered the use of operating profits as the preferred way to finance their businesses. This was seen as the option that could demonstrate self-sustainability and strong businesses fundamentals. Other options for financing explored included bank loans and government grants.

Internal financing was utilized by the majority of the participants (17 out of 18), with only 5 making use of bank loans. Three participants utilized both bank loans and government grants, as part of their financing options. The low rate of bank loan utilization appears to indicate a risk-averse attitude among WSMEs.

It should be noted that the owner of the most mature company in the study, which had been around for more than 30 years and had the highest estimated revenue among participants, was also self-funded and strongly against borrowing.

Internal Funds / Retained Earnings

17 / 18 WSMEs

Government Grants & Loans

6 / 18 WSMEs

Bank Loans
5 / 18 WSMEs

Figure 14: Source of Financing
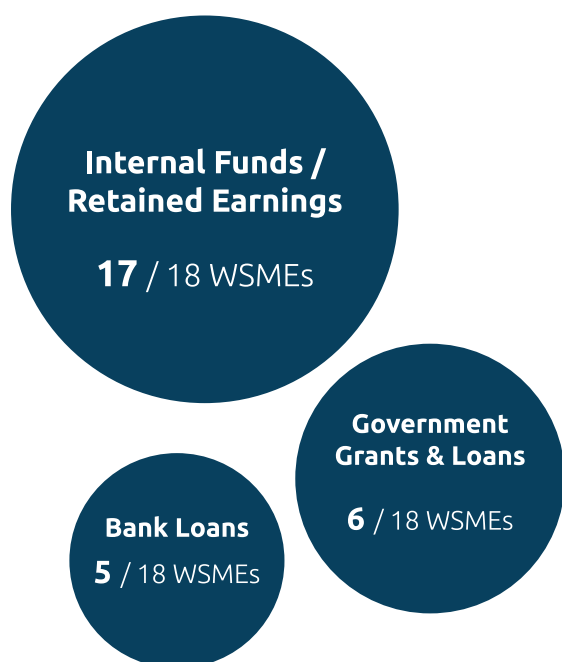
"

My funding is still on my own. I tried to approach the bank for loans because I had customers, and I needed to buy raw materials. Since it's a factory, materials are really expensive. I wrote my business proposal and gave it to the bank, but they said my cash flow was not good. They wanted to see companies with good cash flow then they could lend it to you.

(Owner of Manufacturing SME)

Sufficient internal funds were also cited as one of the reasons for not undertaking other financing options. In cases where external funds were needed, they would rely on family members for assistance. Difficulty in getting bank loans had been a challenge for manufacturing WSMEs as they would need to demonstrate profitability to qualify for a loan. As they tend to invest heavily in machinery, especially in the early years of the business, they may have limited internal financial resources, and hence may not meet the eligibility criteria set by financial institutions.

Bank loans were taken mostly from local banks. However, one participant commented on having to prepare too much documentation prior to loan application submission.

In terms of government grants and loans, participants utilized funding from agencies under various ministries, such as the Ministry of Entrepreneur Development and Cooperatives (MEDAC), Ministry of International Trade and Industry (MITI), and MOSTI.

These are among the ministries that are mandated by the government to provide grants to beneficiaries befitting their respective portfolios. The quantum and type of financial assistance vary by agency.

Pillar 1 - Access to Financing

Innovation Grants Utilized by Manufacturers while New Funding Opportunities Largely Shunned by WSMEs

While digitalization brought many new opportunities in the area of financing, these had not been well utilized by the participants. Apart from the government-administered R&D and digitalization grants, none of the other new funding opportunities, such as equity crowdfunding (ECF), peer-to -peer (P2P) lending, and digital microfinancing, were adopted by the WSME participants.

While two of the three manufacturing participants utilized research and development (R&D) grants and soft loans from the government, as they were developing new biotechnology and chemical products, these grants were not sought by the other participants.

New Available Opportunities	Adopted by WSMEs
Private Equity	NO
Venture Capital	NO
Invoice Financing	NO
Equity Crowdfunding	NO
P2P Lending	NO
Innovation Grants	YES
Women-focused Grants	NO
Digital Micro Financing	NO

- R&D grants from goverment (2 WSMEs - utilizing)
- Digitalization grants from government (1 WSME - sought)

Figure 15: New Opportunities in Access to Financing vs Opportunities Adopted by the WSMEs

This may be due to the lack of available innovation grants that were targeted at non-manufacturers and non-tech companies. A quick check on the available government innovation grants in Malaysia, such as MOSTI R&D Fund[16], the MOSTI International Collaboration Fund[17], MDeC Global Tech Fund[18], the Malaysian Technology Development Corporation's (MTDC) Commercialisation of R&D Fund[19], the MTDC Technology Acquisition Fund and the Biotechnology Transformation program Fund,[20] showed that they were largely targeted at technology companies or manufacturers.

This left companies in the non-tech service sectors (e.g. F&B, retail, building management or printing) with potentially lower chances for accessing this valuable opportunity, even if they planned to introduce innovative services or exciting new ways of delivering their services. A participant from the services sector did apply for the MDeC Digitalization grant, which was a matching grant for the adoption of digital tools. However, she endured a troublesome application process (through an appointed bank) due to lack of clarity on the submission channels, and had yet to receive the money at the time of the interview.

As many as 15 out of the 18 participants claimed that they had heard of alternative financing options before, but had not explored such options in a serious manner. Aside from only one or two participants, perception towards alternative financing bordered on the negative, with entrepreneurs commenting on high-interest rates (for P2P financing), dubious investors, and loss of company autonomy.

There were still doubts over stakeholder protection in the alternative financing sector, especially when compared to established financial institutions. This was even after regulatory frameworks on ECF and P2P financing were put in place by the Securities Commission (SC). Concerns were raised by two participants regarding venture capital (VC), specifically its misalignment with their values on organic growth and profitability. These views on alternative financing and VC were some of the key obstacles in the effort to popularize the digital funding ecosystem among Malaysian WSMEs.

Lack of Awareness and a Strong Mindset against Borrowing and Equity Sharing Prevented WSMEs from Capitalizing on New Opportunities for Funding

When it came to accessing funding, there was a notable lack of awareness, as expressed through inaccurate perceptions on the mechanisms of alternative financing, as well as certain financing options from the government.

> "
>
> For me, I'm anti-borrowing [for business]. But for property I don't mind. I feel that if you're in a business, your business should be able to sustain [itself]. I'm always against borrowing.
>
> (Owner of Property Management SME)

Common Challenges   Faced by WSMEs

Awareness	YES	● Lack of awareness on the mechanisms of alternative funding (13 WSMEs)
Skills	NO	
Regulation	NO	
Language	NO	
Resources	YES	● Lack of time and resources to work on supporting documents (2 WSMEs)
Gender related	NO	
Leadership	NO	
Knowledge	NO	
Other		● Culture/mindset against borrowing and offering company equity to external parties (7 WSMEs)
		● Limited/irrelevant features by the funder/funding platform (2 WSMEs)

Figure 16: Challenges in Access to New Financing Opportunities by the WSMEs

There was also a strong aversion to borrowing money for business, and offering company equity to external investors among a number of the WSME founders. These founders would rather: i) prioritize operational cost management over financing; ii) prioritize internal funding over external financing; iii) prioritize stability over growth; and iv) avoid external funders.

This mindset was seen to have a strong effect on their impressions of new financing methods. The lack of impetus to explore any form of external financing automatically prevented them from seeking out novel methods of funding.

Other challenges faced by participants with regards to access to funding within the digital economy ecosystem included the lack of resources to deal with grant applications and the limited or irrelevant features offered by funding platforms. One of the participants who had explored GoFundMe and Kickstarter a few years ago pointed out that Malaysian bank accounts were not supported on those platforms.

Pillar 2 - Access to Mentoring, Networking, and Skills

Digitalization has Democratized Learning and Networking for WSMEs

With regard to new opportunities in the area of mentoring, networking and learning, it was clear that digital learning was rather well-received. Quite a number of participants leveraged on digital tools to listen to talks and webinars, watch videos on relevant topics and connect with mentors and peers within their industries.

New Available Opportunities | Adopted by WSMEs

New Available Opportunities	Adopted by WSMEs
Wider access to successful women (locally & globally)	NO
Instant/easy communication	YES
Virtual events	NO
Easy low cost access to international professional networks	YES
Virtual training	YES
E-learning	YES
Webinars	YES

● Networking through social media (3 WSMEs)
● Contacting mentors through social media (1 WSMEs)

● R&D grants from goverment (2 WSMEs - utilising)
● Digitalization grants from government (1 WSME - sought)

Figure 17: New Opportunities in Access to Mentoring, Networking, and Skills vs Opportunities Adopted by the WSMEs

"

Go to Google, YouTube... learn things about your business. If you go for formal training, it will cost you money.

(Owner of Property Management SME)

The opportunity to easily connect with successful women or professional networks on a global scale had not been widely taken up by the participants. This could be due to their existing reluctance to seriously explore global business opportunities— partly owing to the fear of being on the losing end of business deals, particularly in foreign countries.

Limits of Digital Learning and Skepticism Over External Mentors

While a decent number of WSME participants had been attending webinars on industry-specific topics and on business management in general, a few of them felt that virtual platforms were not interactive enough to provide a more wholesome learning experience.

Common Challenges | Faced by WSMEs

Common Challenges	Faced by WSMEs
Awareness	NO
Digital Literacy	NO
Language	NO
Available of Training	NO
Gender-related	NO
Leadership	NO
Resources	NO
Other	

• Interior to non-digital learning experience (3 WSMEs)
• Distrust over external mentors (2 WSMEs)
• Favor-trading culture in online networking groups (1 WSMEs)

Figure 18: Challenges in Accessing New Mentoring, Networking, and Skill Acquisition Opportunities among the WSMEs

For example, a physical classroom setting was seen to be more conducive for interacting with the instructor and for practicing new skills on the spot. Digital learning was also seen to require active self-discipline, whereas discipline could be passively instilled by group dynamics in a physical learning setup.

Participants in the manufacturing sector exhibited a sense of unease with consulting external mentors, as potentially sensitive information could be revealed. This unwillingness to seek advice from third parties had prevented them from seeking mentorship via non-exclusive platforms such as online mentoring networks or social media.

It was also highlighted that certain online business networking groups were only willing to share knowledge in exchange for actual business deals. This had prompted participants to return to the tried and tested ways of networking through formal trade associations.

> "
> I have attended a lot, but webinars but those were one-way communication. It's useful but only to a certain extent. You need something like a teacher-student setting to point out your mistakes for you.
>
> (Owner of Cosmetics Retail SME)

> ❝
>
> I cannot find anybody who can mentor me. It's not easy to find someone to mentor [you], because you'll be divulging a lot of things.

(Owner of Cosmetics Retail SME)

Pillar 3 - Business Processes and Management

Digitalization of Business Processes and Management Gain Traction—Particularly in Terms of External Processes

With regard to business processes, quite a number of new opportunities were being utilized by the participants, with social media marketing, official websites, and accounting software being the most widely used. The other digitals tools for improving internal business processes, such as procurement systems, supply chain management systems, CRM systems and data analytics were deployed by a smaller group of WSMEs that were serving the mass consumer market.

In general, social media marketing was seen as affordable and effective in terms of reaching out to the masses, which explains its popularity among the participants. Setting up an official website or an online business profile was also seen to be cost-effective, due to the availability of low-cost website building tools such as Wix and free tools such as Google My Business.

Most digital marketing efforts were also seen to be linked to the desirable outcome of customer acquisition, which could in turn lead to sales. In contrast, it was not easy for many participants to draw a direct link from tools such as HR software, project management applications and cloud storage, to better business outcomes. Those who did utilize the new opportunities to improve internal processes were looking to speed up processes, such as approval and monitoring of leave applications, and to reduce errors in data entry and data organization.

> ❝
>
> We posted on Facebook about our initiatives in producing hand sanitizers for frontliners and donating them to schools, as well as our move to employ youth interns who were struggling to get jobs. People seemed to like it and that's how we got more people buying from us. It spread very fast.

(Owner of OEM Cosmetics Manufacturing SME)

New Available Opportunities   Adopted by
                                WSMEs

New Available Opportunities	Adopted by WSMEs	
Financial management	NO	
HR (Payroll/Employee Engagement) software	YES	● Cloud (5 WSMEs) ● Non-cloud (2 WSMEs)
Accounting software	YES	● Cloud (5 WSMEs) ● Non-cloud (6 WSMEs)
Digital marketing	YES	● Social media marketing (10 WSMEs) ● B2B marketing (2 WSMEs) ● Search optimization (1 WSME) ● Website (12 WSMEs) ● Livestreaming (1 WSME) ● Google My Business (2 WSMEs)
Cashless payments	YES	● Payment gateway (3 + 2* WSMEs) ● E-wallet (2 WSMEs)
Procurement system	YES	
Supply chain management	YES	
Customer relationship management	YES	● None-sector specific software (3 WSMEs) ● Sector-specific software (3 WSMEs)
Data analytics	YES	● Cloud POS
Booking systems	NO	
Data collection / storage	YES	● Free clou storage (2 WSMEs) ● Remote NAS (3 WSMEs)
Other		● E-commerce platform (3+2* WSMEs) ● Robot waiters (1* WSME) ● Video conferencing (8 WSMEs) ● Robotic process automation (1 WSME) ● Collaboration tools (5 WSMEs) ● Biometric system (1 WSME) ● Remote desktop (2 WSMEs)

Figure 19: New Opportunities in Business Processes and Management Transformation Adopted by the WSMEs

Mismatch of Features with Critical Business Needs and Cost of Tools Discouraged Wider Digitalization of Business Processes and Management

However, improvement in business processes was almost always be tied to spending and was still seen primarily as a cost rather than an investment. It was not uncommon, especially among the smaller companies, to hear complaints about the cost of software and the accompanying hardware. The cost of the tools would have to be justified through increased opportunities for sales or highly significant improvements in the speed of business processes.

Common Challenges	Faced by WSMEs	
Awareness	YES	● Lack of awareness on security features of cloud storage (2 WSMEs)
Skills	NO	
Regulation	NO	
Language	NO	
Resources	NO	
Gender-related	NO	
Leadership	NO	
Knowledge	YES	● Resistance to change among staff (5 WSMEs)
Leadership	YES	● Cost of software / service (8 WSMEs) ● Cost of accompanying hardware (4 WSMEs) ● Cost of additional training (1 WSME)
Knowledge	YES	● Need for additional technical training (1 WSME)
Other		● Lacklustre features/mismatch of features with key business needs (9 WSMEs) ● Inferior to non-digital tools in certain situations (4 WSMEs)

Figure 20: Challenges in Accessing New Opportunities in Business Process and Management Transformation Among the WSMEs

The software and services that were seen as costly included specialized software, e-commerce platforms, payment solutions, market intelligence, cloud access, and even basic word processing suites.

It should be noted that tools and software that may seem affordable to large corporations can be seen as a major burden to (W)SMEs. Furthermore, when the tools required certain add-ons to be fully functional or required users to be trained, the additional cost and extra time spent made the participants seriously question their value for money as a whole.

For the more cash-strapped companies, softwares, and online tools that were priced in US dollars were also a deterrent, as they would have to face foreign exchange risks. For example, a Xero Standard subscription might sound very affordable at $30 a month (price as of August 2020), but after conversion and bank charges, it would cost more than RM125 a month (as of August 2020) and more

than RM1,500 a year. In comparison, the Standard version of SQL Accounting, a locally developed accounting software that is used by a number of the WSMEs, comes with a one-off fee of RM2,999.

Products that required add-ons (with an additional fee) to be fully functional were a limitation for companies that were watching their spending and created a mismatch between the product's features and WSMEs' more pressing business needs.

There were several examples cited about this mismatch between products and business needs. The owner of a stationery retail SME noted that an inventory management system that they recently adopted did not offer sufficient automation, as it still required certain data to be entered manually. As a result, team members found themselves spending more time setting up their database than they thought they would.

> " "
>
> We made a big investment in building information modelling (BIM) software…[It's] very costly: not only do you have to change the software, but also the hardware… I also have to train the staff to use it, which is time-consuming... After all the time and money spent in training, the company loses out if [employees] leave or are pinched by other firms.
>
> (Owner of Cosmetics Retail SME)

There were cases in which the digital tools did not cater well enough to the needs of end-users. There also seemed to be an interesting dismissal of cloud storage among 2 participants based on the view that it would not be as secure as on-premise servers, even if cloud providers had been offering advanced security features and were well equipped to deal with security threats.[21 & 22] These 2 WSMEs were in the field of auditing, which required them to treat clients' data with the highest level of privacy and security.

While it could be argued that there was limited awareness of the security features of cloud computing, these concerns were valid and had to be addressed by the other stakeholders in the digital economy ecosystem. This could be through increased education and awareness efforts as well as the development of products and services that catered to these very concerns.

> " "
>
> During the (COVID-19) movement control period, we gave online classes to kids, but we received feedback that it was not easy for parents because they had to work from home and the kids were still young… [As] the parents couldn't adjust, we stopped online classes after 2 weeks.
>
> (Owner of Architecture SME)

Pillar 4 - Crisis Management (COVID-19)

Acceleration of Digitalization Undeniable During the COVID-19 Crisis, but Can It Last?

During the height of the COVID-19 outbreak in Malaysia, when strict movement controls were imposed in March and April 2020, many of the WSMEs were forced to accelerate digitalization of certain business operations. This was evident in the increased adoption of remote working, e-commerce platforms, and digital learning among the WSMEs in the study.

As the consideration surrounding the adoption of digital tools shifted from how much one could benefit from using the tool to how much one stood to lose from not using the tool, the choice was rather straightforward, even for the WSMEs that were doubtful of the value of such tools in the past.

For example, the F&B companies had been considering delivery services prior to the crisis but only started offering the services during the crisis. 1 participant who was skeptical of cloud software also started considering it during the crisis, as she found herself without access to certain data while working from home.

Crisis Management Measures Enabled Through Digitalization	No. of WSMEs That Adopted Them During The Crisis
Digital Marketing	10
Remote Work	10
Video Conferencing	6
E-commerce (including online food ordering & delivery)	4
Digital Learning (as receivers)	2
Digital Learning (as providers)	2
Cloud Systems	1+1*

*Started seriously considering during crisis

Figure 21:. Crisis Management Measures Adopted

Resistance to Digitalization Weakened During the Crisis, Though Cost and Relevance of Certain Digital Platforms Still Caused Problems

While doubts and complaints about digital tools had reduced during the pandemic as participants were forced to adapt to the situation, there were still a few issues that emerged as the WSMEs implemented new crisis management measures.

Challenges When Implementing New Crisis Management Measures	No. of WSMEs That Faced Such Challenges
Cost	2
Not suitable for clients	2
Lacklustre features / services of newly acquired tools	1
Existing software limitations	1
Clients' software limitations	1

Figure 22: Challenges when Implementing Crisis Management Measures

The F&B retailers who turned to delivery platforms to continue serving customers during the crisis saw further strains to their finances due to significant commission charges as well as logistical issues:

> " One of our delivery partners charged 30 percent of sales transactions. The ordering platform charges 10 percent, but there are also additional charges for delivery. In the beginning, we had a lot of problems with the delivery—our food disappeared, riders [went] missing. I think the riders took on too many orders, [so] maybe [they] couldn't cope. In terms of the charges – we just needed to swallow [the losses].
>
> (Owner of Architecture SME)

The obstacles to a smooth implementation of remote work were tied to software limitations of both the WSMEs' IT infrastructure and their clients' IT infrastructure. One WSME could not access certain important data remotely as its existing software did not run on the cloud. Another WSME could not complete certain tasks as its client did not have remote access to necessary data. The remote working environment brought on by COVID-19 amplified the impact of one organization's lack of digitalization to the wider business value chain.

Opportunities

Looking closer at the new opportunities that had been adopted by the WSMEs across the four pillars, it could be observed that there were two key motivations behind the adoption: i) cost-effectiveness, and ii) revenue growth.

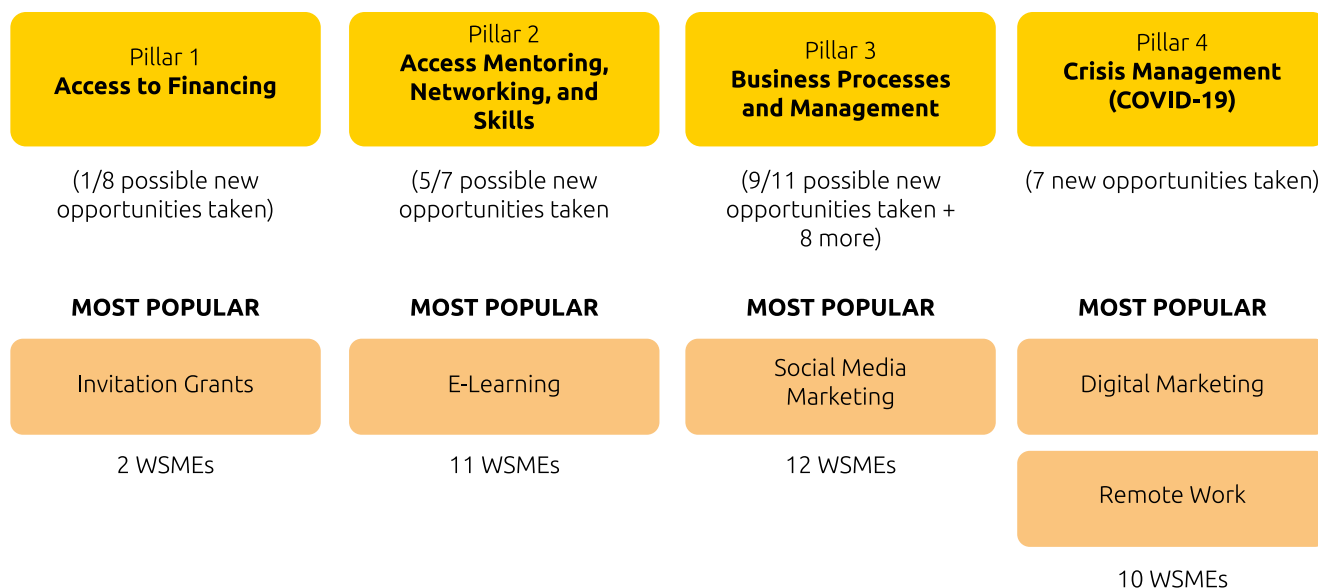| Pillar 1 **Access to Financing**	Pillar 2 **Access Mentoring, Networking, and Skills**	Pillar 3 **Business Processes and Management**	Pillar 4 **Crisis Management (COVID-19)**
(1/8 possible new opportunities taken)	(5/7 possible new opportunities taken	(9/11 possible new opportunities taken + 8 more)	(7 new opportunities taken)
MOST POPULAR	**MOST POPULAR**	**MOST POPULAR**	**MOST POPULAR**
Invitation Grants	E-Learning	Social Media Marketing	Digital Marketing
2 WSMEs	11 WSMEs	12 WSMEs	Remote Work
			10 WSMEs

Figure 23: Top New Opportunities Adopted by the WSMEs Across Four Pillars

In the area of access to funding, government innovation grants were the only new opportunity being utilized by 2 manufacturing WSMEs. There was no shortage of government support with regards to innovation grants for the information technology (IT), manufacturing, biotechnology, energy and agricultural sectors.[23] These WSMEs took the opportunity to fund the development and commercialization of their products with interest-free grants and soft loans, which served the dual purpose of cutting their investment costs as well as realizing their plans for future revenue generation. This opportunity was, however, scarce for non-tech service sectors such as F&B retail, auditing, architecture, property management, and childcare.

In the area of access to mentoring, networking and skills, digital learning through online literature was very popular, as it was mostly free or low-cost in nature. With regard to business processes and management, the popularity of social media marketing tools was attributed to their affordable prices. A few WSMEs ran the most basic form of social media marketing by using free Facebook and Instagram pages without running advertisements. The popularity of social media marketing persisted during the height of the COVID-19 crisis, with most of the country stuck at home with very little exposure to outdoor and point-of-sale marketing materials.

Accounting software was also widely used among the participants, which was not surprising due to its long presence in the Malaysian market. For example, the popular UBS accounting software had been available since 1988.[24] There has also been strong institutional support by government agencies, such as the Inland Revenue Board (LHDN) and the Employees Provident Fund (KWSP), in ensuring that the features of locally available HR and payroll softwares were compatible with local tax documents.

WSME highlight 1: Promise Earth (M) Sdn Bhd

Figure 24: Jovie Chong (3rd from left)

Company Name: Promise Earth (M) Sdn Bhd
Sector: Manufacturing (fertilizers from organic waste)
Respondent's name: Jovie Chong (daughter of the founder, Mr Jeffrey Chong) - Finance Manager

Promise Earth's story:

Promise Earth (M) Sdn Bhd is a biotechnology company that is involved in the treatment of organic waste through the process of fermentation and composting. Organic materials that are treated here are derived from offcuts of food processing plants, and are fermented using a fermentation technology that digests the waste, by the use of aerobic thermophilic microbes, within 24 to 48 hours. The fermented output is then converted into natural fertilizers and animal feed appetizers, under the brand name 'Bio-Mate'. Apart from 'Bio-Mate', the company is now venturing into selling pet supplements (with a brand name 'Epic Treats'), under Jovie's initiative.

New opportunities:

Pillar 1: Access to Financing. Leveraging on its BioNexus status, the company received government funding from the Ministry of Science, Technology and Innovation (MOSTI) and the then Ministry of Energy, Science, Technology, Environment & Climate Change (MESTECC), respectively. These funds were used to expand the use of biotechnology in its product development.

Pillar 2: Access to Mentoring, Networking, and Skills. Citing proprietary technology, Jovie revealed that the company collaborates with consultants in the agriculture industry and partners with Universiti Putra Malaysia (UPM) on its product development. As for her entrepreneurship journey, Jovie shared that she listens to multiple online (mentoring) webinars.

Pillar 3: Business Processes and Management.
Riding on the success of the commercialization of its high-speed fermentation and composting machines, Promise Earth began marketing and selling on a larger-scale, and has been using UBS accounting software 2015 to facilitate smooth transactions with purchasers. The software also enables them to generate profit and loss and balance sheet reports almost instantly, and to monitor their stocks (fertilizers, animal feed appetizers and pet supplement) closely. On the customer front, their product (fertilizers) is promoted digitally to consumers on Facebook and on major online marketplaces, such as Shopee and Lazada.

Note: BioNexus status is awarded to companies undertaking value-added biotechnology and/or life sciences activities.[25]

Challenges:

Pillar 1: Access to Financing. Although Jovie was not fully aware of alternative financing, the company is open to exploring it, as they were seeking funding for other aspects of the business.

Pillar 2: Access to Mentoring, Networking, and Skills. Jovie shared that she would appreciate a mentor in business management and digital marketing. This stemmed from the desire to approach the younger generation of agri-prenuers, who are seen to be more open in embracing digitalization.

Pillar 3: Business Processes and Management.
As agriculture is still a rather traditional industry in Malaysia152, the fertilizers are mostly promoted and sold directly to farmers through their salespersons on the ground. Despite having a website and a Facebook page, digital penetration customers is relatively low due to the traditional base, making it harder to conduct sales online. Despite its offline business transactions, customers are receptive to conducting online banking transactions for purchasing matters.

How does digitalization help you as a female entrepreneur?

A significant challenge faced by Jovie is that the farmers are predominantly older males, who prefer dealing with male salespersons. However, digital marketing channels such as Facebook and the website helped to neutralize this gender-specific element, allowing her to connect to customers that would traditionally not want to engage with her. She noted that this culture was slowly changing with a new crop of second-generation younger farmers, who were more open to communicating with women. ,

> "
> For women, there are limitations. If I go with my husband, customers will usually speak to him and try not to talk or look at me. But the young generation of farmers, they are okay.
>
> Jovie Chong

What is your advice to young female entrepreneurs?

Jovie shared that working digitally was beneficial to women as it allowed them to overcome the gender discrimination they faced when dealing with more traditional or conservative customers, such as those in agriculture. In bypassing this significant physical constraint, digital technologies allowed them direct access to customers who would have ordinarily shied away from communicating with them in person. Further, leveraging digital marketplaces such as Shopee and Lazada also provided WSMEs with a wider customer reach.

WSME Highlight 2: Consumer Products (Anonymous)

Company Name: Consumer Products (Anonymous)
Years in Business: Less than 10 years
Annual Revenue: RM 2 to 3 Million (USD 0.5 to 1 Million)

About the company:

The company features products that are customizable and sold to both local and international markets. Categorized as an SE, the company has less than 20 full-time and part-time employees, but is looking to scale up the business further, riding the wave of digitalization. The company leadership has invested in digital technologies for various business activities, exhibiting a strong growth mindset in relation to digital technologies. The company has managed to keep its costs in check for the digital solutions adopted, and part of its development of a solid digital transformation strategy involves ensuring the existing infrastructure can support the emerging digital transformation.

New opportunities:

Pillar 1: Access to Financing. In addition to internal funding and the reimbursement support received as a member of the Malaysia External Trade Development Corporation (MATRADE), the company leverages on a pre-order sales strategy, inspired by P2P lending and crowdfunding platforms such as GoFundMe and Kickstarter, to finance the development of its products.

Pillar 2: Access to Mentoring, Networking, and Skills. Seeking to scale up the business further, the leadership signed up for a few mentorship programs. Interviewees shared that such programs were beneficial in enhancing knowledge sharing and connecting with successful organizations to learn best practices. In fact, the company's revenue has grown by 20 percent within 9 months, where the success was largely attributed to participation in this type of mentorship programs. The leadership also resourcefully relied on vendors' free webinars to learn new skills, such as the use of newly adopted digital tools, and to transfer that knowledge to their employees.

Pillar 3: Business Processes and Management. Digital technology adoption is a key element of the company's business transformation strategy and growth plan. An e-commerce platform was first launched on Shopify to boost online sales and expand customer reach, which is considered a user-friendly site, for both customers and businesses, and allows cross-software integration. Multiple marketing channels such as Mail Chimp, Instagram, Facebook and YouTube have also been set up to optimize engagement with their customers. The company also moved its operations online, using software such as PayrollPanda for payroll management and employee onboarding; HealthMetrics for employee healthcare and medical receipts management; Trello, Slack and Notion for project management; and, ECount, TradeGecko and Xero for inventory management and accounting purposes.

Challenges:

Pillar 1: Access to Financing. Although aware of other available government grants, the company is not actively seeking such options as they have heard that this can be a tedious process to apply for, with a long wait of up to 5 months and with no guarantee of success.

Pillar 2: Access to Mentoring, Networking, and Skills. The leadership still struggles with employee mindset, due to strong resistance to the use of new digital technologies among staff. This, along with the lack of entrepreneurship and leadership classes for women in Malaysia, has hindered a smooth transition to fully digitalized operations. The woman owner of the company asserts that building a business is like a building puzzle, where leadership skills are needed to overcome the series of obstacles that come one after another.

Pillar 3: Business Processes and Management.
While software applications, such as Shopify, Xero and TradeGecko, provide digital solutions to inventory management, accounting and other business processes, the founder noted that it is often not easy to implement and integrate these applications. Part of the process still requires information to be manually keyed in, as the company faces challenges in organizing and synchronizing the data across the different tools into the same system, and streamlining processes efficiently towards full automation.

How does digitalization help you as a female entrepreneur?
The company owner noted that digitalization had helped women by providing more possibilities for work-from-home arrangements for her and her team, which has greatly assisted in the management of work-life obligations.

What is your advice to young female entrepreneurs? As a female entrepreneur, there are instances that will make you doubt yourself, especially in being underestimated or facing differential treatment due to gender discrimination or cultural stereotypes. Therefore, it is essential for young female entrepreneurs to focus on their strengths and direct their energy to build their business.

Challenges

Operational Challenges Dominate the WSMEs' Troubleshooting Itinerary

As the research assumes that new opportunities brought by digitalization can help WSMEs overcome their business challenges, it is also important to examine the challenges faced by these entrepreneurs.

Most Significant Challenges Faced by WSMEs in Their Businesses

Operational Costs
17/18 WSMEs

Product Features/ Services
13/18 WSMEs

Culture/ Mindset
12/18 WSMEs

Figure 25: Most Significant Challenges Faced by WSMEs

It was found that issues with operational costs were the most common, followed by issues with tools and services by suppliers, service providers and potential funders. Other problems cited by participants related to culture or mindset among team members, clients and other businesses.

Interestingly, interviews revealed that while the new opportunities brought by digitalization managed to address previous issues with tools, they could not overcome issues associated with operational cost and mindset.

"

The reason why we didn't go for a logistics-specific system is the [high] cost, around RM10k+ to set up everything. A generic one [costs] just a few thousand to set up, and just RM500 monthly to maintain.

(Owner of Architecture SME)

New Opportunities Made Possible By Digitalization VS The WSMEs' Most Significant Challenges

Pillar 1 **Access to Financing**	Pillar 2 **Access Mentoring, Networking, and Skills**	Pillar 3 **Business Processes and Management**	Pillar 4 **Crisis Management (COVID-19)**
Top challenges: ● Limited awareness (12 WSMEs) ● Culture/mindset (7 WSMEs)	Top challenges: ● Product features /services (6 WSMEs) ● Culture/mindset (5 WSMEs)	Top challenges: ● Product features /services (9 WSMEs) ● Cost (8 WSMEs) ● Culture/mindset (5 WSMEs)	Top challenges: ● Product features /services (4 WSMEs) ● Cost (4 WSMEs)
New opportunities adopted to address top challenges: ● None	New opportunities adopted to address top challenges: ● E- Learning (11 WSMEs) ● Webinars (7 WSMEs)	New opportunities adopted to address top challenges: ● Online Payment Gateway (1 WSME) ● Cloud Software (1 WSME)	New opportunities adopted to address top challenges: ● Cloud Software (1 WSME)
● Ability of existing new opportunities to address WSMEs' challenges is limited ● Subject to major increase in awareness and change of mindset	● New opportunity (e-learning) managed to address issues with guidance from existing trade associations ● Culture/mindset was still a major stumbling block in promoting new mentoring opportunities	● New opportunity (online payment gateway) managed to address issues with product features/services of existing tools ● Adoption of new opportunity (cloud software) was prevented or slowed down by issues with cost and culture/mindset	● New opportunity (online payment gateway) managed to address issues with product features/services of existing tools ● Adoption of new opportunity (cloud software) was prevented or slowed down by issues with cost and culture/mindset

Figure 26: Opportunities vs Challenges

Underlying Culture/ Mindset Problems Prevent Further Advances in Business Processes & Management and Growth

Looking closer at the common challenges faced by the participants across the four key pillars, problems with products, services and vendors, followed by problems with costs were the most common issues faced. However, upon deeper analysis, the authors discovered that mindset problems were more deeply-rooted and were not being sufficiently addressed. While the women founders put in the effort to address resistance to change among staff members through training and encouragement, some fundamental issues related to the founders' mindsets were not addressed.
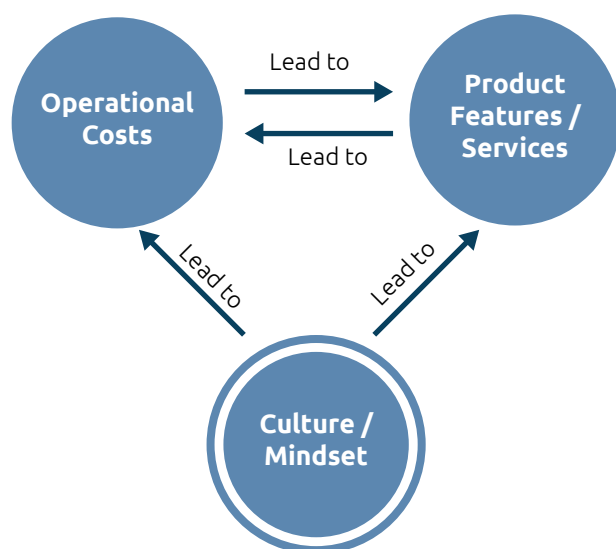

Figure 27: Relationship between Challenges

Upon examining the relationship between the top three challenges, the authors identified culture and mindset issues as the root causes of problems around operational costs and frustrations with unsatisfactory tools.

An anti-borrowing mindset limits the options to address operational costs, while resistance to change limits the options for tools and solutions that can in turn address business process challenges. In addition, the unwillingness to seek advice from

external experts can further limit one's knowledge on how to address challenges at various fronts, from financing to human resources.

Therefore, issues that emerge in relation to the founders' and the team members' mindsets and culture could lead to the delay in addressing other issues across all pillars.

Factors Affecting Digitalization

Higher Digital Adoption among B2C Companies with Experience in Accelerator Programs

In order to evaluate the level of digital adoption among the WSMEs, the participants' answers to questions regarding the digitalization of business processes were examined to see if and what kinds of tools were utilized. This was confirmed through an examination of the web and social media presence of each WSME.

Emphasis was put on the number of digital tools adopted across different business processes instead of the level of sophistication of the tools. For example, a printing company might be using an expensive and highly advanced software for producing posters and banners for clients, but might not be using digital tools across many internal processes. In this case, this company should not be considered highly digitalized. In contrast, another company might be using affordable web-based and cloud applications across various internal and external business processes, including accounting, HR, marketing, project management and customer management. In this case, this company should be seen as highly digitally-enabled.

With regards to the level of digital adoption, the 18 WSMEs can be placed into three categories: i) very highly and highly digitalized; ii) moderately digitalized; and iii) slightly digitalized, as shown in Figure 4.28.

Very Highly & Highly Digitalized (6 WSMEs) | Moderately Digitalized (5 WSMEs) | Slightly Digitalized (7 WSMEs)
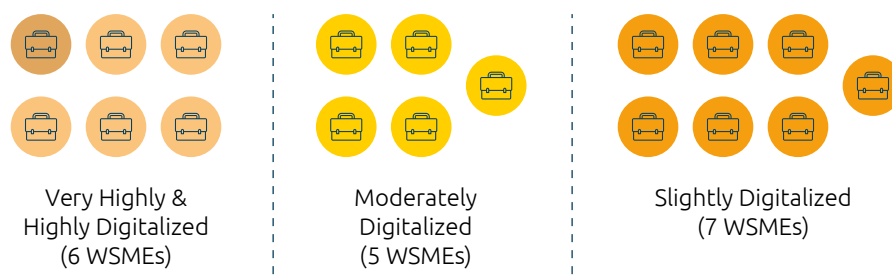
Figure 28: Level of Digital Adoption among the 18 WSMEs

Due to the limited number of MEs in this study, a comparison between MEs and SEs could not be made. However, it could be pointed out that among the 2 MEs interviewed, one of them counts as one of the most digitalized while the other counts as one of the least digitalized in terms of the number of tools deployed across various business processes. The most digitalized company in this study by far, which is also the only company that can be labelled as 'very highly digitalized', is an SE.

A clearer indication of the level of digital adoption is the type of clientele that the company serves. It was found that out of six of the 'very highly digitalized

and highly digitalized' WSMEs, five of them were business-to-consumer (B2C) businesses. The most digitalized WSME is also in the B2C business. In the 'moderately digitalized' category, there is a mix of B2C, B2B2C and B2B companies. In the 'slightly digitalized' category, however, the majority of the WSMEs are B2B companies.

There is perhaps little surprise that B2C companies dominate the top tier of the digitalization rankings, as they are the ones who have had to digitalize most of their external processes—particularly marketing, sales and customer relationship management.

Very Highly & Highly Digitalized (6 WSMEs) | Moderately Digitalized (5 WSMEs) | Slightly Digitalized (7 WSMEs)
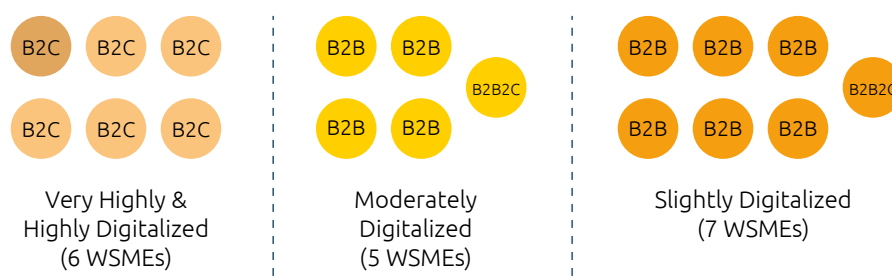
Figure 29: Level of Digital Adoption among the 18 WSMEs by Type of Clientele

It is also notable that out of 6 of the 'very highly digitalized and highly digitalized WSMEs, 5 of them had participated in the business accelerator or mentorship programs before. In fact, all 5 participants belong to the most digitalized group of companies.

It could be argued the experience in these programs might have helped this select group of participants to manage their businesses in a more strategic manner and to be more exposed to the myriad digital tools that could improve their business processes.
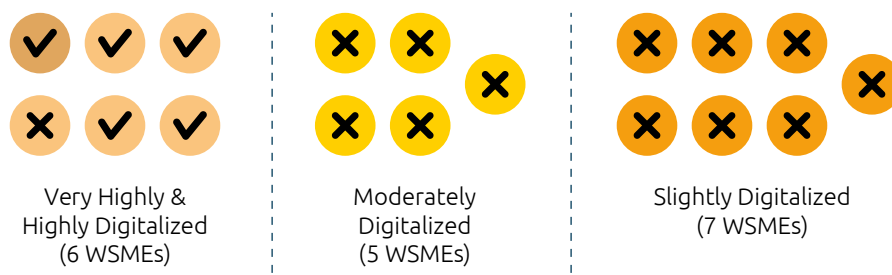

| Very Highly & Highly Digitalized (6 WSMEs) | Moderately Digitalized (5 WSMEs) | Slightly Digitalized (7 WSMEs) |

Figure 30: Experience in Business Accelerator or Mentoring Programs among the 18 WSMEs

> " I bought a robotic automation software [that was introduced to me during an accelerator program]…It helped to automate our container journey documentation… our staff usually need at least 8 minutes to process the document, but the robot can do it in 1 minute.
>
> (Owner of Logistics SME)

4
The Future of Digital Transformation for WSMEs

Experts highlight challenges in lack of awareness and wary mindset among SMEs, despite having training and Mentoring programs

Following the SME interviews, the issues raised were brought to four experts for their views and ideas, flowing around strategies that would alleviate challenges raised by the participants.

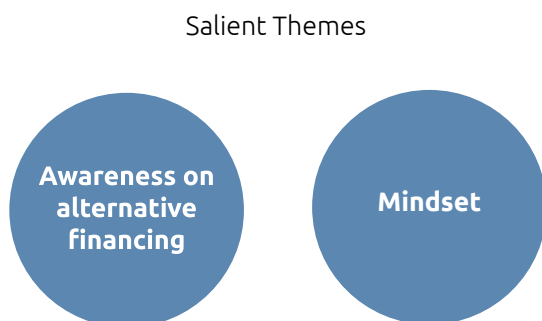**Pillar 1: Access to Funding**

Salient Themes

Figure 31: Salient Themes on Pillar 1

The alternative financing expert noted that a general wariness towards alternative financing partly stemmed from a preconceived notion that companies resorted to alternative financing due to their inability in obtaining bank loans. This indicated a rather limited understanding of alternative financing among WSMEs.

Recommendation: Although efforts were made to better educate WSMEs on alternative financing, these had met with limited success, leading to a suggestion that success stories of WSMEs benefiting from alternative financing be highlighted on major female-centric media channels. The experts acknowledged that another barrier was that not all SMEs were 'investable', highlighting fundamental knowledge gaps, whereby entrepreneurs may not fully understand the reality of fundraising in a business.

The lack of understanding is also demonstrated in the way SMEs viewed ECF. The alternative financing expert shared that many companies did not realize that they could impose their own terms when deciding how much equity is to be given away in a fundraising exercise. The experts noted that such a lack of understanding of alternative financing undermines government efforts to encourage SMEs to raise capital via digital financial platforms.

Despite the flexibility of imposing their own terms in ECF, many participants were still reluctant to relinquish equity to an external party.

On access to funding, the experts did not observe any gender-related issues. In practice, approvals on loans and grants by traditional financial institutions are executed by vetting the creditworthiness of companies through means such as the Central Credit Reference Information System (CCRIS) reports.

Pillar 2: Access to Mentoring,Networking, and Skills
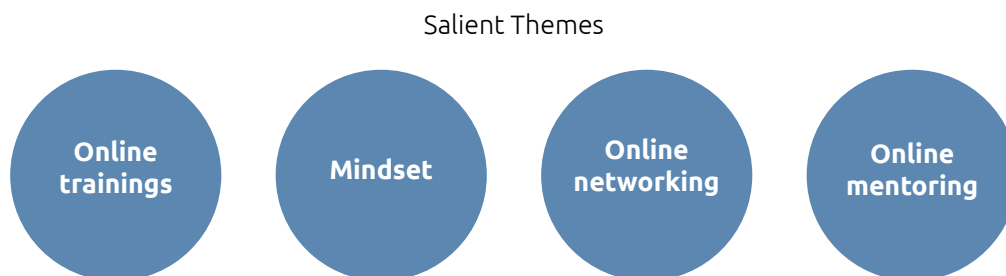
Salient Themes

Figure 32: Salient Themes on Pillar 2

Prior to the pandemic, experts from the women's association and banking/business accelerator program had been conducting offline training for SMEs. The training revolved around entrepreneurship, financial and HR management, change management, and digital skills. While offline events were still preferred due to better interactions and networking, online training enabled SMEs to connect more easily across geographical boundaries, at a much lower cost.

However, the women association expert noted that attracting participants to webinars in the current climate was challenging, and there needed to be a compelling reason for them to join. The sudden surge in webinars during and after the COVID-19 Movement Control Order (MCO), was overwhelming:

"

To attract people online, it is not that easy; it has to be very compelling. They need to feel what they can get out of it. But a lot of people now will send the recording. Some of them wait for the recordings, and they can listen to the recording when they have time. It is just like Google. There is so much information, and you just don't know where to go.

(Women Association Expert)

Recommendation: The women association expert suggested that online training should be smaller scale and more targeted, to encourage more active participation and interaction. It is crucial to engage participants during webinars, as interactions that often take place in offline settings are harder to replicate online.

Both the women association and banking/business accelerator experts agreed that physical networking was superior to online networking, the latter was necessary, given the current conditions stemming from the pandemic:

> "
>
> In terms of networking opportunities, we are not having members [regular] talks because of COVID-19. We are doing it online now...participants can just log in from their phones. But they will drop out as well – like all of sudden, their screen goes blank. We are missing it [physical networking] and it will take a while before we get back to that. But I think we have to adopt the digital way.
>
> (Women Association Expert)

Based on offline training programs conducted by both experts prior to the pandemic, they agreed that providing support and guidance (or "hand-holding") to SMEs is an important element of their programs. This is especially true for more established and 'traditionally-run' SMEs that are not entirely convinced that digitalization would bring about new opportunities and benefits.

As indicated from the WSME interviews, such perception is attributed to mindset issues. Despite their skepticism, such SME owners would still attend 'digitalization' workshops, due to heightened publicity about the subject over the past few years. The banking/business accelerator expert also observed that digital adoption among traditional, family-run businesses was faster if there was a younger, second-generation leadership present.

On mentoring, the women's association expert noted that they had a mentoring program during the 1990s, in which a group of women mentors were sworn to secrecy. However, this was halted over time due to dwindling interest. The mentoring process required business owners to be vulnerable and forthcoming with their information, hence many hesitated to participate, as they wanted to be seen as successful. This observation was corroborated by the WSME findings. Interviewees said that while they might reach out using digital channels, it was only done where they have established trust through non-digital means.

Pillar 3: Business Processes and Management (Digital Transformation)
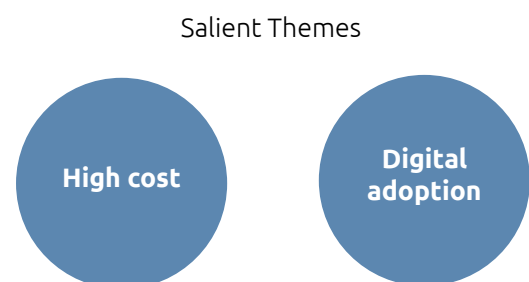
Salient Themes

Figure 33: Salient Themes on Pillar 3

As high cost is a major issue surrounding digital adoption, the banking/business accelerator expert noted that the organization was working with local technology solution providers to provide a bundle package comprising both back and front-end solutions. Back-end digital solutions include automating internal business processes such as HR management, accounting, inventory and project management, among others, whereas front-end solutions include customer-facing channels, such as marketing and e-commerce. Integrating both will enable companies to optimize customer data for their marketing efforts.

An interesting issue raised was that some of the digitalization grants/incentives provided by the government and accelerator programs necessitate that local software vendors be used, limiting options available to businesses.

Recommendation: One workaround suggested was to encourage foreign vendors to set up local offices, and allow regional cooperation, to accelerate digitalization in the region.

The expert affirmed that digital adoption varied across companies and industries: B2B companies would place more emphasis on automating their internal business processes, whereas B2C companies would invest in customer-facing channels.

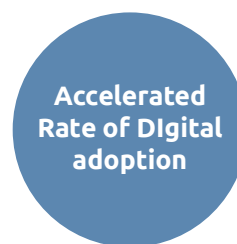**Pillar 4: Crisis Management (COVID-19)**

Salient Themes

Figure 34: Salient Theme on Pillar 4

The expert interviews highlighted that many WSMEs did not take digitalization very seriously prior to the pandemic, which inadvertently accelerated their rate of digital adoption. For instance, F&B companies leveraged food delivery platforms such as GrabFood and Foodpanda, only when the MCO was implemented.

Conclusion. The general wariness in wanting to digitalize, citing high costs as the main barrier, coupled with limited awareness on accessing alternative platforms for fundraising, may indicate an underlying problem that needs to be properly addressed. It was also observed that WSME participants associated digitalization with cost, rather than an investment tool to generate higher revenue. This could stem from a fixed mindset among business owners, prohibiting them from growing their business.

> ❝
>
> For us, we managed to broker a deal [with foreign] tech solution providers, because we ride on the ASEAN footprint, we can actually engage tech solution providers to help the SMEs.
>
> (Owner of logistics SME)

Advisory Panel

Findings from the WSME and expert interviews were synthesized and eventually presented for discussion to 9 experienced panelists, representing important stakeholders in the ecosystem. The panelists were selected based on their leadership in key policy-making organizations, technology organizations, and business/women's associations. The main objective of the panel discussion was to come up with practical solutions to address the challenges faced by WSMEs regarding digitalization.

A modified version of the Lightning Decision Jam (LDJ) exercise by AJ&Smart was used to guide the discussion. The panelists were first given a 30-minute presentation of the research findings, including a list of business problems mentioned by the WSME participants. They were asked to prioritize the problems (top three problems). The main problem was then singled out and reframed as a challenge. Finally, the panelists were asked to ideate as many solutions as possible, and to prioritize the solutions.
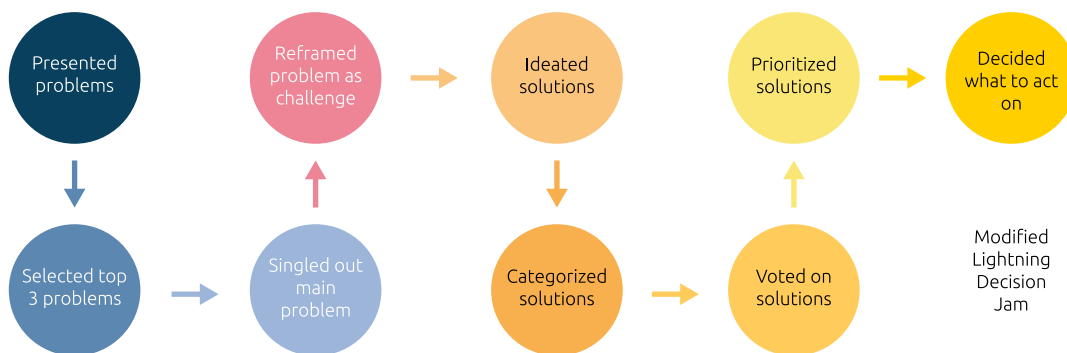

Figure 35: Modified LDJ Method

ADVISORY PANEL COMPOSITION MALAYSIA
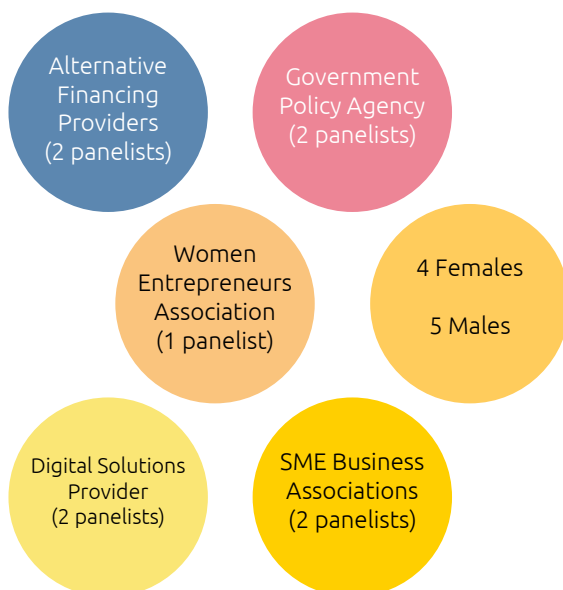25TH AUGUST 2020, KUALA LUMPUR

Figure 36: Profile of Advisory Panel

The cost of digital tools, resources and services received the most number of votes among panelists as a critical problem for WSMEs. However, a question was raised as to why these digital tools were viewed as a cost, and not as 'investment'. This was linked to a 'mindset' issue, leading some of the panelists to suggest a new problem, viz., 'lack of a growth mindset'.

Meanwhile, the problem of having a mindset that is against borrowing and sharing equity received the 2nd highest number of votes.

Overall, the panelists decided that the main problem facing WSMEs was the 'lack of a growth mindset'. A 'growth mindset' is defined as one which is continually seeking to learn, improve, take risks and not be afraid of failure.

This can be linked to the path-breaking research done by Stanford University psychologist Carol S. Dweck, and described in her book 'Mindset: The New Psychology of Success'.[26] Dweck defined a growth mindset as the belief that abilities can be developed with effort and persistence. People with a growth mindset embrace challenges, persist through obstacles, learn from criticism and seek out inspiration in others' success. To them, the journey is the reward, regardless of the outcome.

Questions were raised as to whether the mindset issue was gender-specific, i.e. experienced more frequently by women compared to men. There were anecdotal observations that women were less adept at networking compared to men, instinctively not as competitive, as well as traditionally and culturally socialized to be more restrained. Research conducted in the US indicates that a 'confidence gap' exists between males and females, with females consistently rating themselves lower than male counterparts, in self-reported performance reviews.[27] There is insufficient research in Malaysia, however, to understand how this may impact women's mindset when doing business.

The 'lack of a growth mindset' problem was then rephrased into the following challenge: "How might we help more WSMEs to be aware of and adopt a growth mindset?". As many solutions as possible were ideated for this challenge.

These solutions were subsequently grouped into 4 clusters and placed into an impact-effort matrix, as seen in the next charts.

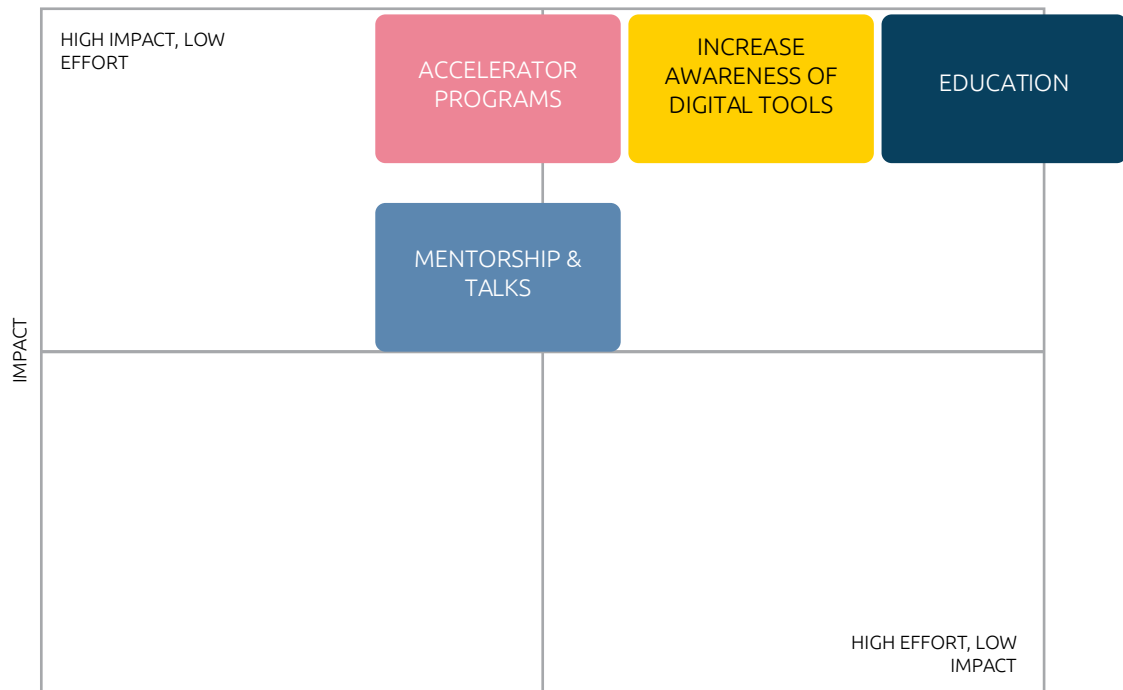Figure 37: Advisory Panel Discussion (Malaysia)

HIGH IMPACT, LOW EFFORT

ACCELERATOR PROGRAMS

INCREASE AWARENESS OF DIGITAL TOOLS

EDUCATION

MENTORSHIP & TALKS

IMPACT

HIGH EFFORT, LOW IMPACT

Figure 38: Impact & Effort Matrix

"How might we help more WSMEs to be aware of and adopt a growth mindset?"
Reformed challenge based on panelists' choice of most important problem to address

EDUCATION

Strong learning and educational system

Make it part of the primary through teritary education system/lifelong learning

Educate youths and WSMEs not to be afraid of failure

MENTORSHIP AND TALKS
Engage:

Inspiring women mentors for the WSMEs

Key opinion leaders

Role models

Influencers

ACCELERATOR PROGRAMS

Government sponsored training programs, with financial incentives, for WSMEs

Business growth programs
(funding + mentorship + training + community)

Recruit WSMEs for mindset-changing accelerator programs

INCREASE AWARENESS OF DIGITAL TOOLS

Help WSMEs see the functional value of these tools

Figure 39: Solutions for Adopting a Growth Mindset (from The Impact & Effort Matrix)

Reforming Education

It was opined that a shift in mindset is best effected from young, through the wider education system. This would produce the highest impact, as mindsets are harder to change when one gets older. However, this was also deemed to be the most difficult, as it would require extensive changes in public education policy, the framework of which is influenced by many factors, including national politics. The educational ecosystem (whether formal or informal) should also incorporate lifelong learning, as a 'growth mindset' seeks continual improvement in knowledge.

More/Enhanced Business Accelerator Programs, Organized by Relevant Government Agencies and Private Sector

A high impact solution, but with the only medium effort needed, is the setting up of business accelerator programs that train WSMEs to adopt a 'growth mindset'. This can be done through public and private initiatives, or a collaboration between both sectors, with government funds/incentives provided for WSMEs to participate (see turquoise rectangle). The programs should involve not only training but also mentoring, networking (community) and access to funds/grants.

This ties in with the findings from the WSME interviews that companies that had undergone accelerator programs had the highest digital adoption rates, implying that their mindsets (in terms of viewing digitalization as an investment that would benefit their business, rather than as a cost) were different from the others. There are several business accelerator programs in Malaysia conducted by the private and public sectors. Private sector programs include those by Alliance Bank, UOB Bank (The Finlab), Endeavour, ScaleUp Malaysia and E3 Hubs (MAD).

Some existing accelerator programs (e.g. MAGIC, CRADLE, SITEC, Alliance Bank and ScaleUp Malaysia) are targeted at start-ups or tech companies, which led to the question of whether they should be extended to more mature and other types of companies.

> **"**
>
> We have so many government programs spending millions on entrepreneurship training, even at the state level…but none especially for WSMEs.
>
> (Government Policy Maker)

This is an important recommendation, as established and traditional SMEs account for a large proportion of total SMEs, and are a major contributor to GDP. More mature women were also felt to make good entrepreneurs, given their education, domain knowledge and experience.

There was another opinion, however, that priority should be given to businesses that are aged 10 years and below, as mindsets are easier to change in younger vs. older organizations. The accelerator programs should have a mix of genders, with a minimum quota for WSMEs, as the latter would benefit from cross-learning with male counterparts.

Meanwhile, there was a view that women entrepreneurs need a 'safe space' to be mentored, stemming from reports of sexual harassment in the marketplace. Structured mentorship, such as that provided by accelerator programs, may reduce potential incidents of sexual harassment, as opposed to informal mentoring environments. The key to raising awareness of accelerator programs is regular and consistent communication across media channels. Success stories that arise should also be highlighted and communicated as role models.

Mentorship and Talks Organized by Business Associations

Meanwhile, a medium impact, medium effort solution was engaging successful and inspiring women leaders as speakers, trainers and mentors for WSMEs. Such engagements are not expected to have long-lasting effects unless they are regular and sustained. Herein lies the difference vis-a-vis business accelerator programs, which are more impactful because of their intensity and duration, with some lasting several months. A panelist representing SME associations suggested that a low effort initiative would be to work through the business associations to present case studies (e.g. 'before and after' success stories) to WSMEs.

Increase Awareness of Digital Tools

Lastly, a high impact but relatively high effort solution would be to increase awareness of digital tools and help WSMEs see the value or benefits of such tools to advance their businesses. This requires a shift in mindset that digitalization requires much effort. The digital solutions panelist shared that some companies do not adopt HR cloud solutions even though these are offered free, due to their fixed mindset. The one successful case of adoption was when the GST (government goods and services tax) was implemented in April 2015, and companies were forced to use accounting software to compute and submit the tax regularly. The government provided a subsidy of RM1,000 (on a first-come-first-serve-basis) for companies to purchase the software.[28]

Key Recommendation: More and Enhanced Business Accelerator Programs with Minimum Quotas for WSMEs, and Targeted at Non-Tech Sector

The key recommendation to policymakers and enablers that emerged from this entire exercise would be to focus on conducting more business accelerator/scale-up programs that would help WSMEs adopt a 'growth mindset'. These programs should not be limited to only tech companies and startups, but also to more established WSMEs of various industries. Quotas should be set to ensure an even representation of women in the programs, which should include substantial prize money in the form of cash or investment as motivation to participate.

The programs should be focused not only on technical training in digital and marketing skills but in leadership, business and growth strategies. It is only when the strategies are clear, that the right digital tools can be adopted and optimized to advance the business. Successful and established entrepreneurs should be invited to provide talks about their life stories during the accelerator programs so that inspiration, insights and wisdom can be drawn and shared.
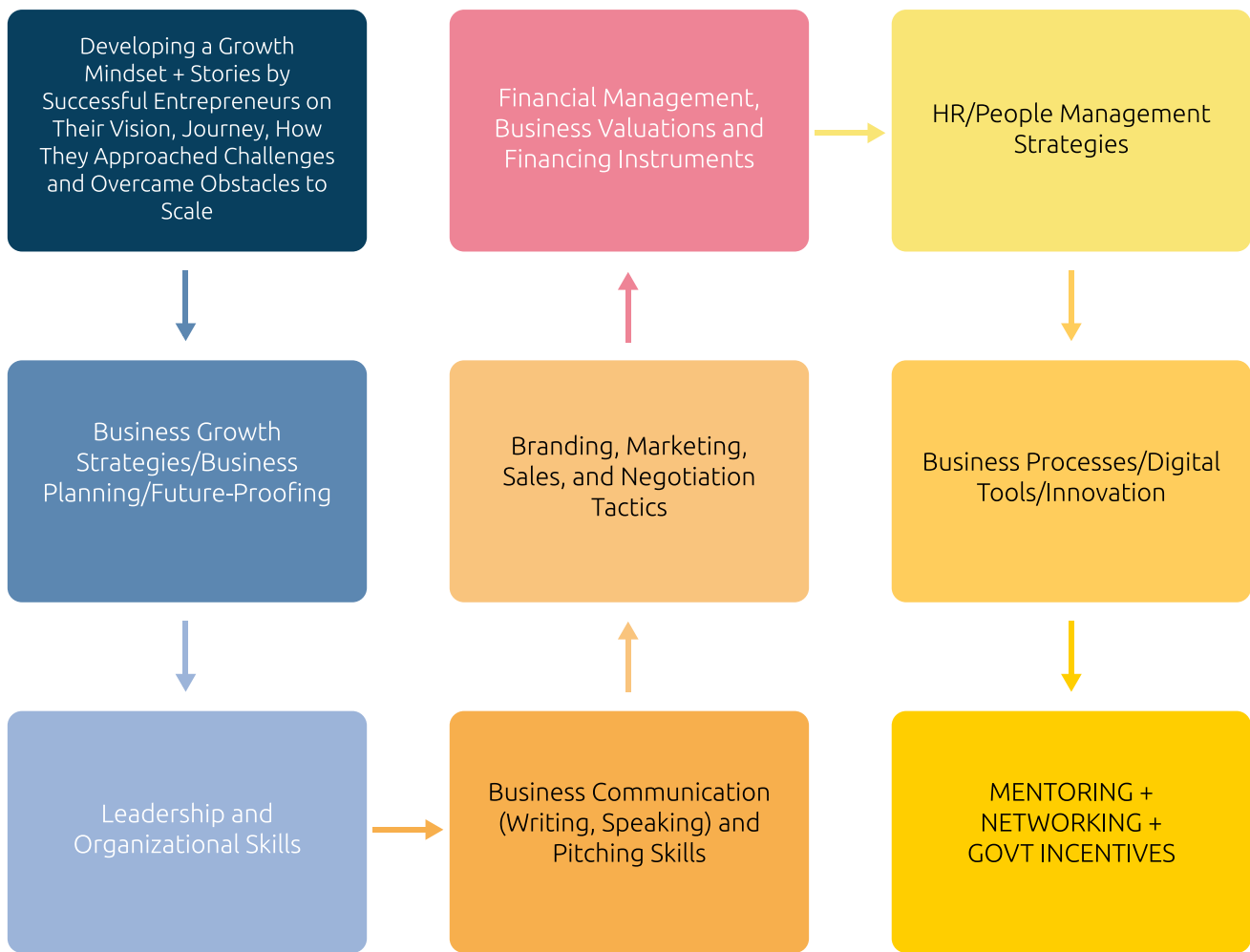
Figure 40: Features of Recommended SME Accelerator Program

Overall, the advisory panel discussion was crucial in prioritizing solutions and recommendations to the business and digitalization challenges faced by WSMEs.

5
Conclusion

The research began with the following assumption: Digitalization offers new opportunities for WSMEs to overcome their gender-related challenges. However, at varying degrees, depending on maturity (small- or medium-sized) of WSMEs.

Collations of findings (opportunities and challenges) from both the WSMEs and experts, were presented to the advisory panelists to be discussed and to recommend practical solutions. The conclusive issue was the cultural and mindset problem, which is prevalent in all pillars. This raises questions about whether the problem could be a gender-related issue that has been perpetuated by society and/or the education system. Hence both short-and long-term solutions were formulated.

Short-term recommendation: To address the pressing need of transforming existing WSMEs to adopt a growth mindset, the panelists suggested introducing more business accelerator programs. As this has already been discussed in detail in the sections above, the authors will not expand on it further.

Long-term recommendation: As part of a long-term solution, it is suggested that the 'mindset' issue be tackled at its roots, i.e. the education system. The country's education system has not promoted an innovative culture, as it is more geared towards rote-learning, with the lack of emphasis on critical thinking. A better performance tracking system needs to be applied to ensure that accomplishments are not limited to only academic excellence. Hence, methods used to train students need to be changed. To have a complete paradigm shift, societal attitudes about women have to also change, as women are seen as more accommodative and compliant, as opposed to men, who are seen as more competitive.[29]

Hence, in order to fully transform WSMEs to adopt a growth mindset, both short- and long-term solutions are needed to better prepare budding entrepreneurs for their entrepreneurial journey in an age of unprecedented digitalization.

6
Endnotes

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