

TOGETHER WITH INNOVATION SMES, INNOVATION CHINA: SMALL AND MEDIUMSIZED ENTERPRISE (SME) OWNERS AND MANUFACTURES IN THE CHINESE MANUFACTURING SECTORS DEVELOP STRATEGIC AND TRANSFORMATIVE INNOVATION STRATEGIES AND NETWORKS

ZHU XUELEI¹, ROZAINI BINTI ROSLI²

¹Research Scholar, Lincoln University College, Petaling Jaya, Malaysia.

²Lincoln University College, Petaling Jaya, Malaysia.

ABSTRACT

China is currently promoting institutional change and restructuring in an attempt to maintain and even accelerate its current level of economic progress, despite the fact that the globe as a whole is experiencing economic difficulties. China is putting in more efforts to innovate in response to the growing significance of innovation. Transform from a factory that creates low-quality items into a factory that creates trimming items that are distributed all over the globe. With a diverse selection of specialized initiatives and programs, the state and federal governments, as well as the regional governments, have made significant investments in order to foster creative regional and statewide development. The emphasis of these positive policy efforts has been on China's small and medium-sized companies (SMEs), which account for the vast majority of the country's firms and constitute the country's industrial base's central focus. China's economy is being more driven by its SME sector. Small and medium-sized firms (SMEs) have historically been seen as low-tech and resource-intensive manufacturers. The expansion of innovative small and medium-sized enterprises (SMEs) throughout China's manufacturing industries is driving the transformation of China's innovation system, resulting in a substantial shift in market structures and links. This is causing significant alterations to market structures and relationships.

Keywords: Manufacturing sectors, Networking, Small and Medium-sized Enterprises (SMEs), Innovation Strategy, Innovation System.

1. INTRODUCTION

The manufacturing industry in China is an essential part of the economy of the nation and a primary factor in the fast economic growth seen by the country. China's efforts to establish itself as a front-runner in innovation are met with enormous challenges on account of the country's long-standing adherence to the "universal factory" model of production. Economy away from imitation that relies on low-tech methods, which is challenging given the rising difficulty of the worldwide industry and the impacts of global. The great majority of Chinese companies are still located at the lowest rungs of the innovation value chain on a global scale, which is not enough to sustainably drive economic expansion in China. There is a lack of competitiveness in China's manufacturing sector inside the world production framework as well as the worldwide innovation value chain. In spite of China's best attempts to catch up to the rest of the world in terms of technological innovation, the vast majority of Chinese companies are still plagued by manufacturing that is focused on exports, utilizes a lot of resources, and has a very poor Research and Development (R&D) intensity. Guo and N' Diaye published their findings in 2007. Despite the fact that China retains the record for the most innovations and scholarly papers, its manufacturers cannot compete intellectually with those of the USA, Japan, or even some of the less affluent European nations. China's industrial sector is

in serious need of a comprehensive innovative overhaul. Made in China 2025 is a 10-year governmental action plan that the Chinese government began in 2015. The major goal of the plan is to turn China from a global manufacturing power to a global manufacturing behemoth. To begin with, the Chinese government is fiercely promoting national research and rebranding the nation internationally by investing heavily and consistently in a vast array of sectors to foster innovation (Adel, 2016). This is part of a larger push to promote China as the global innovation leader. Yet, it remains committed to the shift from a treasury, strategic control system to either a market-driven, bottom-up design. This is done in an effort to address issues and difficulties that arise during this era and to promote the development of ground-breaking new inventions. Industries are hugely affected by government initiatives and schemes throughout China's creative transformation of industrial sectors. Additionally, enterprises take a proactive approach in boosting the overall economy of innovative products and enhancing Chinese enterprises' competitiveness on the global market. This is because organizations are badly affected by governmental initiatives and initiatives throughout China's creative change of industrial sectors. Smaller, privately held companies get a disproportionately lower advantage from the current institutional framework in comparison to larger, state-owned firms and other significant corporations. While they make up a relatively little portion of all firms in China, the influence they exert is disproportionately large (Abe, 2015).

2. PROBLEM STATEMENT

“Because of the challenges in raising capital from outside sources, Chinese SMEs are unable to fully expand and modernise. 92% of China's small and medium-sized businesses have liquidity shortages of varied degrees, and the inability to get capital is a major reason why 67% of SMEs fail during the first three years of operation. Small and medium-sized enterprise (SME) executives in China often lack new tactics to acquire external capital required for company growth, which is a widespread business challenge. Several Chinese business executives of small and medium-sized enterprises (SMEs) have no plans to pursue venture capital investments”.

In China, it is difficult for small and medium-sized enterprises (SMEs) to receive finance from outside sources, which hinders their development and expansion (Rusu, 2020). Around 92% of North Korea's small and medium-sized enterprises (SMEs) face varied degrees of financial limitations, and 67% of Korea's SMEs would not survive beyond three years without access to financing. A widespread issue in the corporate sector is the incapacity of firm executives and founders of medium-sized enterprises (SMEs) in China to develop innovative plans to get the required external finance for the development of their firms. The issue at stake is that a significant number of China's SME CEOs lack the necessary skills to attract venture capital investments.

3. BACKGROUND OF THE STUDY

Robust economic growth depends on flourishing small and medium-sized enterprises (SMEs), but figuring out how to ensure their long-term success is a huge challenge. The performance of small and medium-sized enterprises and their standing in the economy are influenced by the complex changes introduced by the data society or the electronic business. SME characteristics

extend beyond their size. Their distinctive characteristics also change according on the economic, cultural, and political climate. Small and medium-sized enterprises differ from their larger counterparts in a number of ways, which include their planning form and significance and their insufficient resources .Yet, they may also be distinguished by a flat and flexible organizational structure, a penchant for innovation, a mentality that is open to change, and a predilection for adopting and executing evidence-based strategies. Some claim that small and medium-sized companies can only achieve long-term success by embracing digitalization and innovation. The demand for innovation as a core skill in today's dynamic economic environment has highlighted the significance of creation as a main business for all businesses. According to performance management research, innovation is a crucial business activity. Hence, performance frameworks are expanding beyond traditional sectors such as banking and commerce to encompass emergent domains such as digitalization, R&D, and development, where intangibles such as knowledge and expertise play a greater role in determining success. Yet, small and medium-sized enterprises are more susceptible to environmental uncertainty than large firms (Onokala, 2017). They have less resource available to learn about the industry and influence the destiny of the organization. Compared to large organizations, small and medium-sized firms react to environmental changes in distinctive ways. Due to limitations imposed by their own resources and strategic choices, as well as those of their industry and geographic location, businesses can only respond with a limited degree of speed. Depending on the stage of the company's life cycle, this may need various approaches. Throughout the last decade, research on small and medium-sized firms and entrepreneurship has increased, and this is also true for Albania. Notwithstanding the fact that many organizations employ varying definitions of "small and medium-sized firm," it is reasonable to claim that these companies are essential to Europe's economy. Thus, the health of the SME sector is predictive of the overall health of the economy. SME's are a great asset to regional economies when it comes to generating new jobs and bringing in new funds. Small and medium-sized firms can and do innovate, and they can form adaptable supply chains via clustering. Specifically, the impact of digitalization or sophisticated ICTs systems such as Business Intelligence and Analytics and Organisational Learning on the performance of SMEs is examined (Dana, 2016). The growth of the business is the major subject of this research, but it is not the sole emphasis, as will become obvious in the description of the study's scope that follows (Tokath, 2017).

4. LITERATURE REVIEW

"The rebirth of the China nation" approach includes promoting national innovation. The rapid rise of an economy based on activities that involve a lot of resources and labor will have far-reaching effects on the restructuring of economies worldwide. To understand China's progressive liberalization and SMEs' schemes and communications infrastructure in Chinese industrial businesses, this category will analyze Russia's innovation ecosystem, legal frameworks, policies, and stewardship. To grasp China's revolutionary modernization, China's global economic status is summarized in the following section (Harvey, 2017).

The World Bank Group (2017) reported disappointingly poor global economic growth. The IMF's Macroeconomic Outlook (WEO) predicts 3.1% growth for 2016, 3.5% for 2017, and 3.8% for 2022 (Wang, 2016).Growth in big economies like the US, UK, Japan, and Germany and rapid economic developments in Rising Markets and Poor Countries point to a slight rise

in global economic momentum in the near future. This rise is projected within months (EMDEs). Financial system output, particularly in developed nations, remains low in the mid to long term. Long-term and medium-term in a similar vein, the Organization for Economic Cooperation and Development (OECD) has concluded that the world's GDP is expanding, but too slowly, led by major countries like the US and China. Although advanced nations struggle with sluggish growth, low inflation, policy uncertainty, poor spending, and moderate productivity development, EMDEs are likely to drive marginal economic growth. EMDEs are expected to boost marginal economic growth most. Commodity exporting nations reduce barriers to activity, while commodity importing countries increase domestic demand. As emerging markets and developing economies account for over 75% of global production and consumer growth, their importance to the global economy is growing. The IMF's 10 biggest members include the US, Japan, the four major European nations, and the four largest EMDEs - UK, Brazil, China, India, and Russia (Meluzín, 2017). China's size and growth have contributed to the wealth development of emerging markets and developing countries as well as the global economy. The world's largest economies' 2015 GDP and growth rates China's population of almost 1.3 billion people makes its economy the second largest in the world, after the US, and it is increasingly influencing global markets. Due to the government's commitment to Reform and Openness, China's economy has grown rapidly over 30 years. China's GDP used to grow by double digits. China is the fastest-growing major economy at 7%, despite the global slowdown. Notwithstanding its previous success, China faces major problems. China's GDP growth is expected to slow to 6.5% in 2017 and continue beyond the 2017 National People's Congress (NPC) (Fusch, 2015).

5. RESEARCH DESIGN

The goal of qualitative and quantitative research to find statistically significant relationships between variables by collecting numerical data on those variables and feeding it into statistical models. Quantitative studies aim to get a more in-depth understanding of society. Researchers often use quantitative methods when examining phenomena with a personal effect. Quantitative studies provide hard data in the form of tables and graphs. Quantitative study relies heavily on numerical data, which necessitates a methodical strategy to collecting and analysing the data. It may be used in a variety of ways, including averaging out data, making forecasts, looking into connections, and extrapolating results to bigger populations. Quantitative studies are the polar opposite of qualitative studies, which rely on in-depth interviews and observations. Quantitative research techniques are widely used in many academic disciplines, including biology, chemistry, psychology, economics, sociology, marketing, and many more.

Sampling: A pilot study was conducted with the questionnaire using a group of 20 customers from China and final study was conducted with the questionnaire on sample of 385 customers. A total of questionnaires were distributed among customers selected in a systematic random sampling. All the completed questionnaires were considered for the study and any incomplete questionnaire will be rejected by the researcher.

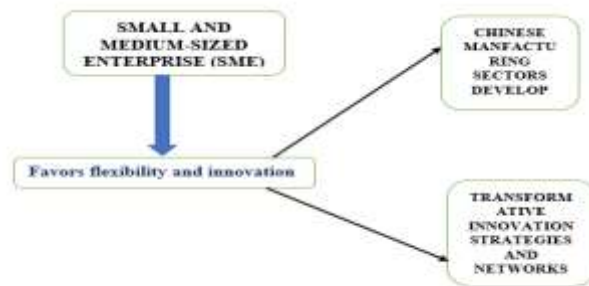
Data and Measurement: Primary data for the research study was collected through questionnaire survey. The questionnaire was divided into two parts – (A) Demographic

information (B) Factor responses in 5-point Likert Scale for both the online and non-online channels. Secondary data was collected from multiple sources, primarily internet resources.

Statistical Software: MS-Excel and SPSS 24 will be used for Statistical analysis.

Statistical tools: Descriptive analysis was applied to understand the basic nature of the data. Validity will be tested through factor analysis.

6. CONCEPTUAL FRAMEWORK



7. RESEARCH OBJECTIVE

- i. To evaluate the relationship between transformative innovation strategies and networks.
- ii. To understand the development strategy of Chinese manufacturing sectors.
- iii. To determine the favors flexible and innovative strategy in the Chinese manufacturing sectors.
- iv. To obtain the small and medium sized enterprise in China.
- v. To identify the competitive and healthier economy in innovation strategy.

8. RESULTS

Factor Analysis:

Factor Analysis (FA) is often used to confirm a measurement set's latent component structure. Latent factors may affect observable variables' scores Model-based accuracy analysis. It models causal connections between observable occurrences, undiscovered causes, and measurement error. Kaiser-Meyer-Olkin (KMO) may test data for factor analysis. The model and its variables are assessed for proper sampling. Statistics estimate shared variance among numerous variables. Factor analysis works best with lower percentages. KMO returns 0–1. Sampling is adequate if KMO is between 0.8 and 1. If KMO is less than 0.6, sampling is inadequate and remedial action is needed. Between 0.5 and 0.6, use your best judgment. Some authors choose 0.5. • KMO Near 0 suggests modest overall correlations compared to partial correlations. Extensive correlations make component analysis difficult. Kaiser's acceptance thresholds: Kaiser's acceptance thresholds: 0.050–0.059. 0.60–0.69 below-average Middle grade: 0.70–0.79. Quality point value: 0.80–0.89. 0.90–1.00 will be spectacular.

Table 1. KMO and Bartlett’s Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.906
Bartlett's Test of Sphericity	Approx. Chi-Square	274.867
	df	190
	Sig.	.000

The KMO value of the data used for this study will be .906. Furthermore, Bartlett’s test of Sphericity derived the significance level as 0.00. Hence, the sample was proven suitable for running factor analysis. After performing EFA, four factors were extracted and the eigenvalues of these factors were 18.37, 1.701, 1.565 and 1.006, respectively.

Test for Hypothesis:

DEPENDENT VARIABLE

Chinese Manufacturing Sectors Develop Strategic

The Big Leap Forward had a significant role in China's overall development strategy (GLF). This plan's objective was to achieve a complete and thorough industrialisation of the economy. The go-ahead for farmers in the nation to participate in agricultural cooperatives was granted to them.

Favors flexibility and innovation

This research defined innovation using the 2005 Oslo Manual by the Association for Economic Founder and Development. The handbook will help locate and assess inventions by categorizing them. Create, gather, and analyze. The book covers four subjects - Product, service, technical, sales, and organizational innovations. Briefly: The Oslo Manual defines "product innovation" as "the opening of a product or service that has never existed or improved greatly considering its characteristics or intended uses". "Major changes in tech standards, materials, suppliers, embedded software, login, or other performance criteria" qualify. Hence, "product/service innovation" will mean new products, services, technologies, etc. Innovative products change production, industry, and labor. This causes the biggest structural alteration (Osei et al., 2016). Fagerberg says innovation boosts income and employment (2004). Economy grows. The Oslo Booklet's three technical development dimensions—launching a new product, generating an innovative product, and upgrading a current product—help businesses increase sales and employees. Osei et al (2016). Product innovations improve Nigerian SME competitiveness and quality, according to Egbetoku, Siyanbola, Olamade, Adeniyi, and Irefin (2008). Fransen (2013) observed new product releases enhanced sales. Small and medium-sized enterprises may benefit from product innovation.

H0: There is no significant relationship between Favors Flexibility & Innovation and Chinese Manufacturing Sectors Develop Strategic

H1: There is a significant relationship between Favors Flexibility & Innovation and Chinese Manufacturing Sectors Develop Strategic

In our study (H1 There is a significant relationship between Favors Flexibility & Innovation and Chinese Manufacturing Sectors Develop Strategic) and (H01 there is no significant relationship between Favors Flexibility & Innovation and Chinese Manufacturing Sectors Develop Strategic) was rejected as per the analysis.

Table 2. H1 ANOVA

ANOVA					
Sum					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	589.467	15	342.764	46.703	.000
Within Groups	90.533	84	1.787		
Total	680.00	99			

In this study, the result will be significant. The value of F is 46.703, which reaches significance with a p-value of .000 (which is less than the .05 alpha levels). This means the “H1: There is a significant relationship between Favors Flexibility & Innovation and Chinese Manufacturing Sectors Develop Strategic” is accepted and the null hypothesis is rejected.

Table 3. KMO and Barlett’s Test

KMO and Bartlett’s Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.901
Bartlett’s Test of Sphericity	Approx. Chi-Square	274.867
	df	190
	Sig.	.000

The KMO value of the data used for this study will be .901. Furthermore, Bartlett’s test of Sphericity derived the significance level as 0.00. Hence, the sample was proven suitable for running factor analysis. After performing EFA, four factors were extracted and the eigenvalues of these factors were 18.37, 1.701, 1.565 and 1.006, respectively.

DEPENDENT VARIABLE

Transformative Innovation Strategies and Networks

In order to ensure the continued success of the firm in the years to come, it is necessary to implement major changes as part of a transformational business strategy. In this setting, it is possible for companies, services, and operating models, together with the resources and infrastructure that are now being used, could all undergo changes.

H02: There is no significant relationship between Favors Flexibility & Innovation and Chinese Manufacturing Sectors Develop Strategic

H2: There is a significant relationship between Favors Flexibility & Innovation and Chinese Manufacturing Sectors Develop Strategic

In our study (H2: There is a significant relationship between Favors Flexibility & Innovation and Chinese Manufacturing Sectors Develop Strategic) and (H02: There is no significant relationship between Favors Flexibility & Innovation and Chinese Manufacturing Sectors Develop Strategic) was rejected as per the analysis.

Table 4. H2 ANOVA

ANOVA					
Sum					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	559.467	15	342.764	44.703	.000
Within Groups	90.533	84	1.077		
Total	650.000	99			

In this study, the result will be significant. The value of F is 44.703, which reaches significance with a p-value of .000 (which is less than the .05 alpha levels). This means the “H2: There is a significant relationship between Favors Flexibility & Innovation and Chinese Manufacturing Sectors Develop Strategic” is accepted and the null hypothesis is rejected.

9. CONCLUSION

The main purpose of this paper was to conduct an investigation how merchandise, process, marketing, and service development affects the success of medium- and small-sized businesses. While this problem has received little attention from academics, especially in China and sophisticated countries like China, the major goal of this essay was to investigate how it may affect the survival of small, medium-sized firms. The study's findings are as follows: Shows that, in terms of the performance metrics under consideration, all four forms of innovation outlined here have a beneficial impact on the accomplishments of SMEs, with process development having the largest effect size. Adoption and execution of innovative product, process, marketing, and process innovations improves the efficiency of small and medium-sized businesses (SMEs) in regards to revenue, profitability, customer satisfaction, and market share, speed of entrance into the market, profit, and employee development will be the conclusion derived from the evidence offered here.

10. LIMITATIONS OF THE STUDY

Scientific research covers a given area. This article's author notes that the study's research approach restricts it, yet these restrictions also allow for further examination. We first investigated the four basic types of innovative notions stated in the. Second, the small sample size prevented generalizations about Chinese mall and medium-sized firms. So, future research must incorporate Chana's regional enterprises. The survey employed quantitative methods, thus respondents may not have been able to provide nuanced reasons. Since the study employed solely quantitative methodologies. In order to generalize the results of this study, the author suggests doing further research, especially qualitative research with virtually entire interviews, in other areas of Chana. Despite the limitations, the author believes the research advances the theory and practice of small and medium-sized enterprises, provides important potential consequences for managers and owners, and adds to the knowledge gained from existing research and conversations on the nexus between product and process innovation and company performance.

REFERENCES

- [1] Abe, M., Troilo, M., & Batsaikhan, O. (2015). *Financing small and medium enterprises in Asia and the Pacific*. *Journal of Entrepreneurship and Public Policy*, 4, 2-32. doi:10.1108/JEPP-07-2012-0036
- [2] Adel, G. (2016). *The venture capital contribution to the financing of entrepreneurial projects: Case of Tunisian risk capital investment company*. *Journal of Internet Banking and Commerce*, 21(S5), 1-21. Retrieved from <http://www.icommercecentral.com>
- [3] A. O., Du, J., & Onokala, U. (2017). *The determinants of location specific choice: Small and medium-sized enterprises in developing countries*. *Journal of Global Entrepreneurship Research*, 7(16), 1-17. doi:10.1186/s40497-017-0074-2
- [4] Çoban, S., & Tokath, E. S. (2017). *The effect of mind mapping technique on students' achievements in music lesson and on their attitudes towards the mind mapping technique*. *Egitim ve Bilim*, 42, 423-435. doi:10.15390/EB.2017.6856
- [5] Dong, J., Zhu, L., Wang, B., Dong, Z., & Li, X. (2016). *The evaluation of financing efficiency of China's stock market*. *Mathematical Problems in Engineering*, 2016. doi:10.1155/2016/3236897
- [6] Dušátková, M. S., Zinecker, M., & Meluzín, T. (2017). *Institutional determinants of private equity market in Czech Republic*. *Economics & Sociology*, 10(4), 83-98. doi:10.14254/2071-789X.2017/10-4/7
- [7] Fusch, P., & Ness, L. (2015). *Are we there yet? Data saturation in qualitative research*. *The Qualitative Report*, 20, 1408-1416. Retrieved from <http://nsuworks.nova.edu/tqr/>
- [8] Harvey, C. (2017). *Ethical emotional encounters: Contemplating challenges in psychoanalytically informed research*. *Psycho-Analytic Psychotherapy in China*, 25, 34-66. Retrieved from <http://www.ppsajournal.co.za/> 126
- [9] Hisrich, R. D., Petkovic, S., Ramadani, V., & Dana, L. (2016). *Venture capital funds in transition countries*. *Journal of Small Business and Enterprise Development*, 23, 296-315. doi:10.1108/JSBED-06-2015-0078