

# A Better Fitting Strategy Planning Model for the Small and Medium-Sized Enterprises in Taiwan: The Financial Strategy Management Analysis Model

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Abstract: Although the widespread recognition of the important roles that small and medium-sized enterprises play in economic, and some research has found that strategy planning has significant impact on enterprise's performance, researches of strategic planning applicable to small and medium-sized enterprises are scattered and limited. It is usually assumed that small and medium-sized enterprises lack the resources to implement strategy planning, and then lead to inferior financial performance. The purpose of this paper is trying to introduce the new strategic planning method, the financial strategy management analysis model, for the small and medium-sized enterprises in Taiwan. This model will help managers in small and medium-sized enterprises more quickly develop strategy, find possible management problem, effectively solve management problem, and improve financial performance.

**Key words:** TOWS analysis; financial/strategy/management analysis; SME **JEL codes:** M10

## 1. Background

SME (small and medium-sized enterprises) have been the major driving force of economic development in many countries (Adamoniene & Andriuscenka, 2007). For many years, SME have been so to the economic development of Taiwan and have made Taiwan become one of the leading export countries in the world, so as one of the so called "Asian Tigers". Therefore, the SME business development experience of Taiwan can be a role model for those SME striving in the developing countries or the emerging market.

The definition of SME in Taiwan, according to the Act of Development of SME, is defined by the registered capital, the revenue, and the number of employees, besides company registration and business registration. For manufacturing industry, construction industry and the mining and quarrying industry, any company of the industries defined as SME must have its actual capital less than 80 million NT dollars and its average number of monthly insured labors in the past 12 month less than 200 people. For other industries like the industry of agriculture, forestry, livestock and fishery, the industry of electricity, gas and water, the industry of transport, storage and accommodation, the industry of insurance and real estate, and the industry of service, the standards of SME as the annual revenue in the previous year must be less than 100 million NT dollars and the average number

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of monthly insured labor in the past 12 month comes under 100 people. Small and medium-sized business is the major economic pattern in Taiwan. According to the SME white paper published in 2010 by the ministry of economic affairs, 98% of all enterprises in Taiwan are categorized to the SME, which are roughly 1.23 million enterprises. Among these enterprises, 57% of them are sole proprietorships, 28% of them are limited liability companies, and 9% of them are corporations.

Apart from the traits of management in large-scale enterprises, such as organization environment, the management pattern and the environment of competition for sole proprietorships and family corporations have become the decisive prerequisite to identify whether the strategic development of a SME will succeed or not (Smith & Smith, 2007). Because most SME are concise, efficient and agile, they tend to grow rapidly even under uncertainty in the industrial environment and make contributions to economic development. However, in comparison to the large-scale enterprises, SME tend to face a higher percentage of business failure and worse business performance (Jocumsen, 2004). There are 33% of the SME cannot survive more than five years and only around 46% of the SME can survive for the first decade. This implies that SME can maintain a higher flexibility to enter and leave of the market but the risk of failure is relatively high. A number of researches have revealed why SME have higher business failure rate. It is because of lack of time and manpower for executing complicated strategic plans and hence most SME are forced to cross out strategic planning (Lurie, 1987; Hormozi et al., 2002; Wang et al., 2008).

Strategic planning is the most wildely applied tool in business management (Rigby & Bilodeau, 2007, Ghobadian et al., 2008). Although different research results are presented as revelance between strategic planning and business performance, some other researches have also shown that in comparison to the trial and error learning method, strategic planning indeed can help improve business performance (Lyles et al., 1993; Jennings & Beaver, 1997; Juul, 2000; Bowman & Helfat, 2001; Gibbons & O'Connor, 2005) and at the same time work as a tool to accomplish organizational goals (Hahn & Powers, 2010).

As the changes of the external environment speed up, the relevance of business processes between strategic planning and performance management has tightened up. Strategic planning can help business managers avoid false business development by ensuring development directions (Aram & Cowen, 1990). Strategic planning is crucial for a newly established enterprise when facing high risk of business failure (Bruderl & Schussler, 1990, Ghobadian et al., 2008). Chell (2001) points out strategic planning can help SME centralize resources, maintain flexibility, improve business performance, coordinate departments with organization, measure the level of accomplishment of organizational goals, and improve time management. In the development of SME, more advantageous and simple analytical tools are required to maintain strategic performances and drivers. Thus the developing strategies for SME must be compatible to its essentials such as small-scale, limited resources and should never conflict to its high flexibility resulting from its simple organization and high response in communication (Lawrie et al., 2006).

However, many literatures and theories on strategic planning neglect SME and discuss only large-scale business. For example, in 2007 there were around 115,000 researches on strategic found on ProQuest, only 1% of them focused on SME (Sharma, 2008, Arago'n-Correa et al., 2008). Therefore, in this study, we are not discussing whether SME should conduct strategic planning or not, neither discussing the relevance among strategic planning and business performance, but we are introducing a logical, relatively simple yet easy to execute strategic planning model of SME in Taiwan. Through this model, we hope to help most enterprises solve their business management problems with efficiency.

The main contribution of this study aims at elaborating the strategic planning model which is compatible to the SME industry in Taiwan. Basing on the successful business development experiences of the SME in Taiwan, a strategic planning model called FSMA(Financial/Strategy/Management Analysis Model) is recommended in this study, which includes a cascade of rather simple steps incorporating business strategies, business finance and management. It is easy to understand and apply for any SME. FSMA is a model provided by one of our authors, with years of experience working as a financial consultant of the Taiwan Small Business Integrated Assistance Center. In order to clearly elaborate how to proceed with FSMA model, a number of case studies of the SME in Taiwan are presented to support the strategic planning model recommended in this study, as a way to effectively discover the deep-rooted problems in business management and rapidly improve business management according to the enterprise missions and organizational goals.

This study consists of five sections; the first one is the introduction which explains the research purpose and scope; the second one is the literature review which a concise explanation on strategic planning and strategic planning in SME; the third section comes to the FSMA model; the fourth section discusses goal, strategies and tactics, and finally, we concludes in the fifth section.

## 2. Literature Review

Business strategic planning comes in two patterns — informal and formal. A formal strategic planning is always in a written form. There are series of steps to make a formal decision-forming and strategic decision-making, including thorough analysis on the environment, analysis on strategic plan forming, decision-making and execution of strategic planning, and control (Certo & Peter, 1995; Verreynne & Meyer, 2010). The formal plan analysis model is generally adopted by large scale enterprises. However, for most SME, strategic planning may not come in such a formal way and possibly just be concealed in the decision-maker's head. Thus, written documents or formal strategy announcements are rarely seen in SME.

Robison and Pearce (1984) points out that the characteristics of SME are informal, non-structured, non-regular, arbitrary, and short-termed. Gibb and Scott (1985) also point out in SME the forming of strategy is not as formal as large scale enterprises. Chan (1997) indicates the traits of SME strategic planning are less-structured, scattered-coverage and non-general. Leitner (2007) believes that due to the lack of time and manpower, the business strategy planning of SME is usually informal, i.e. non-written and intuitional. Wang et al. (2007) point out the obstacles for a SME to conduct strategic planning are lack of time, lack of professional staff, lack of knowledge in the procedure of strategic planning, reluctance to share strategic creativity with employees, constant environment changes, the business of scale of an enterprise and the difficulty in internal execution. Verreynne and Meyer (2010) think most SME do actually conduct strategic planning. Instead of adopting the formal procedure, they rely more on their specific method complying with their own business culture.

Sharma (2008) indicates that there are more than 150 business theories and models to be discussed but there is only few literatures on strategy can be applied to SME industry. McAdam (2000) says through his research he realized the difficulty for many strategic management tools to be effectively applied to SME industry. In order to lessen the influence on strategic planning management from the organization characteristics, such as small scale, Hudson et al. (2001) proposed the continuous strategic improvement process, which comes in four stages. The first stage is to name, which is to assure the strategic goals and priority with a series of tools and technology. The second stage is to act, which is to convene a strategic project team, which can provide advice and assistance to

find out the necessary improvement for strategic fulfillment. The third stage is to use, which is to execute the plan made in the previous stage. The fourth stage is to learn, which is to allocate the project team back to the management team and to review performance management on the improvements. Analoui and Karami (2003) suggest a dynamic strategic management model should include external and internal environment analysis, business visions, strategy forming, strategy execution and control. Nedelea and Paun (2009) point out a strategic management process should include the definition of business and strategic missions and set up the strategic goals, development strategy, execution strategy and strategy performance evaluation.

## 3. Methods

The application of FSMA, meaning the model with the analysis of finance, strategy, and management is employed in the research. Although Mintzberg (1976) thinks that basically strategic planning is not a regular and persistent process and the owners of SME may never experience a formal strategic planning process due to time or manpower. However, any enterprises should have their own business strategies, which reveal the logics behind the running business. Thus one can identify the business strategies from the business events of an enterprise. Any newly started SME intending to raise business survival rate should immediately conduct strategic planning and FSMA (Financial/Strategy/Management Analysis Model) can be adopted into strategic planning. The model structure is illustrated in Figure 1.

The process of strategy forming includes business vision, organizational goal, developing business strategy and policy, and monitoring and controlling. As most SME face the problems in lacking time and professional talents to efficiently execute strategic planning, to convene a project team of three to five persons is recommended as a way to overcome the issue of lacking professional staff. The team-members are directly assigned from the office of managing director or a project team in charge and they would work to help the enterprise control strategic planning and make improvements on business performance by saving more time and more resources added in. By repeating such a strategic planning model, an enterprise can train more staff to become internal business consultant. In order to increase the execution efficiency of strategic planning, this project team must investigate both external and internal environments to acquire more information about strategic factors. After analyzing all the strategic factors, problems can be pinpointed then reviews and corrections can be made to accomplish business missions and goals. Therefore, according to the analytical results, the optimal feasible strategy will be produced, evaluated and chosen then eventually comes the strategy execution and result control.

## **3.1 Defining Business Visions**

Business visions are the criteria of the goals made to accomplish in the future. They are the indicators of business strategic planning and reveal the beliefs of an enterprise as saying "What is it about our business?" "Who are our clients?" and "What will our enterprise become?"

XYZ lighting company, established for a decade, locates in Hsinchu county of Northern Taiwan. Its main business is for lighting appliances, such as outdoor household lighting, i.e., garden lamps and other 2,000 selections of products. Its business headquarter is located in Taiwan, which is responsible for sales, research and design, and finance and management. Procurement office is located in China, which is responsible for purchasing. The business vision of the company is to light up every corner of house in the world.



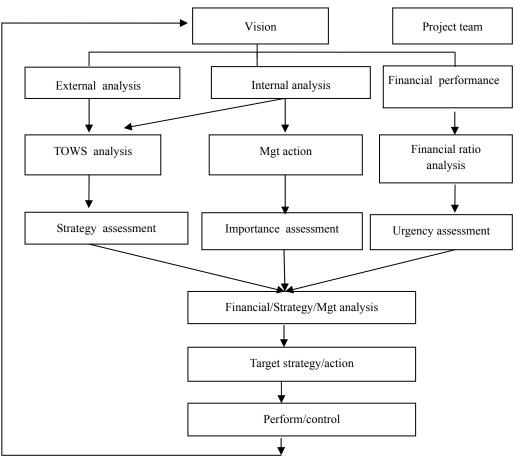


Figure 1 Financial/Strategy/Management Analysis Model (FMSA)

#### 3.2 Analyzing External Environment

External environment analysis aims at studying the industrial appeals and potential threats. Porter's (1985) five force analysis is applied to analyze the external environment. There are around 678 lighting appliances manufacturers in Taiwan and most of them are SME. Most of them are located in northern Taiwan due to materials and related know-how concerns. The industrial structure of lighting appliance industry in Taiwan consists of electric light, lighting appliances and lighting electrical components (including controlling components and others). Most enterprises fall in the latter two tiers of the industry and focus on exporting business. Lighting appliances industry in 1972 was even named as "King of Christmas lighting". Due to the appreciation of NT dollars and the wage hike since 1986, lighting appliance manufacturers started to move to China and South East Asia. With the trends, XZY lighting company opened a business point in China. The lighting appliance industry in China is rather centralized. More than 10,000 companies (scattered industry) are centralized in coastal provinces like Guangdong, Zhejiang, Shanghai, and Jiangsu. Total output made from these four provinces covers more than 90% of the whole country. As China has become the biggest lighting appliances manufacturer in the world, many enterprises started to establish their procurement team in China. Along with the global issues on energy saving and environmental protection, the luminous efficacy of LED lighting has been increasing and the price has gradually come down by year, which also stimulate the market demand on upgrading to new lighting appliances. Consumers nowadays have turned their requirements to ask for better design, interior design compatibility and a good variety of product selection.

According to the analytical result of the external environment, the project team can collect the influential factors to the whole industry. These influential factors are categorized in most important, normal factors and then the project team can form a TOWS analysis from the most important influential factors to assure the industrial opportunities and threats. Table 1 illustrates the TOWS analysis.

#### **3.3 Analyzing Internal Environment**

Business internal environment is defined as the organizational structure, resources, processes and institutional system (Pelham, 1999; Simon & Hitt, 2003; Barney et al., 2001). Business resource-based viewpoint means all the business resources and competitive advantage, which covers tangible and intangible assets within the enterprise including management skills, organizational procedure, information and knowledge (Barney et al., 2001; Johnson et al., 2005). Business resource development must go with the external environmental changes and at the same time through internal analysis to review business resources in production, sales, organizational management, research and development, financial affairs, and other functions. Therefore, a competence analysis can be resulted after comparing to competitors' advantages and disadvantages.

We analyze status quo of the internal environment of XYZ lighting company as an example. XYZ Company runs as a trading company and is capable of research and design new lighting appliance models. It also distributes its product under a brand name. With its strength in new product searching, it also provides consolidation service options to those retailing clients. With business headquarters in Taiwan, procurement will be made after a client place an order. When clients come for samples, sales team has to fly from Taiwan to China, which delays the communication. In addition, clients tend to ask for product in variety and this has incurred cost burdens for manufacturers with diseconomies of scale. It is also difficult for procurement team to find new manufacturers and this has caused on-time delivery a difficult issue for suppliers to meet. All these factors have made XYZ company delay product delivery, increase client complaints and compensation claimed by the clients, which results in exceeding key performance indicator. Thus, the company turnover has come to recession.

Internal analysis is to find the weakness of production, sale, management and organization, R&D, and finance. Some measures of improvement are needed to install. In the mean time, we also have to figure out the strength and weakness of company's competitors. Three scenarios of the competitors' characteristics, most important, important, and ordinary, must be separated by members of company project team. Finally, company then choose the important items and confirm company's factors of strengthes and weaknesses in the environment of business. The details are revealed on the followings.

## **3.4 TOWS Analysis**

Strategic management by SWOT analysis for, an enterprise must conduct analysis on strengths, weakness, opportunities and threats before advancing to plan a series of strategic plans. Weihrich (1982) defines an enterprise's position in competition by reviewing its internal strengths and weakness, and external opportunities and threats and find out the winning strengths and opportunities and less risky weakness and threats. Proper responses will then be planned and it will form four kinds of strategies. Any strategy should be built on business strengths and to eliminate business weakness with such strengths. All threats shall be avoided by taking business opportunities. A comparison of the four factors will be made. For example, with opportunities and strengths, new strategies can be then generated, such as centralization, professionalization, forward/backward integration, strategy of diversification, innovative strategies, stay-the-same strategies, internationalization, settlement, deflation, joint venture, and all kinds of strategic alliance (Weihrich, 1982). Porter (1985) has come out with the most representative strategy for general business management, which is called the model of overall cost leadership,

differentiation and focus. Due to its small-scale and competitive coverage, wright (1987) suggests centralization or niche strategy for SME. Table 1 and Table 2 illustrated the SWOT and TOWS analysis for XYZ company; a"  $\times$ " indicates the relevance among the strengths versus weakness or opportunities versus threats. The first strength is relevant to the first, the second, and the third opportunities, which allows them to development a suitable strategic option. According to TOWS matrix, there are five strategies laid out for XYZ Company.

Internal Factors	Internal Strength (S)		Internal Weakness (W)				
External Factors	S1	S2	W1	W2	W3		
Opportunities (O)	SO Strateg	y: Maxi-Maxi	WO	WO Strategy: Mini-Maxi			
01	<b></b>	×	×	X	X		
02	<b></b>	×	×	×			
03	<b></b>	×	$\bigwedge$	$\bigtriangleup$	×		
O4	$\mathbf{X}$	$\bigtriangleup$		$\times$	$\mathbf{X}$		
Threats (T)	ST Strategy: Maxi-Mini		WT Strategy: Mini-Mini				
T1	×						
T2							
Т3							

Table 1 TOWS Analysis

Denotation:

Internal Strength (S)

S1: Unique procurement process.

S2: Services for consolidation.

Internal Weakness (W)

W1: Late Delivery.

W2: low efficiency of Cross Strait communication.

W3: Lack of talents in design and sales.

Opportunities (O)

O1: Besides safety certification, consumers value brand image.

O2: Elevated living quality has shift focus to stylish, design and overall compatibility.

O3: Enforcing energy saving law is expected to drive the market demand.

O4: The concept of global procurement center.

Threats (T)

T1: Internet has made information transparent, low customer loyalty.

T2: Low quantity high variety, diseconomies of scale, little product differentiation, severe price competition.

T3: LED lighting market is appealing to large semi-conductor manufacturers.

S1O1O2O3 Growth strategy:

Fostering talents in lighting appliances design, developing new products, adopting B2C branding and advertising strategy to increase brand awareness as a way to explore market in Taiwan and China.

S2W1W2O3O4 Integration of suppliers:

Enhance communications among suppliers to spend less time in communication. Play a role as the procurement center in China. O2W3 Innovative strategy:

Designing products to meet the market trends; improving talents management in design and sales through knowledge management and reducing difficulty in product knowledge, and at the same time building a databank of experiences in sales and design.

S1T2T3 Differentiated focus (niche) strategy:

With more and more semi-conductor manufacturers flushing in the industry, SME should concentrate on the niche market to avoid

the potential threats come along with the semi-conductor manufacturers.

S2T1T2T3Comprehensive customer services of forward integration:

Reinforce services in consolidation transportation and provide forward integration comprehensive customer services.

Stratogy options	Factors to be evaluated						
Strategy options	Feasibility	Cost	Benefit	Risk	Talent	Score	ranking
A: S1010203 Growth strategy	15	10	14	14	11	64	3
<b>B</b> : S2W1W2O3O4 Integration of suppliers	7	12	13	12	9	53	2
C: S1T2T3 Differentiation focus (niche) strategy	8	7	5	9	7	36	
<b>D</b> : S2T1T2T3 comprehensive customer services of forward integration	7	9	10	7	9	42	1
E: O2W3 Innovative strategy	7	7	8	3	7	32	

Table 2	Strategy	Feasibility	Analysis
	Buaugy	reasibility	Analy 515

From TOWS analysis we have generated the business strategic options and improvements to make from internal analysis. In order to avoid bad performance by executing all the strategies and management acts, an enterprise should go through strategy selection. Although every strategy and management act for any SME is crucial for business development, due to limited resource all cannot be executed in one run. Even some strategic management acts are accomplishable and tend to win supports from the employees, executive costs and expenses remain a serious concern. Thus every factor which may bring influence to management act shall be consider, as long as it brings influence to the feasibility of strategy, costs and expenses, benefits after execution, risks of execution and support from the organization (Thunhurst & Barker, 1999). For making right strategies, project team must review all the factors. Through evaluation, the difference among subjective judgments can be eliminated to finally reach to a certain extent of agreement.

According to the five strategies developed from the previous stage, one member from the project team thinks growth strategy is plausible than the rest of strategies, thus he marks 5 to the feasibility of growth strategy, whereas the least feasible strategy will get 1. When feasibility, high performance and sufficient professional talents are considered, each factor will be marked from 1 to 5 accordingly. When low cost and low risk are considered, the most competent strategy will be marked as 5, vice versa. Then adding up all the marks for the five factors of every strategy, the result of the five strategies is then be concluded. Usually the highest three on top will be further developed to the details as management tactics, which different weight will be added according to the scores. For example, XYZ Company results in strategy A, B, and C after each team member received the weights for every strategy.

## 3.5 Management Acts

According to the project team diagnosis on the business resources performance, besides listing the relative advantages comparing to the competitors, as well as the weakness and those inefficient business issues are to be solved. All of them are the goals for an enterprise to improve. It's mentioned by Rasiel (1999) that it is similar to MECE principle proposed by McKingsy. However, due to the limited resources, manpower and time of SME industry, it is impossible to progress all the improvement works all together. Thus, project team needs to further analyze each weakness on its acceptance, low cost, high efficiency, sufficient talent, and low risk as in selecting strategic options.

Iable 3     Analysis on the Importance of Management Act								
Management Ast	Factors to be evaluated							
Management Act	Acceptance	Cost	Benefit	Risk	Talents	Score	ranking	
M1: Low handover rate for on-time delivery	11	11	11	10	13	56	2	
M2: Customer complaints more than KPI	7	7	7	11	8	40		
M3: Insufficient R&D staff	9	11	6	9	10	45		
M4: Weak in financial control	14	14	16	14	8	66	3	
M5: Low performance on investing manufacturers in China	10	9	11	10	12	52		
M6: Decreasing revenues	12	11	10	9	13	55	1	

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Table 3	Analysis on the Importance of Management Act
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Take XYZ company as the example, six management acts are proposed by the project team to tackle the unsolved problems. Each project team member gets to evaluate the five factors of each management act. When acceptance, high efficiency, and sufficient talents are considered, points from 5 to 1 will be marked according to the importance. When management act and low cost are considered, points from 5 to 1 will also be marked according to the importance. Then we get five scores from adding up the marks of each factor, and the higher the score is, the more importance the act gets. Weights will be added according to the level of importance. The highest scores on top will become the goals of improvement in management act. We choose the first 3 management acts, M4, M1 and M6 from Table 3, to be the goal of improvement. The explanations are as follows:

- M4: Teaching financial staff the correct knowledge in financial affairs, financing, accounting system and internal auditing procedure, improve financial condition and turn short-term borrowing to long-term borrowing.
- M1: Improve on time-delivery rate, enhance the integration of sales and procurement, efficiently monitoring quality control on suppliers, using computer network to review and analyze each order, and building databank as a way to increase competence.
- M6: Increase quality and delivery rate and the integration of procurement business. Provide more training to the sales team as in international exhibitions, exploring new clients and increase customer satisfaction.

## 4. Results

#### 4.1 Performance Evaluation and Analysis

Porter (1980, 1991), Beal (2000) claim that the external environment is a crucial factor for business management performance. On the other hand, because the internal environment of an organization can be managed by the business manager, Miles and Snow (1978) also claim the internal environment is important for management performance. Traditionally, evaluating business performance is measured by financial figures, such as return on investment (ROI), net income ratio...etc. (Ghalayini & Noble, 1996) and have been considered as the lagging indicators for management acts and business performance. It remains quantitative and single dimension which has overlooked many other non-financial performances as customers and competitors (Hoffecker & Goldenberg, 1994). Smith and Smith (2007) claim that for SME industry the thing really counts is not balanced or comprehensive performance management but the relevance among strategy and performance management.

However, many SME in Taiwan has put paying less tax as their most important principle in generating their accounting statements. Without comprehensive financial accounting system within the organization, low-transparency accounting statements have made most enterprises unclear about their actual business running,

far to say considering non-financial factors for management performance. Therefore, from the viewpoint of FSMA (Financial/Strategy/Management Analysis Model), firstly, the project team needs to review and rebuild credible financial statements to reveal the real status quo of business performance in further financial statements.

As to analyze the performance of business management, ratio analysis is the most common analytical tool in practice. It is to locate all the relevant subjects in financial statements and though calculating the ratios among these subjects to know the relevance. It can also be evaluated by comparing with other enterprises of the same industry. The financial ratios indications can be acquired by calculating the figures on the financial statements and those figures are the results of every business event. FSMA (Financial/Strategy/Management Analysis Model) is based on counterfactual thinking, which starts from thinking how to improve certain financial indicator and then come up with the related business events to be restored. While the project team tries to understand the relation between financial figures and business event, they must have a comprehensive understanding of them. Otherwise it will be a challenge to relate any financial figure to a certain business event.

Financial ratios analysis consists of current ratio, quick ratio, financial leverage, and profit. Through financial analysis, we find XZY lighting company is weaker in short-term liquidity in its current ratio comparing with the industry. Its gross profit margin is controlled at certain standard point but still lower comparing with the industry. As we compared more financial indicators of XYZ lighting company with those of the industry, the more of it fall behind the average of the industry, the more urgent it is to make improvements, so as the urgent weights to be set for the financial figures. For example, we find XYZ lighting company has fallen behind in ratios such as current ratio, revenue growth rate, and gross profit margin.

### 4.2 Financial Strategic Management Analysis

Through FSMA (Financial/Strategy/Management Analysis Model), we can connect strategy, financial affairs, and management altogether. With the feasibility of a strategy, we can connect strategic analysis and external analysis. In addition, the financial urgency can relate financial ratio analysis to business management performance. And from the importance level of management we can thus relate it to the management functions and internal analysis. Thus we can rank the most weighted ratios among financial indicators, strategy, and management as shown in Table 4. Due to limited resource, the strategic analysis, financial indicators, and management improvement acts as mentioned previously are not all necessary in the table of FSMA, thus we can reach to a less complicated chart.

The strategic selection method of the core analysis process of FSMA (Chang & Wu, 2010; Friend, 1989; Thunhurst & Barker, 1999) starts from financial performance because among production management, marketing management, human resource management, research and development management, and financial management, once an enterprise can outstand in any of them among the others of the same industry, the business can definitely make profit. Therefore financial strategic management is based on financial indicators. Through counterfactual thinking, step by step, each strategy and management act and the financial indicators to be improved will then be discussed. If a certain strategy or management act is found to be able to improve a certain financial indicator, an arrow sign will then be drawn until every strategy and management act finds its related financial indicator.

While conducting the counterfactual thinking, we should first consider the direct linear factors. If the improvement process covers non-linear factors, a logical explanation shall then be added to the improvement process. For example, it is defined as a linear factor when the adopted growth strategy can directly influence revenue growth rate. However, as we consider the relation between growth strategy and the improvement on asset turnover ratio, besides the growth in revenue, it may also increase asset scale. Thus the fraction increases the

mutual effects, it requires further discussion in the improvements and logical deduction to know if it can actually improve asset turnover ratio.

	Strategy	Financial Figures	Management	
Weight	Strategy Content	Financial Ratio	Management act	Weight
	Strategy Content	Weight	content	
3	S1010203: Growth Strategy	F3 Current Ratio Weight: 3	M4: Teaching financial staff correct	3
		3×3 = 9	financial concepts	
2	S2S3W1O3O4: Integration of Suppliers	F6 Revenue Growth Ratio Weight: 2 $2\times3+2\times1+2\times2+2\times1=15$	M1: Increase on-time delivery ratio	2
1	<b>S2S3T1T2T3:</b> Forward integration of customer services	F5 Gross Profit Margin Weight: 1 1×2+1×2 = 4	<b>M6</b> :Improve quality and delivery ratio	1

Table 4 FSMA (Financial/Strategy/Management Analysis Model)

If the financial indicator can be handled by strategic improvement manager, the two weights will be multiplied. If the financial indicators can be improved by management advice, the two weights will be multiplied. Then all the figures shall be added up and written under the financial indicators. For example, XYZ Company, F6 means revenue ratio can be improved through growth strategy and strategy for suppliers and customer services. Thus a line is drawn from revenue to connect both growth strategy and strategy for suppliers and customer services. As management improvement act M1 and M6 can improve business growth rate, lines are drawn to relate them. Therefore, all the weights for improvement factors of the financial indicators will be calculated. The weight of improvement for revenue growth is  $2\times3+2\times1+2\times2+2\times1 = 15$ , the weights of improvement for current ratio is  $3\times3 = 9$ ; the weight of improve business management performance are revenue growth, current ration, and then operating profit ratio.

## 4.3 Goals, Strategies and Tactics

According to the table of FSMA (Financial/ Strategy/ Management Analysis Model), after calculating all the weights of the to-be-improved financial indicators the highest one indicates the priority of improvement.

The means of financial ratio improvement is the related strategies and management acts. For XYZ lighting company, the highest weights in financial indicators is revenue growth ratio, which meaning with limited business resources the most demanding financial indicator to be improved is the revenue growth ratio. The corresponding strategies and management acts are explained as follows.

## 4.4 Strategy

S1O1O2O3 Growth Strategy:

Adopting B2C brand promotion strategy to increase brand awareness and exploring domestic sales markets in China and Taiwan.

S2S3T1T2T3 Forward integration of the comprehensive customer services:

Enhance forward integration customer services and the sales in procurement and freight fare, and through credit management to provide more flexibility in payment terms.

#### 4.5 Advice for Management

M1: Enhancing sales and procurement, communications in production management, improving quality

monitoring on suppliers, increasing accurate delivery ratio and informatization, using computers to conduct analysis and review on each order and building database, as a way to compete in the market.

M6: Attending more international tradeshows and exhibitions, exploring more new clients, and increasing customer satisfaction.

#### 4.6 Execution and Control

Carpenter and Sanders (2009) point out strategy execution is a process to execute all the planned and necessary business events. Once the project team pinpoints the most urgent financial indicator to be improved, they can move on to the execution stage to help improve financial indicators with their relating strategies and management acts. The project team is not only responsible for developing the strategies and management acts but also executing the strategies and monitoring the results. Strategic control is to follow up all the executed strategies which are ways to review the premises of strategic developments and to observe if any necessary adjustment is required (Analoui & Karami, 2003). This FSMA model should be repeated as a way to help improve business performance. Once a financial indicator is improved, the project team should move on to the next indicator to be improved and develop specific strategies and management acts. It rotates like a cycle.

## 5. Conclusion

The main contribution of this study aims at elaborating the strategic planning model which is compatible to the SME industry in Taiwan. Due to lack of time, manpower, and professional knowledge in the arena of SME, most small and medium sized enterprises do not conduct complicated strategic planning. Through assigning a project team and apply the recommended financial analysis model elaborated in this report, it will become easy to locate the most demanding financial performance indicator within the business. All in all, we strive to offer a model for SME to implement an efficient management. Eventually, we hope to modify suitable model adapting to other countries' SMEs, in following research of the near future.

#### References

- Adamoniene R. and Andriuscenka J. (2007). "The small and medium-sized enterprises: The aspects of applicance the principles of strategic management", *Economics and Management*, Vol. 12, pp. 548-555.
- Analoui F. and Karami A. (2003). Strategic Management in Small and Medium Enterprises, London: Thomson Learning.
- Ansoff H. I. (1991). "Critique of Henry Mintzberg: The design school Reconsidering the basic premises of strategic management", *Strategic Management Journal*, Vol. 12, pp. 449-461.
- Arago'n-Correa J. A., Hurtado-Torres N., Sharma S. and Garci'a-Morales V. J. (2008). "Environmental strategy and performance in small firms: A resource-based perspective", *Journal of Environmental Management*, Vol. 86, pp. 88-103.
- Aram J. D. and Cowan S. S. (1990). "Strategic planning for increased profit in small business", *Long Range Planning*, Vol. 23, No. 6, pp. 63-70.
- Barney J. B., Wright M. and Ketchen Jr. D. J. (2001). "The resource-based view of the firm: Ten years after 1991", Journal of Management, Vol. 27, No. 6, pp. 625-641.
- Beal R. M. (2000). "Competing effectively: Environmental scanning, competitive strategy, and organizational performance in small manufacturing firms", *Journal of Small Business Management*, Vol. 38, No. 1, pp. 27-47.

Bowman Edward H. and Helfat C. E. (2001). "Does corporate strategy matter?", Strategic Management Journal, Vol. 22, pp. 1-23.

- Bruderl J. and Schussler R. (1990). "Organizational mortality: The liabilities of newness and adolescence", *Administrative Science Quarterly*, Vol. 35, pp. 530-547.
- Wang C. C., Walker E. A. and Redmond J. (2007). "Explaining the lack of strategic planning in SMEs: The importance of owner motivation", *International Journal of Organizational Behaviour*, Vol. 12, No. 1, pp. 1-16.

Carpenter M. A. and Sanders W. G. (2009). *Strategic Management: A Dynamic Perspective Concepts*, London: Pearson Education Edition.

Certo S. C. and Paul J. P. (1995). The Strategic Management Process, Austen Press.

- Chan S. Y. (1997). "An exploratory study of strategy formulation in small business enterprises in Hong Kong", unpublished MPhil thesis, City University of Hong Kong.
- Chang Y. H. and Wu K. (2010). "Using a TOWS matrix in the achievability-effectiveness analysis for scooter commuters interchange to public transportation in Kaohsiung", *Transportation Journal*, Summer, pp. 39-47.
- Chell E. (2001). Entrepreneurship: Globalization, Innovation and Development, London: Thomson Learning.
- Eccles R. G. and Pyburn P. J. (1992). "Creating a comprehensive system to measure performance", *Management Accounting* (US), October, pp. 41-44.
- Friend J. (1989). The Strategic Choice Approach: Rational Analysis for a Problematic World, Chichester: John Wiley and Sons.
- Ghalayini A. M. and Noble J. S. (1996). "The changing? Basis of performance measurement", *International Journal of Operations* and Production Management, Vol. 16, No. 8, pp. 63-80.
- Ghobadian A., O'regan N., Thomas H. and Liu J. (2008). "Formal Strategic planning, operating environment, size, sector and performance: Evidence from the UK's manufacturing SMEs", *Journal of General Management*, Vol. 34, pp. 1-20.
- Gibb A. and Scott M. (1985). "Strategic awareness, personal commitment and the process of planning in the small business", *Journal of Management Studies*, Vol. 22, No. 6, pp. 517-531.
- Gibbons P. T. and O'Connor T. (2005). "Influences on strategic planning processes among Irish SMEs", Journal of Small Business Management, Vol. 43, No. 2, pp. 170-186.
- Gibbs A. A. and Scott M. G. (1985). "Strategic awareness, personal commitment and the process of planning in the small business", *Journal of Management Studies*, Vol. XXII, No. 6.
- Hahn W. and Powers T. L. (2010). "Strategic plan quality, implementation capability, and firm performance", *Academy of Strategic Management Journal*, January.
- Hoffecker J. and Goldenberg C. (1994). "Using the balanced scorecard to develop companywide performance measures", *Journal of Cost Management*, Vol. 8, p. 517.
- Hormozi A. M., Sutton G. S., McMinn R. D. and Lucio W. (2002). "Business plans for new or small businesses: Paving the path to success", *Management Decision*, Vol. 40, No. 8, pp. 755-763.
- Hudson M., Smart P. A. and Bourne M. (2001). "Theory and practice in SME performance measurement systems", *International Journal of Operations and Production Management*, Vol. 21, No. 8, pp. 1096-1115.
- Jennings P. and Beaver G. (1997). "The performance and competitive advantage of small firms: A management perspective", *International Small Business Journal*, Vol. 15, No. 2, pp. 63-28.
- Jocumsen G. (2004). "How do small business managers make strategic marketing decisions? A model of process", *European Journal* of Marketing, Vol. 38, No. 5-6, pp. 659-674.
- Johnson G., Scholes K. and Whittington R. (2005). Exploring Corporate Strategy (7th ed.), England: Pearson Education Limited.
- Juul A. T. (2000). Strategic Planning, Autonomous Actions and Corporate Performance, Long Range Planning, Vol. 33, pp. 184-200.
- Lawrie G., Andersen H. and Cobbold I. (2006). Balanced Scorecard Implementation in SMEs: Reflection in Literature and Practice, Maidenhead, UK: 2GC Limited.
- Leitner K. H. (2007). The Dynamics of Intended, Emergent and Realized Strategies in SMEs: A Longitudinal Study, Austria: Austrian Research Center.
- Lurie S. M. (1987). "Strategic business planning for the small to medium-sized company", *The CPA Journal*, Vol. 57, No. 6, pp. 90-92.
- Lyles M., Baird I., Orris B. and Kuratko D. (1993). "Formalized planning in small business increasing strategic choices", *Journal of* Small Business Management, April, pp. 38-50.
- McAdam R. (2000). "Quality models in an SME context: A critical perspective using a grounded approach", *International Journal of Quality & Reliability Management*, Vol. 17, No. 3, pp. 305-323.
- Miles R. E. and Snow C. C. (1987). Organizational Strategy, Structure, and Process, New York: McGraw-Hill.
- Miller C. C. and Cardinal L. B. (1994). "Strategic planning and firm performance: A synthesis of more than two decades of research", *Academy of Management Journal*, Vol. 37, pp. 1649-1665.
- Mintzberg H. (1976). "Planning on the left side and managing on the right", Harvard Business Review, July-August, p. 56.
- Nedelea S. and Paun L. A. (2009). "The importance of the strategic management process in the knowledge-based economy", *Review* of International Comparative Management, Vol. 10, pp. 95-105.

- O'Regan N. and Ghobadian A. (2002). "Effective strategic planning in small and medium sized firms", *Management Decision*, Vol. 40, pp. 663-671.
- Pelham A. M. (1999). "Influence of environment strategy, and market orientation on performance in small manufacturing firm", *Journal of Business Research*, Vol. 45, pp. 33-46.
- Porter M. (1980). Competitive Strategy: Techniques for Analyzing Industries and Competitors, New York: Free Press.
- Porter M. E. (1979). "How competitive forces shape strategy", Harvard Business Review, March/April.
- Porter M. E. (1985). Competitive Advantage, Free Press, New York.
- Porter M. E. (1991). "Towards a dynamic theory of strategy", *Strategic Management Journal*, Vol. 12, Winter Special Issue, pp. 95-117.
- Rasiel E. M. (1999). The McKinsey Way: Using the Techniques of the World's Top Strategic Consultants to Help You and Your Business, McGraw-Hill Professional.
- Rigby D. and Bilodeau B. (2007). "Bain's global 2007 management tools and trends survey, strategy and leadership", Vol. 35, pp. 4-16.
- Robinson R. B. and Pearce J. A. (1984). "Research thrusts in small firm strategic planning", Academy of Management Review, Vol. 9, pp. 128-137.
- Robinson R. B. and Pearce J. A. (1983). "The impact of formalized strategic planning on financial performance in small organizations", *Strategic Management Journal*, available online at: http://www.highbeam.com.
- Schwenk C. B. and Shrader C. B. (1993). "Effects of formal strategic planning on financial performance in small firms: A meta-analysis", *Entrepreneurship: Theory and Practice*, Vol. 17, pp. 53-64.
- Sharma A. (2008). "Strategy models and their application to small and medium sized enterprises", in: *Handbook of Hospitality Strategic Management*, pp. 425-450.
- Simon D. G. and Hitt M. A. (2003). "Managing resources: Linking unique resources, management, and wealth creation in family firms", *Entrepreneurship Theory and Practice*, pp. 339-359.
- Smith M. H. and Smith D. (2007). "Implementing strategically aligned performance measurement in small firms", International Journal Production Economics, Vol. 106, pp. 393-408.
- Thunhurst C. and Barker C. (1999). "Using problem structuring methods in strategic planning", *Health Policy and Planning*, Vol. 14, pp. 127-134.
- Verreynne M. L. and Meyer D. (2010). "Making strategy at different stages of the industry life-cycle relationships with small firm performance", Small Business Economics, Vol. 35, pp. 399-416.
- Wang C., Walker E. A. and Redmond J. (2007). "Explaining the lack of strategic planning in SMEs: The importance of owner motivation", *International Journal of Organizational Behaviour*, Vol. 12, No. 1, pp. 1-16.
- Weihrich H. (1982). "The TOWS Matrix A tool for situational analysis", Long Range Planning, Vol. 15, No. 2, pp. 54-66.
- Wright P. (1987). "A refinement of Porter's strategies", Strategic Management Journal, Vol. 8, pp. 93-101.