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Marketing Strategy for Small Application Service Providers in a New Market

Abstract

Small to medium-sized enterprises (SMEs) are playing an increasing role in the development of global economies. Meanwhile, small application service providers (ASPs) are beginning to appear in many developing countries, including China. This research studies the marketing strategy for small companies of ASP industry in China using a market survey. The analytical hierarchy process (AHP) is used to analyse critical factors of the ASP industry. To find the critical factors, the research surveys CEO's or senior managers who are working in ASP firms, to identify how a marketing strategy can be developed for an ASP firm to be based in China. It is found that localisation of middle managers, localisation of products and services and protection of intellectual property (IP), and potential of local market, infrastructure and transportation system are the most important factors for small ASP firms to do business in China among the 15 factors studied.

Keywords

Small to medium-sized enterprises (SMEs), application service providers, analytic hierarchy process (AHP), and marketing strategy

Introduction

Many businesses have become globalised and there is no exception to the application service providers. However, long-term planning and customer satisfaction have been two major concerns for company's strategic management objectives when a company is planning to expand its market, particularly new ones. A number of different strategies to enter foreign markets have been proposed by Ekeledo and Sivakumar (1998).

China has become one of the major international investing countries. Since it opened its market to the world more than 20 years ago, China has attracted many international companies, either small or large, to invest heavily in this enormous market, primarily along its east and south-east coast. Some of them have been very successful and have been growing rapidly in terms of their market share while the others are not performing that well. However, it is understood that the appropriate employment of marketing strategies such as the study of customers and competitors, the price of the products, output, profit, and when to enter and/or exit the market in China has been critical to their success. Factors such as entry model, resources, local information, understanding of the Chinese culture, and government relationship among some others are also playing a very important role.

Strategic planning strongly influences the direction a company takes and hence determines the final outcome. Strategic choice theory assumes that the key to entrepreneurial success lies in the decisions of individual entrepreneurs who identify opportunities, develop strategies, assemble resources, and demonstrate initiative. Both perspectives are useful for this study, although this research will focus on the latter framework.

Application service provider (ASP) is an industry term for a wide set of activities supported by multi-module application software that assists a manufacturer or a service business to

manage the important parts of its business. The application service provider (ASP) needs a logical and organized approach to identify, analyse, and manage relevant stakeholder relationships. The conceptualisation of stakeholders and stakeholder management is quite broad - a circumstance that is both beneficial and troublesome for the application to marketing problems. A company's choice of market entry mode may also be influenced by firm factors (firm-specific advantages, experience and strategic considerations) and environmental factors (demand and competitive conditions, political and economic conditions and socio-cultural conditions). When designing an eclectic framework, one needs to pay particular attention to factors that are likely to have, under various contexts, the strongest influence on market and entry selection.

There are two categories of market selection models (Carroll 1984), ie general and context-specific (applicable to specific industries, categories of companies and/or business situations). Models within the latter category include small businesses (Miesenbock 1988), multinational companies (Ayal & Zif 1979), joint ventures (Beamish 1993; Agarwal 1994) and international strategic alliances (Johansson 1995). Most models agree that a market selection process is composed of three stages: screening, identification (or in-depth screening), and (final) selection (Kumar, Stam & Joachimsthaler 1994).

During screening, macro-level indicators should be used to eliminate countries that do not meet the objectives of the firms (Kumar et al. 1994). Country screening may be conducted either in top-down or bottom-up fashion. Screening proposes that the examination of market size, growth rate, basic fit between customer preferences and the existing product line, and competitive rivalry be used as criteria at this stage (Johansson & Yip 1994). Locations, which are generally more open to foreign direct investment (FDI) and offer greater incentives to foreign investors, are typically regarded as being safe. Consequently, foreign investors are more likely to seek a greater share of equity ownership in joint ventures (JVs) in such locations. In China, there are many regions in terms of investment environment, which can be classified into four groups: the 12 coastal areas and five special economic zones especially developed for light manufacturing firms, which offer an attractive environment for export manufacturers; The three metropolitan cities consisting of Beijing, Shanghai and Tianjin (and a new one Chongqing, established recently); other coastal cities designated as open cities; and all other regions not included in the three above main groups.

Service firms tend to be located close to their clients because of the inseparability of service production and delivery, which in this respect, offers more prospects to service JVs. The share of foreign ownership in JVs in this region is likely to be higher than in other regions. Not only are different locations endowed with different resources and infrastructure, but also in China, different locations are characterised by different degrees of autonomy, economic liberalisation and marketisation permitted by the central government. In addition, both local and central governments offer varying incentives to attract firms in certain locations in order to achieve specific regional economic development goals. Thus, the developed nature of different locations and their overall attitude towards FDI tend to influence the extent to which foreign investors commit themselves to particular projects.

Identification stage involves eliciting industry-specific information (market factors, competition analysis) on which to base a short-list of potential country segments. Assessment of industry attractiveness for each of the short-listed candidates considers objectives and resources constraints and expansion strategies. Market size and growth, level of competition, entry barriers and market segments are investigated at this stage.

Finally, those factors can be divided into two phases, the external factors and the internal factors for a company. Strengths and weaknesses refer to internal factors such as marketing, finance, human resources, etc. Opportunities and threats refer to external factors such as social, technical, economy, political, and so on. The selection involves studying firm-specific information, such as profitability, product compatibility with the existing portfolio, to select the markets to enter. There are two major factors being used in selecting new target market: internal strength, including operational capability, technology advancement, competitive edge, and potential profitability and external environment and opportunities – such as the stability of political and economic systems of the nation under consideration, as well as its common ware, labour availability and quality, and potential market size.

According to theories of marketing strategy planning, as discussed above, firms must adapt with an increasing speed to market pressures and competitors' innovations, simultaneously controlling and even lowering product or service costs. For SMEs, it is needed to identify some common patterns, which distinguish employment relations in SMEs from those in larger organizations. Lack of resources, including financial and human resources, are the major problem for SMEs. For those reasons, it is very difficult to choose the wholly owned entry mode for SMEs to enter China's market.

This study will not just deal with the marketing strategy for ASP itself but also labor's abilities in human resource systems in order to successfully realise the goals of an enterprise. This definition is different from the previous research, which focuses on all strategies for small ASP in China. However in any industry, if the structure of an organization cannot match its strategy, its competitiveness will be significantly compromised.

The objectives of the current research are to determine market segments of both resource and customers based on geo-demographic factors in China, to determine and analyse the competitive structure of major competing software design companies for the specified area as per the results of the segmentation analysis, and to develop managerial recommendations and discuss strategic options for competing software design industry based on the above analysis.

Market analysis

China is now a member of the World Trade Organisation (WTO) and liberalisation of FDI or EJVs is expected to accelerate even further. Because of this, companies have to find a way to survive in this seriously competitive market. Meanwhile, many MNCs in China have encountered daunting challenges and found the market elusive. Some have over-estimated the demand for their products while underestimated the level of competition in China (Davies 1994). China has achieved impressive economic growth in recent years. It is undergoing a technological change with huge IT investments in both public and private sectors.

Foreign investment in China

China is the second largest recipient of foreign direct investment (FDI) and equity joint ventures (EJVs) in the world and has been undergoing dramatic transformations toward privatisation, liberal trade policies, and free market forces, to attract foreign direct investment. As there is one-quarter of the world's population living there, its consumption of a wide range of products is growing steadily which has attracted many multinational corporations (MNCs), including at least 200 of the top 500 global companies to invest in this

huge market. As shown in Table 1, there are many foreign traders and investments in China and the amount of the investment is growing annually.

	1999			2000		
	Sum	Direct investment	Other investment	Sum	Direct investment	Other investment
Hong Kong	17,402	16,363	1039	16,729	15,500	1,229
U.S.A.	4,222	4,216	7	4,385	4,384	.63
Japan	3,063	2,973	91	3,061	2,916	145
Taiwan	2,758	2,599	160	2,537	2,297	240
Singapore	2,642	2,642	.03	2,173	2,172	.41
Korea	1,280	1,275	6	1,500	1,490	11
Britain	1,045	1,044	.45	1,164	1,164	0
Germany	1,374	1,373	.37	1,042	1,041	.84
France	884	884	0	853	853	0
Holland	542	542	0	791	789	1
Macao	338	309	29	382	347	35
Canada	314	314	.07	313	280	34
Australia	267	263	3	309	309	0
Italy	187	187	0	210	210	0
Thailand	148	148	0	204	204	.02
Switzerland	247	247	0	194	194	0
Sweden	325	156	169	159	159	0
Total	42,447	40,319	212,8	49,356	4,071,5	8,641
Data source: China statistical annual report (2001) (Unit: 1m U.S. dollars)						

Table 1: Investment of foreign countries in China

Among the major countries or regions who have invested in China, Hong Kong has been the largest, accounting for more than 1 quarter of the total foreign direct investment in China. It is found that there is an annual increase in the FDI of more than 16% from 1999 to 2000 although some of the major investors including Hong Kong, Japan, Taiwan and Singapore slightly slowed down their investment.

Application Service Providers in China

Similar to the linkage with the business strategy, application service provider should also be linked to what is important to the customer. Despite the fact that customer-focus is not a new concept, managers are still in the process of trying to implement organisational changes, which will increase attention to customers and their needs (Homburg, Workman & Jensen 2000).

Cultural characteristics of customers have been the basis for the debate within the standardization versus localisation of international marketing strategy. Baalbaki and Malhotra have argued that the relative cultural sensitivity of the product determines the level of product adaptation that needs to occur (1993). The shift from product-focused to customer-focused

organisational structures is motivated by the need to come closer to the problems the customer is trying to solve.

There are only a very limited number of companies using ERP systems and no big local professional ERP vendors but only a few local software packages are available in China and are low cost primarily of accounting and financial applications.

Data collection for ASP market in China - Survey

The development of a strategic planning framework is used in this study to identify relevant criteria for the investment of small ASP firms in China. A focus group interview is conducted by considering some common factors used in other industries and some factors specific to the assessment of small ASP firms.

Survey design

Internal factors such as service, location, labour and resources are generally regarded as high importance to a successful business while external factors ie market place, strategy, political risk, social stability, managerial skills, are also very important when investing in a new market. To identify critical factors, all external and internal factors are grouped into five categories in this study to explore the relationship between marketing orientations.

A self-report questionnaire was designed, in which CEOs or senior managers were asked to provide responses that best described the aspects of their companies since their inception. The survey instrument was kept as short as possible (25 questions) in order to promote and encourage timely replies. Questions were grouped into the five (5) areas: Strategy, Policy, Social code, Market place and Managerial. A few questions were modified from the questions used in other marketing strategic surveys and a combination of qualitative and quantitative measures was used. All questions were linked to a specific hypothesis, with most hypotheses linked to more than one question surveyed.

Influential factors

Five major factors (political, strategy, market, societal code, and managerial) are used in this study, intending to find the key influential factors for international corporations to enter China's market and operate successfully as a joint venture or via foreign direct investment. Companies must analyse their internal strengths and weaknesses, and their environments, opportunities, and threats.

Strategy

A company's strategy needs to reflect the company's own approach in developing a competitive advantage in its business context. In Chinese market, many methods have already been introduced. However before planning a marketing strategy, it is necessary to consider the different expectations for the partners as listed in Table 2.

Political

Political factors such as: stability of government and its policies, the trend of political reform, the development of economic and legal systems, and the efficiency of governmental agencies

in China, like in any other countries, have an impact on the decisions and operations of foreign investors.

Political risk is a widely accepted influential factor on international business organizations. Due to this instability, organizations tend to avoid vertical integration. Closely akin to political risk is foreign exchange risk. Advocates of the populace, governments attempt to impose regulations which utilise the abundant resources, such as labour, and protect the natural channels which have evolved. Governmental regulation can be categorized as obstacles to channel structured change.

Expectations	Foreign investors	Chinese partners
1	Open China's market for its products	Adopt advanced production technology
2	Overcome trade barriers	Improve R&D capability
3	Take advantage of low cost labour and materials	Open more information channels
4	Expand existing techniques from home facility	Looking for allies for international competition
5	Reduce financial risks	Add new financing source
6	Protect copyright for intellectual products	Increasing firm reputation from famous brand
7	Reduce capital input in investment	Utilise current and available resources
8	Access natural resource	Reduce operational risk

Table 2: Different expectations between foreign investors and Chinese partners

Societal

There are many important societal factors which can also impact the success of an international joint venture in China. Active participation in public activities and assisting local educational and the economic development of other projects would naturally enhance the development of a company's business reputation and standing resulting in a good public image - which, in turn, could bring more long-term business opportunities.

Market

The competitive structure of the marketplace is also a function of the level of economic development of a country. Economic development is tied closely to market infrastructure, which in many cases is the most important determinant underlying distribution. In a recent examination of distribution in lesser-developed countries, Samiee (Samiee 1993) indicates that a close tie exists between economic development and the available channel structure, a tie, which may be insurmountable. For example, limitations in terms of the transport available can affect the channel structure. While infrastructure development is crucial, governmental actions may either increase or decrease the efficiency in which distribution structures operate (Rosenbloom & Larsen 1991).

In China, the cities like Shanghai, Tianjin, and Guangzhou - have been developed into regional business centres, due mainly to their geographic advantages. Displaying a more

modern business-oriented culture, foreign investors can identify the stability of China's economic policies, the establishment of business legal systems, the consumer confidence level and actual income increases, the development of industrial infrastructure components (e.g. energy, transportation, and communication), and the growth rates of China's economy and market, all of which require close monitoring for future investment and operational decisions.

Managerial

For a foreign investor, the first challenge is how to choose a Chinese business partner in a specific industry within a preferred geographical location (costal, urban, suburban). After an initial period, the successful accomplishment of business objectives is more heavily dependent on the quality of cooperation between the two or more managing partners. To some degree, the CEOs representing the foreign firms, their managerial styles, methods, and approaches should all be adaptive to fit into the Chinese culture, tradition, and into the existing system to ensure that their decisions are acceptable to their Chinese counterparts.

Decision hierarchy

The five major factors and selected 15 sub factors (in two levels) are structured into a decision hierarchy:

- A. Strategy factors:
 - A1. Cooperate with local partner.
 - A2. Localisation of products and services.
 - A3. Protection of intellectual property.
- B. Political factors:
 - B1. Stability of local government.
 - B2. Stability of local economic policy
 - B3. Policy for incentive to foreign investors
- C. Social code factors:
 - C1. Understand local culture.
 - C2. Good relationship with government agency.
 - C3. Information channel and availability.
- D. Market factors:
 - D1. Local market potential.
 - D2. Local infrastructure.
 - D3. Local transportation system.
- E. Managerial factors:
 - E1. Middle managers localisation.
 - E2. High level managers localisation.
 - E3. Empower to local labour.

The AHP model starts by identifying pertinent important factors. These factors are then structured into a hierarchy descending from an overall objective to various criteria and sub criteria in successive levels.

Item	9	7	5	3	1	3	5	7	9	Item
Strategy		3	1		2	1			1	Political
Strategy		3		1	2	1	1			Social code
Strategy				2	4		1	1		Market
Strategy	1		1	2	3		1			Management
Political			2	1	4	1				Social code
Political		2				1	4	1		Market
Political		1	2			1		3	1	Management
Social code	1					1	4	2		Market
Social code	1			1	1	1	3		1	Management
Market		2	4	1				1		Management

Table 3: Data of main factors

Item	9	7	5	3	1	3	5	7	9	Item
Strategy		3	1		2	1			1	Political
Strategy		3		1	2	1	1			Social code
Corporate with local partner			1		1	2	1	3		Localisation of products and services
Corporate with local partner				1	1	1	1	4		Protect intellectual property
Localisation of products and services		1	1		3	1		2		Protect intellectual property
Stability of local government		1			4		1	2		Stability of local economic policy
Stability of local government				1	3	1	1	2		Policy for incentive to foreign investors
Stability of local economic policy			1	3	2			2		Policy for incentive to foreign investors
Understand local culture				1	1	2		1	3	Good relationship with government agency
Understand local culture				1	3	2		2		Information channel and availability
Good relationship with government agency	1	1	3		2	1				Information channel and availability
Local market potential		2	1		3		2			Local infrastructure
Local market potential			1		5		2			Local transportation system
Local infrastructure			1	1	3	1	1	1		Local transportation system
High level manager localisation						1	2	5		Middle manager localisation
High level manager localised			1	1	1	3	2			Empowerment of local labor
Middle manager localised		2	3		1	1	1			Empowerment of local labor

Table 4: Data of sub factors

Questionnaire design and statistical information

A questionnaire was designed according to the decision hierarchy. Related elements were grouped to form a matrix for pair-wise comparison. A self-report questionnaire was designed in which CEOs or senior managers were asked to provide responses that best describe the pertinent aspects of their companies. The 2-page questionnaire was organized into 2 parts.

The priority weights of structured critical factors are then determined through pairwise comparison to reflect the judgements and relative preferences of different decision makers. When there are several levels of factors and sub factors, the weight vectors of higher-level factors are first computed then the next level. The weight of the corresponding higher-level element is then used to weigh the factors at a lower level in the hierarchy (composite weight). The procedure repeats by moving downward along the hierarchy, computing the weight of each element at a particular level and using these to determine composite weights for succeeding levels. When multiple decision makers are involved in developing the priority weights, achieving consensus may be difficult.

Tables 3 and 4 listed the statistic information from validated returned questionnaires. All data will be analysed by using AHP research method, which can be used to assess the extent of differences and the potential impact on dealing with business in China.

Analysis and discussion

The data from tables 3 and 4 will be analysed using standard composite priority method to calculate the priority weight and consequently, identify the importance of every factor.

Important main factors

A standard composite priority method was carried out to calculate the priority weight for all the main factors and sub-factors. Table 5 lists the priority weight for the main factors.

Categories	Main factors	(C.R. ratio = 0.09)	Priority Weight
A	Strategy		0.31
B	Political		0.05
C	Social code		0.05
D	Market		0.37
E	Management		0.22

Table 5: Priority weight between main factors

The most important main factor is the market with a priority weight of 0.37 followed by the strategy with a priority weight of 0.31. Although sometimes the target market is attractive, companies still need to develop a suitable strategy to run a business in China. The third important factor is management, whose priority weight is 0.22.

Interestingly, political and social codes are not as important as market, strategy, and management. Their priority weight is only 0.05. It means that although other conditions affect a company's performance, the most important issues that companies have to deal with are human resource management and correct strategy.

Important sub-factors

Similarly the priority weight of all sub factors, is calculated and shown in Table 6.

Factor	Factor priority	Composite priority
A : Strategy factor	0.31	0.31
A1 - Corporate with local partner	0.07	0.02
A2 - Localisation of products and services	0.47	0.14
A3 - Protect intellectual property	0.47	0.14
B : Political factor	0.05	0.05
B1 - Stability of local government	0.32	0.02
B2 - Stability of local economic policy	0.45	0.02
B3 - Policy for incentive to foreign investors	0.23	0.01
C : Social code factor	0.05	0.05
C1 - Understand local culture	0.11	0.01
C2 - Good relationship with government agency	0.77	0.04
C3 - Availability of information channel	0.13	0.01
D : Market factor	0.37	0.37
D1 - Potential of local market	0.33	0.12
D2 - Local infrastructure	0.33	0.12
D3 - Local transportation system	0.33	0.12
E : Management factor	0.22	0.22
E1 - Localisation of high level managers	0.08	0.02
E2 - Localisation of middle managers	0.72	0.16
E3 - Empower to local labour	0.19	0.04

Table 6: Key factors and key sub-factors

Localisation of middle managers

Among all the sub-factors, the most important sub-factor is the localisation of middle managers with a composite priority of 0.16. This represents the importance of hiring local managers at middle level to manage labours which can avoid conflictions of different culture. Thus the company can easily create its local supplier network with local part suppliers. Another benefit is that the local managers are already very familiar with the market and culture. So the localisation of middle managers can reduce the time and cost to help foreign company.

International business is much more personal and relationship-orientated than domestic business. Managers in the international arena require flexible approaches to deal with multicultural environment. Those who are skilled only in mono-cultural management rarely succeed in a multicultural or bicultural environment. Without a proper understanding of cultural norms, expatriates can make embarrassing, sometimes debilitating, social mistakes while trying to communicate with their colleagues and business associates.

Localisation of products and services and Protection of intellectual properties

Localisation of products and services is the second important factor. As well known, small companies are not easy to standardise their products and services. They have to compete with big company and other competitors. The only way to survive in a competitive market is to be close to the customers and try to be flexible with their products and services. Developing a multi-dimensional model for product-dominated services will allow the identification of weaker areas of perceived quality and provide potential to improve total customer satisfaction.

Another important aspect is to protect intellectual property and it is particularly important in ASP industry which has the same level of composite priority weight as the localisation of products and services.

Potential of local market, infrastructure and transportation system

The next equally important factors are potential of local market, local infrastructure and local transportation system. These three sub factors are under the main factor of market, for a small business.

Conclusions

Meanwhile, small application service providers (ASPs) industry is beginning to appear in many developing countries, including China. Based on the analytic hierarchy process (AHP) critical factors are analysed for the ASP industry to establish new business in China. To find the critical factors, the research surveyed CEO's or senior managers who are working in ASP firms, to identify how to develop a marketing strategy for an ASP firm to be based in China. The relationship between management and marketing activities employed by SMEs, as well as critical dimensions of their relationships with customers are also studied.

It is found that localisation of middle managers, localisation of products and services and protecting intellectual properties and potential of local market, local infrastructure and local transportation system are the more important factors for small ASP firms to do business in China than the other factors studied.

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