

Association for Information Systems AIS Electronic Library (AISeL)

PACIS 2003 Proceedings

Pacific Asia Conference on Information Systems
(PACIS)

December 2003

Marketing Strategy for New Small Application Service Providers in China

Harian Hsu

University of South Australia

Lingxue Kong

University of South Australia

Follow this and additional works at: <http://aisel.aisnet.org/pacis2003>

Recommended Citation

Hsu, Harian and Kong, Lingxue, "Marketing Strategy for New Small Application Service Providers in China" (2003). *PACIS 2003 Proceedings*. 62.

<http://aisel.aisnet.org/pacis2003/62>

This material is brought to you by the Pacific Asia Conference on Information Systems (PACIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in PACIS 2003 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Marketing Strategy for New Small Application Service Providers in China

Harian C.-M. Hsu and Lingxue Kong

Centre for Advanced Manufacturing Research,
University of South Australia, Mawson Lakes, SA 5095, Australia

Chih-Ming.Hsu@postgrads.unisa.edu.au

Lingxue.Kong@unisa.edu.au

Abstract

Small to medium-sized enterprises (SMEs) including small application service providers (ASPs) are playing an increasingly important role in the development of global economies particularly in developing countries like China. This paper studies marketing strategies of small application service providers (ASP) with a focus on what the important factors are to establish a new ASP business in China. An analytical hierarchy process (AHP) method is used to analyse critical factors of the ASP industry. The research surveyed CEOs or senior managers who are working in ASP firms, to identify how a marketing strategy can be developed for an ASP firm to start business in China. It is found that the localisation of middle level managers, the localisation of products and services, the protection of intellectual property (IP), and infrastructure and transportation system are the most important factors for small ASP firms to do business in China.

Keywords

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

Introduction

Businesses have become globalised. There is no exception to the application service providers (ASP), which means that ASPs need to explore international market. When a company is planning to establish a new market and expand its existing ones, long-term planning and customer satisfaction have been the two major areas for the company to work on to meet its strategic management objectives. Different strategies for a company to enter foreign markets have been proposed by Ekeledo and Sivakumar (1998).

China has become one of the major international investment countries. Since it opened its market to the world more than 20 years ago, China has attracted many international companies, small or large, to invest primarily along its east and south-east coast. Some of them have been very successful and have been growing very rapidly in terms of their market share.

Strategic planning strongly influences the direction that a company takes and hence determines the final investment 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 initiatives.

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

There are two categories of market selection model (Carroll 1984), ie general and context-specific (applicable to specific industries, specific categories of companies and/or specific 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 or regions* that do not meet the objectives of the firms (Kumar et al. 1994). Country/region screening can be conducted either in a top-down or a bottom-up way. Market size, growth rate, basic fit between customer preferences and the existing product line, and competitive rivalry are used as criteria during the screening process (Johansson & Yip 1994). Special locations designated by many countries to attract foreign investors, which are generally more open to foreign direct investment (FDI) and offer greater incentives to foreign investors, are generally regarded as being safe to invest. Consequently, foreign investors are more likely to seek a greater share of equity ownership in joint ventures (JVs) in these locations. In China, there are many regions using these strategies, which can be classified into four groups:

- * 12 coastal cities/areas and five special economic zones especially developed for light manufacturing firms, which offer a very attractive environment for export manufacturers;
- * Three metropolitan cities consisting of Beijing, Shanghai and Tianjin (and, Chongqing, a recently established one);
- * Other coastal cities designated as open cities; and
- * All other regions not included in three main groups discussed above.

The percentage of foreign ownership in JVs in these special regions is likely to be higher than that in other regions. In China, not only are different locations endowed with different resources and infrastructure, but also are characterised by different degrees of autonomy, economic liberalisation and marketisation permitted by the central government. In addition, both local and central governments offer various incentives to attract firms to invest in certain locations in order to achieve specific regional economic development goals. Thus, the investment environment of different locations and their overall attitude determines the extent to which foreign investors commit themselves to particular projects.

Identification involves eliciting industry-specific information (market factors, competition level) to identify a short-list of potential segments. Assessment of industry attractiveness for each of the short-listed candidates will examine objectives, resources constraints and

expansion strategies. Market size and growth, level of competition, entry barriers and market segments are also investigated at this stage.

Those factors can be divided into two groups, the external factors and the internal factors, for a company to investigate and develop business plan. The factors can be studied by using SWOT (strength, weakness, opportunity and threat) analysis. Strengths and weaknesses refer to internal factors such as marketing, finance, human resources, etc, while opportunities and threats refer to external factors such as social, technical, economy, political, and so on.

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. The selection involves studying firm-specific information, such as profitability, product compatibility with the existing portfolio, to select the markets to enter.

Firms must adapt with an increasing speed to market pressures and competitors' innovations, simultaneously control and even lower product or service costs. For SMEs, it is needed to identify some common patterns, which distinguish employment relations in SMEs from those in larger organisations. 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 small ASP itself but also labour's abilities in human resource systems in order to successfully realise the goals of an enterprise. 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. It will concentrate on how strategies can be developed and adopted for ASP companies to explore a new market in China.

Market analysis

China is now a member of the World Trade Organisation (WTO) and liberalisation of FDI or EJV's 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: US\$1m)

Table 1: Investment of foreign countries in China

However, what can the application service providers (ASP) do with this huge market? Just follow others to invest or wait until it is more certain that an investment can be done?

Application Service Providers in China

The development of business strategies of the application service providers should also be linked to what is important to customers. 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 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.

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 small ASP firms to invest 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.

A questionnaire was designed and sent to CEOs or senior managers who provided responses to describe the aspects of their companies since their inception. The survey instrument was kept as short as possible (25 questions) to promote and encourage a timely reply.

Influential factors

Questions were grouped into the five areas: Strategy, Policy, Social code, Market place and Managerial, 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 factor

A company's strategy needs to reflect its own approach in developing a competitive advantage in its business context. Before planning a marketing strategy, it is necessary to consider the different expectations for partners (Table 2).

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

Political factor

Political factors such as the stability of the government and its policies, the trend of political reform, the development of economic and legal systems, and the efficiency of governmental agencies 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 abundant resources, such as labour, and protect the natural channels which have evolved. Governmental regulation can be categorized as obstacles to channel structured change.

Societal factor

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 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 factor

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 (1993) indicates that a close tie exists between economic development and the available channel structure 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 and tradition, and into the existing system to ensure that their decisions are acceptable to their Chinese counterparts.

Decision hierarchy

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

- A. Strategy factors:
 - o A1. Cooperation with local partner.
 - o A2. Localisation of products and services.
 - o A3. Protection of intellectual property.
- B. Political factors:
 - o B1. Stability of local government.
 - o B2. Stability of local economic policy
 - o B3. Policy for incentive to foreign investors
- C. Social code factors:
 - o C1. Understanding local culture.
 - o C2. Good relationship with government agency.
 - o C3. Information channel and availability.
- D. Market factors:
 - o D1. Local market potential.
 - o D2. Local infrastructure.
 - o D3. Local transportation system.
- E. Managerial factors:
 - o E1. Middle managers localisation.
 - o E2. High level managers localisation.
 - o 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	-8	-6	-4	-2	0	2	4	6	8	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

Questionnaire design and statistical Analysis

A 2-page questionnaire organized into 2 parts was designed according to the decision hierarchy. Related elements were grouped to form a matrix for pair-wise comparison.

Item	-8	-6	-4	-2	0	2	4	6	8	Item
Corporation with local partner			1		1	2	1	3		Localisation of products and services
Corporation 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
Understanding local culture				1	1	2		1	3	Good relationship with government agency
Understanding 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

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 is repeated by moving downward along the hierarchy, calculating 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 eight validly returned questionnaires. As indicated before, the ASP industry in China is not well developed, which adversely affects the samples. 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.

The data from tables 3 and 4 is 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 main factors and sub-factors. Table 5 lists the priority weight for the main factors calculated with composite priority method (Hsu 2002). CI ratio is the rate of consistency index to random index.

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. This indicates that the Chinese market is very attractive but the development of a suitable strategy still plays an important role in a successful operation 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 the development of a 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 conflicts 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.

International business is much more personal and relationship-orientated than domestic business. Managers in an international arena require flexible approaches to deal with multicultural environment. Those who are skilled only in mono-cultural management environment 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 companies 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 weak areas of perceived quality and provide potential to improve total customer satisfaction.

Another equally important aspect is to protect intellectual property and it is particularly important in ASP industry.

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.

References

- Agarwal, S. (1994). "Socio-cultural distance and the choice of joint ventures: a contingency perspective." *Journal of International Marketing* 2(2): 63-80.
- Ayal, I. and J. Zif (1979). "Market expansion strategies in multinational marketing." *Journal of Marketing* 43: 84-94.
- Baalbaki, I. and N. K. Malhotra (1993). "The marketing management bases for international market segmentation: research propositions and managerial implications." *International Marketing Review* 10(1): 19-44.
- Beamish, P. W. (1993). "The characteristics of joint ventures in the People's Republic of China." *Journal of International Marketing* 1(2): 29-48.
- Carroll, G. R. (1984). *Organizational ecology*, Annual Review of Sociology.
- Davies, K. (1994). "Foreign investment in the retail sector of the People's Republic of China." *Journal of World Business* 29(2): 56-69.
- Ekeledo, I. and K. Sivakumar (1998). "Foreign market entry mode choice of service firms: a contingency perspective." *Journal of the Academy of Marketing Sciences* 26(4): 274-92.
- Homburg, C., J. P. Workman and O. Jensen (2000). "Fundamental changes in marketing organization: the movement towards a customer-focused organizational structure." *Academy of Marketing Science Journal* 28(4): 459-478.
- Hsu, H. C. M. (2002). *Marketing Strategy for Small Application Service Provider Firms in China*. School of Advanced Manufacturing and Mechanical Engineering, Adelaide, University of South Australia: 91.
- Johansson, J. K. (1995). "International alliances: why now?" *Journal of the Academy of Marketing Sciences* 23(3): 301-304.
- Johansson, J. K. and G. S. Yip (1994). "Exploiting globalization potential: US and Japanese strategies." *Strategic Management Journal* 15(8): 579-601.
- Kumar, V., A. Stam and E. A. Joachimsthaler (1994). "An interactive multicriteria approach to identifying foreign markets." *Journal of International Marketing* 2(1): 29-52.
- Miesenbock, K. J. (1988). "Small business and exporting: a literature review." *International Small Business Journal* 6(2): 42-61.
- Rosenbloom, B. and T. L. Larsen (1991). "International channels of distribution and the role of comparative marketing analysis." *Journal of Global Marketing* 4(4): 39-54.
- Samiee, S. (1993). "Retailing and channel considerations in developing countries: a review and research propositions." *Journal of Business Research* 27(2): 103-130.