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Determinants of Innovative Success: A study of Small to Medium Enterprises in Tainan City <u>selected area</u>.

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Abstract The main purpose of this stud, abstract is not success of small to medium needed research approach will be employed in the investigation. Instruments used to collect data will be semi-structured interviews. Accordingly, through face-toface interviews with 30 owners/managers of small to medium enterprises data will be collected. With this study, many determinant factors of product innovative success will be identified. However, the three strategic types; namely entrepreneurial orientation, market information processing and network ties will be identified as the highly important while experience of workers and education levels of owners/managers of small firms were also mentioned as other factors.

Keywords: Entrepreneurial orientation; network ties; market information processing; product innovative success; SME

1. Introduction

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1.1 Background of the Study

Innovations are one of the main sources of a competitive advantage and they are essential for a company growth Fast technology development, combined with the globalization and fast changes in customer demand, implies that a competitive advantage of a company can be only temporary.

Small to medium-sized enterprises (SMEs) with the ability to quickly and efficiently transform new ideas into successful ventures are key drivers of innovation and development of the socio-economic policies of countries (Joanna, 2014). Schumpeter pointed out that small companies are the best in the implementation of innovation (Kurz, 2012). However, their ability to adopt tools and techniques that create innovation is much lower than in the case of large companies (Maravelakis, *et al.*, 2006).

Kacker (2005) points out that the word innovation comes from the Latin word *"innovare"* which means *"to make new"*. Innovations involve new methods of doing things and are associated with risk, failure, new ways of management thinking and unlearning of old ways. Innovation is the process of doing new things. It is important to recognize that innovation implies action, not just conceiving of new ideas. According to Schumpeter (1934) in his classic *"The theory of Economic Development"*, describes the motor of the development as the innovation.

The role of Small- and Medium-sized Enterprises (SMEs) in Taiwan's postwar economic development has attracted much attention in recent years. Some believe that they have played a more important role in Taiwan than that in elsewhere, and that their relative importance meant that Taiwan's postwar growth path has been close to that of free-market capitalism.

There are indeed numerous SMEs in Taiwan. Let us first study a snapshot of Taiwan's economy in 1997. The total number of enterprises in all sectors amounts to a little over one million, and 98% of them are SMEs. On the other hand, the size of the population is a little less than 22 millions, out of which a little less than ten millions are in the labor force.

Citation needed

According to the 2019 Small and Medium Enterprise White Book small- and mediumsized companies accounted for 97.64 percent of the total number of enterprises in Taiwan at the end of 2018. They are also responsible for 78 percent of the total employed population in Taiwan, which marks the highest since 2014.

Product innovation is the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses (OECD, 2005). Examples of product innovation by a business might include a new product's invention; improvements in features, materials and components of an existing product, the development of new product and other aspects (OECD, 2005).

While product innovation success in this study refers to the number of innovative products that a firm has introduced onto the market, achieve success in both market and financial success. Market success (its market share size in the market, acceptance of new product by customers) and financial success (sales volume and net profit growth) (Griffin and Page, 1993; Mohammad,

2013; Theresia, 2015).

This section should

The role of the small and medium scabe an earlier scene has been critical and the sector is considered as the "backbone" of many setter a et al.; 2012). However, the SME sector faces many constraints such as technological backwardness, and entrepreneurial capabilities, unavailability of appropriate and timely information, insufficient use of information technology and poor product quality. Consequently, the economic contribution of SMEs in developing countries is currently far behind compared to developed countries (Altenburg & Eckhardt, 2006; Asian Productivity Organization, 2011; Emine, 2012). But also, the result of study on innovation and barriers to innovation: small and medium enterprises in developed Countries (Silashi, 2014) shows; lack of cooperation (network ties), lack of competitive strategic orientation & market information, inadequate R&D were obstacle to SMEs' technological and product innovation success.

This is partly in the section above.

Have a hard hitting introduction. Then elaborate the literature.

Taiwanese SMEs have been the source of creativity and the key driving force of economic growth early since the 1960s, key partners in supply chain and industry clusters later, and recently focal point of local economy, social value, and dreams for young generation. Taiwanese enterprises are efficiently producing a great deal of goods they had no experience in at all a few Work to make your

1.2 Background of the SME in Taiwan

years ago. Moreover, in modern economies an increased utilizat writing more **A** advanced efficient. Two key technologies as well as the more intensive use of physical and hu served. In points: (1) use this regard, the economic development of Taiwan is considered active rather than y process of capital accumulation, innovation and learning. Taiwan's gover passive tense (2) s into two try to use present categories based upon product types, available capital, and nurtense where ategory 1 includes manufacturing, construction, mining, and quarrying possible as it ital from simplifies writing shareholders of NTD (New Taiwan Dollars) \$80 million (US \$2 with fewer than 200 employees, and Category 2 includes agriculture, forestry and fisheries, water, electricity and gas, commercial, transportation, warehousing and communications, finance, insurance and real estate, industrial and commercial services, or social and personal services industries, with sales revenues of NTD \$100 million (US \$3.03 million) in the last year and with less than 100 regular employees. In 2017, the number of Taiwan's SMEs reached a record level of 1,437,616 and accounted for 97.7 % of all enterprises. In addition, the number of employed

all employed persons in Taiwan. The annual sales of SMEs in 2017 came to NT\$12,139 billion, accounting for 30.22 % of the total annual sales of all enterprises in Taiwan . Recently in Vietnam, the SMEs have accounted for 98% of the total enterprises (of which 72.8% are micro and 1.7% are medium), employed 64% of employment, but only 48% of the total capital, contributed to about 45% to GDP, 31% to the total government revenue and 14.1% of the export

persons in SMEs rose to 8,904,000 the highest level in recent years and represented 78.44 % of

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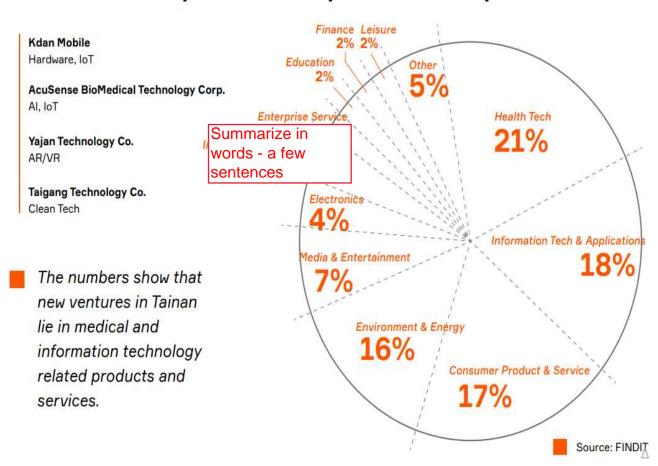
Since any rarwan also have certain characteristics different from those in European and US enterprises, and in other Asian countries. Kishikawa Zenko's Twenty-First-Century Management Strategy focuses on features common to Taiwan SMEs, including family-oriented management, high flexibility, risk-taking, and highly mobile employees.

Many of Taiwan's SME entrepreneurs are also influenced to some extent by Confucian-inspired cultural values such as filial piety, hard work, and loyalty to business associates and employees.

SMEs in Taiwan are often fan Where has the citation gone? mon for people in Chinese-based cultures to hand over positions or property to their relatives instead of outsiders, regardless of family member capabilities. Foreigners seeking cooperative partnerships with SMEs are advised to form a good relationship with the owner and his or her family so that trade agreements and partnerships will proceed more smoothly, especially when one is considering long term partnerships after a certain level of initial relationships is established.

Well known startups

Composition of startups in Tainan



Kdan Mobile is one of the few Taiwan-based SaaS (Software as a Service) providers that has emerged into the global marketplace. Used over 200 Milion global users. Acusense Biomedical was founded in 2017, with a focus on development of medical devices and the core proposition to make medical environment safer. Yajan Technology Co. Real-time facial recognition opens up a new horizon Facial/Body/Emotion recognition technologies. Taigang Technology Inc. Chemical Products (Manufacture, Wholesale).

1.3 Statement of the Problem In reviewing of the literature, few innovation small to medium enter discussed about the determinants developing and developed counties.

The review of literature shows that one of the main reasons for the low innovativeness of SMEs is the lack of long-term strategies. The method of strategic management is determined by the strategic orientation of individuals. The company prior to the development of its long-term strategies should clearly define its strategic orientation (Kurz, 2012; Laukkanen *et al.*, 2013; Joanna, 2014).

In general, the majority of the studies addressed determinants of innovations in to three main strategies Namely, entrepreneurial orientation, market information processing and network ties were identified as with their sub-elements and others while experience of workers and education levels of owners/managers of small firms were also mentioned as other highly important factors.

Product innovation is the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses (OECD, 2005). Examples of product innovation by a business might include a new product's invention; improvements in features, materials and components of an existing product, the development of new product and other aspects (OECD, 2005). While product innovation success measured with market and financial success. Because of the financial and market share objectives both were considered measures of commercial success (Erik, 2008).

Therefore, product innovation success in this study refers to the number of innovative products that a firm has introduced onto the market; achieve success in both market and financially. Market success includes: market share size in the market, acceptance of new product by customers while financial success includes sales volume and net profit growth (Erik, 2008, Fu, 2010, Mohammad, 2013; Theresia, 2015).

According to various recent researchers have found that the levels of product innovation success directly affected by the various aspects of the internal environment of the firm: Entrepreneurial Orientation (Zahra and Garvis, 2000; Muhammed, 2010) of the firm and

information from external environment acquired; network ties orientation and market information processing capability (Wei and Morgan, 2004) of the firm are the keys for success of innovative. Furthermore, network ties and market information processing are an important outside-incapability that can be protected with isolating mechanisms and when implemented in innovation, it may help firms to create a good innovative success and competitive advantage (Erik 2008; Muhammed 2010; Theresia, 2015).

The entrepreneurial orientation (EO) refers to decision making concerning the firm's strategy to embark on innovation, proactiveness and risk taking (Cools & Van den Broeck, 2008). As per recent studies, innovativeness, referring to willingness to support creativity and experimentation in introducing new products/services besides novelty, technological leadership and R&D in developing new processes. Risk taking which means tendency to take bold actions such as venturing into unknown new markets, committing a large portion of resources to venture with uncertain outcomes, and/or borrowing heavily. Proactiveness is an opportunity-seeking, forward-looking perspective involving introducing new products or services ahead of the competition and acting in anticipation of future demand to create change and shape the environment (James, Dennis and Vincent, 2014; Henri, 2015). Those EO competencies are important for the innovativeness of firms because EO is associated with a process of experimenting with new things, a willingness to seize new products, new markets, and new opportunities and a firm's propensity for undertaking risky ventures (Henri, 2015; Theresia *et al.*, 2015).

A market orientation leads to the market oriented behaviors of acquiring, disseminating and responding to market information (which in this study is referred to as market information processing) (Langerak, Hultink and Robben, 2004; Gotteland and Boulé, 2006; Erik, 2008). Marketing information processing is the process of acquisition, disseminate; utilization of about both current and future customer needs as well as factors that may influence those needs in different phases of innovation processes (Erik,2008; Torsti *et al.* 2009). Knowledge and information are strategic assets for the success of enterprises and nations worldwide.

According to Gaudici (2013), network ties are the pattern of relationships involving direct and indirect ties with different external actors. Large firms can establish separate sub-units for pursuing the exploitation and exploration strategies simultaneously, but SMEs do not usually have that option. How, then, can a firm pursue this strategy if it has limited resources? When resources are limited, SMEs must remain alert for windows of opportunities. They can compensate by relying on their network ties (Hewitt-Dundas, 2006; Theresia *et al.*, 2015) which may provide them with additional resources. Network ties provide access to a diversity of new ideas, referrals, knowledge and information (Stam, 2010).

Product innovation s prot influences the revenues and value (e.g. on growth and survival of individual firms) (Fu, 2010). One of the recent best practice studies showed that, among the best performing firms, 48% of sales are derived from new products introduced in the last five years. Actually, there are lots of studies concerning product innovation success. For instance, successful innovation can be achieved through an integrated development of a firm's business strategy and market positioning, organization of work, technology and people (Ebru, *et al.*, 2014).

It is obvious that hurdles in the business success are far more then it was in previous. The environments as well as and some other factors that are very complex and dynamic. The only thing that is more concerned to the entrepreneur is what he should do to survive in a competitive market. The factors which we are concerned more in the literature are financial resources marketing strategy, technological resources, information access, and government support and business plan.

Furthermore, various recent researchers have recommended as, future studies should continue to examine the effect of combination of elements of strategic orientation, entrepreneurial orientation (Mohammad, 2013; Justina, *et al.*, 2014), marketing information processing (Erik, 2008; Sylvia and Kalsom, 2013), network ties (Theresia *et al.* 2015), competitive strategy orientation (Gatignon and Xuereb, 1997; Muhammad, 2010, Justina, Marcela and Craig, 2014) on innovative success of SMEs and to fill gaps in literature. Therefore, by exposing gaps and to fill these gaps, this study addresses the following basic research questions.



How the major determinants of innovative suc than the title enterprises.

medium

> How Institutional factor affect the product innovation success of SMEs?

Be consistent nall enterprises define and apply entrepreneurial orientation for their (SMEs) ve success?

- How small enterprises define and ap innovative success?
 You might draw on one of these three for focus
 tion processing for their
- ➢ How small enterprises define and use network ties for their innovative success?'

1.5 Objective of the Study

- To understanding of major determinants of innovative success of small to medium enterprises and to add theory on these topics.
- > To Exploring Institutional factors affect the product innovation success
- To Assessing small enterprises define and apply entrepreneurial orientation for their innovative success
- To Assessing small enterprises define and apply marketing information processing for their innovative success
- > To assessing the effects of network ties on product innovation success of SMEs

1.6 Significance of the Study

Innovation in the various forms in which it exists is nowadays an important key term to almost any company. Being innovative offers advantages over competitors and is therefore seen as essential for a firm to stay in the business. Innovative companies are a prerequisite for a dynamic and competitive economy. Therefore, it may be of particular interest to find out what factors determine innovation. The study of innovation determinants in SMEs in this era of globalization is relevant in this context as a critical factor for the sustainability SMEs generally, and particularly Tainan SMEs.

All too frequently SMEs struggle to innovate. However, few studies directly explore . . . NO "era of globalization" = horrible cliche

1.7 Limitations research

The survey in Tainan will be conducted in selected area; therefore it may not reflect the views and practices of SMEs in other of Taiwan. This is necessary for exploratory study that requires a large scale confirmatory research to test the hypotheses which are suggested as result of the thesis. There is also a need of large scale survey to identify whether there is validate the results. The role of banking sector in Small and medium entrepreneurs financing can be investigated in

future research.

2. Literature Review

Get organized! What is most of the above, if not literature?

2.1 Overview of SME

In the present global knowledge economy, technology and innovation are important determinants of economic growth (OECD, 2004). Innovation is important for economic growth because it makes a contribution to increased productivity and higher employment rates (European Commission, 2007). Thus, the degree to which firms are able to product innovation and bring them to the market successfully determines the economic prosperity of many nations.

Product innovation is probably one of the most important processes for many firms as it influences the revenues and margins that a firm can achieve and it has a positive impact on firm value (eg. on growth and survival of individual firms) (Pauwels et al.; 2004).

2.2 Empirical Studies

The most recent best practice study showed that, among the best performing firms, 48% of sales are derived from new products introduced in the last five years (Adams and Doug, 2004).

Innovation is determined by many factors both internal as external one. The most commonly innovation factors are as follows: financial factor, firm size, institutional factor, technological capability, consumer preferences, economic factor, culture factor, management skills, market orientation, competitive advantage, learning capability. (Rosenbusch et al., 2011, p. 442).

The factors listed are the innovation drivers. They are universal and do not depend on the size or industry the company operates within, though the relationship between size, innovation and performance has long been debated. Many empirical studies have sought to test the Schumpeterian hypothesis that large firms tend to have a resource advantage over smaller ones when it comes to the development and commercialization of new technologies. Innovation and SMEs are closely tied. First, the development of a new idea is the key reason why entrepreneurs

establish a new business. Second, "the entrepreneur or small business manager needs to have an innovative edge to compete against bigger incumbents" (Rosenbusch et al., 2011, p. 442). Otherwise, it is likely they will be taken out of business by the Big Fish. Third, SMEs can adjust to environmental changes faster than bigger organization "due to their nimbleness, missing hierarchies, and quick decision-making" (Rosenbusch et al., 2011, p. 442).

However, innovation is a risky endeavour. On the one hand, it requires resources that may be hard to come by a SME. It is well-known that SMEs face tight financial resources restrictions due to credit constraints (Nixson and Cook, 2005; OECD, 2009; OECD, 2015); but they also may face other kinds of resource deficits, such as scarce management resources or limited access to human capital (OECD, 1998; Abdullah, 2000). On the other hand, the results Determinants of innovation of those investments can be uncertain. So, it is no surprise that SMEs have a high mortality rate.

I. Innovation strategy

Innovation defined as the generation, acceptance, and implementation of new ideas, processes, products or services (Rogers, 1995; Robertson and Yu, 2001). *The innovation process includes the acquisition, dissemination and use of new knowledge* (Calantone et al; 2002) and *successful implementation of creative ideas within an organization* (Amabile et al; 1996).

In general, innovation denotes the successful introduction of novelties. The word "innovation" itself originates from the Latin word "innovare", which can be translated as "renewal". To be innovative thereby indicates the ability to create something new. It is normal to separate the act of innovation and the output of innovation. It is also normal to distinguish between *inventions and innovations*. *An invention* is the first occurrence of an *idea for a new product* or process, and *innovation* is the *act of putting it into practice* (Fagerberg et al., 2005). From an economic perspective, *an invention must be advantageous, or at least thought to be advantageous, to be considered an innovation*. As per (Schumpeter; 1934, Drucker, 1985) innovation is the process of generating something new (*new good /service*) that has a significant value to an individual, a group, an organization, and industry, or a society. Innovation is the use of new knowledge to offer a new product or service that customers want (Marijan and Rozana, 2010). *It is invention plus commercialization*. It is according to Porter (19980) a new way of doing things that is commercialized.

Firm competence and asset determine the innovation of new products, gaining low cost products, contribute to improve attributes but also to create new attributes which will help firm in competitiveness (Marijan and Rozana, 2010).

II. Typology of Innovation

Past scholars have often found it necessary to categorize and distinguish innovations in order to understand the true nature of the construct (Downs and Mohr 1976). Innovation can come in different forms, including: product innovation, organizational innovation, management innovation, process innovation, marketing innovation, and service innovation (Trott, 2008).

According OECD (2005); Jaramillo et al (2001:157-62) four types of innovation are identified:

- Product innovation: is the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses.
- Process innovation: is the implementation of a new or significantly improved production and/or delivery method for the creation and provision of services.
- Marketing innovation is the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion and pricing that is use of new pricing strategies to market whereas,
- Organizational innovation is the implementation of a new organizational method in the firm's business practices, workplace organization or external relations(OECD, 2005).

III. Product innovation

(1) product versus process, and (2) radical versus incremental 3)Administrative versus technical.

These different typologies were developed in order to bring some clarity to the study of innovativeness. While the objective of this thesis is to help gain a broader understanding of product innovation (good or service), because it is difficult to integrate the research on innovation together with so many different typologies examined.

Product innovation, which underlies new products, may include improvements in features, materials, and components, the development of new software, enhanced user friendliness, and other aspects (OECD, 2005). It is in the context of a relevant group, or niche and environment, that the product needs be new (Zinga et al., 2013). New product development can be considered as one types of product innovation. The next section reviews the theoretical and empirical literatures on the definition of product innovation. Product innovation is, by definition, deemed to be novel, but the degree of novelty differs by product (Arundel and Hollanders, 2005). OECD (1992, 1996, 2005) classifies firm's product innovation into two types; "the introduction of a product only new to the firm" and "the introduction of a product new to the market." The latter innovation is newer and more drastic than the former (OECD, 2009), and is considered to be novel. It is an important research agenda to examine product innovation in light of its novelty in three counts. First, new-to-market product innovation may contribute to firm performance, as it can provide a firm with temporary market power (Petrin, 2002). Second, new-to-market product innovation exhibits possible technological spillovers in firm's innovation activities. Spillovers associated with firm's innovation activities have attracted much attention in both theoretical and empirical studies.

In our study, we focus on product innovation, which is "new products or services introduced to meet an external user or market need" (Damanpour, 1991). Zmud (1982) distinguished between the initiation and implementation stages of the adoption of innovations.

Following Zmud's approach, we further distinguish among three constructs associated with product innovation. They are innovation orientation, resources commitment in product innovation and product innovation success.

From a collective perspective, *innovation orientation is defined as openness to new ideas as an aspect of a firm's culture* (Cooper and Kleinschmidt, 1988, Rosenau and Moran, 1993, Urban and Hauser, 1993, Hurley and knight, 2004), and it reflects the organization's willingness to innovate its offerings. Innovation resources refer to the actual investment activities while implementing innovation strategy, and product innovation success is the outcome and

consequence of innovation activity (Zahay et al. 2004). Obviously, these three constructs are interrelated but quite different concepts, and innovation orientation and innovation resources can be considered as innovation related resources.

IV. Innovation Success

Innovation is traditionally understood to mean the introduction of new goods, the use of new materials, the development of new methods of production, the opening of new markets, or the implementation of a new approach to organization (Schumpeter, 1934). Since, both academics and practitioners agreed that *measuring innovation success* is important (Griffin and Page, 1993). However, measuring new product success is not easy. Several researchers have suggested that *innovative* success is multidimensional and that success can be measured in different ways (Griffin and Page, 1996; Hart, 1993; Marsh and Stock, 2003). There are many success criteria

available to determine whether a new product is a success or a failure (Griffin and Page, 1993; Hultink and Robben, 1995). According to (Katila & Ahuja, 2003), *the ability of firms to develop new products* is considered as a measure of innovative success. New products are an important indicator of innovative success because they reflect a firm's ability to adapt to changes in markets and technologies (Schoonhoven et al., 1990) and they exert a significant impact on *market share, market value, and firm survival* (Banbury & Mitchell, 1995).

New product success is the degree to which organizational goals involving new product profit, sales volume, and market share have been reached (Erik, 2008). Product Innovation success defined, as it is the success in new products is occurring when the product is adopted by a large number of the target customers and the organization is able to achieve target sales figures (Griffin and Page, 1993; Kleinschmidt and Cooper, 1991).In addition, they define new product success as the degree to which the new product being evaluated meets that product's success goals (Griffin and Page 1993; Montoya-Weiss and Calantone, 1994). For example, Marsh and Stock (2003) proposed that success in product innovative could be assessed at three different levels: project level (e.g., *time, cost efficiency and functional success), product level (e.g., profitability, market share and revenues of the new product*) and firm level (returns to the firm generated by the new product).

A comparison of the measures that academics use with the measures practitioners use or would like to use resulted in 16 core measures that everyone uses or wants to use to assess the success of a single product development. Three independent dimensions were identified underlying these measures: consumer-based, financial-based, and technical or process-based measures of success (Erik, 2008). *Based on these empirical findings, this research project defines innovative success at the project level as the extent to which a new product has achieved its market success or consumer-based and financial based objectives.*

V. Network Ties Orientation

The focus of this section is to find out the concepts of network ties and its role in product innovation success of SMEs. So, different theories and empirical studies are conducted to find the relationship between network ties strategy and innovative success. Therefore, this section tried to discuss network or cluster (intra and extra-cluster ties) as can be driving forces in SMEs' innovative success.

A relational network orientation is apt to emerge when the organizational context promotes external cooperation and when distinct partners of individuals in the network are not the overriding emphasis (Alina and Noshir,2015). This orientation is promoted by a network structure emphasizing dense and integrated networks of various partnerships and relationships, where density refers to the ratio of actual to potential ties (Pittaway,2004) and integration refers to the degree of interaction among various partners (James, Dennis & Vincent, 2014). Dense and integrated much relationships will increase the extent to which individuals view themselves as relationship partners inhibiting clusters corresponding to organizational characteristics (Alina and Noshir, 2015). By implementing temporary task coalitions, structuring tasks so that partners have differing and interlocking roles (e.g., Miller & Davidson- Podgorny, 1987; Gaudici, 2013), such networks encourage the sharing of ideas, information and perspectives across fluid relationship structures.

Mulu and Pierre (2011) contrast local and non-local knowledge linkages, whereas, Giuliani (2013) compares business and knowledge networks effect on firm innovation and finds positive effect of business and knowledge networks on firm innovation when these variables are included separately in the model. James, Dennis & Vincent (2014) finds a strong association between connectedness with local or non-local networks and product innovation success.

2.2.1 Knowledge Gap

From the perusal of literatures on Determinants of Innovative Success of SME around the world, it is true that there have been many studies undertaken on these issues in developed, developing and low-income countries. However, the researcher has observed the following knowledge gaps over the captioned study.

- Setting Gap: The study undertaken in cross country has varieties of socio cultural dimension which prejudices the result of social determinants of innovative success of SME. Each country is having unique culture under the society where the result of the study might give a different interpretation about determinants of innovative success of SME.
- Methodological& Evaluation Void Gap: The SMEs under the review of literatures are based on age, size and fund based SMEs separately. No study has been done that portray a comprehensive analysis of age, size and fund based MFIs in a single context of a low income country.

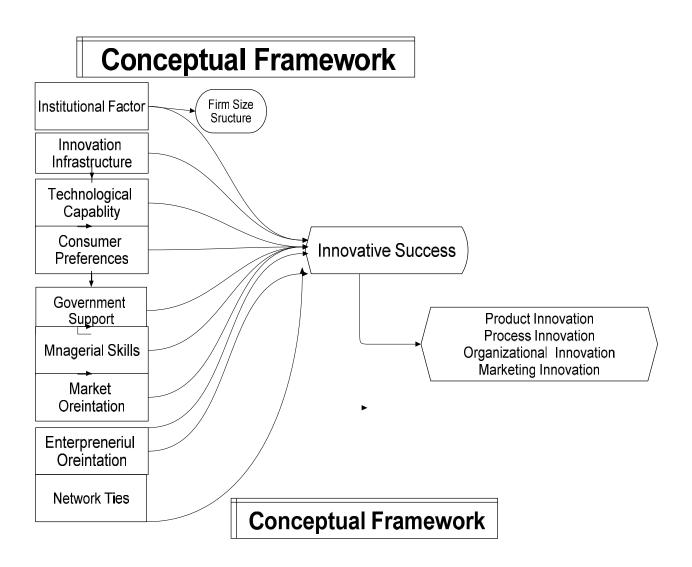
- 3. Conceptual Gap: In the early days when SMEs started, they were financed by government that have a poverty eradication goal/employee opportunity. Although there are many studies have been undertaken in Asian context, no formal literature evidences are found in Tianan context overt the issue of determinants of innovative success of SME while retaining the social objective of job opportunity/poverty reduction goal.
- 4. Evidence Gap: Most of the studies are based on panel data sourced from MIX market data base and very few studies have been undertaken based on primary data such as questionnaire being the managers' and staff as the prime respondents. Additionally, there is no evidence found in the literatures the effort to compare the result of the opinion of the managers and staff and the result as per panel data based on the audited financial statement so as to ascertain the factual nature of the tradeoff between determinants of innovative success of SME operating in the context in a Tainan.

Hence, the study finds cognizance of the knowledge gaps in the area of determinants of innovative success of SME mentioned supra and intends to conduct a research in this field in the context of a Tainan which might have future policy implication for the regulators and managers towards the upliftment of marginalized and downtrodden people of the society towards a better, healthy and peaceful living.

2.3 Conceptual Framework

The main objective of this section is to discuss the association of Different Determinants with innovation success.

Regardless of the definition adopted, innovation may be represented by new products, new methods of production, new sources of supply, the exploitation of new markets, new ways to organize business.

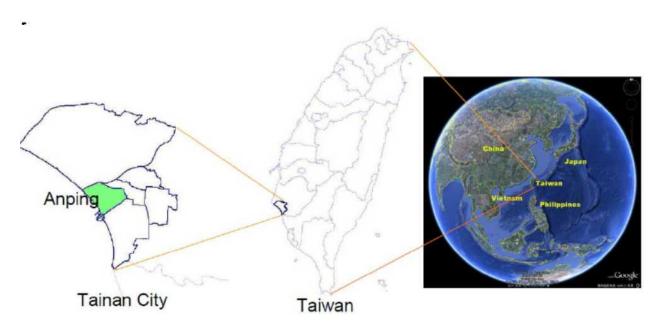


3. Methodology

3.1 Description Study Area

According to Taipie Times (**Nov 04, 2020**) of The number of SMEs increased to 1.49 million last year, up 1.72 percent year-on-year, accounting for 97.65 percent of all Taiwanese businesses, the paper said. About 9.05 million Taiwanese worked at SMEs last year, up 0.99 percent from the previous year, making up 78.73 percent of the nation's total workforce, the report said.

The number of SMEs and the number of people employed at them both reached their highest in recent years, it said. "SMEs are an important foundation of economic stability and job growth," "More than 100,000 SMEs were created last year," the report said. In 2017, the number of Taiwan's SMEs reached a record level of 1,437,616 and accounted for 97.7 % of all enterprises. In addition, the number of employed persons in SMEs rose to 8,904,000 — the highest level in recent years and represented 78.44 % of all employed persons in Taiwan.



3.2 Sampling frame and sample size

Generally, the sample sizes used in qualitative research are not justified (Marshall et al, 2013) even though researchers are concerned about using the right sample size (Dworkin, 2012). One review identified that samples of 20 and 30 (and multiples of 10) were most common (Mason, 2010), with 25-30 being a typical recommendation (Dworkin, 2012). This subjective nature has

led to many different opinions in the realm of correct sample size for qualitative project design. Interestingly, a common practice appears frequently in the industry and that is a sample size of 30.

3.3 Research Design

The main objective of this study will to discover uncovered meaning in practitioners' view, gain understanding of the variables, those determinants of innovative success of small to medium enterprises. Therefore, qualitative interpretive approach will be utilized. Qualitative interpretive approach is "an inductive or theory- building approach". It is one whereby the researcher deemed part of the research process and endeavors to uncover meaning and gain understanding of broad interrelationships in the context they research. It helps to understanding how and why things happen: exposing meaning (Creswell, 2002,). For survey, in-depth interviews will made with owners/managers; analytical approaches will be employed. For qualitative study only owners/managers will be chosen because of they have clear information about innovation and types of strategies they use to be success. Furthermore, to achieve the objective of the study a cross-sectional field study will used. Because cross-sectional and specifically sample survey field studies are particularly useful for gaining a representation of the reality of a social structure utilizing a single administration research instrument.

3.4 Sampling procedures and data collection method

Miles and Huberman (1994) emphasized that sampling for qualitative research should be "purposive" rather than random. Therefore, purposively the samples of thirty owners/managers of small and medium enterprises in Tainan City, will be taken to include all businesses, as well as a mix of industries and age groups. To achieve objective of the study, in-depth interviews involved collection of information from multiple sources rich in context. As a method of data collection, in-depth interviews are recommended if the purpose of the study is to understand an event, activity, process, or one or more individuals (Creswell, 2002). This suggests the suitability of in-depth interviews for this study. Secondary data will be used to collect data, Books, Articles, Reports. data can be analyzed by using tables, graphs and regression and correlation will be analyzed.

3.5 Validity of Finding for Qualitative Study

Validity in qualitative research has to do with description and explanation and the extent to which the explanation fits the description (Riege, 2003). Thus, one issue of validity concerns the conflation between method and interpretation. In addition, utilizing different sources of evidence maximize validity and quality of qualitative research if three principles are followed, namely multiple sources of evidence, creating a case study database and maintaining a chain of evidence. The first has to do with the research design; the others with the process and the rigour of management of the research process. Case studies can, for example, be entirely based on interviews (Yin, 1994). Only the use of multiple sources of evidence can challenge the real strength of the case study research methodology, namely a combination of different data sources and the development of converging lines of inquiry; a process of data triangulation. With triangulation potential problems of construct validity and reliability was addressed.

Triangulation refers to the use of two or more data sources, methods (data collection etc.), investigators, theoretical perspectives and approaches to analysis in the study of a single phenomenon and then validating the congruence among them. The major goal of triangulation is to avoid the personal biases of investigators and overcome the deficiencies intrinsic to single-investigator, single-theory, or single-method study thus increasing the validity of the study (Riege, 2003). For this study, by combining multiple observers, theories, methods, and empirical materials, researchers can hope to overcome the weakness or intrinsic biases and the problems that come from single method, single-observer and single-theory studies.

3.6 Ethical Consideration

The research takes care of ethical stance while distributing the Interview to the managers and staff of the sampled SMEs as respondents. Since the result of the research is to ascertain whether the effort of SMEs to reach Innovation Success, many respondents might be reluctant to give their personal opinion for fear of losing confidentiality of official information or might be biased if they do so. So, it is essential to maintain confidentiality, security and safety of the respondents while dealing with them during the course of research. They should be briefed about the objective of the research being solely for academic purpose and get their willing consent before Interview. They should even be assured to deliver the results of the research so that they will feel comfortable to cooperate on the research activities. With respect to the secondary data sourced from MIX Market data base, the researcher uses these for academic purpose that minimizes the risk of any negative bearing to the concerned SMEs. Contrast to this, the head of the SMEs should be briefed in advance and assure them to deliver the results of the research which might guide them in making policy ramification.

4. Time and Cost breakdown

Table 2. Time Schedule of the proposals

No	Task to performed	Time Frame							
		March	March 25,	April 2022	April	April	April	may	May
		2022	2022		2022	2022	2022	2022	2022
1	Title selection and submission	~							
2	Problem identification formulation	✓							
3	Proposal development	 ✓ 							
4	Proposal submission		✓						
5	Proposal defense		✓						
6	Questionnaire development			 ✓ 					
7	Data collection			✓					
8	Data coding, editing and entry				~				
9	Data analysis					✓			
10	paper working and editing						✓	✓	
11	Final submission of the paper								~
12	Presentation of the Paper								~

No	Item	Unit	Quantity	Unit price	Total price	Remark
				TWD	TWD	
2	Computer paper	Parcel	1	220	220	
3	Pen	No	8	5	40	
4	Pencil	No	5	3	15	
5	Ruler	No	1	10	10	
6	Binder	No	1	15	15	
7	Note book	No	4	50	200	
8	Flash8GB	No	1	250	250	
9	Cost of printing	No	100	3	300	
10	Cost of copy	No	300	1	300	
11	Expense of researcher	Day	80	200	16,000	
	Total				29,570	
12	Contingency cost 10%				2,957	
	Grand total				32,527	

Table 3.4 BUDGET SPECIFICATION

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NCKU, IMBA - FEEDBACK, CLASS PRESENTATIONS

THE GROUP YOU AND ABE YOUR GROUP NAM		Save your file. Use this format: group being assessed your group.doc So an example would be TIV Voltes5.doc – where TIV is the group being assessed and Voltes5 is your group.			
А	В	С	D		
Are ideas presented connected with the aim of the presentation?	Are the ideas presented clearly supported with evidence and logical argument?	Is it easy to follow & to understand? (Are the slides clear and easy to follow e.g. use of new pictures, words, graphs)	Overall impression (is it a group presentation etc.?)		
40%	30%	20%	10%		

5%	5%	5%	5%			
Comments (space will expand as you type)						

Comments (space will expand as you type)

Opening slide - very hard to look at. Make the background image washed out. Use a non-serif font for ease of viewing

Note - technicality - a title should not normally be used with a first name (so either "James" or "Professor Stanworth")

Try to keep the agenda a bit briefer

Reduce the words on the slide - key points only

Fit picture to topic - how is this picture innovation? Later picture shows an international audience (statement of problem)

Animate the points - one by one / group by group (click-talk click-talk . . .)

Background - slide 5 - way too much on the slide. Too small to see. Try to be more efficient - this may be a part repeat of what has come before? Figures are too small to see/read

See Atkinson & Mayer - 5 lessons for reducing PowerPoint overload

Conceptual framework - you tell us 3 times!

Qu - 98% typical globally - SME count for most jobs and most economic activity

Qu - statement of problem - Tainan city (problem of generalizability)

Qu - focus - perhaps one of the strategies (entrepreneurial orientation...)

- Qu "no research on . . . " dangerous statement
- Qu questions/objectives one or other

NCKU, IMBA - FEEDBACK, CLASS PRESENTATIONS

Qu - Qu enough for several dissertations! Qu - Qu 1 - determinants - but where and perspective Ou - sample size - yes can determine Qu - validity - more critical in qualitative than reliability Getting confused - conceptual model - with independent / dependent variables. Here you want to focus on factors determinants Report: The presentation of the report is rather rambling and long winded. The lack of structure is palpable and in parts it feels like literature is randomly jumbled together. Use headings to get a clear structure to shape your arguments. So, for example, obvious headings would include: SMEs, SMEs in Taiwan, Determinants of innovative success, Research gap You need to narrow and focus. You might focus on a type of innovation in SMEs in Taiwan. This narrows the scope to an aspect of innovation and to a specific context. This needs to build from the flow, organization and balance in the literature. The RQ needs then to be consistent with this focus and reflect what you have stated in the title. Limitatations - your concern is generalizability. This is achievable from a study in Tainan if you position your work as studying firms in a Confucian society (a point you touch on) 82%

Grade (%) 20%

Peer review

<u>Kemi</u>

Overall the report shows detailed, rich content and lots of effort put forth.

The topic is very interesting. I would also like to explore and know more about innovative success of SMEs in Tainan.

The gap analysis is very detailed. However, I was quite unclear on which gap will be addressed? I was just wondering is it too much to shoulder for the report (just my personal opinion).

Possible questions: How do legal frameworks enable innovation in Taiwan? And does familyorientation nature of SMEs in Taiwan would pose an effect on innovation?

Impressive job Abe!

<u>Laura</u>

<u>Steven</u>

<u>Tony</u>

I did not observe the whole presentation. However, for the few minutes I was there, my reviews are:

The delivery was at a fast pace. You could slower a bit.

Interesting topic. Lots of information input.