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SMALL AND MEDIUM ENTERPRISES (SMES) IN MYANMAR: SUCCESS FACTORS AND FUTURE OUTLOOKS

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PREPARED WITH ASSISTANCE BY BUILDING MARKETS

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Small and Medium Enterprises (SMEs) in Myanmar: Success Factors and Future Outlooks

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Executive Summary

Myanmar has been a country of immense potential and interest, yet is still considered one of the poorest countries in the world. It has a long history of political turmoil and uncertainty. In the early 2010s, the country started its journey towards democracy and opened its economy to the rest of the world. Its economy has expanded rapidly due to wide-ranging political and economic reforms undertaken by the Myanmar Government. Like other developing countries, the small and medium-sized enterprises (SMEs) play a pivotal role in Myanmar's economy, contributing about 36 percent of the GDP (Gross Domestic Product). In fact, roughly 90 percent of the businesses in Myanmar are SMEs and they employ about 70 percent of the workforce. Given the importance of SMEs to Myanmar's economy, it is imperative to understand the effectiveness of these enterprises and the factors that explain their success.

We develop a success framework to understand factors that contribute to the effectiveness of SMEs in Myanmar. Building on the technology, organizational, and environmental (TOE) framework that has been widely used in organizational research, we identify a set of technological, environmental, and organizational factors that explain the success of SMEs in Myanmar. SME success is operationalized using four indicators, sales, profit, growth intent, and bidding success. The framework was validated using a unique dataset of over 3,000 SMEs in Myanmar. These unique data points were collected by Building Markets, a non-profit organization dedicated to building markets, creating jobs and sustaining peace in developing countries such as Afghanistan, Haiti, Liberia, Mozambique and Myanmar. This dataset was analyzed using advanced statistical techniques to develop insights on the effectiveness of SMEs in Myanmar.

Key findings are as follows.

1. Internet use for business purposes was consistently associated with SME effectiveness during the data collection period (2013 to 2016). SMEs that used internet for business operations, such as online orders, research, and communications experienced a high degree of success in Myanmar.
2. Employee size was the most significant organizational factor associated with sales and profitability. SMEs with a larger number of full time employees experienced more success in terms of sales and profitability. However, employee size did not affect growth intent and bidding success.
3. Gender of the owner had no major effect on the success of the SMEs. Female ownership increased from 18.1 percent in 2013 to 25.4 percent in 2016 (about 40 percent increase in 4 years).
4. SMEs in the Yangon region performed better than the SMEs in other regions. However, this finding should be interpreted carefully because we do not have enough data from other regions across different years.
5. There was no discernable pattern of performance difference across different industry sectors. However, the results indicate that SMEs in the manufacturing sector performed better than other SMEs.
6. Some of the major challenges that SMEs in Myanmar face are: lack of skilled labor, competition, poor infrastructure, difficulty in accessing finance, exchange rate and currency issues, government policy and bureaucracy, and outdated (or lack of) equipment.

In addition to these key findings, this report also summarizes a set of key challenges that SMEs in Myanmar face, such as lack of skilled employees, intense competition, poor infrastructure, and difficulty in accessing finance. The Myanmar Government and international agencies need to take proactive measures to help SMEs overcome these challenges and achieve a high degree of success.

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Introduction

Myanmar (the Republic of the Union of Myanmar), also known as Burma, is a South-East Asian country bordered by Bangladesh, India, China, Laos, and Thailand. It has a population of approximately 51 million representing various ethnic groups, such as the Bamar (68 percent), Shan (9 percent), Karen (7 percent), Rakhine (4 percent), Chinese (3 percent), Indian (2 percent), Mon (2 percent), and others (5 percent). Due to its geographic location, a long history of political instability (e.g., military rule from 1962 to 2011), and decades of civil strife, Myanmar has been a country of immense interest and scrutiny. Yet, little was known about Myanmar until the 2010s when the country started political and economic reforms and opened itself more broadly to the rest of the world for economic activities, such as foreign direct investments (FDIs). Since 2008 Myanmar has been experiencing steady growth in GDP (Gross Domestic Product). Myanmar's GDP annual growth rate is expected to be approximately 7.7 percent in 2017 and 7.9 percent in 2020 (see Figures 1 and 2). This is an important achievement for Myanmar because many countries, including the United States, China, Brazil, and Russia, are projected to experience a much slower (or declining) growth rate in the next several years.

Figure 1: Myanmar GDP

SOURCE: WWW.TRADINGECONOMICS.COM | WORLD BANK

Figure 2: Myanmar GDP Annual Growth Rate

SOURCE: WWW.TRADINGECONOMICS.COM | CENTRAL BANK OF MYANMAR

Like many other developing countries, Myanmar has approximately 70 percent of its population living in rural areas. The vast majority of this rural population lives in poverty. The Myanmar Government has been making great strides in carrying out necessary reforms in areas such as policy, politics, economy, and society, and these reforms are expected to bring much needed FDI. In fact, Myanmar's FDI has been increasing steadily (see Figure 3).

Figure 3: Myanmar Foreign Direct Investment

SOURCE: WWW.TRADINGECONOMICS.COM | CENTRAL STATISTICS ORGANIZATION, MYANMAR
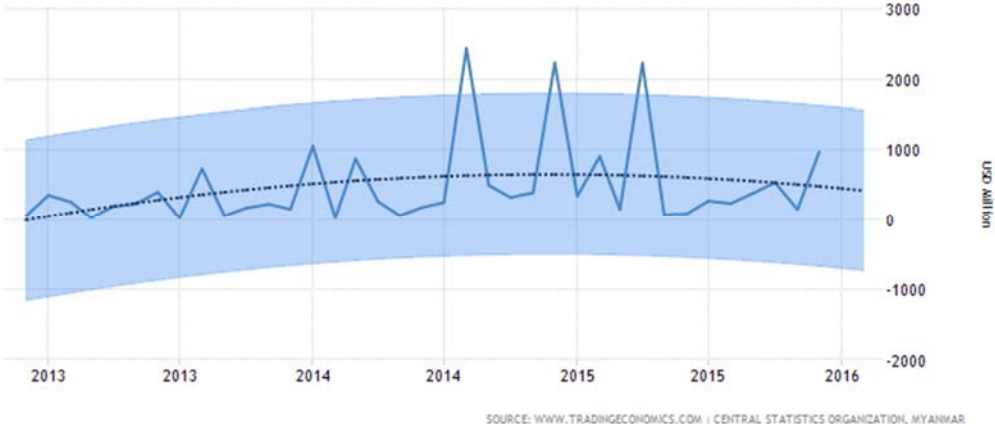
While FDI is important for Myanmar's economic prosperity, investment alone cannot ensure its economic sustainability and stability. SMEs are considered the backbone of any country's economic sustainability and stability, and Myanmar is not an exception. Although agriculture still contributes the most to GDP (approximately 41 percent), the contributions of the industrial and service sectors have been increasingly steadily. SMEs are expected to play a critical role in expanding these contributions.

SMEs in Myanmar

SMEs are typically non-subsidiary, independent firms that are defined using two attributes – number of employees and annual revenue (or turnover). While there is no universally accepted definition of SMEs (see Table 1 for more details), the 2014 Small and Medium Sized Enterprise Bill (SME Bill), a legislation that helps SMEs grow by facilitating and encouraging competitiveness and investment, in Myanmar defined small enterprises as those between K50 million (approximately US $50,000) and K500 million (approximately US $500,000) in capital or with between 30 and 300 employees. Medium enterprises are defined as having between K50 million (approximately US $50,000) and K1 billion (approximately US $1 million) in capital or between 60 and 600 employees (Charlston Myanmar, 2016). These definitions are different from the OECD (Organization for Economic Cooperation and Development) definition of SMEs that suggests a micro-enterprise should have between 1 and 9 employees, a small-enterprise between 10 and 49 employees, and a medium-sized enterprise between 50 and 249 employees (OECD, 2005). With respect to financials, according to the OECD and European Union, the revenue of medium-sized enterprises (50-249 employees) should not exceed EUR 50 million; that of small enterprises (10-49 employees) should not exceed EUR 10 million while that of micro firms (less than 10 employees) should not exceed EUR 2 million. In the United States, SMEs

include firms with fewer than 500 employees, which is similar to the definition of SMEs in the SME Bill in Myanmar. Table 1 summarizes these definitions of SMEs.

Table 1: SMEs Definition

	SME Bill, Myanmar		OECD		US
	Employee Size	Capital	Employee Size	Revenue	Employee Size
Micro enterprise	30 to 300	US$50,000 to US$ 500,000	1 to 9	EUR 2,000,000	Fewer than 500
Small enterprise			10 to 49	EUR 10,000,000	
Medium enterprise	60 to 600	US$50,000 to US$ 1,000,000	50 to 249	EUR 50,000,000	

SMEs represent almost 90 percent of businesses in Myanmar.[1] Although there is no official estimate for what percentage of Myanmar's workforce is employed in SMEs, it is estimated that approximately 70 percent of the workforce is employed in SMEs (The RSIS Center for NTS Studies, 2013). SMEs contribute about 36 percent to Myanmar's GDP. Recognizing the importance of SMEs in the economy, the Myanmar Government has undertaken various steps to assist and encourage SMEs in Myanmar. One of these important steps was to establish and publish the 2014 SME Bill that enabled and empowered SMEs in Myanmar by improving the business and legal environment for SMEs. The Myanmar Government has recently established a key working group chaired by the President, the Central Committee for SME Development, to encourage SME development and facilitate SME growth. Notwithstanding these efforts, SMEs in Myanmar continue to face many challenges that are likely to affect their performance and ability to contribute effectively to Myanmar's economy. In particular, with the ASEAN Free Trade Area (AFTA) agreement in place, it is clear that SMEs in Myanmar will face intense international competition in the future. Therefore, it is imperative to understand the determinants of SME success and associated challenges in Myanmar so that appropriate interventions and recommendations can be offered.

Success Framework

Prior academic research and practitioners' literature have operationalized SME success primarily using financial metrics, such as profitability (Lussier & Halabi, 2010). Although growth (in revenues and number of employees) has been used as a measure of success (Wiklund et al., 2009), it has been argued that entrepreneurs and/or SME owners may become less growth-oriented over time as their personal motivation changes (Hunter & Kazakoff, 2012; Westhead & Wright, 1999). Prior research has found that SMEs world-wide have a high attrition rate—about two-thirds of SMEs are forced to cease their operations for a variety of reasons. Therefore, survival and/or longevity is considered a success factor for SMEs. Overall, given the unique characteristics of SMEs (e.g., size, revenue, attrition), success of SMEs may not be entirely captured through traditional success-measures, such as financial metrics. In this report, a holistic assessment of success is used that has multiple dimensions, such as revenue (or turnover), profitability, growth intent (i.e., whether the owner of the SME has an intention to grow the business through partnership), and bidding success (i.e.,

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[1] There is no official estimate for the percentage of businesses in Myanmar that are SMEs. This number could range from 88 percent (Smurra, 2013) to 99 percent (Charlston Myanmar, 2016). It is

whether the SME was able to win a bid or tender, which is typically considered highly desirable in developing countries).

Prior research suggests various antecedents of SME success (e.g., Wiklund et al., 2009). These antecedents can be broadly categorized into organizational and environmental factors. Further, there are factors related to the owners' view towards growth (e.g., goals, growth attitude). Prior research has also focused on entrepreneurial orientation characterized by a firm's "willingness to innovate in order to rejuvenate market offerings, take risks in order to try out new and uncertain products, services and markets, and to be more proactive than competitors towards new marketplace opportunities" as an important antecedent of SME success (Wiklund et al., 2009, pp. 353-354). Broadly, entrepreneurial orientations can be manifested through a firm's technology and innovation orientations (although entrepreneurial orientation is likely capture more than a firm's technology orientation). In this report, we identify the antecedents of SME success based on the TOE (technological, organizational, and environmental) framework that is one of the most widely used theoretical frameworks for studying success of organizations and organizational innovations (Tornatzky & Fleischer, 1990; Venkatesh & Bala, 2012). It posits that various contextual factors influence the organizational processes and effectiveness. These factors represent three important aspects of a firm's context: *technological*, *organizational*, and *environmental*.

Technological factors represent the characteristics of current and new technological innovations. Examples of organizational factors include size and managerial structure of a firm. The TOE framework suggests that, in addition to these descriptive factors, organizational resources and organizational innovativeness are important organizational factors. Finally, environmental factors represent the characteristics of the environment in which a firm operates, such as industry, competitors, and relationships with partners. Together, these three aspects of an SME's context are expected to explain how the SME will perform. Figure 4 presents the SME success framework developed for this report.

Figure 4: SME Success Framework
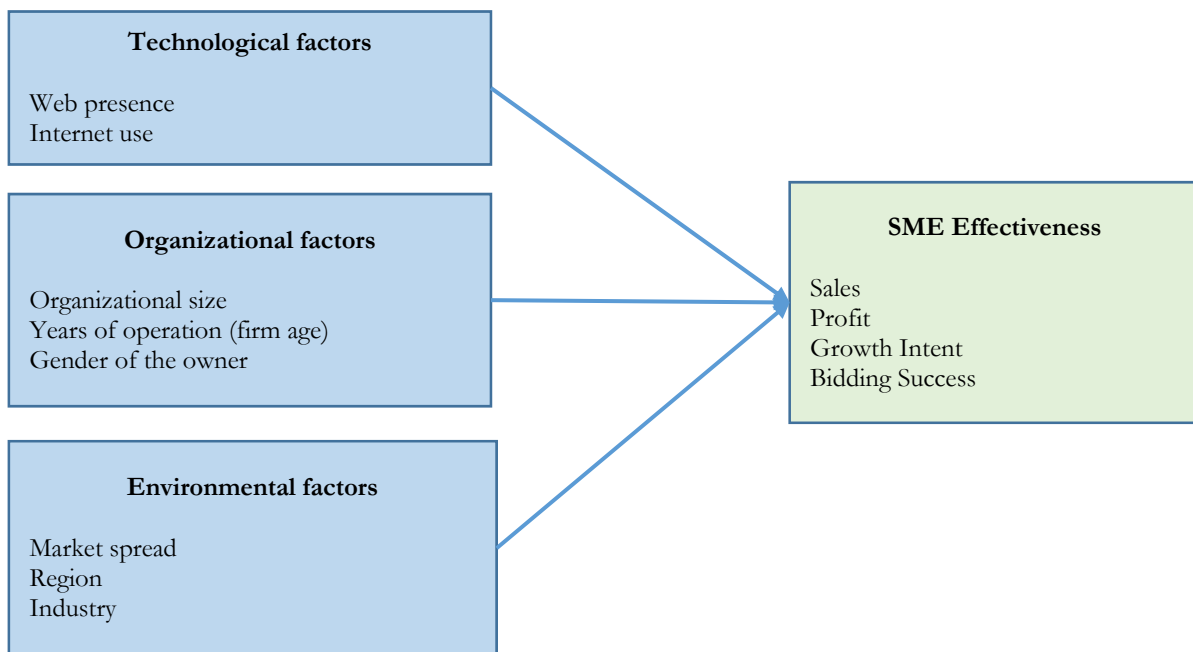
Technological Factors

The first technological factor in the success framework is *web presence* which represents whether an SME has a publicly available website. Although Myanmar is a developing country and SMEs in Myanmar are likely to not have a high degree of web presence, internet penetration is rapidly increasing (from 0.002 percent in 2000 to 19.3 percent in 2016). From the available data that we received from Building Markets, we found that about 18 percent of the SMEs in Myanmar have a web presence.

Internet use refers to whether SMEs use the internet for business-related communication and information gathering. We expect that SMEs who use the internet are likely to be able to gather critical business-related information more efficiently. This will help these SMEs perform better than those SMEs that do not use the internet for business purposes.

Organizational Factors

The first organizational factor, *organizational size*, represents the total number of full-time employees of an SME. Although SMEs are small/medium enterprises with respect to employee size, they have substantial variability with respect to how many employees they employ. It is possible that SMEs enjoy different levels of success due to the size of the organization. Prior research has suggested and found that organizational size is significantly associated with various organizational outcomes (primarily a positive association).

Years of operation (firm age) refers to the total number of years an SME is in business. Although SME age can be considered a success dimension, our framework considers it as an antecedent because we suggest that SME age is likely to be a surrogate measure for the owners' experience and business maturity. Given that owner experience and business maturity are likely to have an effect on the success of their ventures, we expect that SME age will serve as an antecedent of SME success.

Gender of the owner has been used extensively in prior SME research as an antecedent of SME success (e.g., Kalleberg & Leicht, 1991). Although prior research did not find conclusive evidence regarding the effect of gender on SME performance, we suggest that gender might play a role in SME success in a developing country such as Myanmar. It is more likely the SMEs with male ownership will perform better because of unique socio-economic and cultural conditions in developing countries.

Environmental Factors

Market spread, the first environmental factor, represents whether the primary client (or customer) of an SME is a domestic or an international client. The majority of SMEs in Myanmar serve the needs of domestic customers. However, there are many SMEs who cater to the needs of international customers. This factor will help us understand if having primarily international clients will lead to greater success in Myanmar.

Region refers to the various states in Myanmar. Many developing countries are not decentralized and a vast majority of SMEs tend to operate in major metropolitan areas. Myanmar is no different and the majority of SMEs operate in the Yangon region of the country. Due to various regional advantages (e.g., access to an

affluent customer base), we expect that SMEs in the Yangon region are likely to be more successful than the SMEs in other regions.

Industry represents different economic sectors that are served by SMEs in Myanmar. The three primary categories and/or sectors of industry are: primary industries (e.g., agriculture, forestry), manufacturing, and service. The manufacturing and service sectors are further divided into other industry categories, such as food, textile, machinery, logistics, transportation, wholesale, retail, restaurant, and hospitality.

Methodological Approach

The SME success framework was validated using the Building Markets dataset of more than 3,000 unique SMEs in Myanmar. Data was collected through annual surveys by recruiting and training employees who visited SMEs and interviewed Myanmar firms using a structured questionnaire developed by Building Markets. Interviews were with the owner or an employee with the appropriate authority (e.g., a manager) and responses were recorded, transcribed and updated periodically to ensure the integrity of the data. This analysis was undertaken with support from the USAID-funded Advancement and Development through Entrepreneurship Programs and Training partnership in Myanmar, implemented by the Indiana University Kelley School of Business, Institute for International Business. The Building Markets dataset has been exclusively used in this report.[2]

Findings

We followed the definition of SMEs from Myanmar's SME bill and included SMEs that had less than 600 employees in our analysis. We first present the results from our descriptive analysis followed by the results from regression analysis. It is important to note that we did not have an equivalent number of participating SMEs across the four years of data collection (i.e., 2013 through 2016). In particular, the number of participating SMEs in 2014 was substantially less than the number of SMEs in other years.

Current Status of SMEs

Table 2 presents the number of SMEs from different regions who participated in the Building Markets survey. There were about 4,300 SME data points involved in the survey. A majority of these SMEs were located in the Yangon Region. Other areas, such as the Mandalay Region and Mon State, began to attract SMEs around 2014-15.

Table 2: SMEs from different regions in Myanmar

Region	2013	2014	2015	2016	Total
Mandalay Region	0	153	460	187	800
Mon State	0	0	174	195	369

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[2] Given that data have been collected since 2012 by Building Markets, the actual number of SME data points used in the analysis is greater than 3,000 because some SMEs participated in multiple years. We conducted year-by-year analysis to avoid using the same SMEs multiple times in our analysis.
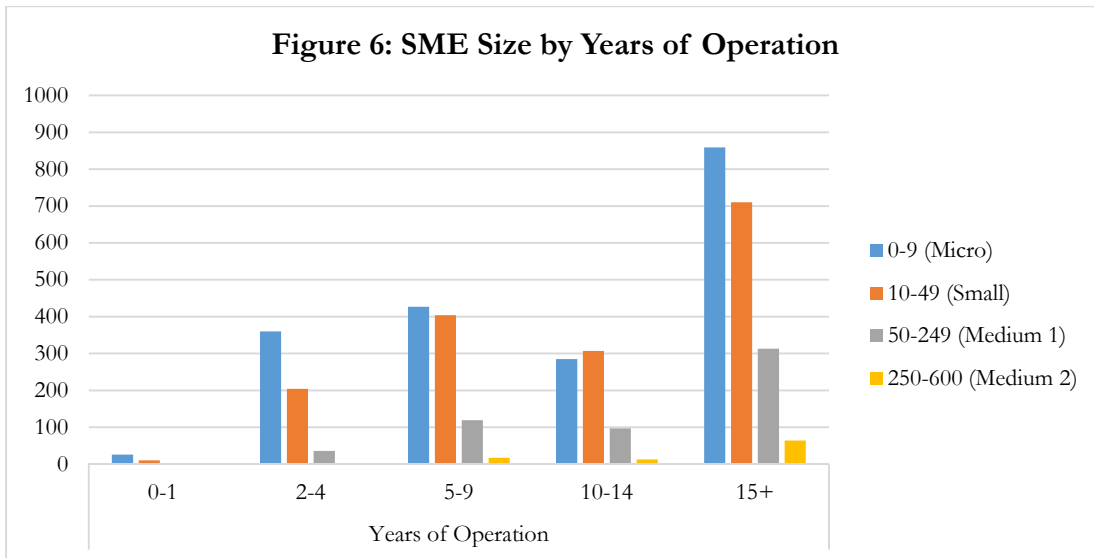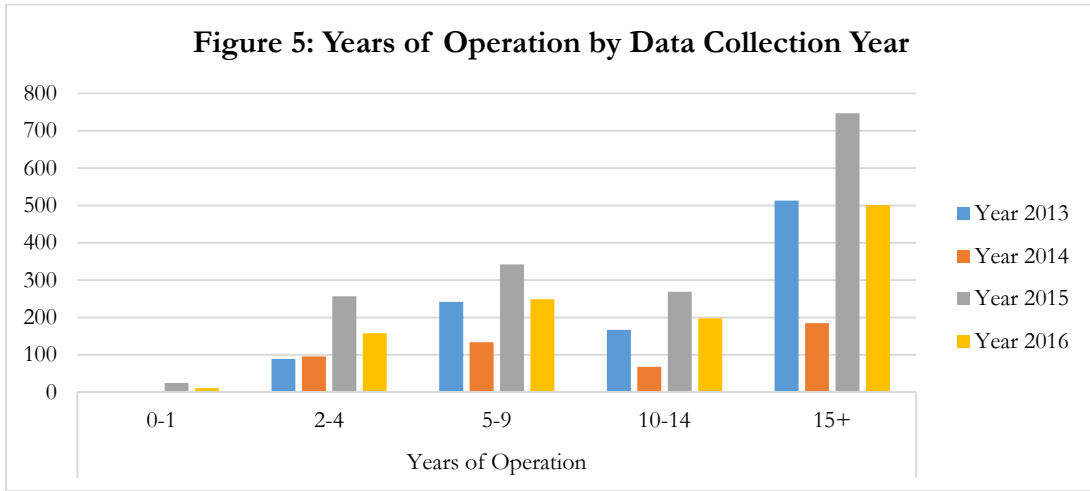
Yangon Region	1,030	337	1,028	748	3,143
Total	1,030	490	1,662	1,130	4,312

Table 3 provides additional insights on the nature of the data and the SMEs who participated in the survey. According to the survey, about 22 percent of the SMEs in Myanmar are owned by female owners. It is encouraging to see that the number of female owners has been steadily increasing since 2013. A majority of the SMEs in the dataset have been in business for at least 15 years. It is interesting that only 17 percent of the firms were between 10 and 14 years old, potentially suggesting that if a firm survives the first 9 years, it is likely to have a high opportunity for survival and be in business for 15 or more years. Table 3 suggests that while web presence was declining, the use of internet has been steady (i.e., about 57 percent of the SMEs have used the internet business purposes). Finally, Table 3 shows that a majority of the SMEs were from the manufacturing sector (about 60 percent). Approximately 7 percent of the SMEs were involved in the primary industries, such as agriculture.

Table 3: SMEs Characteristics by year

	2013	2014	2015	2016	Total
Owner gender					
Female	186 (18.1%)	110 (22.5%)	346 (21.0%)	287 (25.4%)	929 (21.6%)
Male	844 (81.9%)	378 (77.5%)	1,303 (79.0%)	841 (74.6%)	3,366 (78.4%)
Years of operation					
Firm age (5-9 years)	242 (23.9%)	134 (27.7%)	342 (20.9%)	249 (22.3%)	967 (22.7%)
Firm age (10-14 years)	167 (16.5%)	68 (14.1%)	269 (16.4%)	198 (17.7%)	702 (16.5%)
Firm age (15+ years)	513 (50.7%)	185 (38.3%)	747 (45.5%)	501 (44.9%)	1,946 (45.8%)
Technology					
Web presence	251 (24.1%)	119 (24.0%)	227 (13.4%)	202 (17.6%)	799 (18.3%)
Internet use (every day)	780 (76.5%)	312 (64.5%)	654 (41.8%)	652 (58.1%)	2,398 (57.2%)
Industry categories					
Primary (e.g., agriculture)	60 (05.8%)	19 (03.9%)	144 (08.7%)	70 (06.2%)	293 (06.8%)
Manufacturing	517 (50.2%)	322 (65.7%)	1,088 (65.7%)	645 (57.2%)	2,572 (59.8%)
Food	52 (05.0%)	23 (04.7%)	140 (08.4%)	107 (09.5%)	322 (07.5%)
Textile	23 (02.2%)	37 (07.6%)	126 (07.6%)	46 (04.1%)	232 (05.4%)
Machinery	268 (26.0%)	152 (31.0%)	468 (28.2%)	307 (27.1%)	1,195 (27.7%)
Wood	124 (12.0%)	99 (20.2%)	358 (21.5%)	163 (14.4%)	744 (17.3%)
Other (Manufacturing)	73 (07.1%)	48 (09.8%)	122 (07.3%)	68 (06.0%)	311 (07.2%)
Service	452 (43.9%)	149 (30.4%)	424 (25.6%)	412 (36.6%)	1437 (33.4%)
Logistics & Transportation	86 (08.3%)	32 (06.5%)	65 (03.9%)	54 (04.8%)	237 (05.5%)
Wholesale & Retail	65 (06.3%)	19 (39.0%)	61 (03.7%)	65 (05.7%)	210 (04.9%)
Restaurant & Hospitality	144 (14.0%)	36 (07.3%)	135 (08.1%)	123 (10.9%)	438 (10.2%)
Professional Services	59 (05.7%)	33 (06.7%)	65 (03.9%)	71 (06.3%)	228 (05.3%)
Other (Service)	98 (09.5%)	29 (05.9%)	98 (05.9%)	99 (08.8%)	324 (07.5%)
Primary customer base (market spread)					
International	346 (49.1%)	82 (43.6%)	104 (38.8%)	167 (44.4%)	699 (45.5%)
Domestic	358 (50.9%)	106 (56.4%)	164 (61.2%)	209 (55.6%)	837 (54.5%)

Figure 5 presents the number of SMEs with different ages over time. It suggests that a majority of the SMEs in this dataset have been in operation for at least 15 years. Figure 6 shows that a majority of the SMEs 15 years or older were in fact micro (up to 9 employees) and small (10 to 49 employees) enterprises. Figure 7 shows that the proportion of micro, small, and medium (50 to 600 employees) enterprises was similar across the four years of data collection (except year 2013, which had a greater number of small enterprises than micro enterprises).
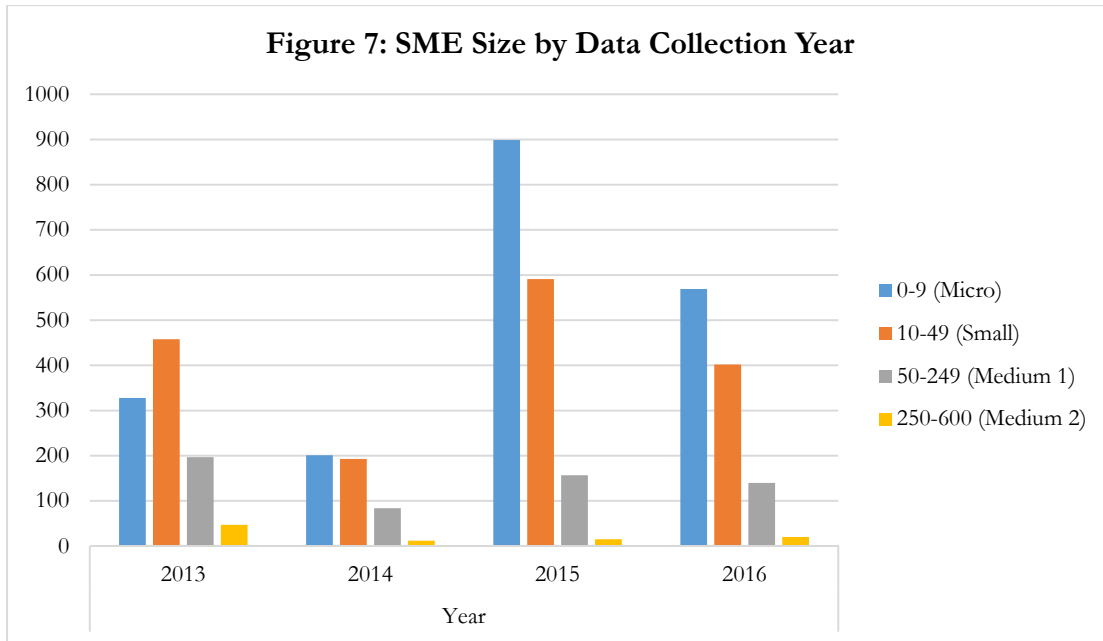

Figure 5: Years of Operation by Data Collection Year

Figure 6: SME Size by Years of Operation

Figure 7: SME Size by Data Collection Year

Table 4 provides detailed descriptive statistics of the variables that were include in the SME success framework. The SMEs surveyed had an average of 30 full-time employees. The average annual profit, according to 770 SMEs who reported, was around $92,924 USD (K92,924). The annual turnover (sales) was approximately $300,000 (K2,994,879.57). The table also shows that about 18 percent of the SMEs had bidding success (i.e., won a tender) and more than 75 percent of the SMEs would welcome potential investment and partnership (i.e., growth intent). Finally, the table shows that about 55 percent of the SMEs focused primarily on the domestic market.

Table 4: Descriptive Statistics

Factors	Min	Max	Mean	Std. Dev.
Web presence	0	1	0.18	0.384
Internet use	1	4	2.93	1.323
Employee size	0	600	30.45	61.454
Owner gender	0	1	0.78	0.412
Years of operation (firm age)	0	81	15.17	11.274
Primary customer base (market spread; 1: domestic, 0: international)	0	1	0.55	0.498
Sales	0	2,500,000,000	2,994,879.57	61,949,148.75
Profit	0	35,000,000	92,924.45	1,283,499.021
Growth Intent	0	1	0.75	0.433
Bidding success	0	1	0.18	0.385

Influence of Technological Factors

Our results shown on Table 5 indicate that the use of technologies (i.e. website exposure and internet usage in this survey) was positively associated with SMEs' annual sales, profit, and bidding success. The influence of technology in supporting regular SMEs' business has broadly increased since 2013. Table 5 shows that internet use had a positive association with SME success across all the years. Web presence also had a significant positive association with the success dimensions. Overall, these results suggest that technological factors are important antecedents of SME success in Myanmar.

Table 5: Effects of Technology Factors on SME Performance

Factors	Sales				Profit				Growth Intent				Bidding Success			
	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016
Web presence	.17***	.28***	.10**	.13***	-	-	.06	.13*	.33	.19	.10	-.14	.48**	1.10***	.47*	.68***
Internet use	.12*	.23**	.26***	.26***	-	-	.26***	.29*	.32**	.37***	.12*	-.01	.37***	.43**	.12***	.42***
R^2	.057	.173	.099	.109	-	-	.082	.124	.049	.067	.009	.001	.056	.132	.079	.099
N	357	148	762	623	-	-	269	345	347	323	1328	580	899	482	1512	1047

Notes:
1. $* p < .05, ** p < .01, *** p < .001$
2. N represents the sample size used in respective regression models. This sample size is much lower than the overall sample size in different years due to missing data in different variables.
3. Profit for 2013 and 2014 could not be analyzed due to the small number of valid responses.
4. Given that growth intent and bidding success were binary variables, logistic regression was performed on them. Nagelkerke R^2 is shown for these variables.

Influence of Organizational Factors

As shown in Table 6, the size of SMEs was positively associated with annual sales, profit, and bidding success. The age of SMEs had no particular association with overall growth or success of SMEs, and neither did the gender of the main owners of SMEs, suggesting that there was no difference in SME success between male and female owners in Myanmar. In other words, SMEs with male owners did not necessarily enjoy greater success in Myanmar.

Table 6: Effects of Organizational Factors on SME Performance

Factors	Sales				Profit				Growth Intent				Bidding Success			
	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016
Org. size	.55***	.66***	.44***	.57***	-	-	.36***	.59***	.20^	.15	.07	-.02	.27***	.55***	.30***	.40***
Firm age	-.04	-.01	-.01	-.03	-	-	.07	-.03	-.01	.01	-.00	-.00	-.00	-.01	.00	.01^
Owner's gender	.05	.02	.02	.01	-	-	-.01	-.01	.76*	.30	.25	-.15	-.01	.89*	-.05	.20
R^2	.31	.43	.20	.32	-	-	.14	.33	.04	.03	.01	.002	.04	.15	.03	.09
N	351	141	500	511	-	-	139	259	340	304	984	450	869	456	1216	884

Notes:
1. $^ p < .10, * p < .05, ** p < .01, *** p < .001$
2. N represents the sample size used in respective regression models. This sample size is much lower than the overall sample size in different years due to missing data in different variables.

Influence of Environmental Factors

As expected, SMEs in Yangon Region had occasional advantage in annual sales and bidding success, especially in recent years; however, those in Mon State are more prone to encounter financial loss, particularly in 2016 (see Table 7). There has been no systematic difference between manufacturing and service-oriented SMEs. Manufacturing SMEs had slightly higher sales revenues. However, these firms had limited bidding success.

Table 7: Effects of Organizational Factors on SME Performance

Factors	Sales				Profit				Growth Intent				Bidding Success			
	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016
Market spread	.05	-.16	-.04	-	-	-	-.49*	-	-.68*	.34	.21	-.86	-.46*	.25	-.09	-.40
Mon	-	-	.02	-.20***	-	-	-.07	-.49***	-	-	-.68	-	-	-	-17.55	-
Yangon	-	.34*	.15	.11*	-	-	-.02	-.11*	-	-.44	-.94	.53	-	.39	2.48*	.48
Manufacturing	.14*	.14	.05	.12**	-	-	.14	-.01	.50	-.45	.36	.52	-.47*	-.22	-.68*	-.28
R^2	.02	.14	.03	.08	-	-	.24	.19	.05	.02	.03	.05	.04	.01	.12	.03
N	340	146	677	590	-	-	225	319	225	105	186	82	570	177	237	323

Notes:
1. * $p < .05$, ** $p < .01$, *** $p < .001$
2. N represents the sample size used in respective regression models. This sample size is much lower than the overall sample size in different years due to missing data in different variables.
3. Given that growth intent and bidding success were binary variables, logistic regression was performed on them. Nagelkerke R^2 is shown for these variables.
4. Primary industry (e.g., agriculture) was not included in the analysis due to small sample size.

Summary and Concluding Remarks

The TOE framework offers insights on SME success in Myanmar. Technological factors (i.e., web presence and internet use) had a positive association with SME success, suggesting that SMEs need to be aware of technologies that may help them attract new customers and conduct business-related communication with customers and trading partners. Further, SMEs are able to gather business-related information more efficiently using the internet. Given that internet penetration in Myanmar is rapidly increasing, it is likely that prospective customers will search online to find more information about local SMEs. This will be even more critical as Myanmar is opening its economy to the rest of the world, particularly to the ASEAN countries. One of the limitations of these findings is that we were able to incorporate only two technology-related factors due to the limitation of the dataset. Other technological factors, such as use of technology in production and operations, use of computer software managing different aspects of the business, and technological innovations, should be measured in future surveys to develop a comprehensive understanding of the impact of technological factors on SME success in Myanmar.

The organizational factors offer several important insights. Firm age and gender of the owner had no effect on SME success, suggesting that older firms and male owners do not necessarily lead to successful SMEs. However, firm size had a significant positive association with SME success, indicating that large SMEs are

likely to enjoy more success due to their ability to offer and manage a wider variety of product and service offerings. There are other organizational factors, such as organizational innovativeness, entrepreneurial orientation, owner and employee characteristics and competencies, business practices and policies that are likely to play important roles in SME success. These factors should be included in future surveys.

The environmental factors suggest that there was no systematic difference in performance between SMEs that focus on domestic customers vis-à-vis international clients. This implies that SMEs do not necessarily need to find international customers in order to be successful in Myanmar. However, there were significant regional effects—the SMEs in the Yangon region performed slightly better than the SMEs in other regions. This finding has important implications for SME policies in Myanmar. The Myanmar Government and international agencies need to take proactive measures to encourage SMEs in other regions and improve their business environment. Although manufacturing SMEs performed slightly better than service SMEs, they did not enjoy much bidding success. Other environmental factors, such as competition, environmental dynamisms, government and non-government support should be included in future surveys to develop a more comprehensive understanding of the influence of environmental factors on SME success.

Limitations

Although the framework presented in this report explained various success dimensions for SMEs in Myanmar, there are limitations of this framework that should be considered while interpreting these findings. One of the major shortcomings of this framework is that it does not provide insights into the challenges SMEs in Myanmar face on a day-to-day basis. Figure 8 provides a summary of major challenges expressed by the participants of Building Markets' survey. Many of these challenges can be explained in light of the findings presented in this report. For example, employee size has been shown to be a major antecedent of SME success and the lack of skilled employees has been suggested as a major challenge faced by SMEs in Myanmar. Together, this suggests that there is a need to provide appropriate training to employees in SMEs. Vocational schools and polytechnic institutions should undertake training programs for SME owners and employees in various areas ranging from technology to entrepreneurship and small business management.

Figure 8: Biggest Challenges for Myanmar SMEs
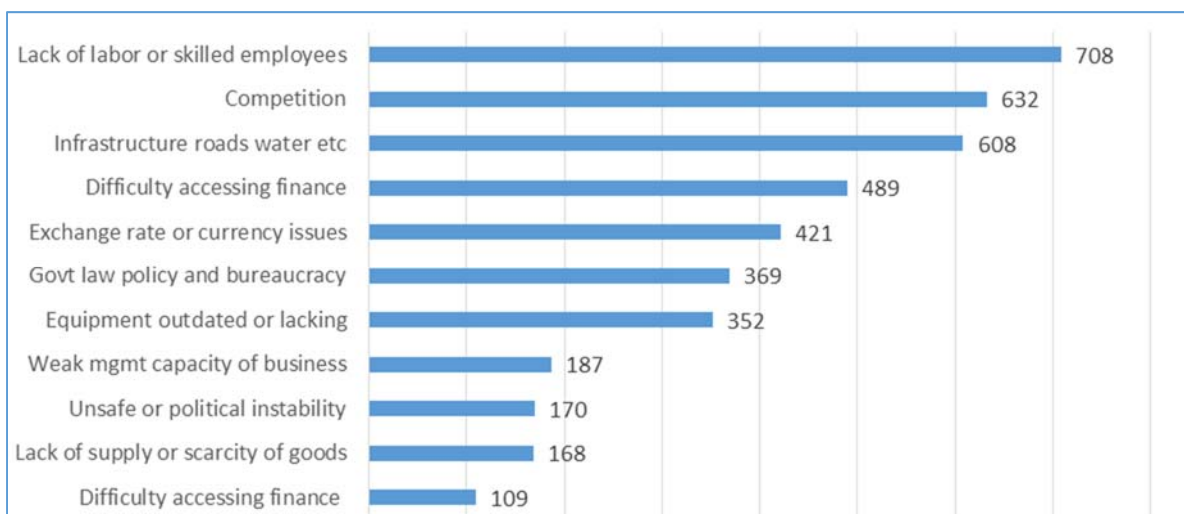
Many of the challenges presented in Figure 8 are commonplace in a developing country. For instance, issues related to infrastructure, difficulty in accessing finance, and government policy and bureaucracy are expected to surface in any SME survey in a developing country. It is encouraging that the Myanmar Government and local and international NGOs are aware of the challenges the SMEs in Myanmar face. Measures, such as the 2014 SME Bill and a powerful working group chaired by the President, the Central Committee for SME Development, are important milestones to address some of these challenges. We expect that with sustained efforts SMEs in Myanmar will see substantial progress in the next few years with respect to infrastructure and access to finance.

Notwithstanding the measures taken by the Government and NGOs, these challenges are likely to hinder the success of SMEs in Myanmar (at least in the short run). It will be critical to assess the impact of these challenges on the SME success factors. Future surveys should develop instruments related to these challenges to empirically assess the impact of these constraints on SME success.

Another limitation of the TOE framework is that it does not capture the unique socio-economic characteristics of a developing country. Developing countries, such as Myanmar, are likely to have unique characteristics that may influence and shape how SMEs operate in these countries (e.g., social values and cultural elements). Qualitative data collection will allow researchers to unearth these characteristics and understand the interplay among these characteristics. Prior data collection in developing countries, including the World Bank Enterprise Surveys, have not included expanded qualitative data collection (e.g. open-ended interviews, focus group, observations). However, prior research has shown that qualitative data collection is critical to generate insights on unique factors that may influence a phenomenon in a developing country (e.g., Venkatesh et al., 2016). Future data collection efforts in Myanmar should therefore incorporate qualitative data collection procedures to develop rich insights on SME success.

Given the importance of SMEs in Myanmar's economy, it is important to understand the factors that are associated with their success. This report suggests that factors related to technology, organization, and environment are strongly correlated with SME success in Myanmar. Given the importance SMEs to Myanmar's economy, it is important for the Myanmar Government and non-government agencies to consider measures and interventions that can help SMEs succeed and contribute to the country's growth.

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