



**Asia-Pacific Economic Cooperation (APEC)**

**APPLICATION OF E-COMMERCE STRATEGIES TO  
SMALL AND MEDIUM SIZED TOURISM ENTERPRISES  
IN THE APEC REGION**

2002. 6

**APEC Tourism Working Group**

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## Executive Summary

Due to the pivotal role information plays in the description, promotion, distribution, amalgamation, organization, and delivery of tourism products, technology has become a main source of sustainable competitive advantage and a strategic option, especially in the tourism and hospitality industries. It is understood that the tourism industry is private sector-driven, comprised largely of Small to Medium-Sized Enterprises (SMEs), and regionally dispersed between and within member economies. However, according to a WTO report (2001), “small and medium-sized tourism enterprises (SMTEs) are facing more stringent impediments to the adoption of new information technology, in particular, e-business. Part of the problem relates to the scale and affordability of some information technologies, as well as the facility to implement them in the context of rapidly growing and changing organizations. In addition, new solutions configured for large, stable, and globally-oriented firms have little strategic fit with small, dynamic, and locally-based tourism firms.”

Despite these challenges, small- and medium-sized tourism enterprises (SMTEs) with well-developed and innovative websites can now have ‘equal Internet access’ to international tourism markets. This implies equal access to telecom infrastructure, as well as to marketing management and education. According to a UN report in 2001, “it is not the cost of being there on the on-line market place, that must be reckoned with, but the cost of not being there.” It is certain that embracing digital communication and information technology is no longer an option, but a necessity. Thus, one of the most important characteristics of electronic commerce is the opportunity and promise it holds for SMTEs to extend their capabilities and grow.

Thus, the aim of this project was to review existing studies of e-commerce by SMTEs, examine problems and solutions related to electronic commerce of SMTEs in the APEC region, present successful cases of e-commerce which could be applied to SMTEs, and finally to develop strategies for SMTE e-commerce in the APEC member economies.

This project responds to the priorities of APEC leaders and ministers, as determined by economic and technical cooperation established in the Osaka Action Agenda, which includes action programs, a vision statement, and a policy statement

related to this study. It also relates to the APEC Tourism Ministerial Meeting's Policy Goal 1, referred to as "Remove Impediments to Tourism Business and Investment" and Policy Goal 2, referred to as "Increase Mobility of Visitors and Demand for Tourism Goods and Services in the APEC Region in the APEC Tourism Charter," endorsed by the Ministers of Tourism in July 6, 2000.

Dividing 21 APEC member economies into two groups (leader/contender and follower/laggard), the project should simplify the context of e-commerce strategies for SMTEs in the APEC region and its research issues. The project explored three elements for SMTE e-commerce strategies: strategic management, government policy, and technology. According to different levels of e-business infrastructure among the APEC member economies, these three aspects should be approached strategically, keeping in mind the circumstances of each member economy. The stages of e-business development, ranging from start-up to established SMTEs, should also be considered.

This project employed five stages of research procedures. First, the objectives of the research were formulated for developing e-commerce strategies for SMTEs in the APEC region. Second, research was performed to collect the secondary data regarding e-commerce for SMTEs. Based on those data, a web-based survey was developed to obtain challenges and opportunities faced by SMTEs in the APEC region. More specifically, the survey covered e-commerce activities, benefits, barriers, the important factors for the successful implementation of e-commerce, and performance in success factors. Third, this project employed an expert opinion method, holding an International Symposium on 'E-commerce and Tourism in the APEC Region' in Feb. 2002 in Seoul, South Korea. More than 50 experts shared meaningful data and information, including practices and cases from several APEC member economies. Fourth, findings were scientifically analyzed, presenting Importance-Performance Analysis and significant statistical results. Finally, implications, applications, and recommendations were suggested for e-commerce strategies which can be applied to SMTEs in the APEC region.

It is believed that SMTEs across 21 APEC member economies have shown their strong interest and participation in e-commerce, recognizing that the potential benefits of e-commerce significantly outweigh the disadvantages and risks. The potential benefits include 'business to business transactions,' 'online ordering,' 'market research,' 'after sales service,' 'competitor analysis' and 'electronic payment.'

This research also found that barriers exist in adopting e-commerce for SMTEs. They are identified as ‘limited knowledge of available technology,’ ‘lack of awareness,’ ‘cost of initial investment,’ ‘lack of confidence in the benefits of e-commerce,’ and ‘cost of system maintenance.’ In particular, the follower/laggard group experienced more serious barriers than the leader/contender group in adopting e-commerce in terms of internal firm capacities. These barriers include ‘limited knowledge of available technology,’ ‘cost of system maintenance,’ ‘cost of securing skilled human resources for e-commerce,’ ‘difficulty with integrating e-commerce & existing systems,’ ‘shortage of skilled human resources,’ and ‘resistance to adoption of e-commerce.’ In terms of market situation, barriers include ‘lack of awareness of e-commerce,’ ‘insufficient e-commerce infrastructure,’ and ‘small e-commerce market size.’ Moreover, the follower/laggard group considered one of their perceived barriers, ‘lack of government support,’ as more significant than the leader/contender group did.

Results of analysis show that SMTEs in the APEC region consider ‘skilled human resources,’ ‘security of the e-commerce system,’ ‘user-friendly web interface,’ ‘trust of customers,’ and ‘top management and government support’ as most important for e-commerce. However, they said that ‘skilled human resources’ and ‘top management and government support’ are not performed or managed well relative to their importance. In addition, it was found that most SMTEs do not recognize the importance of ‘sharing knowledge and information between SMTEs’ and ‘business partnerships’ as e-commerce strategies, even though the two elements are critical for SMTE success.

Making a more proactive and comprehensive utilization of e-commerce is far more beneficial than adopting e-commerce for specific functions such as receiving orders or ordering goods and services. SMTEs can use more advanced solutions that are applied to B2B and B2C transactions with reasonable cost of business solutions on the Internet. Regarding perceptions of benefits from e-commerce, most SMTEs recognized the benefits of B2C transactions like ‘providing easy access to information on tourism,’ ‘providing convenience for customers,’ ‘creating new markets,’ and ‘expanding choices by customers’ than they recognized the benefits of B2B transactions such as ‘simplifying business process,’ ‘reducing operation cost,’ ‘interacting with other business partners,’ and ‘founding new business partners.’ It implies that managers of SMTEs should be more aware of many other benefits of e-commerce including ‘B2B transactions,’ ‘improving quality of service,’ and

‘establishing interactive relationships with customers.’

This research confirms that SMTEs, in the follower/laggard APEC member economies in particular, believe that governments have an important role to play in enabling firms to be competitive by promoting the development of electronic commerce. To boost e-commerce, government policies should focus on 1) the development of information infrastructure, 2) commencement of e-commerce activity, and 3) a legal enforcement system in e-commerce. Sufficient access to information infrastructure at reasonable cost is fundamental for e-commerce. It is also suggested that governments should provide a variety of policies to enhance sharing knowledge and information between SMTEs and business partnerships.

According to different levels of e-commerce infrastructure and stages of e-business development, the research suggests different strategies. In leader/contender member economies, Internet start-up SMTEs should take business models appropriate for their own e-business objectives and environments. External service providers have great potential for them. Marketing should be done selectively. Earning a good reputation in the local market should be the first priority. Established SMTEs should focus on two key strategies: 1) expanding the range of services and products and 2) upgrading their quality. They should redesign their websites to focus more on ‘customer retention’ than ‘customer acquisition’ to ensure quality of service. The Internet is a useful tool to reach international markets. E-partnerships through alliances between SMTEs or large firms are important. They also should utilize their resources to build e-community. In follower/laggard member economies, Internet start-up SMTEs can develop a strategy to access international markets directly to sell their tourism products and services. Their e-business strategies should be formulated according to their business environments. Linkage to a site of destination management organization (DMO) is critical to success. Development of an online booking system is the most important technological aspect. Various measures to overcome lack of trust and confidence of consumers should be taken such as utilization of ‘about us,’ ‘frequently asked question (FAQ),’ and ‘call center’ services. Established SMTEs should consider e-strategy issues, including; 1) target market segments, 2) building trust and confidence of e-consumers, and 3) expanding e-commerce activities.

This project makes recommendations to all APEC member economies and their small- and medium-sized tourism enterprises (SMTEs) for promoting e-commerce in

general. These recommendations will be applied to both leader/contender and follower/laggard groups simultaneously. Each group can apply these recommendations to its SMTEs based on its particular situation.

- 1) Develop a national vision, plans and policy guidelines for SMTE e-commerce and involve tourism stakeholders in developing e-commerce strategies and products within the context of overall tourism marketing strategies.
- 2) Establish appropriate laws and regulations and service standards in order to build trust and consumer confidence.
- 3) Adopt appropriate information technology to improve business and consumer access to the Internet and to electronic commerce.
- 4) Raise awareness of e-commerce through training and education. E-commerce can not be implemented without empowering and enabling tourism stakeholders to take advantage of new Internet and e-commerce technologies.
- 5) Implement appropriate mechanisms in APEC member economies for the safer use of electronic payment in tourism transactions at the local, regional, and global levels.
- 6) Implement e-marketing strategies to take advantage of interactivity, mass customization, real time, and a database of customers.
- 7) Integrate SMTEs into industry-wide associations. This will encourage SMTEs to stop competing at the destination level, and to develop networks of wealth creation and mutual benefits in order to deliver seamless tourism products and to compete against remote destinations and SMTEs.
- 8) Manage digital brand. Brand power is more important on-line than off-line because e-business is a virtual world where consumers are more dependent on recognized brands.
- 9) Formulate and implement e-business strategies through partnerships with other SMTEs or large firms, especially in the area of brand management (BM),

customer relationship management (CRM), and human resources management (HRM).

- 10) Take business models appropriate for SMTEs' own e-business objectives and environments. SMTEs can perform e-business combining two or more of models in the commerce model, media model, usage fee model, dynamic-pricing model, information service model, and do-it-yourself trip design model. External service providers have great potential to assist SMTEs.
- 11) In the established stage, re-design website to focus more on 'customer retention' to ensure quality of service than 'customer acquisition.' Also, develop strategies to expand into international markets.
- 12) Associate with e-shopping malls. It allows SMTEs to conduct Internet-based e-commerce without bearing all the start-up costs or the costs of improvements, advertising and technical difficulties, which are instead shared by all merchants in the mall.

Collective recommendations may be taken by groups of APEC member economies to enhance the environment for electronic commerce and support its adoption by SMTEs.

- 1) Improve the information infrastructure for electronic commerce across the APEC region.
- 2) Ensure that fair taxation is applied across jurisdictions, and that value-added tax is transparent and consistent when applied to e-commerce transactions for SMTEs.
- 3) Develop and maintain common standards to facilitate e-commerce among APEC members.
- 4) Work towards facilitating international electronic commerce, through organizations such as the World Trade Organization (WTO), the Organization for Economic Co-operation and Development (OECD), and the World Tourism Organization (WTO).

- 5) Build e-community across the APEC region to utilize their resources. E-community provides multiple tools including discussion forums, online chat, and instant messaging.
- 6) Develop capacity building through training and basic education in e-commerce in relevant fields, such as informatics and telecommunications, and conduct awareness campaigns about SMTE e-commerce.
- 7) Build cybermalls to help SMTEs in the APEC region that do not have distribution channels of their own.
- 8) Facilitate international strategic alliances at government-to-government (G2G) as well as industry-to-industry (I2I) levels, and help local firms to grow, regionalize and globalize.
- 9) Help create markets in emerging areas at the initial stage and help remove regulatory obstacles that may impede the growth of markets and businesses.

There are several issues that must be addressed in the future. Further research should focus on both macro- and micro-analysis.

- 1) There is a need for further research on selected legal and regulatory developments in SMTEs e-commerce.
- 2) More research needs to be conducted on how e-commerce situation changes periodically. Thus, time series analysis of SMTE e-commerce opportunities and challenges should be undertaken with a periodic survey of SMTE capabilities and perceptions of e-commerce opportunities and barriers in the APEC region.
- 3) There is a need for further research on exploring e-commerce strategies of SMTEs by sector, including hotel, travel agents, DMO, MICE, etc. Moreover, research on partnerships between SMTEs and larger tourism corporations is needed.
- 4) Further research needs to focus on behavioral topics in the future.



# 1. Introduction

## 1.1 Context and Rationale

Tourism is widely regarded as being the world's largest industry, making significant contributions to the economies of most countries, in particular as: a) a key source of economic demand and growth in demand; b) a major employer of both women and men at all economic levels and generator of sustainable employment opportunities; c) a significant earner of foreign exchange; d) an important generator of business opportunity for small and medium-sized enterprises; e) an effective vehicle for dispersing economic benefits within and between countries, particularly at the provincial level; f) an important contributor to the achievement of government economic, fiscal, social and environmental goals; and g) a catalyst for partnership between the public and private sectors (APEC Tourism Charter, 2000).

The WTTC (World Travel & Tourism Council, 2002) estimates that tourism and travel in the Asia-Pacific region presently accounts for more than 110 million jobs, generates over US\$2 trillion in travel and tourism-related demand and approximately US\$400 billion in export earnings. The WTTC is also forecasting that by 2012 employment in travel and tourism will increase by more than 20 million new jobs, and export earnings will increase by more than US\$1,000 billion. Total tourism and travel demand in 2012 is expected to exceed US\$4,707 billion.

Tourism is a complex product, involving the integration of services from diverse organizations: private and public, large and small, local and remote. Effective collaboration between these organizations is essential for the delivery of a quality product. The availability of up-to-date, accurate, attractive and accessible information is regarded as crucial for the success of a tourist product. Thus, tourism is information rather than a physical product that needs to be distributed and made available to both intermediaries and end-consumers; it is almost entirely dependent upon representations and descriptions to help consumers make a purchase decision (Laubenheimer, 1999).

Tourism and the Internet are ideal partners (WTO, 2001). For tourism businesses, the Internet offers the potential to make information and booking facilities available to large numbers of tourists at relatively low cost. It also provides a tool for

communication and relationship development with tourism suppliers and intermediaries, as well as end-consumers. These factors have resulted in the travel and tourism sector taking a larger and larger share of e-commerce globally (WTO, 2001). As a result, the Internet is revolutionizing the distribution of tourism information and sales. According to the WTO (2001), “an increasing proportion of internet users are buying online and tourism will gain a larger and larger share of the online commerce market (p.10).” Obviously, the Internet is having a major impact as a source of information for choosing and planning holidays and other forms of travel and increasing importance as a booking channel.

The use of the Internet in developed countries for purchasing tourism products is increasing dramatically. Of total e-commerce sales of \$64 billion in 1999, travel, transport and hotel reservations as a group represented the largest category of Internet transactions, accounting for 38.5 percent of all on-line sales (United Nations, 2001). The major part of these transactions originated and materialized in the United States.

However, according to WTO report (2001), “the SMTEs are facing more stringent impediments to the adoption of new information technology, in particular, e-business. Part of the problem relates to the scale and affordability of some information technologies, as well as the facility to implement them in the context of rapidly growing and changing organizations. In addition, new solutions configured for large, stable, and globally-oriented firms have little strategic fit with small, dynamic, and locally-based tourism firms.”

Despite these challenges, small and medium-sized tourism enterprises (SMTEs) with well-developed and innovative websites can now have ‘equal Internet access’ to international tourism markets. This implies equal access to telecom infrastructure, as well as to marketing management and education. According to UN report (2001), “it is not the cost of being there, on the on-line market place, that must be reckoned with, but the cost of not being there.” It is certain that embracing digital communication and information technology is no longer an option, but a necessity. Thus, one of the most important characteristics of electronic commerce is the opportunity and promise it holds for SMTEs to extend their capabilities and grow.

According to SME Electronic Commerce Study done by APEC-TEL (TEL05/97T), “small and medium enterprises are significant players in business-to-

business (B-to-B) electronic commerce, which constitutes more than 80 percent of all e-commerce activities. SMEs that can demonstrate their capabilities to use e-commerce will have a competitive advantage in e-commerce marketplace.” Accordingly, to encourage e-commerce among SMTEs in the APEC region, all APEC member economies must be aware of progress in the area, and work towards identifying barriers and problems, solving any problems, and exploring opportunities and benefits for SMTEs in the APEC region.

## 1.2 Project Objectives

It is understood that the tourism industry is private sector-driven, comprised largely of Small to Medium Enterprises (SME), and regionally dispersed between and within member economies. Project beneficiaries should be small and medium tourism enterprises which run tour companies, accommodation facilities, transportation businesses, shopping and other tourism-related businesses in APEC member economies. More SMTEs adopting e-commerce accelerate trade and investments within APEC member countries, which benefits all member economies. Thus, the aim of this project was to review existing studies on e-commerce of SMTEs, examine problems and solutions related to electronic commerce of small and medium-sized tourism enterprises (SMTEs) in the APEC region, present several successful cases of e-commerce which could be applied to SMTEs, and finally develop strategies for e-commerce of SMTEs in the APEC member economies.

This project responds to the priorities of APEC leaders and ministers, as determined by economic and technical cooperation established in the Osaka Action Agenda, which includes action programs, a vision statement, and a policy statement that relate to this study. It also relates to the APEC Ministerial Meeting’s Policy Goal 1, referred to as “Remove Impediments to Tourism Business and Investment” and Policy Goal 2, referred to as “Increase Mobility of Visitors and Demand for Tourism Goods and Services in the APEC Region in the APEC Tourism Charter,” endorsed by the Ministers of Tourism in July 6, 2000.<sup>1</sup>

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<sup>1</sup> It is stated that these goals can be achieved by (1) promoting and facilitating the mobility of skills, training, and labors; (2) promoting and facilitating productive investment in tourism and associated sectors; (3) facilitating and promoting e-commerce for tourism business; and (4) fostering a non-discriminatory approach to the provision of visitor facilities and services.

Thus, the specific aims of the project are as follows:

- 1) To produce significant value to increase mobility of visitors and demand for tourism goods and services in the APEC Region. Reducing barriers to trade in tourism services and investment in SMTEs will empower the SMTEs to be represented in the electronic marketplace and network with consumers and partners in APEC member economies.
- 2) To facilitate the amalgamation of independently-produced tourism products and ability to deliver seamless tourism experiences.
- 3) To help SMTEs achieve competitive advantages, establishing their niche as unique and authentic.
- 4) To make a contribution to APEC Trade and Investment Liberalisation and Facilitation (TILF).

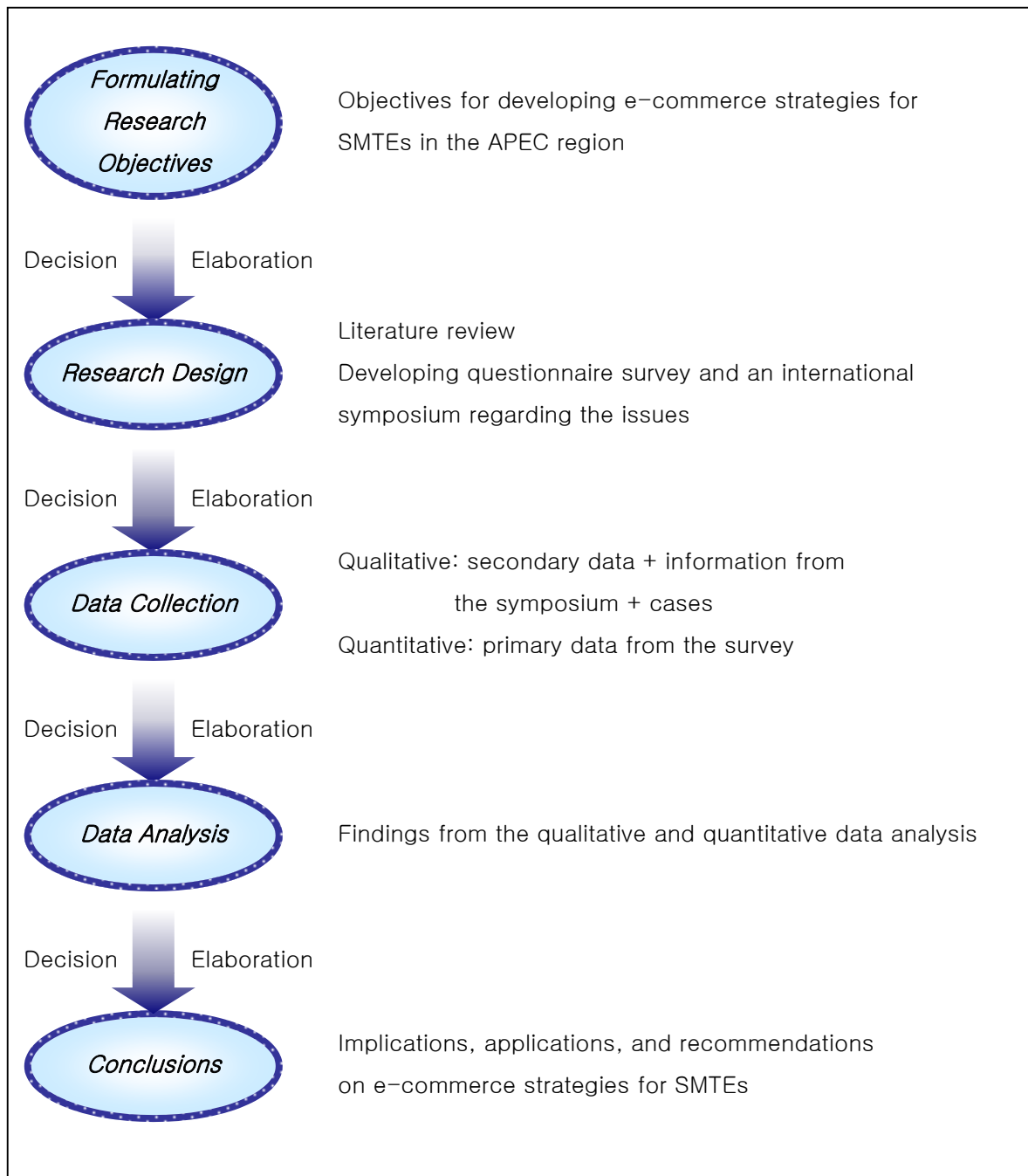
### 1.3 Methodology

This project employed five stages of research procedures as shown in **Figure 1-1**. First, the objectives of the research were formulated for developing e-commerce strategies for SMTEs in the APEC region. Second, research was performed to collect secondary data regarding e-commerce for SMTEs. Based on those data, contents of a web-based survey was developed to help understand challenges and opportunities faced by SMTEs in the APEC region. More specifically, the survey covered e-commerce activities, benefits, barriers, the important factors for the successful implementation of e-commerce, and SMTE performance in success factors.

Third, this project employed an expert opinion method, holding an International Symposium on 'E-commerce and Tourism in the APEC Region.' It was held in Feb. 2002 in Seoul, South Korea, with more than 50 experts sharing data and information, including practices and cases from several APEC member economies.

Fourth, findings were scientifically analyzed to measure importance and performance and to gather significant statistical data. Finally, implications, applications, and recommendations were suggested for e-commerce strategies which can be applied to SMTEs in the APEC region. **Figure 1-1** shows the research procedures for this project.

[Figure 1- 1] Project Research Procedures



#### 1.4 Definitions and Type of E-commerce

To understand e-commerce in the tourism industry, it is necessary to clarify what definitions and concepts of e-business or e-commerce are and what kinds of e-business

exist.

E-business has been defined as “improving business through connectivity” (<http://www.pricewaterhousecoopers.com>) and “the use of Internet technologies to improve and transform key business processes” (<http://www.ibm.com/e-business/overview>). There are four kinds of e-business in general.

**Business-to-Business.** Business-to-Business (B2B) activity refers to the full spectrum of e-commerce that can occur between two organizations. Among other activities, this includes purchasing and procurement, supplier management, inventory management, channel management, sales activities, payment management, and service and support.

**Business-to-Consumer.** Business-to-consumer (B2C) e-commerce refers to exchanges between businesses and consumers, such as those managed by Amazon, Yahoo, and Charles Schwab & Co.

**Consumer-to-Consumer.** Consumer-to-consumer(C2C) exchange involves transactions between and among consumers. These exchanges can include third-party involvement, as in the case of the eBay auction website.

**Consumer-to-Business.** Consumers can band together to present themselves as a buyer group in a consumer-to-business (C2B) relationship.

#### 1.4.1 Definition of Small and Medium-sized Enterprises (SMTEs)

SME Electronic Commerce Study (1999) reported that the definition of what constitutes the SMEs varies widely among APEC member economies.<sup>2</sup> This project defines SMTEs as enterprises that have up to 500 employees in order to find the common ground of the results.

### 1.5 Categorization of APEC Member Economies for This Project

The levels of e-business infrastructures in the APEC region are varied due to the wide diversity in economic and social development among 21 APEC member economies. It is not meaningful for this study to present e-commerce strategies to all

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<sup>2</sup> APEC SME Policy Level Group, APEC SME Indicators: *A Feasibility Assessment*, 1998.

APEC member economies uniformly, due to the extent of the digital divide. Accordingly, for this study, it was necessary to divide 21 APEC member economies into two groups: leader/contender group (L/C Group) and follower/laggard Group (F/L Group), as shown in **Table 1-1**.

[Table 1– 1] The Division of APEC Member Economies

Leader/Contender Group (L/C Group)	Follower/ Laggard Group (F/L Group)
U.S.A, Australia, Canada, Singapore, Hong Kong Chinese Taipei, Japan, New Zealand, South Korea	Chile, Malaysia, Mexico, Philippines, Peru, Russia, Thailand, China, Indonesia, Vietnam, Brunei Darussalam, Papua New Guinea

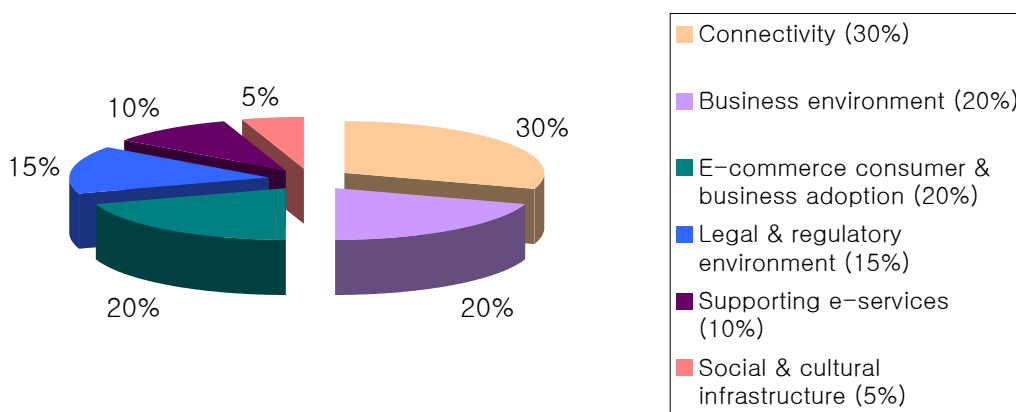
The division was based on the results of research conducted in 2001 by the Economist Intelligence Unit (EIU), a country and market research institute of the United Kingdom. The two groups are comprised of ‘e-business leaders,’ ‘e-business contenders,’ ‘e-business followers,’ and ‘e-business laggards.’ The EIU proposed the different levels of development as e-readiness indicators, which means the extent to which a country’s business environment is conducive to Internet-based commercial opportunities. EIU suggested that e-readiness depends on a wide range of factors from the sophistication of telecom infrastructure to the security of credit card transactions to the literacy rate of the population.

The group of ‘e-business leaders’ consists of countries that have most elements of e-readiness in place, though there may still be some concerns about regulatory safeguards. ‘E-business contenders’ are nations that have both a satisfactory infrastructure and a good business environment but lack some factors in the e-business equation. ‘E-business followers’ is the largest group and consists of countries that have begun to create an environment conducive to e-business but still need much improvement. The group of ‘e-business laggards,’ consists of nations that lag behind and face major obstacles to e-business growth, primarily in the area of connectivity.

To produce the rankings for countries in terms of e-readiness, the EIU uses the following six categories; connectivity (30%), business environment (20%), adoption of

e-commerce by consumer and business (20%), legal and regulatory environment (15%), supporting e-services (10%), and social and cultural infrastructure (5%), as presented in **Figure 1-2**.

[Figure 1– 2] Six Criteria in Evaluating E-commerce Infrastructure



\* Source: Economist Intelligence Unit, 2001

“Connectivity” means accessibility on the basis of adequate telecommunications and Internet infrastructure. “Business environment” takes into account the expected attractiveness of the general business environment over the next five years, covering criteria such as the strength of the economy, political stability, the regulatory environment, taxation, and openness to trade and investment. “Adoption of e-commerce by consumer and business” measures the extent of credit card ownership, the existence of secure, reliable and efficient electronic payment mechanisms, the ability of vendors to ensure timely and reliable delivery of goods, and the extent of website development by local firms. The extent of legal support for virtual transactions and digital signatures is considered as “legal and regulatory environment.” It is very important for business or industry to make use of “supporting e-services.” These include application service providers (ASPs), web-hosting firms, portals and other online intermediaries, as well as website developers and e-business consultants. For the future development of e-business, it is necessary for each country to have basic “social and cultural infrastructure,” including education and literacy of a population.

As shown in **Table 1-2**, ranging from 1 to 10 of e-readiness scores, ‘e-business leaders’ are the U.S., Australia, Canada, Singapore, and Hong Kong. The group of ‘e-



business contenders’ is comprised of Chinese Taipei, Japan, New Zealand, and South Korea. ‘E-business followers’ are Chile, Malaysia, Mexico, Philippines, Peru, and Thailand. Last are ‘e-business laggards’ China, Indonesia, and Vietnam. EIU points out that powerful economies are not only important for fostering e-business infrastructure, but high connectivity and communication infrastructure are also important to accommodating high levels of internet traffic.

[Table 1- 2] Levels of E-Commerce Infrastructure in the APEC Region

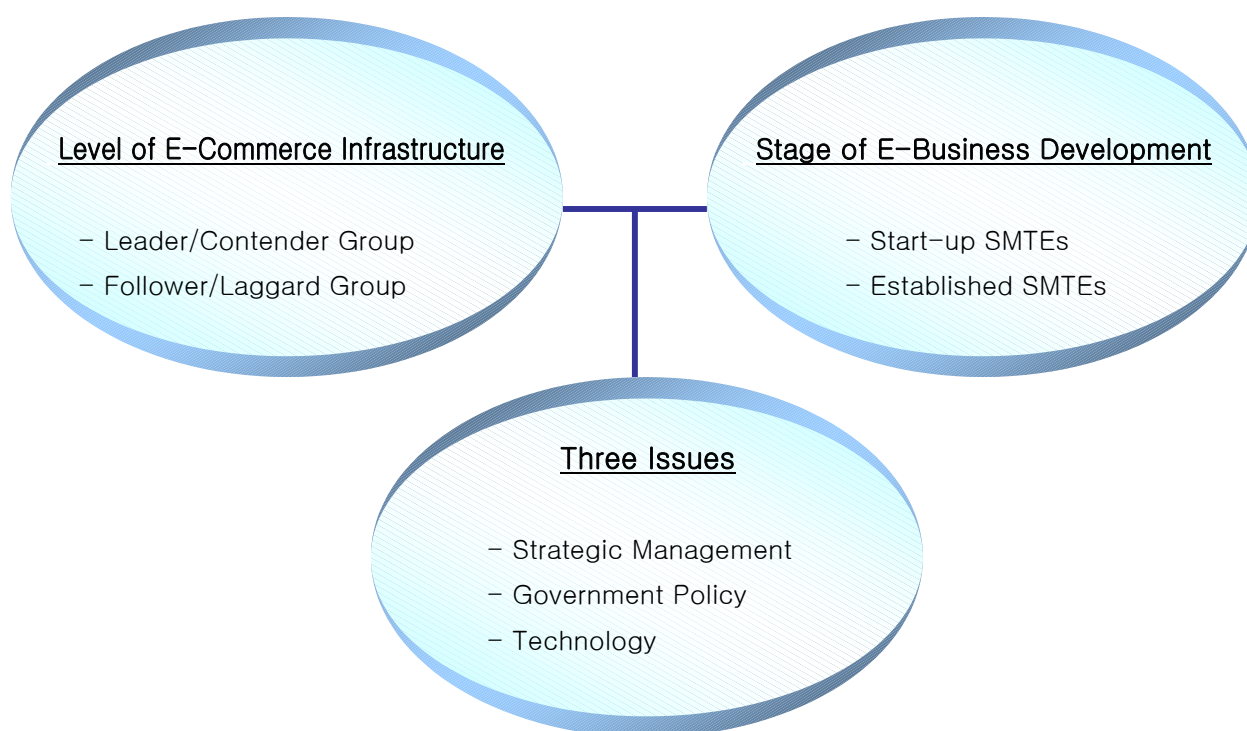
Category	Country	E-readiness score (of 10)
E-business leaders	U.S.A.	8.73
	Australia	8.29
	Canada	8.09
	Singapore	7.87
	Hong Kong	7.45
E-business contenders	Chinese Taipei	7.22
	Japan	7.18
	New Zealand	7.00
	South Korea	6.97
E-business followers	Chile	5.28
	Malaysia	4.83
	Mexico	4.78
	Philippines	3.98
	Peru	3.88
	Russia	3.84
	Thailand	3.75
E-business laggards	China	3.36
	Indonesia	3.16
	Vietnam	2.76

*\* Source: Economist Intelligence Unit, 2001*

## 1.6 Framework of E-commerce Strategies for SMTEs in the APEC Region

Dividing 21 APEC member economies into two groups based on EIU results, the project could simplify the context of e-commerce strategies for SMTEs in the APEC region and its research issues. The project explored three elements for e-commerce strategies of SMTEs: strategic management, government policy, and technology. According to different levels of e-business infrastructure among the APEC member economies, these three aspects should be approached strategically, keeping in mind the circumstances of each member economy. The stages of e-business development, ranging from start-up to established SMTEs, should also be considered. **Figure 1-3** presents the context of e-commerce strategies for SMTEs in the APEC region.

[Figure 1– 3] The Context of E-Commerce Strategies for SMTEs in the APEC Region



With respect to the three aspects of e-commerce strategies of SMTEs, the major research issues are as follows:

**❖ Strategic Management**

- 1) According to level of e-commerce infrastructure and stage of development, how will SMTEs compete with large firms?
- 2) What are appropriate business models for SMTEs?
- 3) How do SMTEs manage the Internet marketing elements?

**❖ Government Policy**

- 1) According to level of e-commerce infrastructure and stage of development, what should government policies focus on and deal with?
- 2) In what way does inter-governmental cooperation contribute to resolve the digital divides?

**❖ Technology**

- 1) According to level of e-commerce infrastructure and stage of development, what are the most technologically important issues? And what are possible strategies that SMTEs should formulate and implement?
- 2) As for the front office applications, which include marketing, CRM (Customer Relationship Management), distribution channels, and reservation and payment, what do managers of SMTEs consider?
- 3) As for the back office applications, which include ERP (Enterprise Resource Planning), SCM (Supply Chain Management), human resources, operational control, and product development, what do managers of SMTEs consider?
- 4) What are possible solutions for standardization of SMTEs? (e.g., real-time reservation system)

## 2. IT and Tourism in the APEC Region, and Previous Research

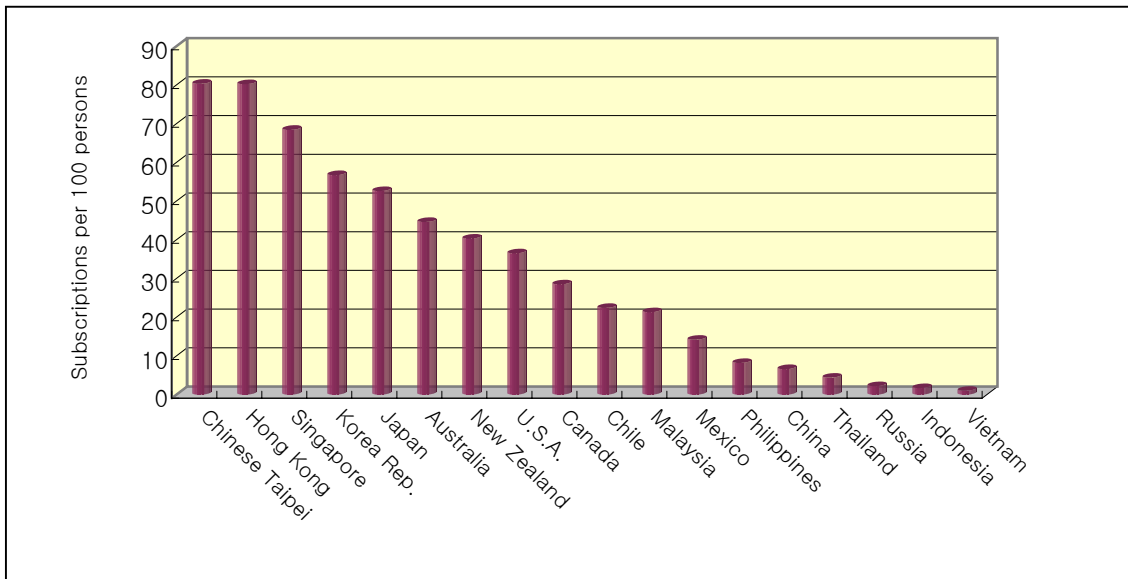
### 2.1 Status of Information Technology (IT) in the APEC Region

The status of IT and e-commerce among APEC members varies widely. However, the use of IT, including the Internet and e-business, in the Asia-Pacific region, is increasing steadily. IT can be defined as all the tools, skills, and knowledge needed to process information electronically. With respect to this definition, the current applications include the use of mobile telephones, personal computers, the Internet, and e-commerce infrastructure.

#### 2.1.1 Mobile Telephone Subscriptions

Ranked by mobile telephone subscriptions per 100 peoples in 2000, Chinese Taipei leads the region with 80.3 subscriptions, followed by Hong Kong (80.2), Singapore (68.4), Korea (56.7), and Japan (52.6). The Philippines, China, Thailand, Russia, Indonesia and Vietnam each have under 10 mobile telephone subscriptions per 100 peoples. **(Figure 2-1)**

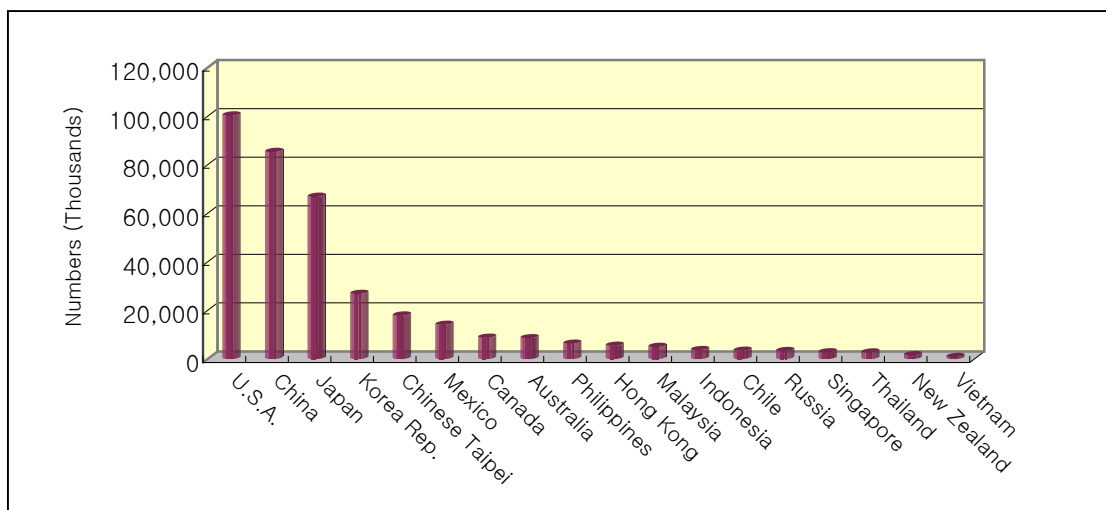
[Figure 2- 1] Mobile Telephone Subscriptions per 100 Persons (2000)



\* Source: ITU (2001). World Telecommunication Indicators

In total number of mobile telephone subscriptions, as presented in **Figure 2-2**, the U.S. has 100 million subscriptions, China 85 million, Japan 66 million, Korea 26 million and Chinese Taipei 17 million. Thailand has 2.6 million subscriptions, New Zealand 1.5 million while Vietnam has the lowest number of subscribers at 0.7 million.

[Figure 2- 2] Mobile Telephone Subscribers (thousands)(2000)

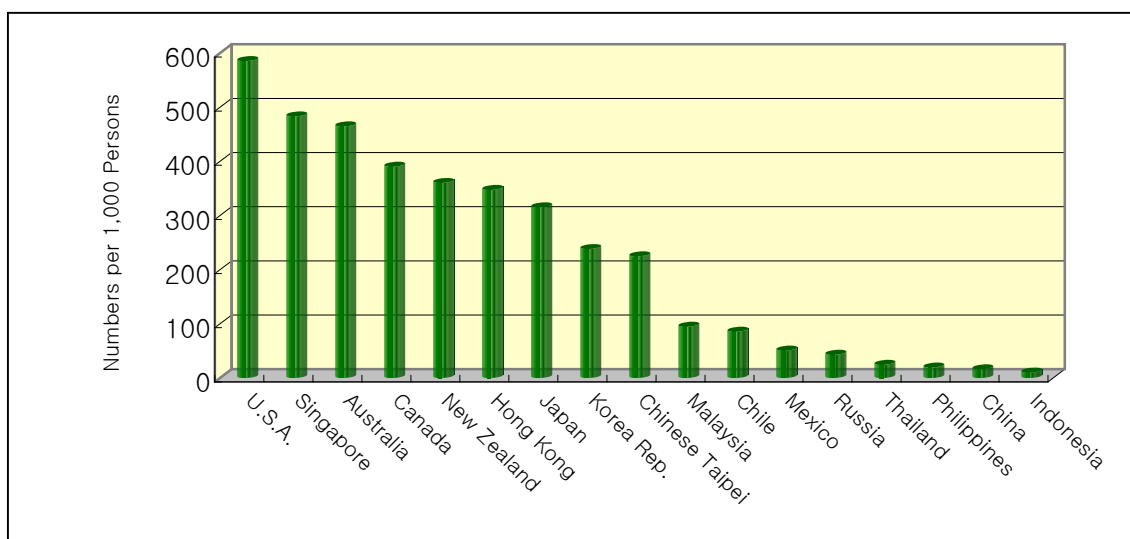


\* Source: ITU (2001). World Telecommunication Indicators

### 2.1.2 Use of Personal Computers

As shown in **Figure 2-3**, the number of personal computers per 1,000 persons is lead by the U.S with 585.2. Singapore and Australia follow with 483.1 and 464.6 respectively. Thailand has 24.3, Philippines 19.3, China 15.9 and Indonesia 9.9. (**Figure 2-3**)

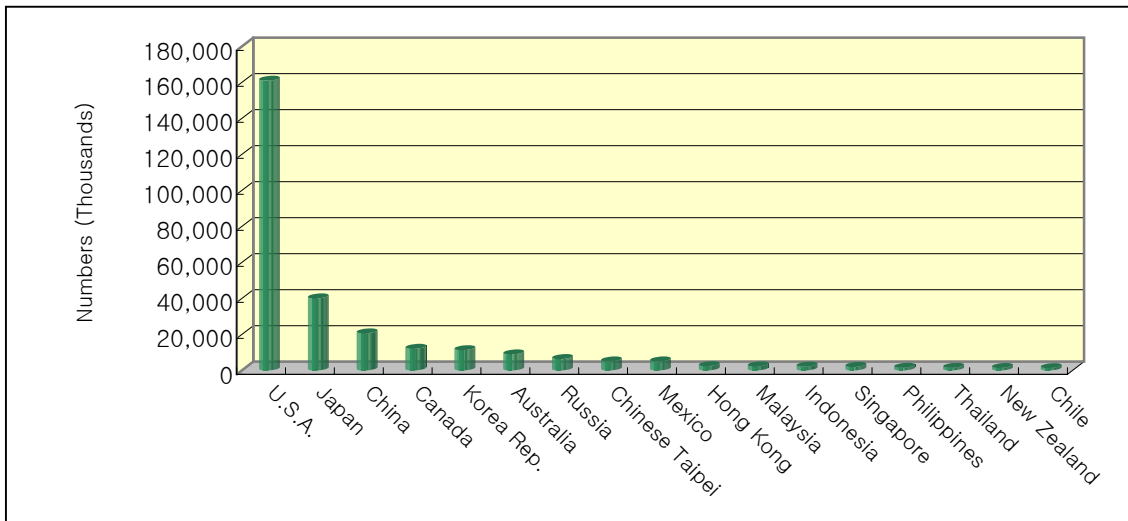
[Figure 2- 3] Personal Computers per 1,000 Persons (2000)



\* Source: ITU (2001). *World Telecommunication Indicators*

In total number of personal computers used, the U.S.A. reports 161 million, Japan 40 million, China 20 million and Canada 12 million, while some economies like Philippines, Thailand, New Zealand and Chile report below 2 million. (**Figure 2-4**)

[Figure 2- 4] Personal Computers in Use (2000)

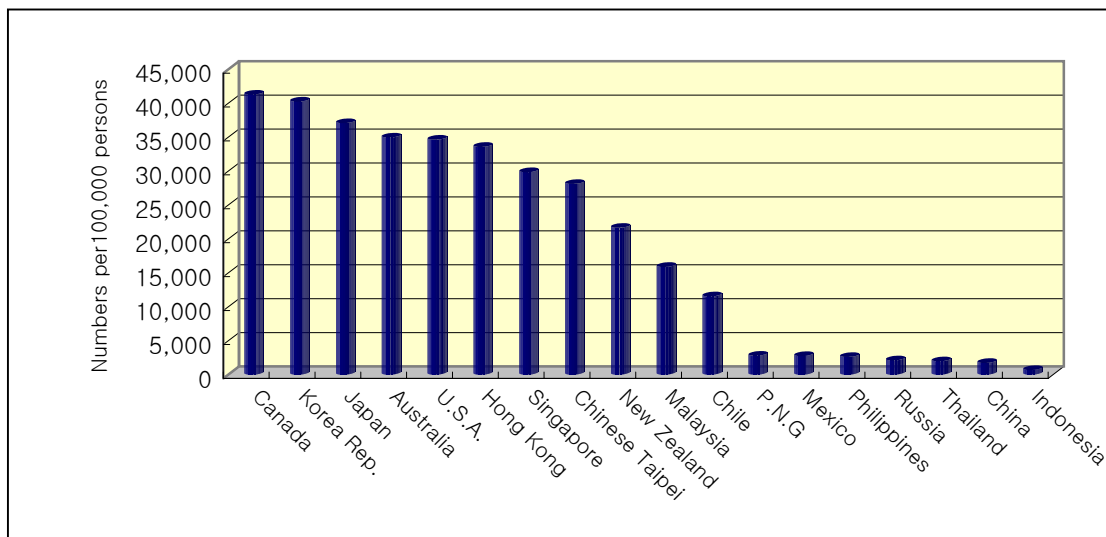


\* Source: ITU (2001). World Telecommunication Indicators

### 2.1.3 Internet Users

The number of Internet users per 100,000 people is highest in Canada with about 41,300 users. Korea has 40,300, Japan 37,100, Australia 35,000 and U.S.A. 34,700. The number is lowest in Indonesia (683.7), China (1,737) and Thailand (1,980). (Figure 2-5)

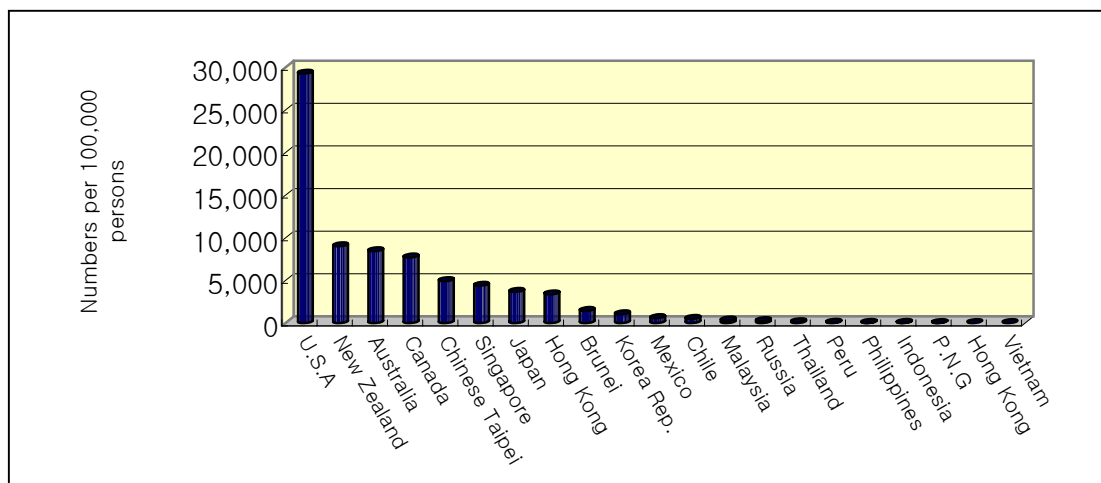
[Figure 2- 5] Internet Users per 100,000 Persons (2000)



\* Source: ITU (2001). World Telecommunication Indicators

In number of Internet hosts per 100,000 individuals, statistics show that the U.S.A. has about 29,300 hosts, New Zealand 9,000, Australia 8,400 and Canada 5,000, as shown in **Figure 2-6**. With under 20 Internet hosts per 100,000 persons are Indonesia (12.6), P.N.G (9.2), China (5.4) and Vietnam (0.2).

[Figure 2- 6] Internet Hosts per 100,000 Persons (2000)



\* Source: ITU (2001). *World Telecommunication Indicators*

#### 2.1.4 E-Commerce Infrastructure

A prominent feature of the 21 APEC member economies is the wide diversity in economic and social development, ranging from fully developed to developing economies. As shown in **Table 2-1**, the economies can be distinguished by GNI (Gross National Income) per capita. This seems to correlate strongly with other key indicators that reveal important differences in information infrastructure. Personal computer use, Internet use, and number of Internet hosts are fundamental for e-commerce in any economy.

Any effort to assess current or future electronic commerce in APEC must begin with the recognition of differences in information infrastructures among member economies. Level of development is also an important factor in determining the extent of the domestic and international market available for e-commerce and the success potential of any SME's domestically driven e-commerce strategy. The next chapter of this report will divide the APEC economies by development status, analyze the survey results and suggest an e-commerce strategy accordingly.



[Table 2– 1] GNI Per Capita and Key Information Infrastructure Indicators (2000)

APEC Member Economy	GNI Per Capita (US\$)	Personal Computer per 1,000 persons	Total Internet Users (thousands)	Total Internet Host	Population (million)
Japan	35,620	315.2	47,080	4,640,863	127
United States	34,100	585.2	95,354	80,566,947	282
Hong Kong, China	25,920	347.2	2,283	228,979	7
Singapore	24,740	483.1	1,200	175,799	4
Brunei	24,100	–	–	4,636	0.3
Canada	21,130	390.2	12,700	2,364,014	31
Australia	20,240	464.6	6,700	1,615,939	19
New Zealand	12,990	360.2	830	345,107	4
Korea Republic	8,910	231.1	19,040	483,700	47
Mexico	5,070	50.6	2,712	559,165	98
Chile	4,590	85.5	1,757	74,708	15
Malaysia	3,380	94.5	3,700	68,248	23
Peru	2,080	–	–	10,705	26
Thailand	2,000	24.3	,200	63,447	60
Russian Federation	1,660	42.9	3,100	326,523	146
Philippines	1,040	19.3	2,000	19,448	76
China	840	15.9	22,500	70,391	1,262
Papua New Guinea	700	–	135	444	5
Indonesia	570	9.9	1,450	26,727	210
Vietnam	390	–	–	179	79

\* Source: World Bank ([www.worldbank.org](http://www.worldbank.org))

## 2.2 Tourism Status in the APEC Region

### 2.2.1 International Arrivals and Tourism Receipts in APEC Economies

In 1999, a total of \$455 billion was generated by selling tourism services to international tourists worldwide. This represents an average annual growth rate of 6.3% when compared with the \$263.4 billion generated in 1990. However, if domestic tourism and all travel are included, global demand for tourism and travel services is expected to amount to \$4,475 billion for 1999. Forecasts made for 2010 predict total international tourism receipts of \$1,325 billion and a global tourism demand of \$8,972 billion. In 1999, developing countries managed to capture 29% of international tourism receipts.

**Table 2-2** shows the performance of APEC tourist destination countries. Growth rates of international tourism receipts were on average 50 % higher in the developing countries included in **Table 2-2** than those of developed countries. This is reflected in a general shift of tourism arrivals towards developing country destinations.

[Table 2– 2] International Arrivals and Tourism Receipts

Economy	Inbound Tourists 1999 (thousands)	Outbound Tourists 1999 (thousands)	International Tourism 1999 (\$ millions)	International Tourism Expenditures 1999 (\$ millions)
United States	48,491	68,390	74,881	59,351
Canada	19,367	19,641	10,171	11,345
Mexico	19,043	11,076	7,223	4,541
Russia	18,493	5,627	7,510	7,434
Hong Kong	11,328	56,400	7,210	...
Thailand	8,651	2,193	6,695	1,843
China	8,432	8,222	14,098	10,864
Malaysia	7,931	3,285	3,540	1,973
Singapore	6,958	8,588	5,974	2,749

Indonesia	4,728	2,532	4,710	2,353
Republic of Korea	4,660	4,342	6,802	3,975
Australia	4,459	6,194	7,525	5,792
Japan	4,438	23,787	3,428	32,808
Chinese Taipei	2,411	8,788	3,571	5,635
Philippines	2,171	1,777	2,534	1,308
Vietnam	1,782	297	...	...
New Zealand	1, 607 <sup>1</sup>	1,804	2,083	1,493
Chile	1,622	1,103	893	806
Peru	...	521	890	443
Papua New Guinea	67	61	76	53
Brunei	...	278	...	...

\* Source: World Tourism Organization (2001. 9)

*WTO, Yearbook of Tourism Statistics 1995-1999, Vol. 2-53 ED (2001)*

<sup>1</sup> International visitor arrivals

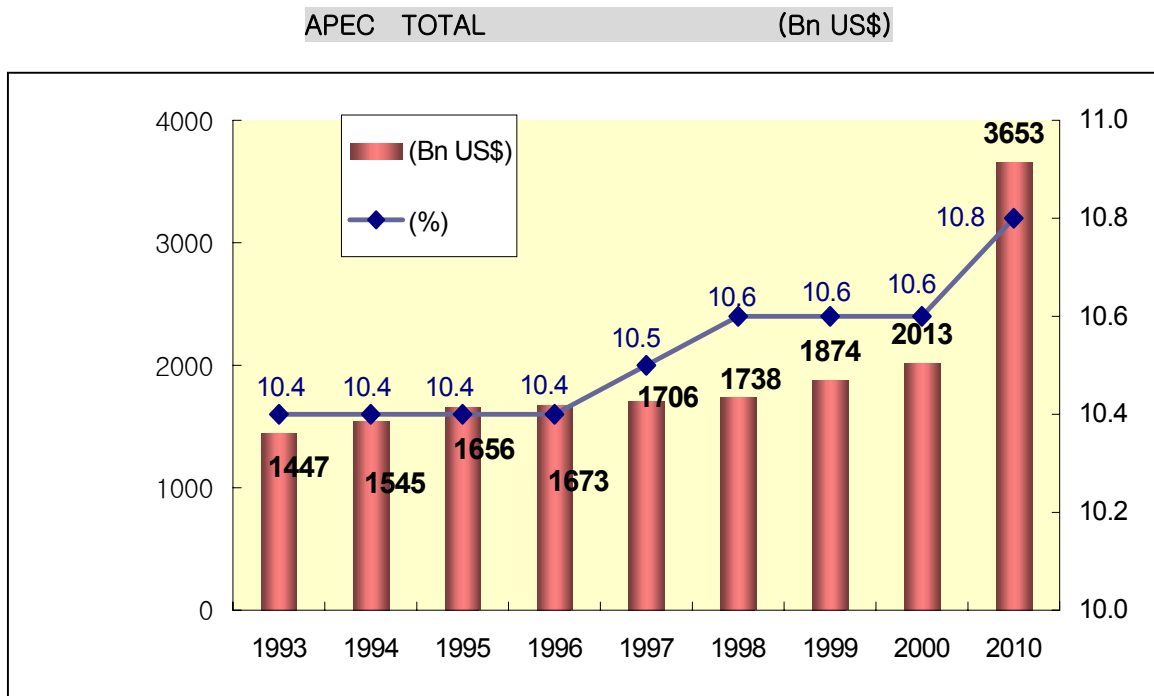
## 2.2.2 Tourism Economy GDP in the APEC Region

In 1998, APEC travel and tourism was expected to contribute \$1.7 trillion (direct and indirect) or 10.6% of total Gross Domestic Product (GDP) to the APEC economies. Over the next twelve years, this contribution is expected to grow 3.5% per annum to \$3.7 trillion (**Figure 2-7**).

Between 1989 and 1992, APEC travel and tourism lost nearly two thirds percentage points of GDP contribution, reaching its lowest level of 10.3% of total GDP for the period of study. Following the additional set back from the current Asian financial crisis, it is expected to take another twelve years before APEC travel and tourism regains its previous GDP contribution level of 10.8%.

From a global perspective, travel and tourism contribution to gross domestic product is expected to total 11.6% in 1998, growing to 12.5% in 2010.

[Figure 2- 7] Gross Domestic Product and % of Total from Travel and Tourism



**Table 2-3** shows the percent of total Gross Domestic Product (GDP) in APEC economies that Travel and Tourism occupied in 2000. The top five member economies include Thailand, Australia, Malaysia, Singapore & Hong Kong.

[Table 2- 3] Travel and Tourism Economy GDP

APEC Member Economies	Percent of Total
Thailand	13.9%
Australia	13.1%
Malaysia	12.9%
Singapore	12.4%
Hong Kong	12.3%
Canada	12.1%
New Zealand	12.1%
United States	11.5%
Philippines	9.7%

Japan	9.5%
Chile	9.4%
Indonesia	9.2%
China	8.6%
Papua New Guinea	7.9%
Brunei	6.8%
Republic of Korea	6.8%
Chinese Taipei	5.7%
Mexico	5.6%

\* Source: World Travel & Tourism Council (<http://www.wttc.org>)

### 2.2.3 On-line Reservation Ranking of Tourism Company

According to **Table 2-4**, on-line agents are the most prominent representative of e-tourism business. The large global airlines are in a close second place. Reflecting consumers' great thirst for information, on-line information resources rank third, followed by several accommodation categories and car rental. Purchase of tourism products through Internet in developed countries is increasing dramatically. Travel, transport and hotel reservations, as a group, occupied the largest category of Internet transactions in 1999, accounting for 38.5% of all on-line sales. The major portion of these transactions came from the U.S.A. During 2001, on-line booking for airfare, hotel reservations or car rentals was conducted by almost half of all Americans. Embracing digital communication and information technology is no longer an option, but a necessity (UNCTAD, 2001).

[Table 2- 4] Ranking by Type of Company

Rank	Company URLs surveyed per category	Type	Composite unique visitors (thousand)	Top Site Within Category
1	55	On-line Agents	24,688	Travelocity.com
2	45	Airlines	22,686	Southwest.com
3	69	Resources/Reviews	16,445	Milesource.com

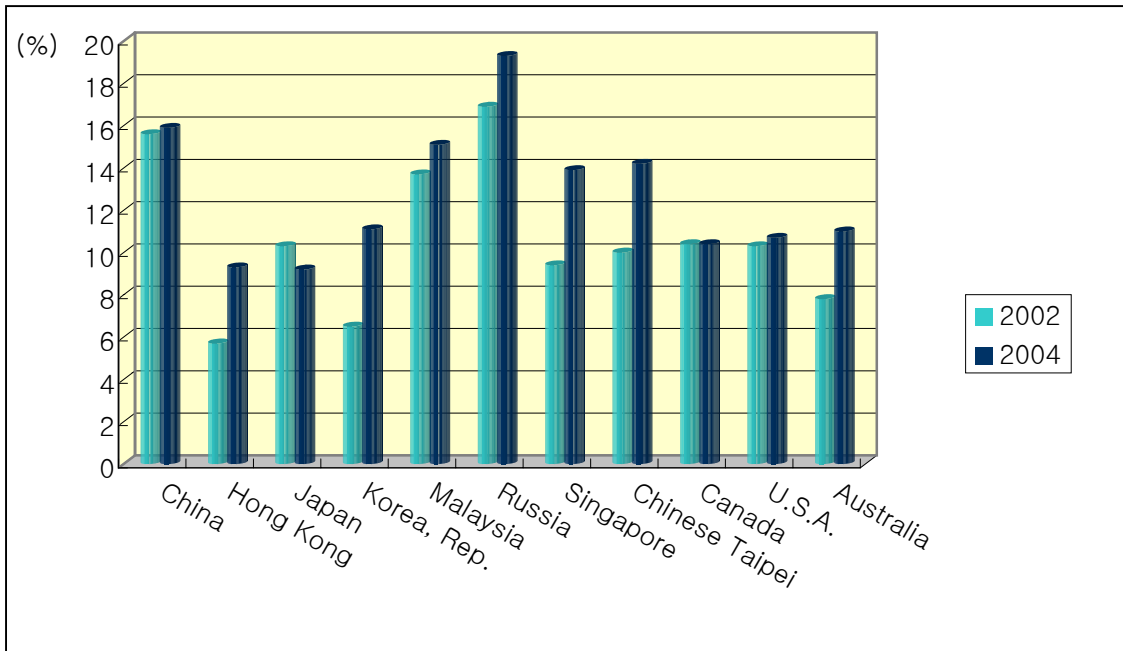
4	92	Hotels/Resorts	12,011	Basshotels.com
5	179	Destinations	11,397	Vegas.com
6	48	Hotel Booking	8,648	Travelnow.com
7	43	Vacations & Tours	5,806	Deltavaactions.com
8	62	Transport	5,256	Amtrack.com
9	13	Rental Cars	5,142	Hertz.com
10	12	Cruise Lines	2,648	Ncl.com
11	6	Adventure Travel	1,476	Gorp.com
12	9	Timeshares	1,343	Rci.com
13	8	Bed & Breakfast	925	Virtualcities.com

\* Source: Top9.com (March 2001: <http://www.top9.com>)

#### 2.2.4 Prospect of Tourism IT Market

The Asia-Pacific region makes up the biggest portion of the IT industry with 62% of world IT market volume. According to the Gartner Group, the IT market in the Asia-Pacific region is expected to increase 11% yearly from 2001 to 2004 if the world economy grows from 3.5 % to 3.7 %. It is expected that the USA and Japan will maintain a 10% market increase, and IT markets in China, Russia and Indonesia will increase as much as 15%. IT markets in Korea, Hong Kong and Australia are expected to increase by 9% to 10%. According to IDC, an IT industry research institute, despite the worldwide economic slowdown, the Asia Pacific region, especially China, is expected to grow significantly within the next two to three years. A report forecasts indicates that China's IT marketing is showing the fastest growth and it is expected to increase ten fold from \$ 0.9 billion in 2000 to \$ 9 billion in 2005. Communication, banking and public sector service fields will help lead the growth of the IT industry.

[Figure 2- 8] Prospect of IT Market Growth Rate in the Asia Pacific Region

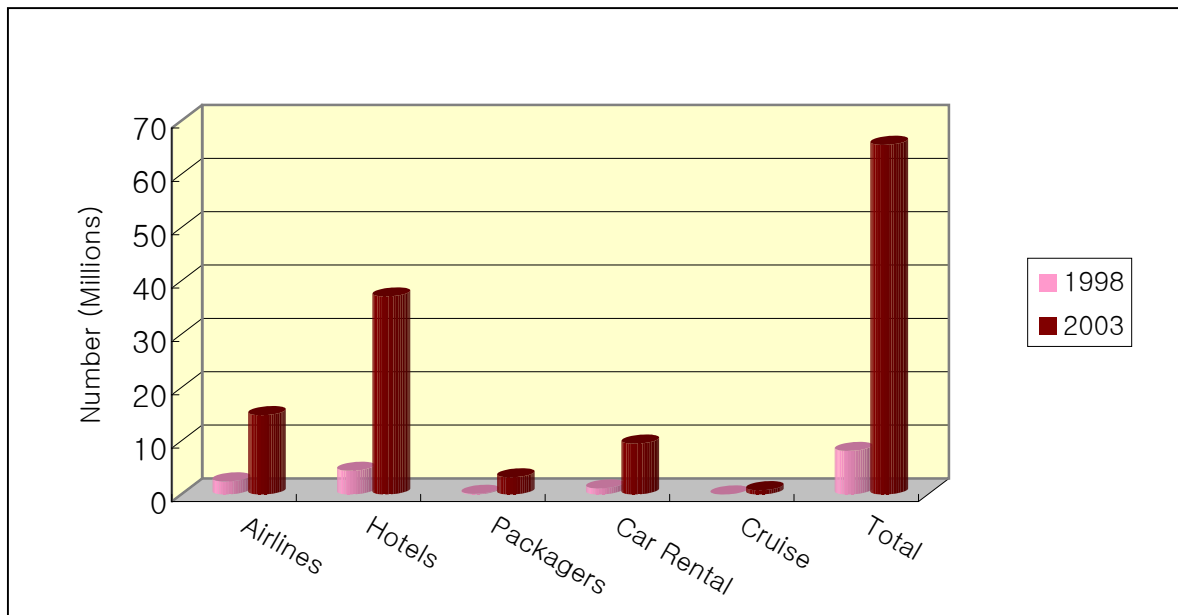


\* Source: Gartner Group, *Worldwide IT Market Databook*, 2000 (Sep. 2000)

Travel and tourism is a fast growing economic sector and its growth is expected to continue for the next decade. E-commerce for tourism is becoming an important part of the tourism business. Many research agencies forecast that the travel industry will become the largest industry on the net.

According to Forrester Research, the number of online reservations for holiday travel is expected to increase from 8 million, recorded in 1998, to 65 million in 2003. The number of hotel reservations will be highest, followed by airlines, car rental, tour packages, and cruise reservations (**Figure 2-9**).

[Figure 2– 9] The Number of Online Reservation Markets in the Tourism Industry Worldwide



\* Source: Forrester Research, 1999. (<http://www.forrester.com>)

### 2.3 Review of Previous Research

The study of e-commerce in the tourism industry has emerged as a ‘frontier area’ for information technology. The literature on e-commerce of small and medium sized tourism enterprises was critically reviewed with a view to developing a framework suitable for this project.

OECD (2000) revealed that the advent of Internet-based electronic commerce offered considerable opportunities for firms to expand their customer base, enter new product markets and rationalize their business. In case of every tourism destination and supplier, large and small, WTO (2001) also brought up that electronic business on the platform of the Internet offered the opportunity to undertake their business in new and more cost-effective ways. However, adoption of information and communication technologies (ICT) is only part of the story (OCED 2000, WTO 2001, UN 2001). In particular, network access costs, dissemination of information on electronic commerce, training, skill development and human resources provide big challenges for smaller companies. The difficulty in addressing issues of trust and confidence also makes SMEs more vulnerable than large firms to problems linked to authentication/certification, data security and confidentiality and the settling of commercial disputes (Buhalis, D. & Schertler, W. 1999, OECD, 1999).



Most research suggested that government played an important role in facilitating the use of electronic commerce for SMEs and in increasing their ability to reap the benefits, (e.g. via awareness building and training programmes) and governments in partnership with the private sector should establish a more comprehensive and consistent policy approach to SMEs and electronic commerce, and apply evaluation mechanisms to assess what works and does not work (UN 2001, OECD, 2000, Korea Information Society Development Institute 2000, APEC-TEL 1999).

It was worthwhile to mention that some research made specific suggestions for eliminating obstacles to SME e-commerce (Korea Information Society Development Institute 2000):

- Enhance perception about e-commerce by SMEs
- Increase government role and effort for case excavation and PR activity
- Make a common effort to educate user in e-commerce
- Improve safety and security of network and Internet
- Build the legal environment
- Develop of certification technology and system
- Take steps against credit card illegality
- Assure safe and reliable payment methods
- Develop human resources
- Support building of SME website
- Build distribution channels
- Create the e-government
- Create information center and support network for SME

These suggestions was consistent with can be applied to results done by the Asia-Pacific Economic Cooperation (1999)'s study "SME Electronic Commerce Study." In particular, APEC (1999) recommended each member economies to follow actions individually and collectively.

## 2.4 Implications from Previous Research

This chapter draws implications from review of previous research. Suggestions will be proposed in 3 parts; strategic management, technology and government policy.

## ***Strategic Management***

### **Eliminating obstacles**

- There are many kinds of obstacle to implementing for SME e-commerce. For efficient adoption of e-commerce, eliminating the obstacles is necessary absolutely.
- Some suggestions for minimizing obstacles to e-commerce are; Perception enhancement of SMEs regarding e-commerce, common effort to educate users about e-commerce and increase demand, safety and security of network and Internet, and building a legal environment

### **Building trust and confidence of e-consumers**

- Trust and confidence of users of e-commerce are critical to maintaining successful e-commerce.
- Companies are less concerned about security once they become engaged in transaction-related e-commerce and take appropriate security measures. As mentioned in the 'building trust with customers' section, managers should maintain user trust through various measures, such as encryption technology, digital certificates, secure commerce servers, and authentication, to ensure confidentiality of personal information.

### **Association and Integration**

- Groups of small firms are entering into electronic partnerships with large firms, which are their customers or suppliers, or with industry-wide associations. This works best when e-commerce is used proactively as part of a set of strategies to increase SMEs' competitiveness in global markets.
- The development of a Destination Integrated Computer Information Reservation Management System will enable destinations to develop networks of SMTEs and promote them under their brand name. This will encourage SMTEs to stop competing so strongly fiercely at the destination level, and to develop networks of wealth creation and mutual benefits in order to deliver seamless tourism products and to compete against remote destinations and SMTEs.
- E-commerce can also facilitate business partnerships. In some cases, the Internet can be used to form closer partnerships with complementary businesses, either domestic or international. For example, SMEs may be able to overcome high costs of entry and

concerns about legal and security issues by participating in web-based networks of buyers or sellers.

#### Enhancing the domestic market for electronic commerce

- This might include measures to ensure consumer and supplier access to the Internet and to appropriate electronic payment systems, the enhancement of consumer protection, and the maintenance of business ethics and good business practice in electronic commerce.

#### Delivering business-friendly information

- Providing information that is “business-friendly” will facilitate the implementation of e-commerce. If the objective is to achieve greater diffusions of e-commerce in order to improve and transform competitiveness, efforts to address awareness and familiarity and to shorten the learning curve should be practical. The information should be user-focused and have maximum reach and convenience.

### ***Technology***

#### Constituting Elements of E-Commerce

- In comparison to other communication media, the Web is characterized by the combination and integration of different functional properties.
- The feature indicates the breadth of design parameters from different domains, such as business, law, telecommunication and especially, technology, that have to be aligned and negotiated among the participants.

#### Outsourcing technology solutions

- By outsourcing to an expert provider’s managed services operation, they are securing a scalable infrastructure to support their expansion plans. They can benefit from advanced hardware, software upgrades, year-round maintenance and help desk support without major upfront capital investment. Solutions provided by technology partners enable them to cope with issues such as reduced margins and rapidly changing technology and distribution opportunities. In short, outsourcing is a strategy by which tours operators may secure the best technology on the most convenient terms.

#### Connecting to major reservation systems

- Clearly operating in an outsourcing mode can also open the door to integrating traditional Global Distribution Systems (GDSs). Indeed, few SMTEs take this opportunity seriously, preferring to operate their own reservation infrastructure in many instances. Many options are opened, especially into an integrated fashion, along the trend of outsourcing.

#### ***Government Policy***

##### Developing the telecommunications infrastructure

- To improve business and consumer access to the Internet and to electronic commerce. This action was identified to be of particular importance for SMEs from developing economies.

##### Enhancing the climate for investment

- Including measures to attract and retain venture capital and investment in SMEs with potential for rapid growth. SMEs that could benefit from this type of investment include new start up e-business firms and other more traditional enterprises that are now implementing electronic commerce strategies.

##### Addressing security issues

- To build trust and confidence in the electronic marketplace, including measures to ensure the authenticity of electronic documents, and the privacy and confidentiality of personal and corporate records.

##### Raising business awareness of electronic commerce

- Including measures to promote greater awareness of the opportunities and benefits of electronic commerce for SMEs, such as training and skills development programs, and the distribution of best practices.

## 2.5 Web Site Evaluation

### 2.5.1 Indicators for Web Site Evaluation

In order to understand developments in e-commerce, how e-commerce is applied to businesses and what implications the trend in e-commerce has, this report evaluated

20 web sites. APEC member economies are divided into two groups: e-commerce Followers/Laggards (F/L) and Leaders/Contenders (L/C). Selected sites of Destination Management Organizations (DMOs) and Small and Medium-Sized Tourism Enterprises (SMTEs) were evaluated. The indicators used for evaluation are divided into seven categories based on the ‘Internet marketing elements (7Cs)’ in **Figure 2-10**.

[Figure 2- 10] Internet Marketing Elements (7Cs)



\* Source: Rayport and Jaworski, 2002

Detailed information on each indicator is shown below and specific indicators for each of seven categories are shown in **Table 2-5**.

- Content: Text, pictures, sound, and video that the website contains
- Community: The ways that the site enables user-to-user communication
- Customization: Site's ability to tailor itself to different users
- Communication: The ways the site enables site-to-user, user-to-site, or two-way communication
- Connection: Degree that site is linked to other sites
- Commerce: Site's capabilities to enable commercial transactions
- Context: Site's layout and design

[Table 2- 5] Indicators for Web Site Evaluation

Dimension	Indicators
<b>Content</b>	Essential travel information (money, customs, clothing, shopping...)
	Itineraries/tour information
	Maps
	On-line security transactions information
	Product search
	Quality assurance from governing body
<b>Community</b>	User-to-user communication service
<b>Customization</b>	Multi-language service
	Tailored multi-language service
	Personalized service
	Search function
<b>Communication</b>	E-mail
	Q&A, FAQ
	Call center
	Contact details
<b>Connection</b>	Links to other corporate sites
	Links to related sites
<b>Commerce</b>	Booking facilities
	On-line registration
	On-line shop
	Security
<b>Context</b>	Sitemap
	Top menu
	Simplicity
	Multimedia contents

### 2.5.2 Destination Management Organization (DMO) Web Site Evaluation

Generally, it was found to be no big differences in terms of the 7C indicators between the L/C and F/L groups. Considering the overall features of the web sites, the contexts of DMO web sites were satisfactory in both groups. In providing multimedia contents, however, DMOs in the L/C group performed much better. It was revealed that insufficient support was given to the commerce category. Some might argue that this is natural since DMOs are not commercial organizations. However, it is a challenge that must be addressed soon to deliver enhanced convenience to tourists and to better support tourism enterprises in e-commerce.

[Table 2- 6] DMO Web Site Evaluation (Leader/Contender Group)

		Korea (www.tour2korea.com)	Singapore (www.newasia-singapore.com)	Japan (www.jnto.go.jp)	Hong Kong (www.hkta.org)	Canada (www.travelcanada.ca)
<b>Content</b>	Essential travel information (money, customs, clothing, shopping...)	○	○	○	○	○
	Itineraries/tour information	○	○	○	○	○
	Maps	○	○	○	○	○
	On-line security transactions information		○		○	
	Product search		○	○	○	
	Quality assurance from governing body					
<b>Community</b>	User-to-user communication service	○	○		○	○
<b>Customization</b>	Multi-language service	○	○	○	○	○
	Tailored multi-language service	○	○		○	○
	Personalized service		○		○	○
	Search function	○	○	○	○	○
<b>Communication</b>	E-mail	○	○		○	○
	Q&A, FAQ	○	○		○	○
	Call center	○	○			
	Contact details	○	○		○	○
<b>Connection</b>	Links to other corporate sites	○	○	○		○
	Links to related sites	○	○	○	○	○
<b>Commerce</b>	Booking facilities	○	○	○		
	On-line registration		○			○
	On-line shop					
	Security		○		○	
<b>Context</b>	Sitemap	○	○		○	○
	Top menu	○	○	○	○	○
	Simplicity	○	○	○	○	○
	Multimedia contents	○	○		○	○

[Table 2– 7] DMO Web Site Evaluation (Follower/Laggard Group)

		<b>Brunei</b> (www.brunei.bn)	<b>Vietnam</b> (www.vietnamtourism.com)	<b>Philippines</b> (www.tourism.gov.ph)	<b>China</b> (www.cnta.com)	<b>Malaysia</b> (www.tourism.gov.my)
<b>Content</b>	Essential travel information (money, customs, clothing, shopping...)	○	○	○	○	
	Itineraries/tour information	○	○	○	○	○
	Maps		○			
	On-line security transactions information					
	Product search		○		○	
	Quality assurance from governing body					○
<b>Community</b>	User-to-user communication service					○
<b>Customization</b>	Multi-language service		○		○	○
	Tailored multi-language service				○	○
	Personalized service		○		○	
	Search function	○	○		○	
<b>Communication</b>	E-mail	○	○	○	○	○
	Q&A, FAQ	○				○
	Call center			○	○	○
	Contact details		○	○	○	○
<b>Connection</b>	Links to other corporate sites	○	○	○		
	Links to related sites	○	○	○	○	
<b>Commerce</b>	Booking facilities		○			○
	On-line registration					
	On-line shop					
	Security					
<b>Context</b>	Sitemap					○
	Top menu	○	○	○	○	○
	Simplicity	○		○	○	○
	Multimedia contents					



### 2.5.3 SMTE Web Site Evaluation

Overall, SMTEs have well-constructed websites in terms of communication and context. Portal sites in particular excelled in communication and context. Most of the sites were found to need improved functions of community, customization, connection, and commerce. Although the sites were found to be doing well in terms of context, they were not offering sitemaps, which are essential for customer convenience. Multimedia contents were also not being offered by most sites.

For SMTEs, commerce is the most important function. Therefore, they have to make ‘the commerce’ function fast and convenient as possible for users. Community is an important function in that it facilitates information exchange among customers, word-of-mouth advertising, and repeat purchasing. It is not easy to induce active participation in communities by customers. Community services must be enhanced on the web sites.

Websites selling tourism-related products should consider implementing one-stop services like portal sites given the fact that customers want not only simple, fragmented information about products, but also other necessary information on tourism destinations such as tourism resources, transportation modes, and visas.

[Table 2- 8] Web Site Evaluation of SMTEs (Leader/Contender Group)

		<b>Zeustours</b> (www.zeustours.com)	<b>Chanbrothers.com</b> (www.chanbrothers.com)	<b>Go Bush Tours</b> (www.gobush-tours.com.au)	<b>Snowy Mountains Accommodation</b> (www.snowaccom.com.au)	<b>Gold Tour</b> (www.gold-tour.com)
<b>Content</b>	Essential travel information (money, customs, clothing, shopping...)		○			○
	Itineraries/tour information	○	○	○	○	○
	Maps	○	○			
	On-line security transactions information		○			○
	Product search		○			
	Quality assurance from governing body					
<b>Community</b>	User-to-user communication service		○			○
<b>Customization</b>	Multi-language service					
	Tailored multi-language service					
	Personalized service	○	○			
	Search function		○			
<b>Communication</b>	E-mail	○	○	○	○	○
	Q&A, FAQ		○			
	Call center	○	○	○	○	○
	Contact details	○	○	○	○	○
<b>Connection</b>	Links to other corporate sites		○	○		○
	Links to related sites		○	○		○
<b>Commerce</b>	Booking facilities	○	○		○	○
	On-line registration		○			○
	On-line shop					
	Security		○			○
<b>Context</b>	Sitemap					
	Top menu	○	○	○	○	○
	Simplicity	○	○	○	○	○
	Multimedia contents					○

[Table 2– 9] Web Site Evaluation of SMTEs (Follower/Laggard Group)

		<b>Maribagoblu water Beach Resort</b> (www.bluwat esort.com)	<b>All Asiatravel Co., Ltd</b> (www.vietnamto urism.com/allasi a)	<b>Safari Tours &amp; Travel</b> (www.mana dosafaris.co m)	<b>Patong Bayshore Hotel</b> (www.phuket.co m/patong/baxsh ore.htm)	<b>Genting Bayu Chalet</b> (Gbayuc.tioma n.tripod.com)
<b>Content</b>	Essential travel information (money, customs, clothing, shopping...)			○		
	Itineraries/tour information	○	○	○		○
	Maps	○		○		
	On-line security transactions information					
	Product search					
	Quality assurance from governing body					
<b>Community</b>	User-to-user communication service					
<b>Customization</b>	Multi-language service					
	Tailored multi-language service					
	Personalized service				○	
	Search function					
<b>Communication</b>	E-mail	○	○	○	○	○
	Q&A, FAQ					
	Call center	○	○	○	○	○
	Contact details	○	○	○	○	○
<b>Connection</b>	Links to other corporate sites			○		
	Links to related sites			○		
<b>Commerce</b>	Booking facilities		○		○	○
	On-line registration					
	On-line shop					
	Security			○	○	
<b>Context</b>	Sitemap					
	Top menu	○	○	○	○	○
	Simplicity	○	○	○	○	○
	Multimedia contents					

## 3. Analysis and Implications of Survey Results

### 3.1 Symposium

A symposium was held in Seoul, South Korea in February, 2002 to investigate principles, processes, and policies of e-commerce strategies for SMTEs, and to identify best practices on e-commerce strategies for SMTEs in APEC member economies. Furthermore, the symposium examined successful e-business models and internet marketing strategies for SMTEs, and value chain models for e-commerce strategies of SMTEs. Discussions and suggestions from the symposium provided implications and several cases on SMTE e-commerce in the APEC region. Main presentations and texts for the symposium appear in **Appendix II**.

### 3.2 Survey Methods and Instruments

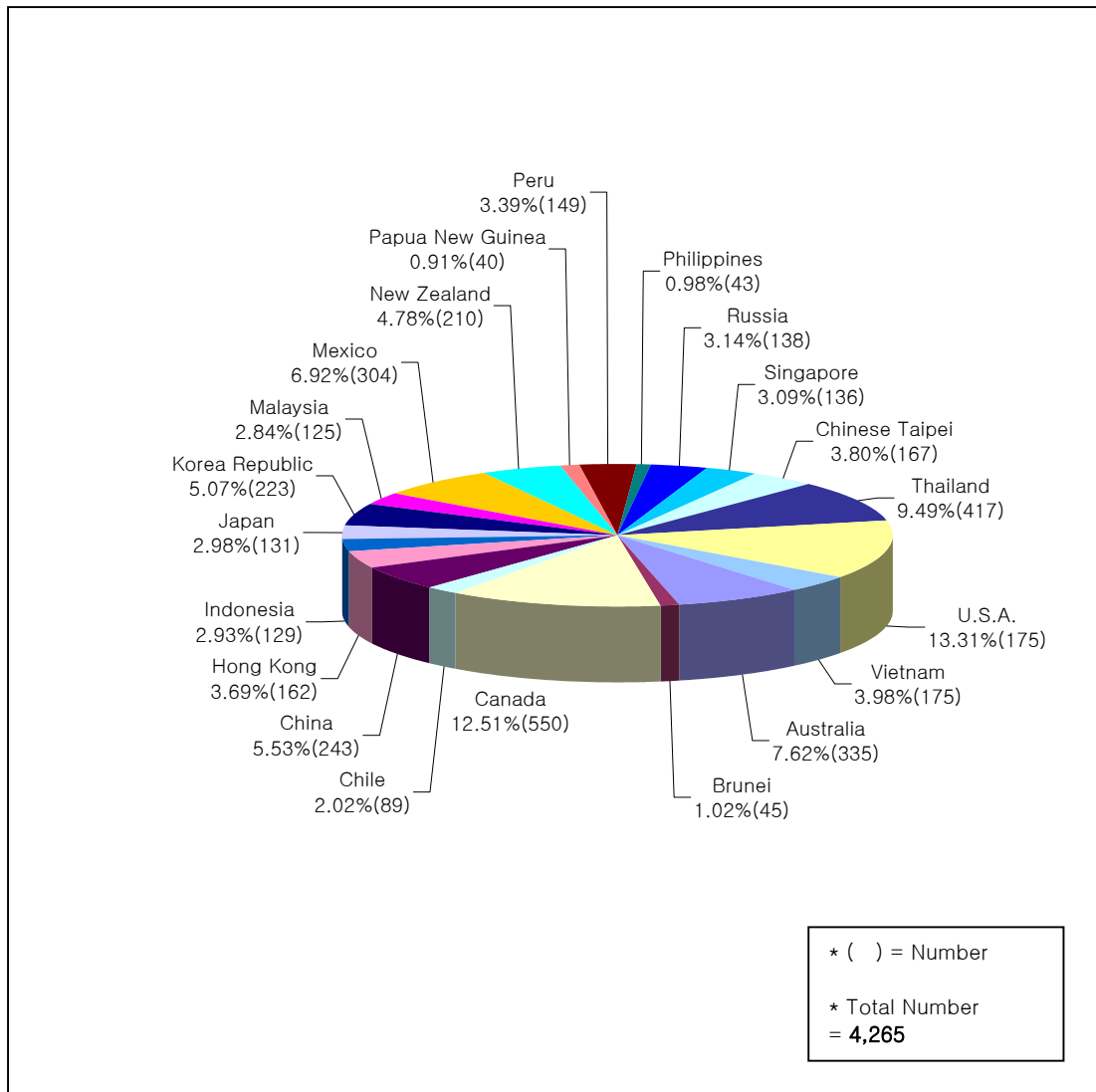
A survey instrument was prepared from implications of previous studies and posted on the World Wide Web (**Appendix I**). The survey was located at <http://www.ktri.re.kr/e-commerce.htm>. Respondents were asked to indicate on a five-point Likert scale benefits, barriers, importance and performance of e-commerce for small and medium-sized tourism enterprises (SMTEs).

The survey was distributed by e-mail to about 4,000 SMTEs and national tourism organizations (NTOs) in the APEC region. The survey samples were selected from lists of APEC-TWG contact points, PATA member directory and lists of selected SMTEs recommended by several APEC member economies.

### 3.3 Analysis of Survey Results

**Figure 3-1** shows the distribution of the survey to the APEC member economies. The survey was e-mailed three times with reminders two months later.

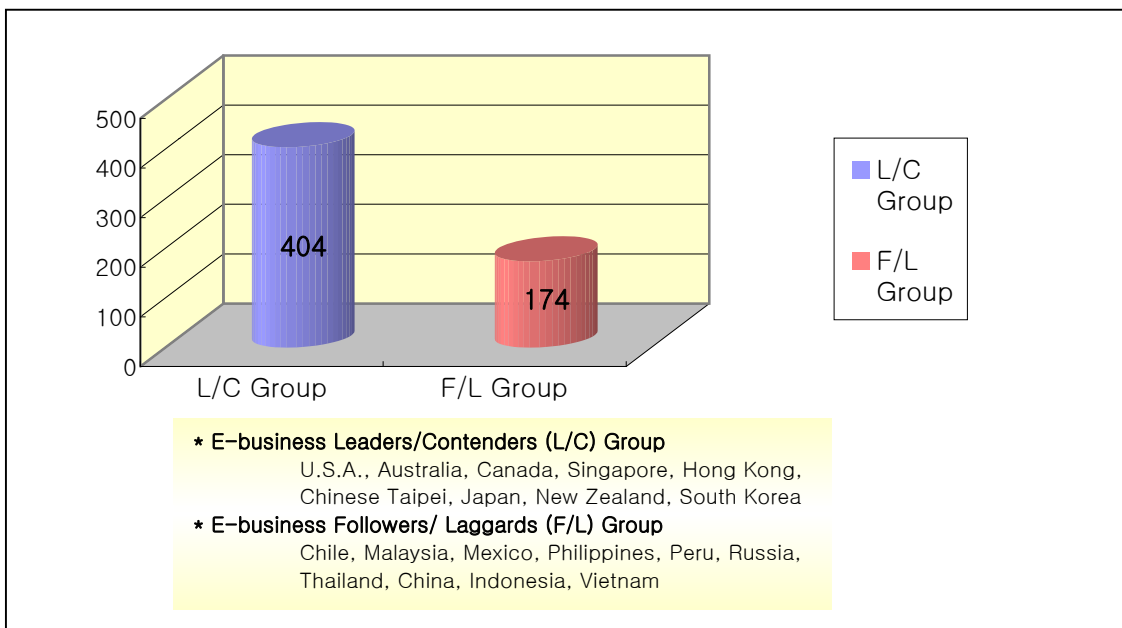
[Figure 3- 1] Distribution of Web-based Survey



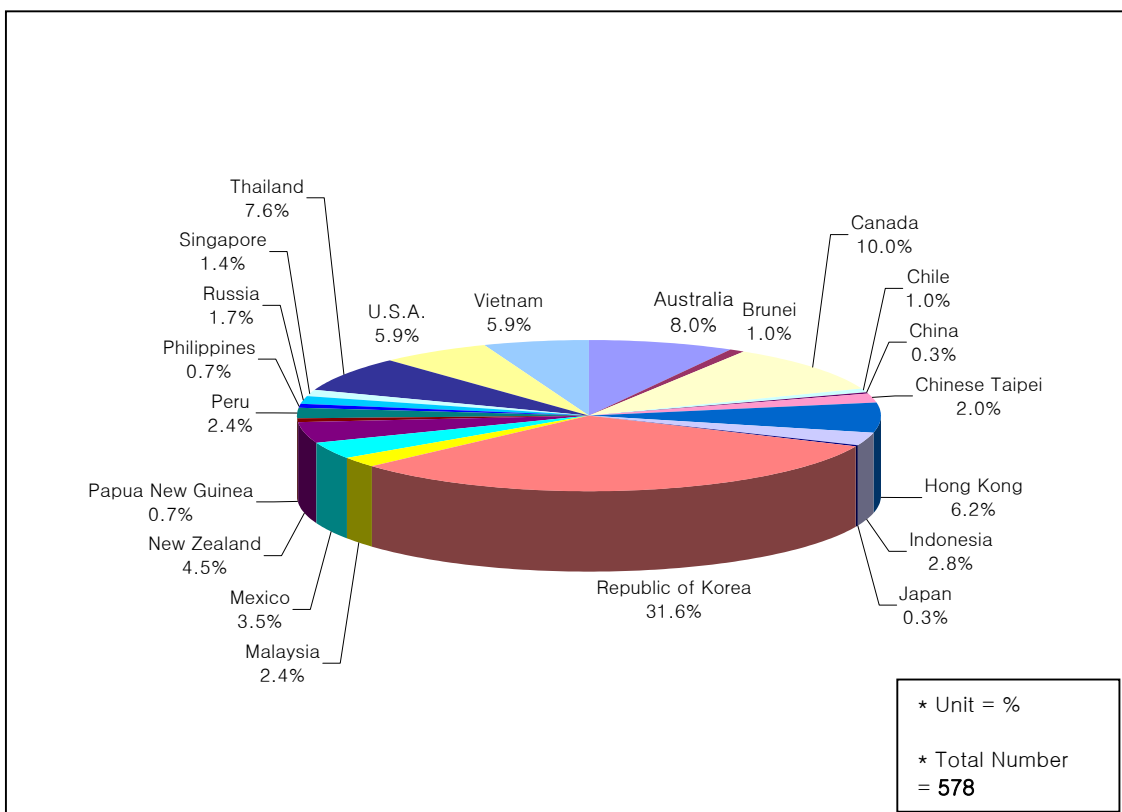
As a result, around 600 valid data (response rate: 13.6%) were collected. Two hundred and four data were collected from the leader/contender member economies and 90 data were collected from the follower/laggard member economies (**Figure 3-2**).

**Figure 3-3** shows the percentage of survey response for the member economies.

[Figure 3- 2] Valid Samples of a Web-based Survey



[Figure 3- 3] Response Percentage of Survey



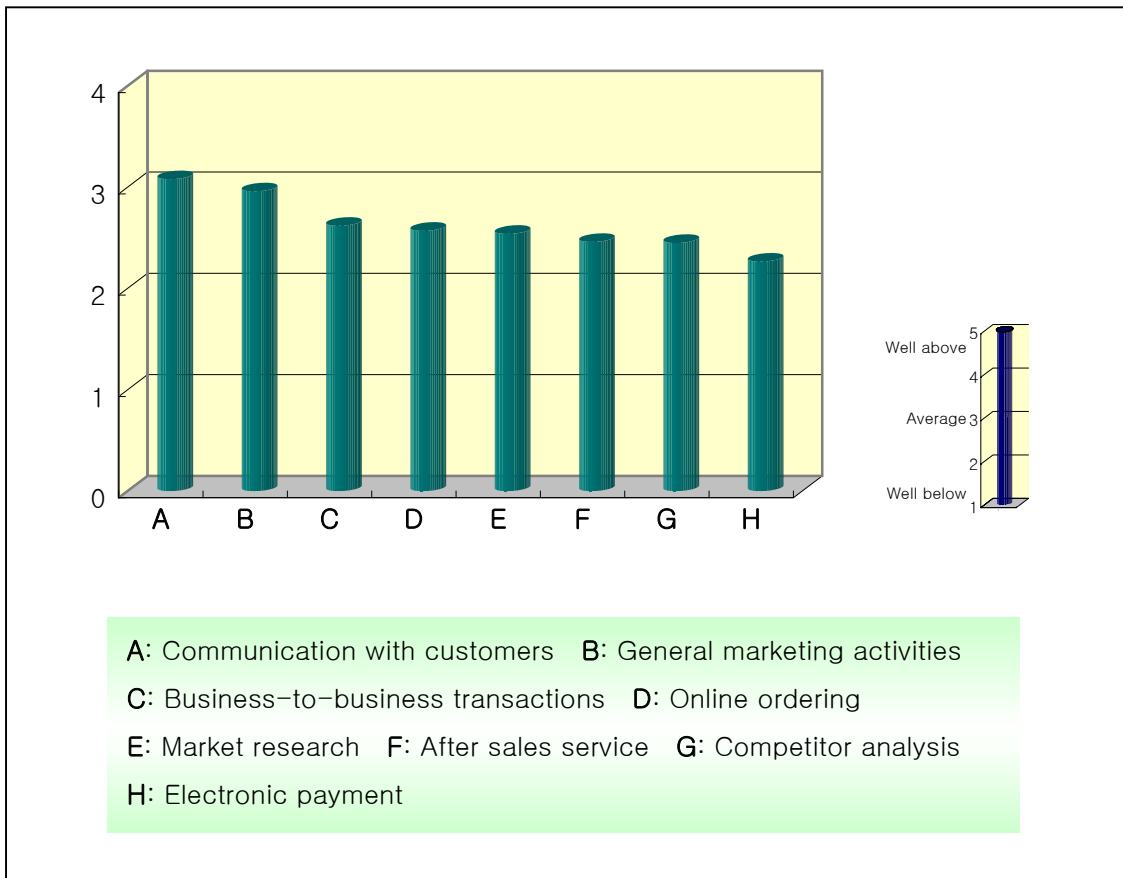
Following are the combined results of the survey.

### 3.4 Reasons for Using E-commerce

Regarding reasons that SMTEs use e-commerce, 'communication with customers' and 'general marketing activities' were indicated as most important due to their usefulness in business-to-customer transactions. However, SMTEs should utilize e-commerce for other functions such as 'business-to-business transactions,' 'online ordering,' 'market research,' 'after sales service,' 'competitor analysis' and 'electronic payment.' (Figure 3-4).

SMTEs should utilize e-commerce for other functions such as 'business to business transactions,' 'online ordering,' 'market research,' 'after sales service,' 'competitor analysis' and 'electronic payment.'

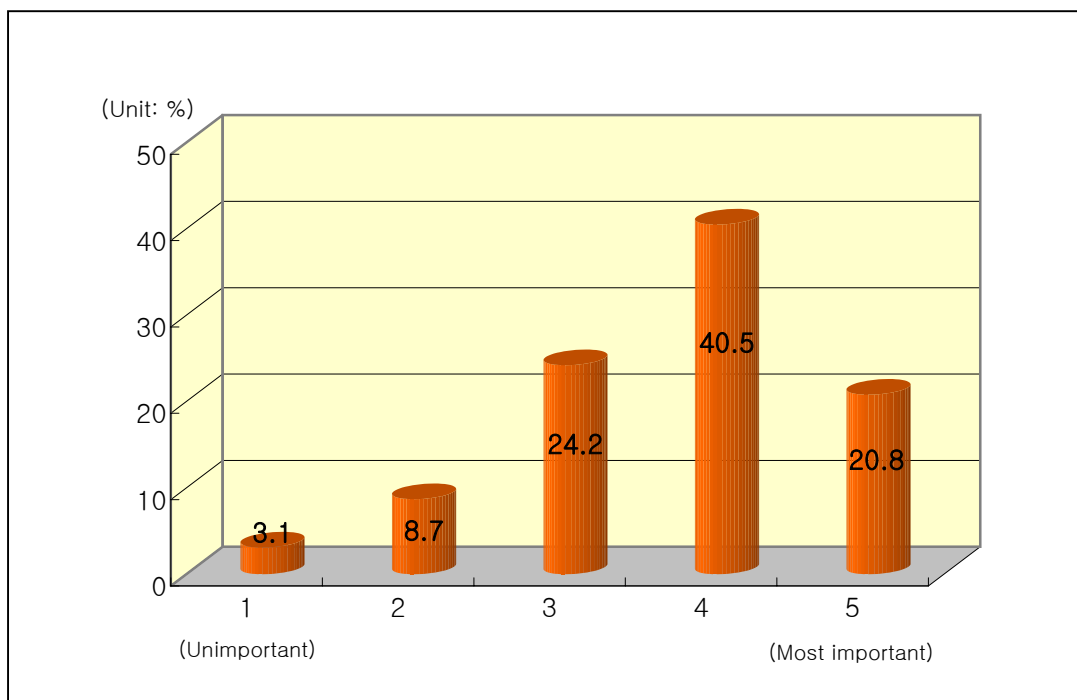
[Figure 3- 4] Reasons for using e-commerce



### 3.5 Importance of E-commerce Strategies for SMTEs

Awareness of importance of e-commerce strategies for SMTEs was considered as relatively high, because more than 60% of respondents answered that e-commerce strategies for SMTEs are necessary (**Figure 3-5**).

[Figure 3- 5] Importance of E-commerce Strategies for SMTEs



### 3.6 Benefits of E-commerce

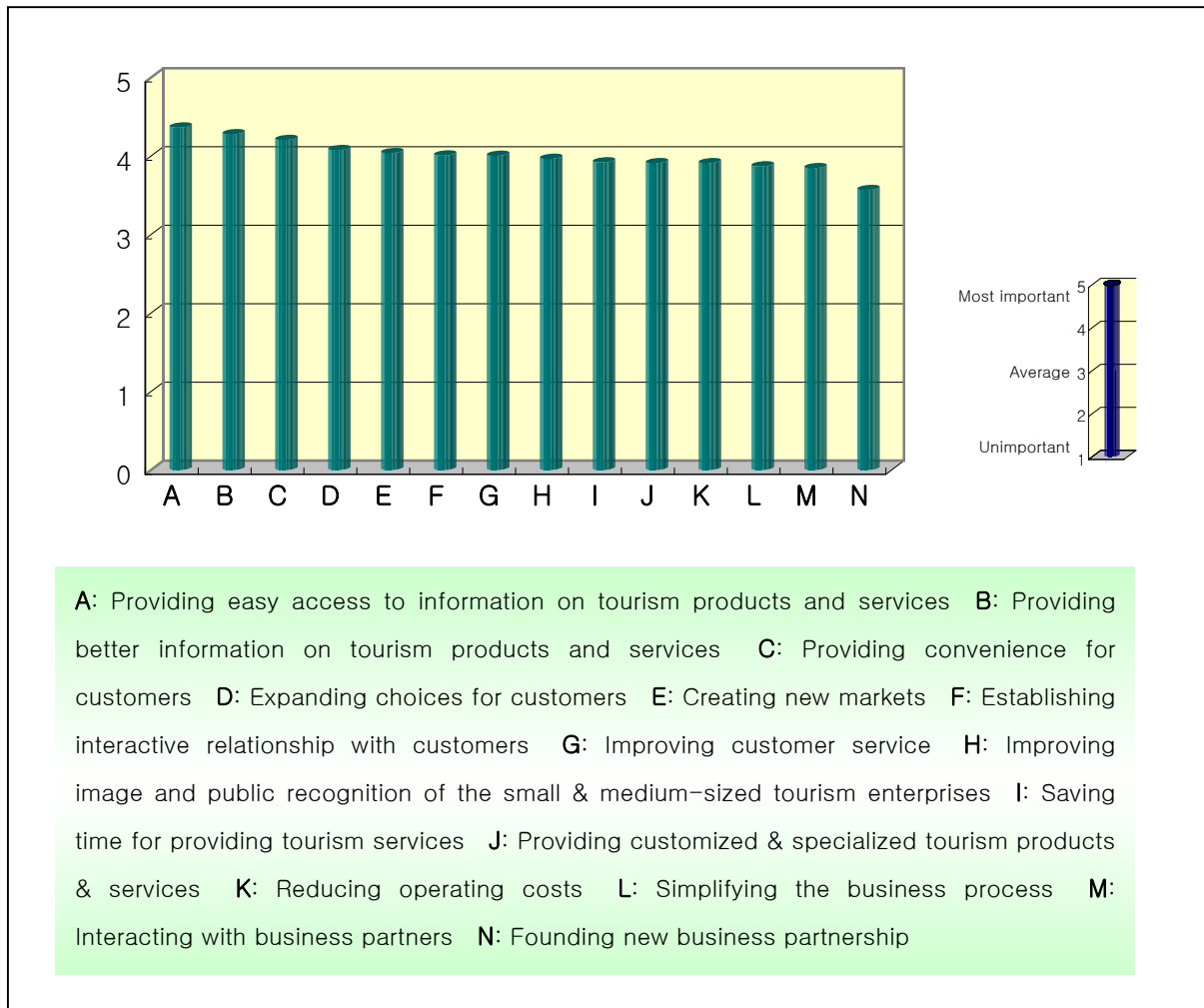
With respect to benefits from e-commerce for SMTEs, respondents considered ‘providing easy access to information on tourism services,’ ‘providing better information on tourism services,’ and ‘providing convenience for customers’ as most important. This implies that respondents are less aware of many other benefits of e-commerce such as ‘creating new markets,’ ‘improving customer services,’ ‘establishing interactive relationships

Respondents are less aware of many other benefits of e-commerce such as ‘creating new markets,’ ‘improving customer services,’ and ‘establishing interactive relationships with customers’, ‘reducing operating cost’, ‘interacting with other business partners’, and ‘founding new business partners’



with customers,’ ‘reducing operating cost,’ ‘interacting with other business partners,’ and ‘founding new business partners’ (Figure 3-6).

[Figure 3- 6] Benefits of E-Commerce



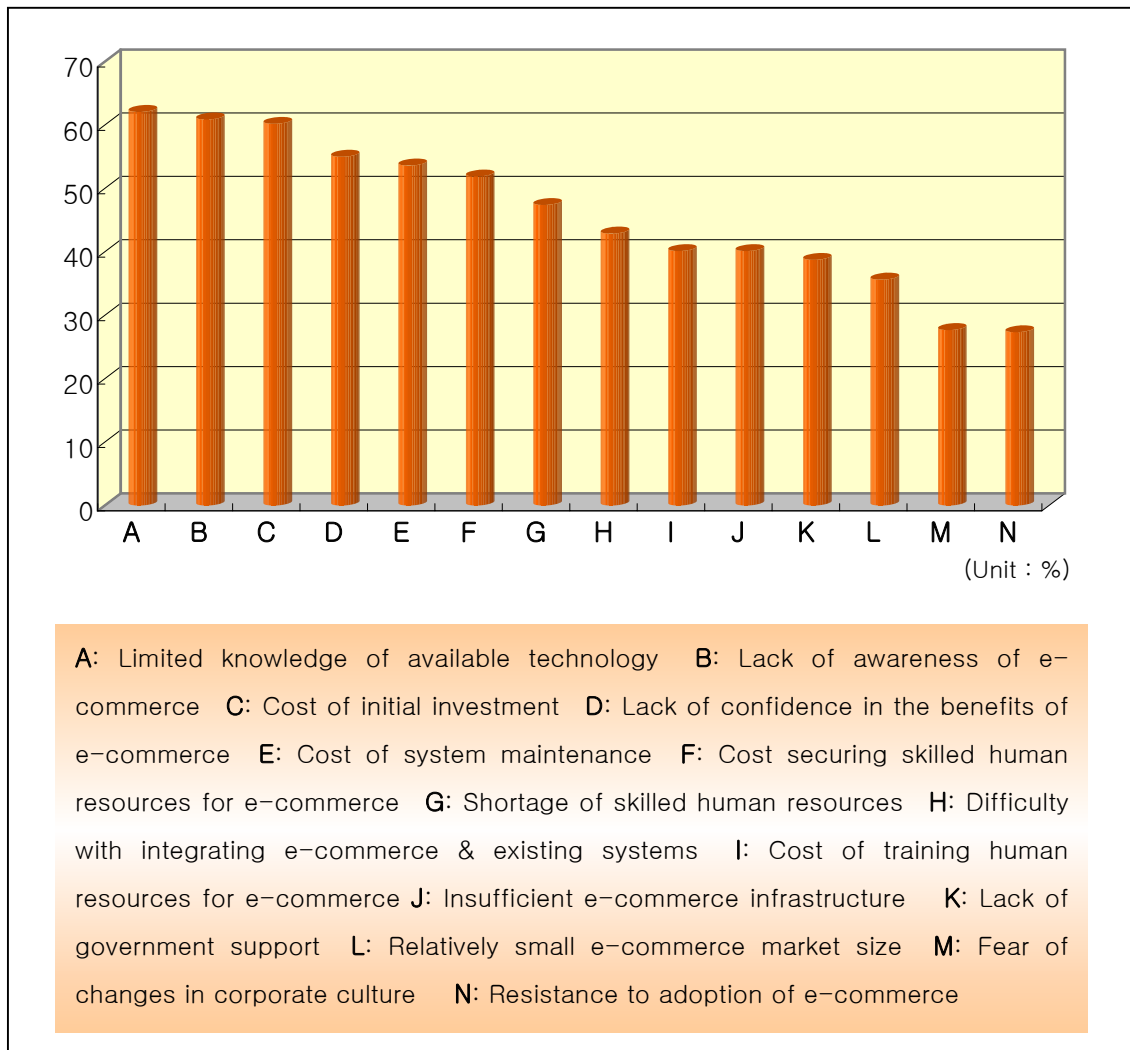
### 3.7 Barriers to Using E-commerce

As barriers to adopting e-commerce respondents listed ‘limited knowledge of available technology,’ ‘lack of awareness,’ ‘cost of initial investment,’ ‘lack of confidence in the benefits of e-commerce,’ and ‘cost of system maintenance.’ Fortunately, costs of solutions and application services have decreased due to competition

As barriers to adopting e-commerce respondents listed ‘limited knowledge of available technology,’ ‘lack of awareness,’ ‘cost of initial investment,’ ‘lack of confidence in the benefits of e-commerce,’ and ‘cost of system maintenance.’

and SMTEs can invest in better technology than before. However, acquiring skillful human resources is a fundamental problem in which governmental support is necessary (Figure 3-7).

[Figure 3- 7] Barriers to Adopting E-Commerce



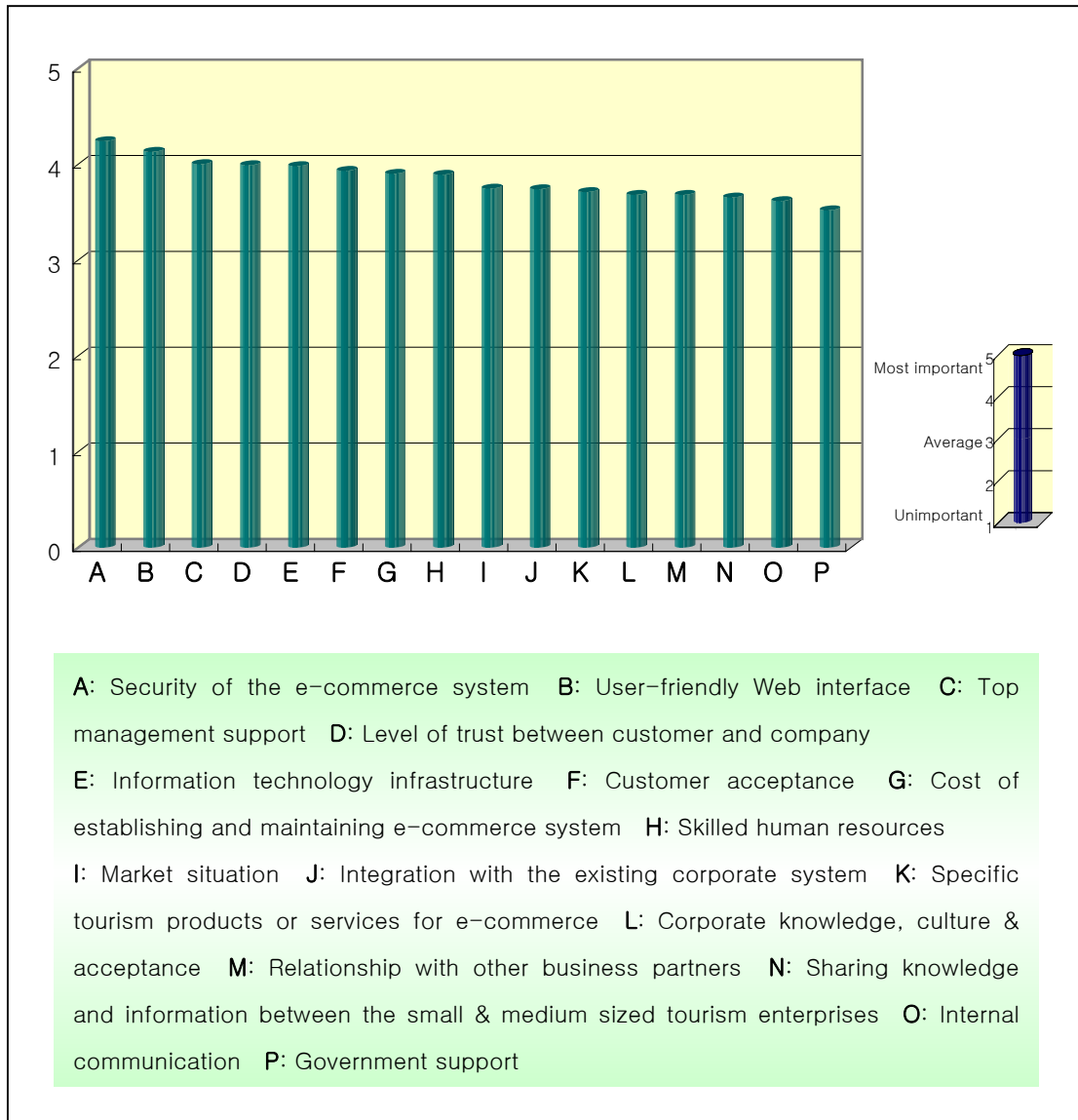
### 3.8 Factors in Conducting Successful E-commerce

As important factors for conducting successful e-commerce, ‘security of the e-commerce system’ and ‘user-friendly web interface’ were cited most. This implies that building customer trust and convenience for customers are important to success. ‘Top management support,’ ‘IT

As important factors for conducting successful e-commerce, ‘security of the e-commerce system’ and ‘user-friendly web interface’ were cited most.

infrastructure,’ and ‘customer acceptance’ were also considered as important factors. While ‘government support’ was considered as relatively low, it is actually very important, especially for the follower/laggard countries. (Figure 3-8).

[Figure 3- 8] Important Factors for Successful E-Commerce



In the following section, the results are broken down by leader/contender and follower/laggard group responses so that the differences between the two groups can be considered.

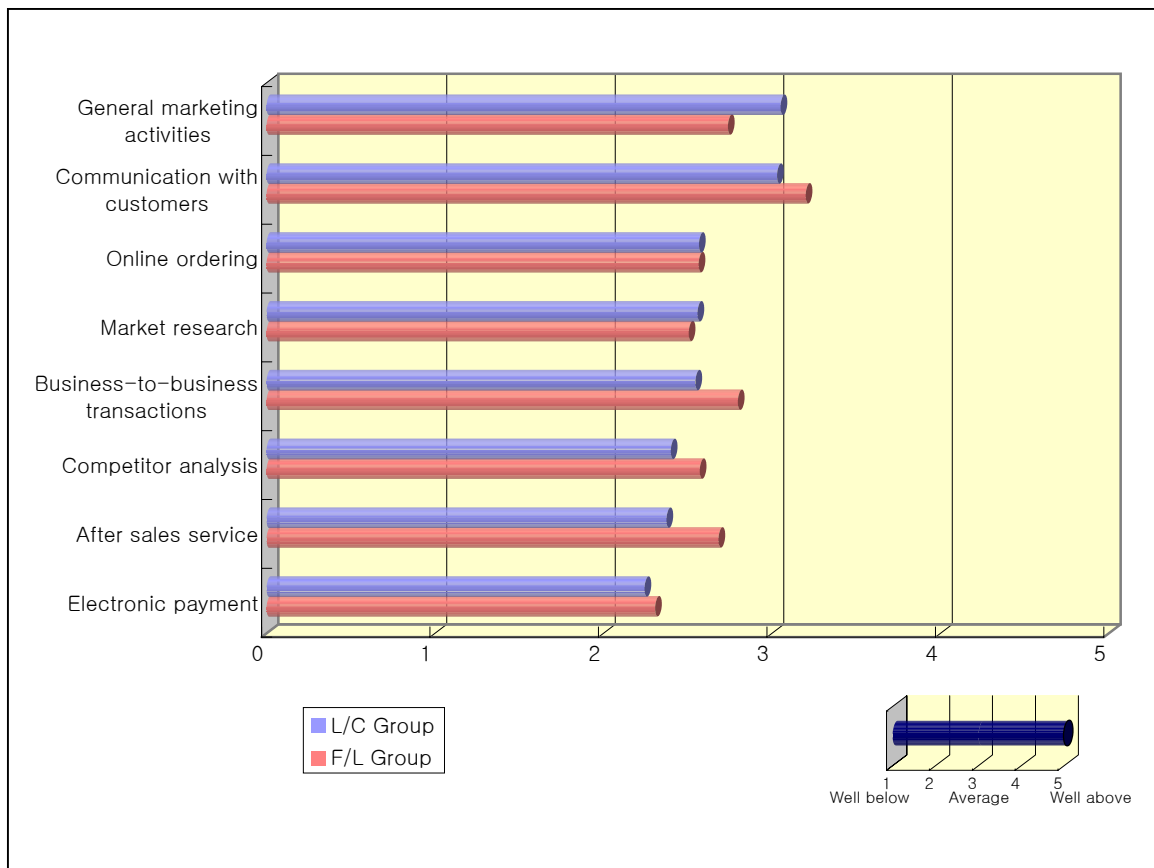
### 3.9 The Differences Between Leader/Contender and Follower/Laggard Groups in E-commerce Infrastructures

#### 3.9.1 Reasons for Using E-commerce

Regarding reasons of using e-commerce, the leader/contender group indicated use e-commerce for marketing activities more than the follower/laggard group while respondents of SMTEs in the follower/laggard group indicated ‘communication with customers,’ ‘B2B transactions,’ ‘after sales service,’ and ‘competitor analysis’ more than respondents in the leader/contender group (Figure 3-9).

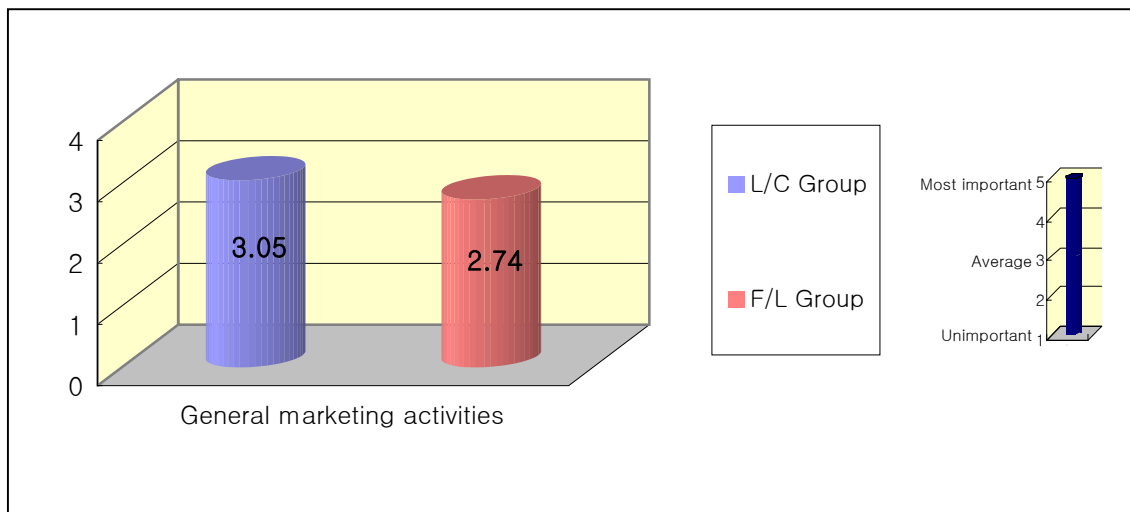
E-commerce is regarded as the most efficient and effective means of marketing within a well-prepared technological infrastructure among the leader/contender group

[Figure 3- 9] Reasons for Using E-commerce Between the Two Groups



Specifically, as for the differences between leader/contender and follower/laggard member economies, respondents in the leader/contender group considered e-commerce a more significant means of marketing than respondents in the follower/laggard group. This is probably because e-commerce activities in the leader/contender group are more frequent than in the follower/laggard group. E-commerce is regarded as the most efficient and effective means of marketing within a well-prepared technological infrastructure among the leader/contender group (**Figure 3-10**).

[Figure 3- 10] Major Differences in Reasons for Using E-commerce

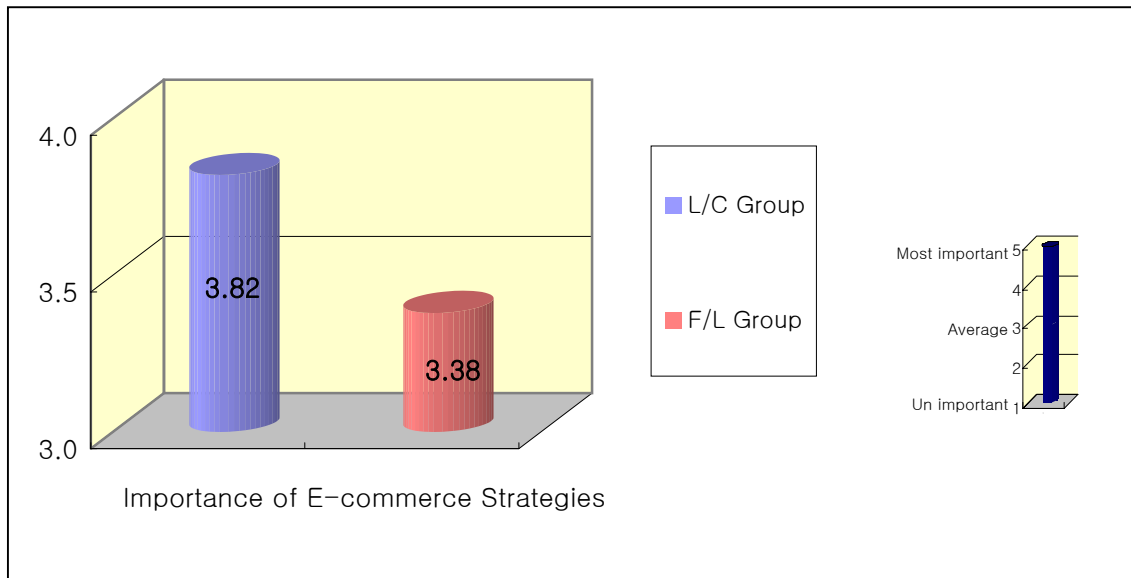


### 3.9.2 Importance of Adopting E-commerce Strategies for SMTEs

Regarding importance of SMTE adoption of e-commerce strategies, respondents in the leader/contender group considered it more significant than those in the follower/laggard group. This lower awareness of importance of e-commerce strategies for respondents in the follower/laggard group implies that more education, government support, and inter-governmental cooperation are needed (**Figure 3-11**).

Regarding importance of SMTE adoption of e-commerce strategies, respondents in the leader/contender group considered it more significant than those in the follower/laggard group.

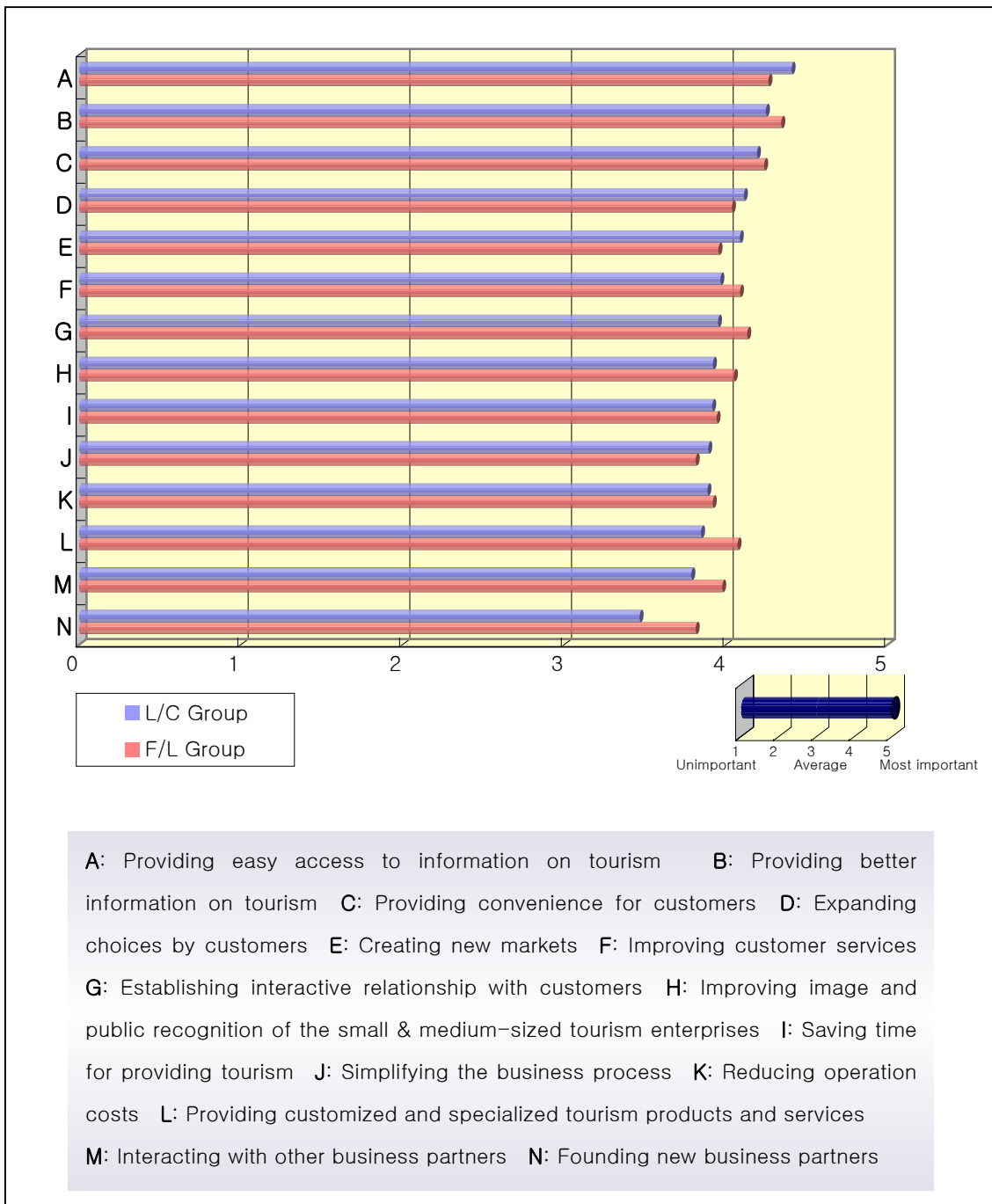
[Figure 3- 11] Importance of E-commerce Strategies for SMTEs



### 3.9.3 Benefits of E-commerce

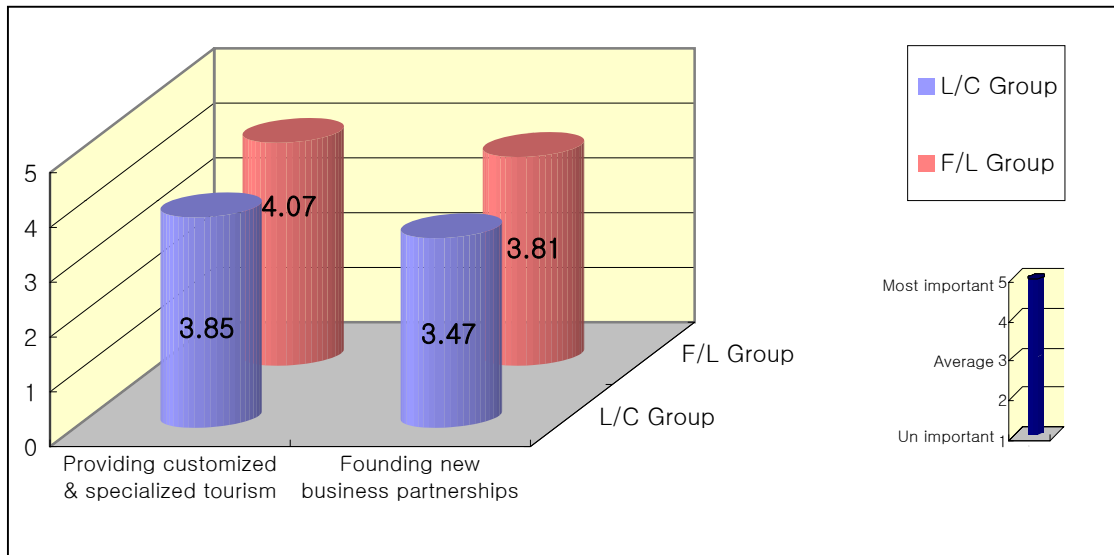
Both respondents in the two groups considered the benefits of e-commerce in B2C transactions (such as items A through I, and L) significantly more than in B2B transactions (such as items J, K, M, N) (**Figure 3-12**).

[Figure 3- 12] Perception of Benefits Between the Two Groups



With respect to benefits of e-commerce, respondents in the follower/laggard group considered ‘providing customized and specialized tourism products and services’ and ‘founding new business partners’ more important than respondents in the leader/contender group (**Figure 3-13**).

[Figure 3- 13] Major Differences in Benefits of E-Commerce



### 3.9.4 Barriers to Using E-commerce

Respondents in the follower/laggard group indicated many more barriers to using e-commerce than respondents in the leader/contender group. Only two factors, ‘cost of initial investment’ and ‘lack of confidence in the benefits of e-commerce’ were indicated more as barriers in the leader/contender group than in the follower/laggard group.

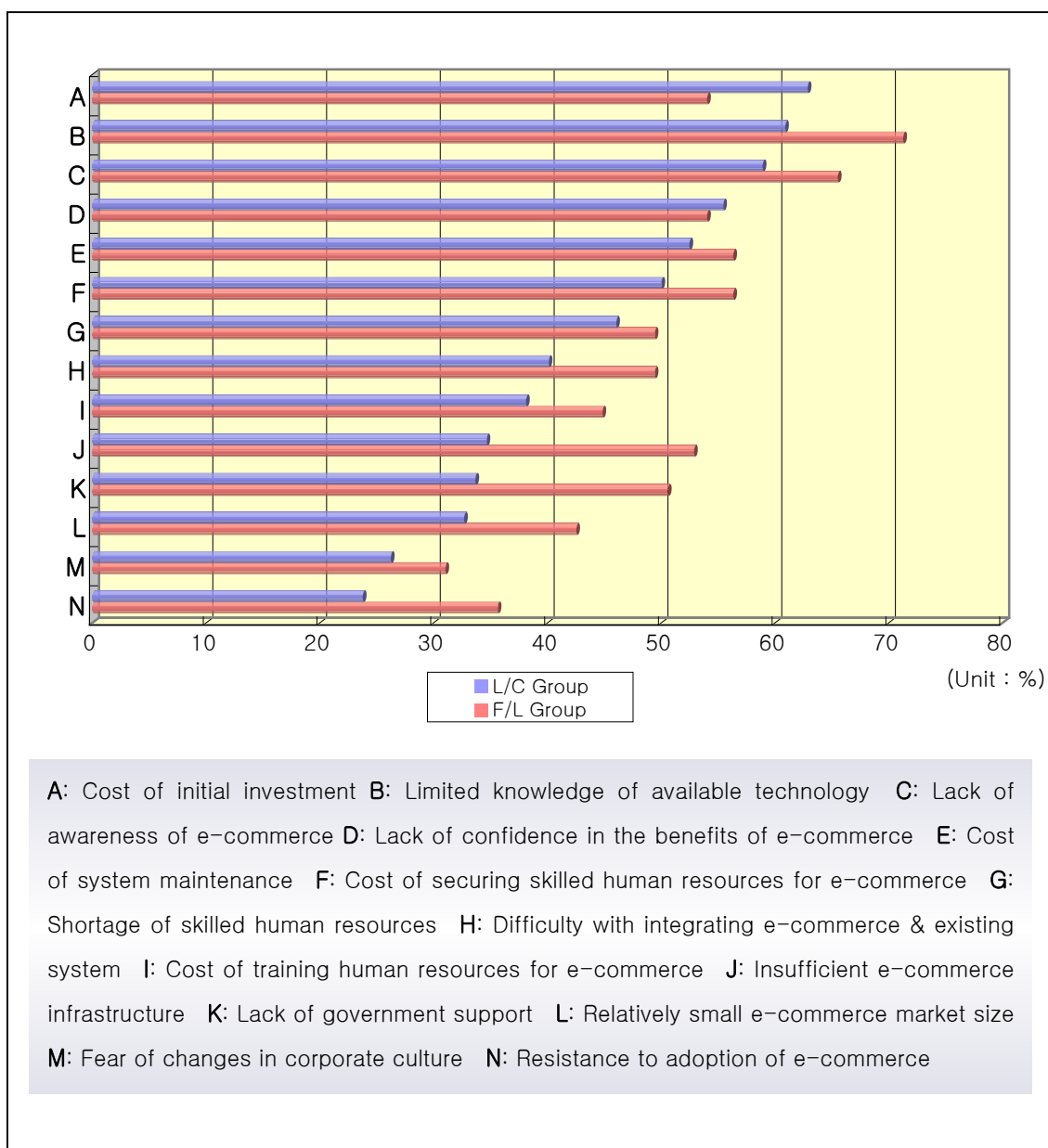
For the follower/laggard group, relating to internal firm capacities, the barriers include :

1) limited knowledge of available technology, 2) cost of system maintenance, 3) cost of securing skilled human resources for e-commerce, 4) difficulty with integrating e-commerce & existing system, 5) shortage of skilled human resources, and 6) resistance to adoption of e-commerce.

Relating to market situation, barriers include: 1) lack of awareness of e-commerce, 2) insufficient e-commerce infrastructure, and 3) small e-commerce market size. Respondents in the follower/laggard group indicated ‘lack of government support’ significantly more than the leader/contender group (**Figure 3-13**).



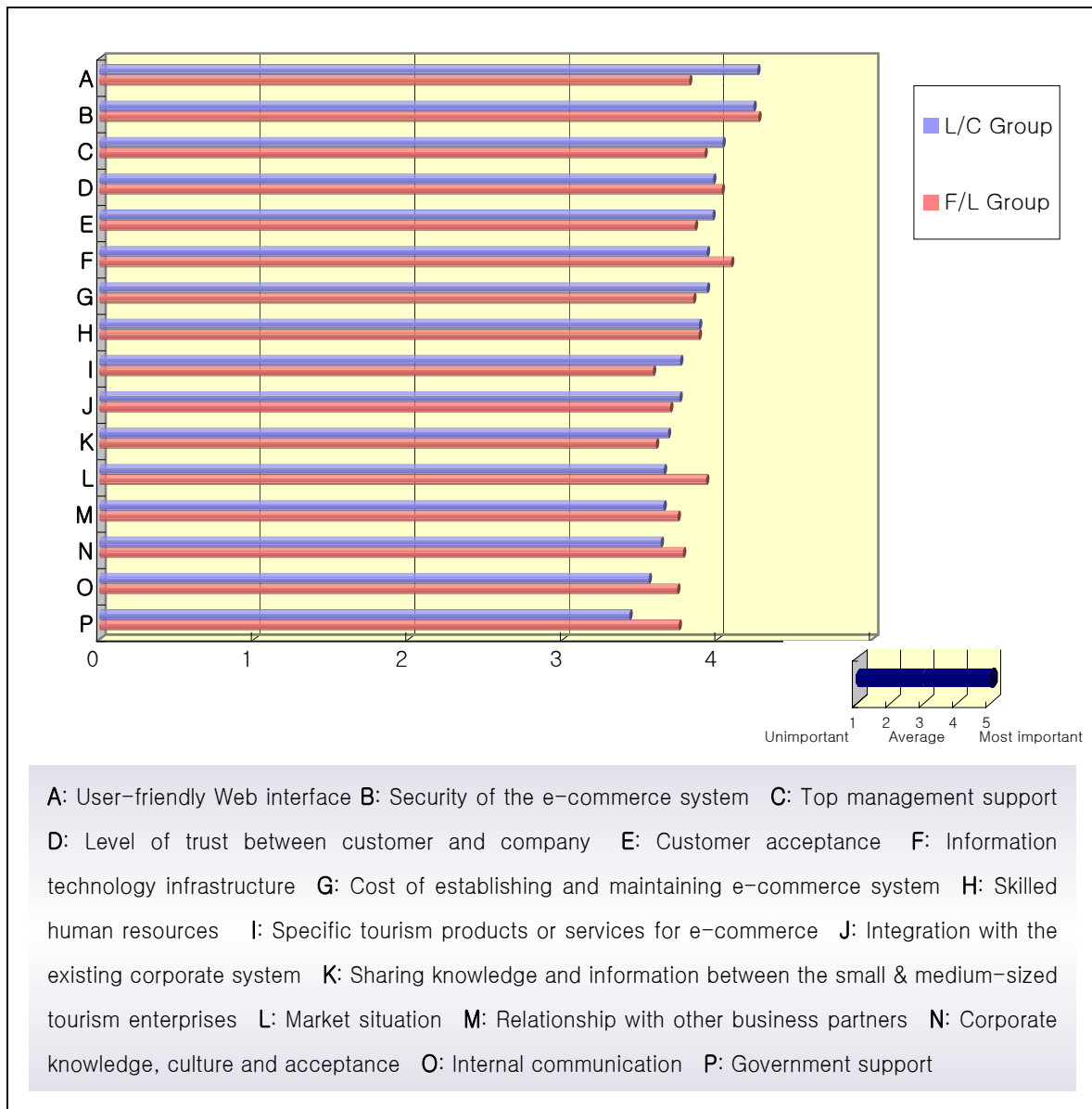
[Figure 3- 14] Barriers to Adopting E-Commerce



### 3.9.5 Important Factors for Successful E-commerce

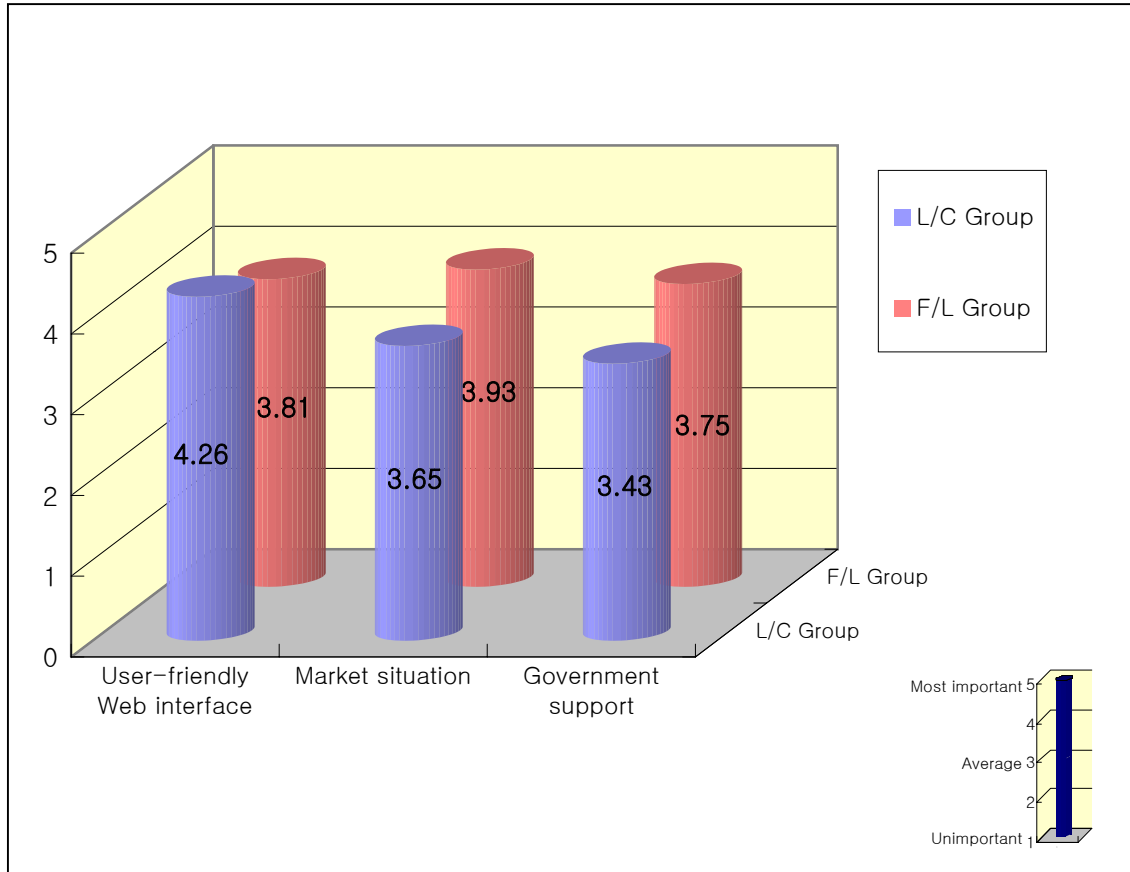
For both the two groups, highly rated important factors for successful e-commerce include: 1) user-friendly web interface, 2) security of the e-commerce system, 3) top management support, 4) level of trust between customer and company, and 5) information technology infrastructure (**Figure 3-15**).

[Figure 3– 15] Important Factors for Successful E-commerce



As important factors for successful e-commerce, user-friendly interface was considered more important in the leader/contender group than in the follower/laggard group, while market situation and government support were considered more important in the follower/laggard group than in the leader/contender group. This implies that government support and policy in e-commerce are more important for the follower/laggard group than for the leader/contender group. Making a more suitable environment for active online commerce is critical for follower/laggard member economies, while appeal to customers is a more critical issue for the leader/contender group (Figure 3-16).

[Figure 3– 16] Important Factors for Successful E-Commerce



Finally, for both leader/contender and follower/laggard member economies, respondents of SMTEs consider ‘skilled human resources,’ ‘security of the e-commerce system,’ ‘user-friendly web interface,’ ‘trust of customers,’ and ‘top management and government support,’ as most important for e-commerce. However, as mentioned before, ‘skilled human resources’ and ‘top management and government support’ are not performed or managed well relative to their importance. In addition, it was found that respondents do not recognize the importance of ‘sharing knowledge and information between SMTEs’ and ‘business partnerships’ as e-commerce strategies, even though the two elements are critical for SMTEs.

As important factors for successful e-commerce, user-friendly interface was considered more important in the leader/contender group than in the follower/laggard group, while market situation and government support were considered more important in the follower/laggard group than in the leader/contender group.

### 3.10 Importance and Performance of SMTEs' E-Commerce

The study used IP (Importance • Performance) analysis to develop appropriate e-commerce strategies for different levels of e-commerce infrastructures. For 'Importance,' respondents indicated how important each of 16 proposed factors are for successful implementation of e-commerce by SMTEs. For 'Performance,' respondents were asked to indicate how well their member economy performs regarding e-commerce in relation to their response to 'Importance.'

By producing a matrix through IP analysis, four IP categories emerge. First, in the 'Keep up the good work' category, both 'Importance' and 'Performance' are high. Second, the 'concentrated efforts' category has 'high importance' and 'low performance' responses. Third, in the 'low priority' category there are 'low importance' and 'low performance' responses. Fourth, the 'Possible overkill' category means that performance is high while importance is relatively low in implementing e-commerce.

Following are the results of IP analysis of SMTE respondents in the APEC region:

#### ***Keep up the good work***

In the APEC region, respondents considered the following factors as important; 'security of the e-commerce,' 'user-friendly web interface,' 'IT (Information Technology) infrastructure,' 'level of trust between customer and company,' 'customer acceptance.' All factors are strongly related to consumer issues such as security and user convenience. These factors were also considered as relatively well-performed.

#### ***Concentrated efforts***

The factors in this category include 'top management support' and 'skilled human resources.' These are very important for implementing e-commerce but are considered as performed insufficiently and more concentrated efforts for these factors are needed.

#### ***Low priority***

'Government support,' 'sharing knowledge and information between SMTEs,' 'integration with the existing corporation,' and 'relationships with other business partners' received low marks in importance and performance. These factors, however,

are actually critical to successful e-commerce of SMTEs. This implies that managers have limited information and knowledge on e-commerce and should recognize the importance of those factors.

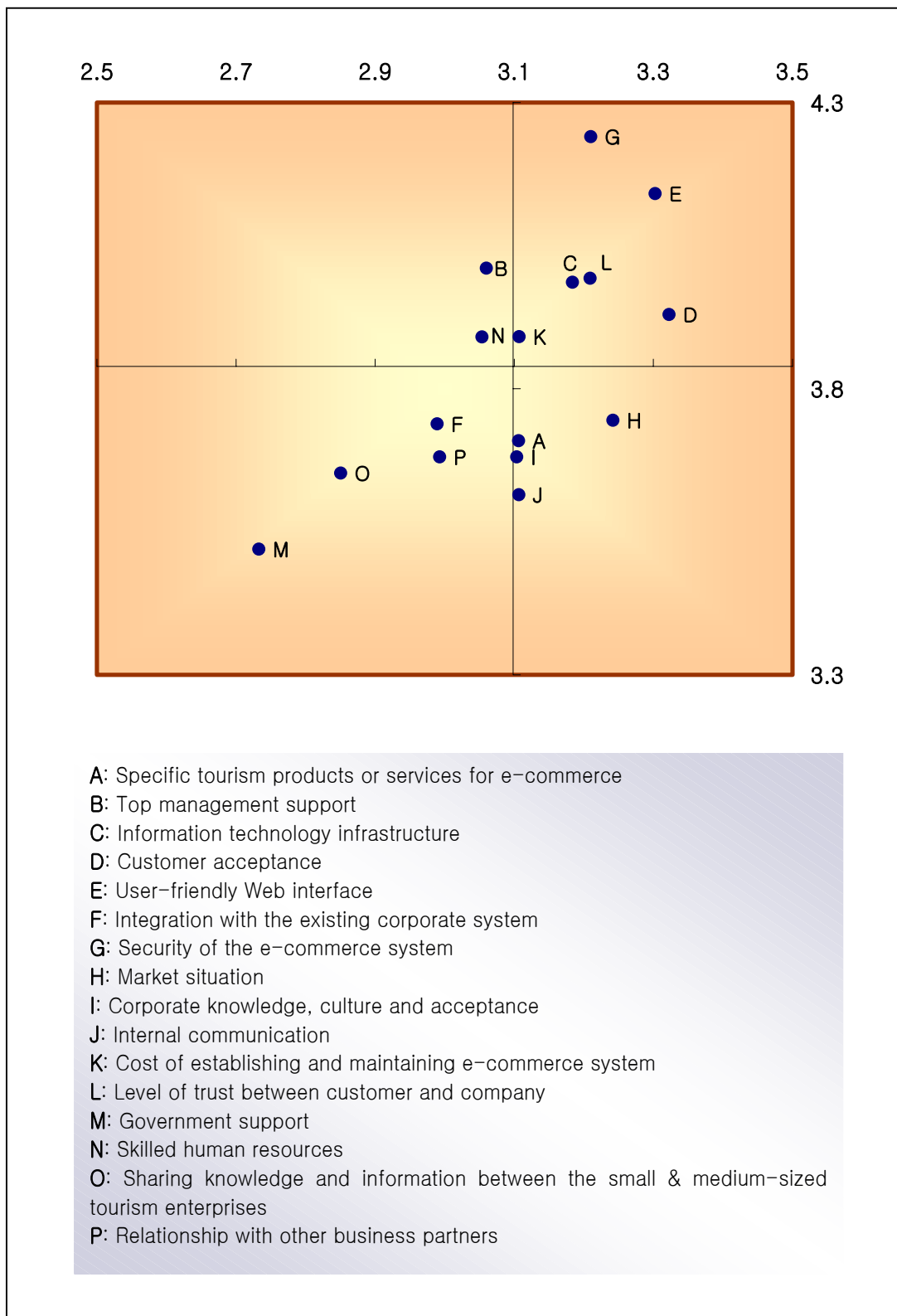
***Possible overkill***

‘Market situation’ falls in the ‘possible overkill’ category. According to the survey results, managers of SMTEs in the APEC region utilize the Internet for market analysis (may include competitor analysis) but do not consider this factor as important. Researchers believe that this result has some discrepancy with previous reports that SMEs (Small and Medium sized Enterprises) usually do not use the Internet for market research.

***Remainder***

Three factors including ‘specific tourism products or services for e-commerce,’ ‘corporation knowledge, culture, and acceptance,’ and ‘internal communication’ fall somewhere between ‘Low Priority’ and ‘Possible Overkill.’ One factor, ‘cost of establishing and maintaining e-commerce system’ is between ‘Concentrated Efforts’ and ‘Keep up the Good Work’ categories. These factors were assessed similarly to ‘low importance’ and ‘middle performance.’

[Figure 3- 17] Importance and Performance of SMTEs' E-Commerce



### 3.11 Implications from Survey Results

General marketing activities and communication with customers are major reasons for using e-commerce. However, it is recommended that SMTEs utilize e-commerce further for various functions such as B2B transactions, market research, after sales service, competitor analysis. The extent to which e-commerce is integrated throughout the business value chain is crucial to determining the benefits that can be gained. Making a more proactive and comprehensive utilization of e-commerce is far more beneficial than adopting e-commerce for specific functions such as receiving orders or ordering goods and services. SMTEs can use more advanced solutions that are applied to B2B and B2C transactions with reasonable prices of business solutions in the Internet.

Regarding the conceptions of benefits from e-commerce, respondents of SMTEs more considered the benefits in B2C transactions such as 'providing easy access to information on tourism,' 'providing convenience for customers,' 'creating new markets,' and 'expanding choices by customers' than the benefits in B2B transactions such as 'simplifying business process,' 'reducing operation cost,' 'interacting with other business partners,' and 'founding new business partners.' It implies that managers of SMTEs should be more aware of many other benefits of e-commerce including 'B2B transactions,' 'improving quality of service,' and 'establishing interactive relationships with customers.'

Barriers in using e-commerce can be largely related to the two factors, 1) market situation and 2) internal firm capacities. The barriers related to market situation are 'lack of awareness of e-commerce,' 'insufficient e-commerce infrastructure,' and 'small e-commerce market size.' The barriers related to internal firm capacities include 'limited knowledge of available technology,' 'cost of system maintenance,' 'cost of securing skilled human resources,' 'difficulty with integrating e-commerce and existing system,' 'shortage of skilled human resources,' and 'resistance to adoption of e-commerce.' Respondents in the follower/laggard group indicted 'lack of government support' significantly more than the leader/contender group. 'Market situation' and 'government support' are more critical factors for successful e-commerce in the follower/laggard group than in the leader/contender group. To boost e-commerce, government policies should focus on 1) the development of information infrastructure, 2) commencement of e-commerce activity, and 3) a legal enforcement system in e-

commerce. Sufficient access to information infrastructure at reasonable cost is fundamental for e-commerce. Also, governments should provide a variety of policies to enhance sharing knowledge and information between SMTEs, and business partnerships.

As important factors for successful e-commerce, highly-rated were 1) user-friendly web interface, 2) security of the e-commerce system, 3) top management support, 4) level of trust between customer and company, and 5) information technology infrastructure. Internet marketing elements, including content, customization, community, commerce, context, communication and connection, should be reinforced according to e-business objectives. To gain trust and confidence from consumers, SMTEs in the early stage of e-commerce should utilize 'about us' or 'firm introduction' pages on their homepages. Security concerns would decrease as SMTEs and consumers become more aware of security technologies. Information Technology (IT) infrastructure should be planned and implemented by a national strategy for e-business, which is more important for the follower/laggard group than for the leader/contender group.



## 4. E-Commerce Strategies for SMTEs

### 4.1 Strategic Management

#### 4.1.1 General E-marketing Strategy

As shown in the results of the survey, ‘communication with customers’ and ‘general marketing activities’ were indicated as the most important reasons that SMTEs use e-commerce. The former refers to ‘interactivity’, which is the biggest advantage of electronic marketing. Regarding general e-marketing strategy, this section covers; 1) Internet marketing elements, 2) building trust with customers, 3) success factors for e-marketing, 4) e-market segmentation, 5) managing digital brand, and 6) implementing e-marketing strategies.

Regarding general e-marketing strategy, this section covers 1) Internet marketing elements, 2) building trust with customers, 3) success factors for e-marketing, 4) e-market segmentation, 5) managing digital brand, and 6) implementing e-marketing strategies

##### *1) Internet marketing elements*

Traditional marketing elements involve product, price, promotion, and place (in addition to physical surroundings, participants, and processes for service marketing). These, however, do not fit into the Internet marketing paradigm. Seven internet marketing elements have been suggested, including content, customization, community, commerce, context, communication, and connection (Rayport and Jaworski, 2002).

**Content** is defined as all digital subject matter on the site, including text, pictures, sound, and video. It focuses on “what” is presented. **Customization** means the site’s ability to tailor itself to different users or to allow users to personalize the site. Service that allows customers to design personal itineraries by themselves is a good example of customization.

**Community** is defined as the interaction that occurs between site users. User-to-user communication can occur between two users (e.g., e-mails, joint game-playing) or between one user and many (e.g., chat rooms). As an e-business model, the community model is used to organize favorable customers and to increase their loyalty. Furthermore, it is expected that they play a critical role as opinion leaders for general consumers. Community opinions on-line are considered a more effective marketing

means than ‘word of mouth’ in the off-line world.

**Commerce** means the site’s ability to facilitate commercial transactions. For example, many e-shopping sites have a shopping-basket feature along with shipping information. The shopping basket usually provides information including quantity, description, size, prices, and availability.

**Context** involves the site’s layout and design. It has both aesthetic (colors, visuals) and functional (simple, easy to navigate) design elements to communicate the site’s main benefits.

**Communication** refers to the dialogue that unfolds between the site and its users. This communication can consist of three types: site-to-user communication (e.g., email notification), user-to-site (e.g., customer service requests), or two-way communication (e.g., instant messaging). On many travel sites, this function enables the user to talk directly with the contact person while using the site.

**Connection** is defined as the number of formal linkages between the site and other sites. It involves a program that supplies affiliated sites with banner advertisements to link visitors from other sites to a particular site. Finally, the factors of fit and reinforcement play a critical role in gaining synergy among the 7Cs. Fit means the extent to which each of the 7Cs individually supports the business model. Reinforcement refers to the degree of consistency between each of the Cs.

## ***2) Building trust with customers***

Most SMTEs lack a recognizable consumer brand. A survey conducted by the Georgia Institute of Technology found that only four percent of on-line users routinely register at web sites, and most consumers do not register due mainly to a lack of trust. The power of a recognizable brand is based on consumers’ trust. Building trust that leads to satisfied customers is essential.

A recent McKinsey report suggests that managers can build mutually valuable relationships with customers through a trust-based collaboration process.<sup>3</sup> Their research has identified four stages of trust building as 1) attraction, 2) user-driven personalization, 3) marketer-driven personalization, and 4) trust-based collaboration.

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<sup>3</sup> Building Trust On-line, The McKinsey Quarterly, 2001 Number 4

In the first stage, the best strategy is to provide the consumer with information without demanding anything in return because there exists no real relationship between the marketer and the consumer. In this stage, what the consumer is giving the marketer is something quite valuable, time and attention, along with a view of how the site is traversed. The time and attention have the potential to develop into the 'mind share' to create a brand preference. If the site gets a consumers' concentration longer, its effect can be greater than a 30-second TV advertisement.

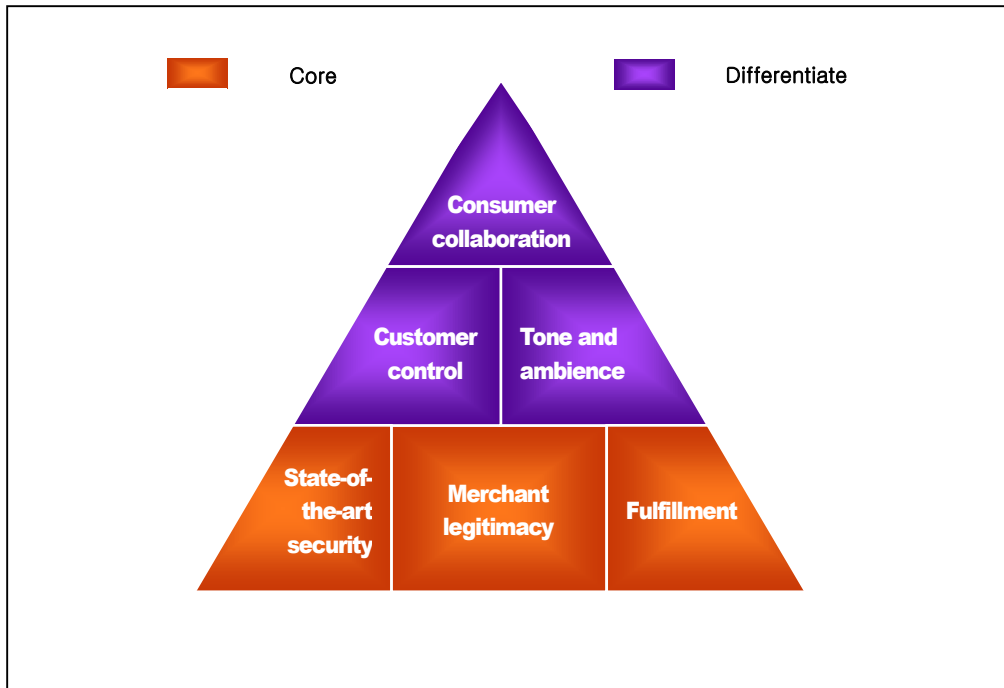
In the second stage, customers can personalize their home pages with their specific preferences and tastes. The site invites users to set up a personal page through its personalized service, where users can not only design their trip but also get customized travel news and weather information.

In the third stage, manager- or marketer-driven offers perform after user-driven personalization. It means that managers use insights provided by consumers to beam information back to them. The site uses its knowledge of consumers to suggest tourism products or services they might like, which consumers then rate as either on or off target. One good practice is to let the user set the pace of personalization and contact from marketers. Consumers are more likely to buy when the message is personalized and based on information they had volunteered.

At the final stage, the manager and the consumer work together closely. The consumer allows the manager to access to the most personal information such as family, health, and finances, and in turn gains customized experiences and consultative problem-solving assistance. The report notes that very few on-line managers have reached this level of trust with their customers. SMTEs, however, should ultimately pursue this stage of trust-based collaboration between manager and consumer.

As shown in **Figure 4-1**, a 'trust pyramid' is composed of six elements, which include 1) state-of-the-art security, 2) merchant legitimacy, 3) fulfillment, 4) consumer control, 5) tone and ambience, and 6) consumer collaboration. The base of the pyramid consists of the three core elements, state-of-the-art security, merchant legitimacy, and fulfillment. At the higher level, there are consumer control, and tone and ambience. Consumer collaboration is the highest level.

[Figure 4- 1] Building Customer Trust



\* Source: *The McKinsey Quarterly*, 2001 Number 4.

#### State-of-the-art security

Managers are recommended to use the best security measures on the site and notify the consumers about them in easily understandable language. Managers should give users confidence by various measures such as the latest encryption technology, digital certificates, secure commerce servers, and authentication to ensure personal information.

#### Merchant legitimacy

Recognizable brands help consumers sort out their choices when they have a limited range of clues as to the quality and function of a tourism product. For SMTEs which usually do not have a brand power, two tactics can be suggested as follows. 1) The first tactic is to ally SMTE's product or service with an established brand. 2) The second tactic is to encourage prospective customers to sample services through low-risk trials and creative offers.

#### Fulfillment

A trust-building site must fulfill orders efficiently and with minimal hassles. The

best way is to explain all costs, and have an infrastructure that gets the right service to the right buyer in a reasonable period of time.

#### Customer control

Consumers learn to trust the managers they deal with only when they know that they – not the managers – control access to personal information. Some leading sites discuss the benefits provided by cookies on a user hard drive then asks the user for permission to place a cookie.

#### Tone and ambience

Consumer trust is produced by more than technical aspects of a web site. Without strong confidentiality, consumers will never move ahead with a value exchange. Leading marketers post an easy-to-read privacy statement and explain how they collect and handle customer information. A site's appearance and ease of navigation are also critical elements.

#### Collaboration

A site can nurture trust when it encourages its customers to inform each other about the company's products and service offerings. Consumers consider other users of a product to be the most trusted source of advice when considering a purchase of that product. Therefore, chat groups let consumers query each other about their purchases and experiences.

### ***3) Success factors for e-marketing***

Kierzkowski, et al (1996) argued that five apparent factors for success in e-marketing include: 1) attracting users, 2) engaging users' interest and participation, 3) retaining users and ensuring they return to the site-based service, 4) learning about their preferences, and 5) relating back to them to provide customized interactions that represent the true "value bubble" of e-marketing. This last factor is crucial, as in most cases it will require managers to make an e-marketing initiative part of the current business system or environment.

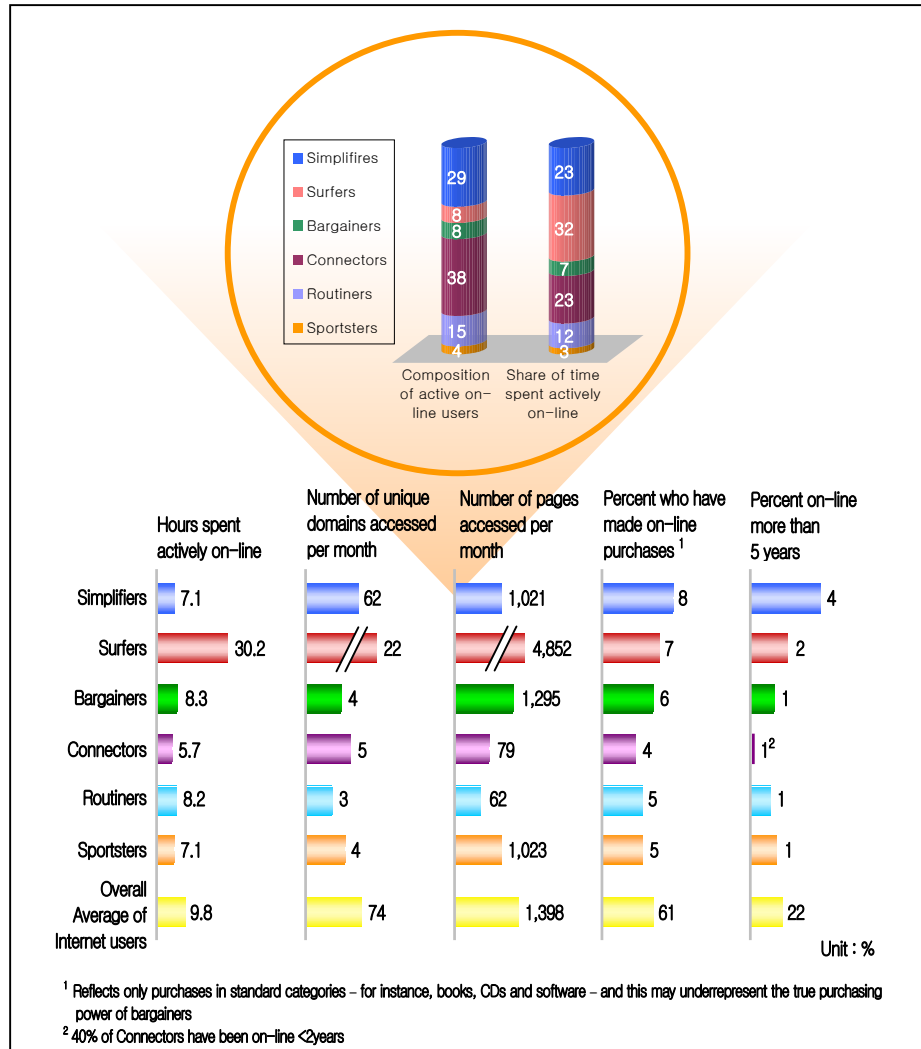
The types of e-marketing opportunities available involve providing better service to consumers at lower cost by delivering information about a product or service, building relationships with on-line consumers, and using new channels. As an example of a new channel, airlines are increasingly bypassing travel agents to sell tickets

directly to customers, thus saving significant commission costs. For instance, United Connections in the US is a disk-based service allowing travelers to make their own bookings, reducing distribution costs by up to \$50 on a typical \$500 round-trip fare. This trend has enticed travel agents to seek other opportunities to make the profits.

#### ***4) E-market segmentation***

Market segmentation and target marketing are essential for managers of SMTEs. Empirical research in the US shows that current, active on-line consumers are categorized into six segments, including; simplifiers, surfers, bargainers, connectors, routiners, and sportsters (Forsyth, et al., 2000). Each of these segments has different characteristics and needs, and managers should distinguish which segments that their sites attract and match their site strategies to the needs of the target audience. Each segment is different in terms of its on-line behavior and traits, such as the amount of time they actively spend on-line, the number of sites and pages they access, the time they spend actively viewing each page, and the types of sites they visit (**Figure 4-2**).

[Figure 4- 2] Six Segments of Online Consumers



\* Source: The McKinsey Quarterly, 2000 Number 4

“Simplifiers” are the most attractive consumers since they account for more than 50% of all on-line transactions. They occupy 29% of the total user population but are challenging to serve and easy to lose because they want ease of access and convenience. They prefer readily available product information, reliable customer service, and easy returns. They respond positively to any feature, conveyed through advertising or on-site messages, that allows them to do business easier or faster, both on- and off-line. The one-click ordering process at Amazon.com is a good example of a feature designed for “simplifiers.” Other research indicates that even heavy on-line

shoppers consider off-line customer service to be better than its on-line counterpart. SMTEs (Small and Medium sized Tourism Enterprises) should cater to customers with more personalized services.

“Surfers” spend most time on-line (32% of total time) even though they occupy only 8% of the user population. They access upward of four times more pages than average users. They use the Internet for several reasons, such as to explore, shop, find information, and be entertained. They move quickly among sites, however, continually seeking new on-line experiences. To attract and retain them, a site should have a strong on-line brand, cutting-edge design and features, constant updates, and a rich variety of services.

“Bargainers” are mainly concerned with getting a good deal. They generate 52% of all visits to eBay, the busiest auction site, although they make up just 8% of the active on-line population and spend less time on-line than average users do. Their favorite sites include Priceline.com and uBid, as well as financial information sites, such as Quote.com. They enjoy searching for a good price, controlling transactions, and a sense of community. Sixty-four percent of all “bargainers” indicate that they have made on-line purchases from standard categories, which include books, compact discs, and software. To get them to repeatedly visit, a site should appeal to them on both a rational and emotional level. For instance, eBay devotes an entire section to a newsletter, chat groups, a library, and opportunities to make donations to charities.

“Connectors” use the Internet mainly to relate to other people through chat services and e-card services. They tend to be Internet beginners: 40% have been on-line for less than two years, and only 42% have made purchases on-line, compared to 61% for all Internet users. They consider what is available to them and what they think of as valuable. Managers should focus on ways to shape the habits of “connectors” so that they can turn them into members of a more attractive segment, such as “simplifiers.” One approach is to help “connectors” find their way around the Internet, in the meantime gaining their trust. Readersdigest.com is a good example because it gives special help to subscribers over the age of 50. The site includes features explaining how users can protect themselves on-line and how e-mail works, as well as simple explanations of technology, and “netiquette” lessons.

“Routiners” use the Internet for content, usually news and financial information,



and spend more than 80 percent of their on-line time surfing through their ten favorite sites. The Wall Street Journal interactive edition and the MSNBC on-line site are among the most popular sites for the members of this group. The superior and exclusive content of those sites is regarded as their major attraction.

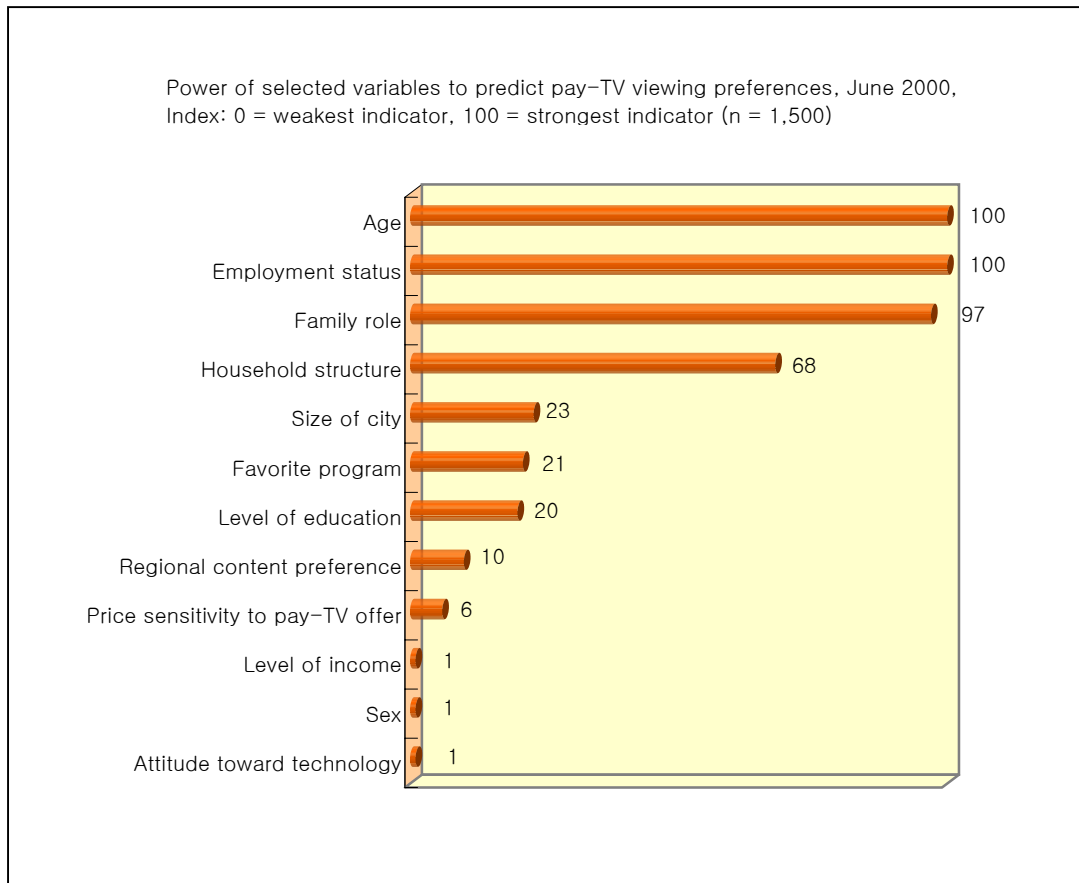
“Sportsters” are similar to “routiners,” but are attracted to sports and entertainment sites. Sites should be fresh, colorful, and interactive to attract them mainly because they view content as entertainment. ESPN.com, for example, is one of the most popular sites for them because it features sports results, polls, chat rooms, fantasy games, news, and radio broadcasts.

Of all the user segments, the method of making a business model for “routiners” and “sportsters” is the most unclear. An obvious way to generate revenue is to attract visitors of free content sites to ones which require paying subscriptions. For instance, Quote.com provides some information free of charge but offers considerably more inside the site for paid subscribers. ESPN.com generates significant revenue from subscription fees for its sports leagues. Other options include the creation of links to transaction-based sites and the use of targeted advertising and promotions to influence the off-line purchasing behavior of visitors.

Consultants suggest that managers should avoid trying to span all segments with a single offer. They are better off cultivating core-segment customers who repeatedly purchase items of greater than average value. Also, new technologies will allow managers to display the contents that appeal most to particular user segments.

For SMTEs, acquiring information related to market segmentation is a time-consuming and costly process. A recent McKinsey study presents an easier way with which SMTEs can adopt and implement B2C transactions. The study used cases of pay-TV companies, which face similar problems, and found that pay-TV companies could best uncover the interests and preferences of consumers by using basic socio-demographic variables such as age, employment status, family role, and household structure (**Figure 4-3**). These variables are regarded as a better indication of the broad content preferences of large groups of consumers than any combination of widely tracked factors, such as occupation, income, and attitude toward technology.

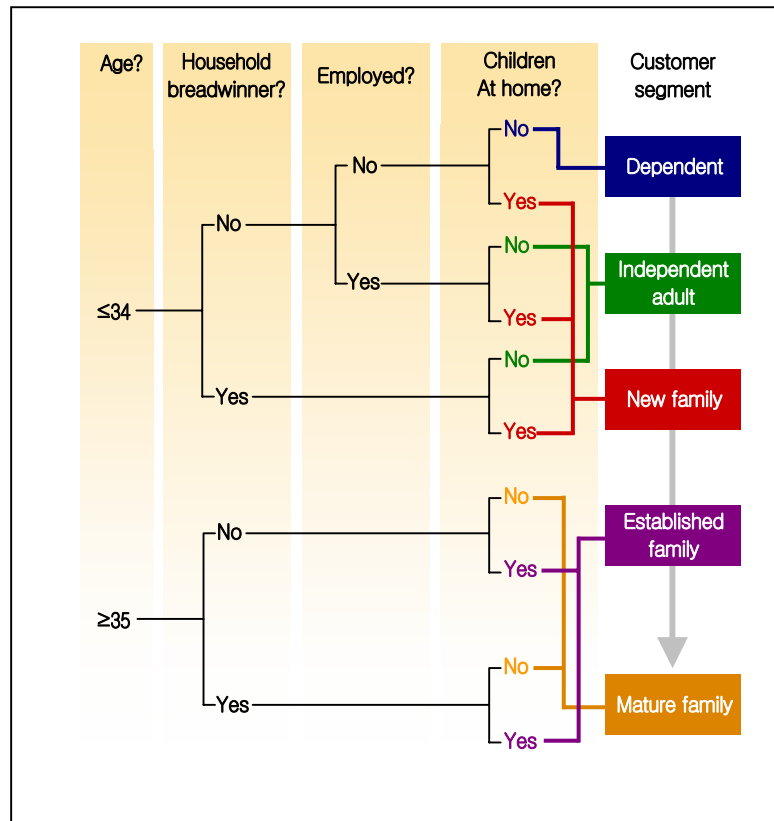
[Figure 4- 3] Indicators for Content Preferences



\* Source: *The McKinsey Quarterly*, 2001 Number 3

The study results suggest that age, employment status, family role, and household structure organize site visitors into segments based on life stages (**Figure 4-4**). As target customers successively enter each new life stage, they demand a different kind of service and product. Tourism businesses tend to find their most profitable customers concentrated in certain life stage segments, which vary from business to business in the tourism sector. Creating appealingly differentiated content for each segment is a relatively simple task for B2C. Life stage segmentation allows a B2C to focus on improving its overall offers to its most valuable customer groups from the start, as well as to work out a long-term strategy.

[Figure 4- 4] A segmentation of online consumer



\* Source: The McKinsey Quarterly, 2001 Number 3

As an example of developing a niche market, seoulnavi.com(www.seoulnavi.com) provides potential Japanese tourists with travel information, tour guidance, and shopping contents online to capture the Japanese niche market.

[Figure 4- 5] www.seoulnavi.com

Company	Seoulnavi.com (www.seoulnavi.com)
Business Type	Provide Japanese tourists with travel information, tour guidance, and shopping contents on-line
Contents	<ul style="list-style-type: none"> <li>✧ Travel information and tour guidance for Korea using the Japanese language</li> <li>✧ On-line shopping for travelers</li> </ul>
Features	<ul style="list-style-type: none"> <li>✧ Captures Japanese niche market on-line</li> <li>✧ Help off-line travel business to overcome challenges and to start a new business model</li> <li>✧ Provide distinctive quality of information using detailed data on Japanese favorites &amp; tastes</li> </ul>
Website Image	

Inala-Nature Tours of Bruny Island (www.inalabruny.com.au) targets the eco-tourist market providing eco-tour guide service and information about local flora and fauna.

[Figure 4– 6] www.inalabruny.com.au

Company	Inala–Nature Tours of Bruny Island (www.inalabruny.com.au)
Business Type	Nature tour company
Contents	<ul style="list-style-type: none"> <li>✧ Nature Tours of Bruny Island</li> <li>✧ Information regarding Bruny Island</li> </ul>
Features	<ul style="list-style-type: none"> <li>✧ Provides eco-tour guide services</li> <li>✧ Provides information about local flora and fauna</li> </ul>
Website Image	

### 5) Managing digital brand

Brand power is more important on-line than off-line because e-business is a virtual world where consumers are more dependent on recognized brands. Gaining and retaining trust in a brand are the biggest issue and challenge. Dayal et al. (2000) suggested that the first goal of the marketer should be to select the core promise for service or product, appealing to the target customers. ‘Priceline.com,’ for example, promises to help consumers get airline tickets in the most efficient way.

Promises must be translated into specific interactive functions and web design features collectively giving consumers a seamless experience. Such design features as one-click ordering help deliver the promise of convenience or collaboration tools such as chat rooms or ratings functions make it possible to realize the promise of belonging.

Smaller firms do not necessarily have to establish their own reputations for quality and reliability when branding can be provided by third parties. Larger, more established firms can act as intermediaries and connect consumers and smaller e-tailers. The key to building trust on the web for both B2C and B2B organizations is to learn to use the Internet to relay information about reputation, competence, quality, and reliability.

#### **6) *Implementing e-marketing strategies***

The major advantages of e-marketing involve interactivity, mass customization, real time, and a data base of customers. Challenges for Internet businesses include a lack of reliable consumers and a lack of standardization.

E-marketing strategies are formulated and implemented with elements which include 1) content, 2) customization, 3) community, 4) commerce, 5) context, 6) communication, and 7) connection. Investing in a web site is much more affordable than it was a few years ago, thus SMTEs can now easily design or renovate this important means of client interface. For web site promotion, a variety of options are opened to SMTEs, from joining affiliate programs or a DMS (Destination Management System) that will list their site in a fully integrated catalogue, to planning a systematic advertising campaign to make SMTEs known to specific market segments in some specific period of the year (WTO, 2001).

The process of implementing strategy should focus on 1) customer acquisition, 2) customer cultivation, and 3) customer retention. Customer acquisition is seeking potential customers. Customer cultivation relates to what they need and how to encourage them purchase services or products. Customer retention focuses on how to create repeat customers.

#### **4.1.2 Leader/Contender Member Economies**

In implementing e-commerce for SMTEs, the biggest advantage that leader/contender member economies have over follower/laggard member economies is their well-established IT (Information Technology) infrastructure. Also, high consumer demand in leader/contender member economies propels the future advance of technology. Increased competition is the biggest disadvantage that leader/contender member economies have, and increased competition means that providing 'customer satisfaction' is critical to a company's success.

Customization (or individualization) and interactivity are key to customer satisfaction. Customization means the personalization of communications between users and a website. Interactivity is defined as the real-time (or delayed) two-way communication between users and the site, and multiple communications between users. As shown in the results of the survey, the leader/contender member economies considered e-commerce a more significant means of marketing than the follower/laggard member economies. User-friendly web interface is a basic factor for successful e-commerce. Balancing and reinforcing Internet marketing elements (or the 7Cs: content, customization, community, commerce, context, communication, connection) are critical for user convenience.

SMTEs should formulate and implement e-business strategies through partnerships with other SMTEs or large firms, especially in the area of brand management (BM), customer relationship management (CRM), and human resources management (HRM). Following are e-commerce strategies according to the stages of e-business development: start-up stage and established stage.

### ***Start-up SMTEs***

#### **Business models**

Start-up SMTEs should take business models appropriate for their own e-business objectives and environments. There are six basic e-business models: the commerce model, media model, usage fee model, dynamic-pricing model, information service model, and do-it-yourself trip design model. Internet start-up SMTEs do not need to take only one e-business model but are recommended to perform e-business combining two or more of those models. *Priceline.com*, for instance, combines the commerce and media models and therefore leads markets that are vastly superior to those of other travel agencies both on- and off-line. Applying the commerce model, the company aggregates suppliers of travel services such as airlines, and provides an auction place between consumers and suppliers. Applying the media model, it exposes its audience to third party advertisers by suggesting services and products to its customers (Dayal et al, 2000).

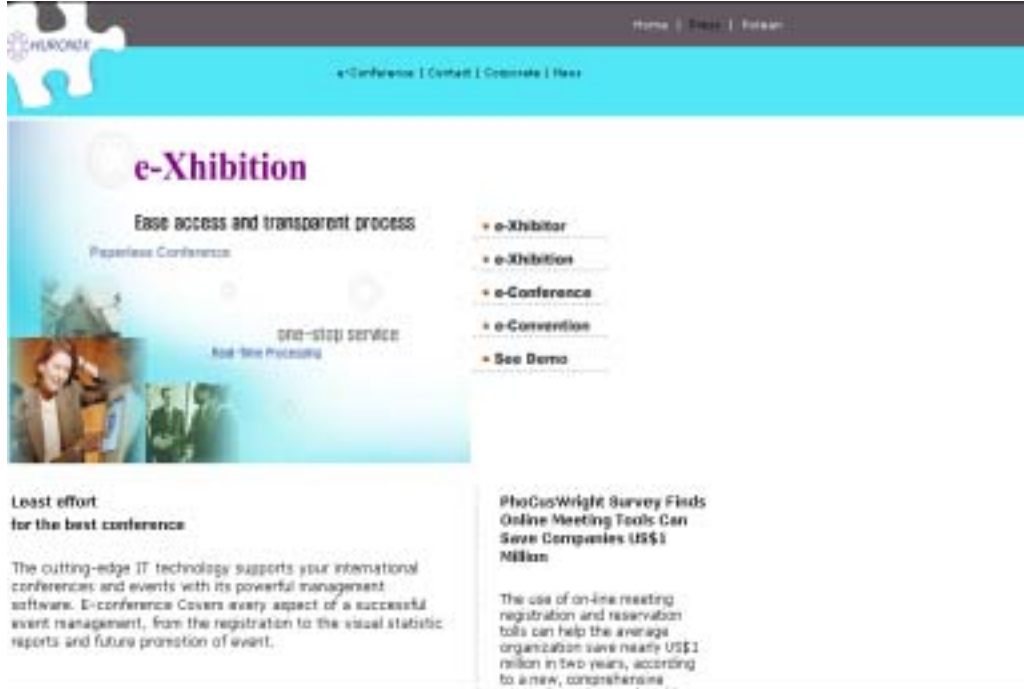
Strategies of internet start-up SMTEs in the leader/contender group should focus on formulation of business models, eliminating obstacles, and e-marketing strategy.

External service providers have great potential to assist start-up SMTEs. E-commerce applications in hospitality services and travel agents include supply chain

management (SCM), enterprise resource planning (ERP), operational control, marketing, customer relationship management (CRM), and so on. As an example of external service providers, application service providers (ASPs) host applications such as ERP software packages that can be accessed via the Web. They not only meet the increasing demand for IT products but they also are extremely responsive to customers' needs and very efficient in dealing with customer' enquiries and requests.

As an external service provider, Huronix (www.huronix.com) enjoys continued growth, offering software solutions for managing international conferences, digital proceedings for the events and operational automation and support for academic societies.

[Figure 4– 7] www.huronix.com

Company	Huronix (www.huronix.com)
Business Type	Database and software engineering
Contents	<ul style="list-style-type: none"> <li>✧ Software solutions for managing international conferences, intelligent digital proceedings for such events, and operational automation and support for academic societies</li> </ul>
Features	<ul style="list-style-type: none"> <li>✧ Aiming to expand benefited area of IT technology</li> <li>✧ Applying database technology into software solutions</li> <li>✧ Providing a leading solution that automates the complex tasks and processes of the professional meeting planners</li> </ul>
Website Image	 <p>The screenshot shows the Huronix website interface. At the top, there is a navigation bar with 'Home   Press   Contact' and a secondary bar with 'e-Conference   Contact   Corporate   Home'. The main content area features a large heading 'e-Xhibition' with the subtext 'Ease access and transparent process'. Below this, there are several key service areas: 'Paperless Conferences', 'One-stop service', and 'Real-time Proceedings'. A sidebar on the right contains a menu with 'e-Xhibition', 'e-Xhibition', 'e-Conference', 'e-Conference', and 'See Demo'. The bottom section includes a testimonial titled 'Least effort for the best conference' and a news snippet 'ProCusWright Survey Finds Online Meeting Tools Can Save Companies US\$1 Million'.</p>



### Eliminating obstacles


As shown in the results of the survey, many obstacles exist in implementing successful e-commerce services. Among them, costs for initial investment on e-business, for promotion, and for securing skilled human resources can be prohibitive. For most businesses, one of the biggest problems is in letting the general public know about their companies and services. The problems related to promotions force companies to invest heavily in affiliation and advertising. If SMTEs target a general public, marketing is even less effective and more expensive so marketing should be done selectively. Fortunately, the prices of business solutions in the Internet have been falling so SMTEs can use more advanced solutions than before. Partnerships between SMTEs will be effective for co-procurement of those solutions and co-marketing to the selected markets.

### E-marketing strategy

The Internet is an effective tool for reaching international markets but it is currently applicable to mostly established SMTEs. Internet start-up SMTEs should primarily focus on the local market and enlarge their market later if possible. Earning a good reputation in the local market should be the first priority. Focusing on narrow geographical boundaries can be more effective in the initial stage.

For instance, Snowy Mountains Accommodation ([www.snowaccom.com.au](http://www.snowaccom.com.au)) provides a personalized conference and holiday planning service to the local market.

[Figure 4– 8] www.snowaccom.com.au

Company	Snowy Mountains Accommodation (www.snowaccom.com.au)
Business Type	Local accommodation booking business
Contents	✧ Personalized conference and holiday planning services
Features	<ul style="list-style-type: none"> <li>✧ Avoided the ‘Shopping cart style’</li> <li>✧ Offers personalized holiday arrangements specifically designed to meet the customer’s needs</li> </ul>
Website Image	

The formulation of an online brand is vital for start-up SMTEs. In creating a brand, the business has to develop a strategy for future, in order to prevent dramatic repositioning of the brand image later on. According to Plant (2000), brand creation strategies are based upon the following points: 1) Differentiation is key. If the business plan does not differentiate, then the SMTE cannot be a brand creator. 2) The SMTE must have a high degree of visibility and a prominent Internet URL address. 3) In the e-commerce environment, a rapid consolidation of cyber-market spaces is continuing to occur. The time between start-up and established brand has been very rapid in the cyber space.

**Established SMTEs**

SMTEs can establish their e-business by developing their own e-strategies or entering into e-partnerships with large corporations. Established SMTEs recognize

some tactics to satisfy the customers through the Internet and focus on two key strategies, 1) expanding the range of services and products, and 2) upgrading their quality (OECD, 2000).

Strategies of established SMTEs in the leader/contender group should focus on formulation of comprehensive e-commerce strategy, e-partnerships, building e-community.

#### Formulation of comprehensive e-commerce strategy

In the established stage, SMTEs should formulate comprehensive e-commerce strategies in which the business operates. The initial objectives for e-business should be evaluated. Web sites should be re-designed to focus more on 'customer retention' to ensure quality of service than 'customer acquisition.' Strategies for customer relationship management (CRM), such as partnerships with other SMTEs in operating CRM systems, should be implemented.

SMTEs in this stage should also develop strategies to expand into international markets. Associating with e-shopping malls allows SMTEs to conduct Internet-based e-commerce without bearing all the start-up costs or the costs of improvements, advertising and technical difficulties, which are instead shared by all merchants in the mall. The same results can be achieved on a cooperative basis (OECD, 2000).

#### E-partnerships

Combining forces through partnerships between SMTEs is important. SMTE business partners should be carefully selected around the globe and exhibit the principles of relationship building, caring, and providing exceptional value to customers. To build a long-term relationship with each customer, SMTEs should continue to grow with both customers and business partners and commit to providing exceptional value via e-commerce. Alliances benefit businesses in the areas such as 1) controlling the cost of research and development; 2) marketing and distribution growth requirements; 3) the risks of entering new geographic and technological markets; 4) the desire for diversification; 5) time to market where product cycles are getting shorter.


Alliances can take a variety of forms, including licensing arrangements, marketing arrangements, and R&D cost sharing. For SMTEs wanting to go global, partnering with local firms in their target market is a quick, relatively inexpensive way for an SMTE to gain a foothold in new geographic areas (Trepper, 2000).

SMTEs should take part in big projects led by large firms or by industry-wide

associations. When large firms decide to set up e-commerce solutions with all of their subsidiaries and all of their suppliers, this decision can affect thousands of domestic and foreign companies of all sizes. This strategy gives SMTEs many benefits in terms of a pooling of knowledge, know-how, and investment (OECD, 2000).

For instance, Central Coast Tourism (www.cctourism.com.au) provides travel information about Australia's Central Coast through SMTE partnerships. It has detailed information about various accommodation properties, automated emails and faxed advice to both customers and suppliers, and a global access reservation system.

[Figure 4- 9] www.cctourism.com.au

Company	Central Coast Tourism (www.cctourism.com.au)
Business Type	Membership-based organization
Contents	<ul style="list-style-type: none"> <li>✧ Various tourism products &amp; services of members</li> <li>✧ Information about the Central Coast</li> </ul>
Features	<ul style="list-style-type: none"> <li>✧ Co-funded Global Access Reservation System through a grant from the federal government</li> <li>✧ Detailed information about various accommodation properties</li> <li>✧ Automated emails and faxed advice to both customers and suppliers</li> </ul>
Website Image	


**Building e-community**

Established SMTEs should utilize their resources to build e-community. A community provides multiple tools including discussion forums, online chat, and

instant messaging. Traditional customer relationship management (CRM) utilized by the marketplace operator can be a community building tool for managing customer relationships with buyers, sellers, and third-party service providers. The marketplace operator can use communities to build business relationships with its customers or with its trading partners in the marketplace. Community interaction encourages users and members to return to the site. The community could also allow users to generate content for the site without commercial implications. For instance, if a discussion forum about a topic generates responses with valuable insight, the manager could harvest this information, reformat it, and either post it in a knowledge base for any user to access or, in some cases, sell it to users (Rayport and Jaworski, 2002).

IC&S Korea (www.expatown.com) expects to build e-community for foreigners living in Korea, offering tour-inclusive services.

[Figure 4- 10] www.expatown.com

<b>Company</b>	IC&S Korea (www.expatown.com)
<b>Business Type</b>	All-round service for foreigners living in Korea
<b>Contents</b>	<ul style="list-style-type: none"> <li>❖ Tour-inclusive services</li> <li>❖ E-community for foreigners in Korea</li> </ul>
<b>Features</b>	<ul style="list-style-type: none"> <li>❖ On-line membership services on settlement, tours, etc.</li> <li>❖ Various information such as places to go, real estate, etc.</li> </ul>
<b>Website Image</b>	 <p>The screenshot displays a website interface with a header and a main content area. The main area features a grid of article thumbnails, each with a small image, a title, a date, and a 'View All' link. The articles cover various topics including living in Korea, Gyeongju Saemsaeng, education, food, and real estate. A search bar is visible in the top right corner.</p>

### 4.1.3 Follower/Laggard Member Economies

For successful e-commerce, the critical factors in follower/laggard member economies include 'market situation' and 'government support.' Market situation means the degree of e-commerce activity. Due to a less developed domestic market, insufficient numbers of local customers or suppliers participate in e-commerce activities, thus there is little motivation for SMTEs to become engaged in e-commerce themselves. However, making earlier use of e-business in follower/laggard member economies may secure more opportunities and success than in the leader/follower group, in part due to less competition.

Government policies should focus on 1) the development of information infrastructure, 2) commencement of e-commerce activity, and 3) a legal enforcement system in e-commerce. Sufficient access to information infrastructure at reasonable cost is fundamental for e-business. It is also important for e-commerce to make use of efficient supporting payment and distribution systems, such as the postal service. For example, consumer research indicates that most users do not want to wait much longer than 10 seconds for a site to load. An SMTE that develops sophisticated e-commerce capabilities cannot benefit from e-commerce if the infrastructure in its country is poor. To instigate e-commerce, governments should implement a variety of policies such as tax reductions, venture certification, and monetary supports for SMTEs. Legal issues should include 1) the validity and legal enforcement of contracts, 2) protection of intellectual property, 3) legal protection in disputes arising from e-commerce activities, and 4) other liability issues (PricewaterhouseCoopers, 1999).

#### ***Start-up SMTEs***

##### **Target market segments**

If the limitations of the domestic market are the major obstacle, SMTEs can develop a strategy to access international markets directly to sell their tourism services and products to foreign customers through e-commerce by strategic alliances with foreign firms. As benefits of using e-commerce to target international markets, survey respondents of SMTEs in developing member economies indicated 'founding business partners' and 'providing customized and specialized tourism services and products.'

Strategies of internet start-up SMTEs in the follower/laggard group should focus on establishing of target market segments, formulating specific e-business objectives, connecting to DMOs, establishing of online booking systems, and building trust.

### Formulation of specific e-business objectives

Internet start-up SMTEs should formulate specific short-, medium-, and long-term e-business objectives, according to their business environments, which are constantly changing. In an immature market situation, overly advanced ideas or objectives may result in failure. For instance, consumers may still prefer mail order or phone order shopping over Internet shopping because of reliable payment systems and more attractive offline catalogues. Given that traditional offline services are considered more reliable, e-commerce should be supportive instead of primary. Internet start-up SMTEs can utilize e-commerce as a supportive model for their business in the initial period and move to rely more on online as the online market grows. The objectives should be monitored and evaluated over a specified period.

### Connection to DMOs


Linkage to a destination management organization (DMO) site is critical to success. Web presence alone cannot guarantee success. Connections to various sites, especially with DMOs or other recognized sites if possible, are most effective in making SMTEs known to customers, especially potential international travelers. DMO sites should have connection services, links to related sites and links to other corporate sites. For securing user transactions, email confirmation should be conducted.

### Online booking

For successful e-marketing, online bookings can be performed in three ways: 1) An SMTE can work with an established online booking agent which has already developed suitable systems and can incorporate an SMTE into their operations. This means that the SMTE potentially benefits from much greater and broader exposure. The downside is that competitors will be promoted together and it is harder for an SMTE to maintain its own identity. 2) An SMTE can buy an off-the-shelf software solution, which is usually cheaper and easier than developing its own solution. 3) An SMTE can develop its own site with the help of a programmer. This will be the most expensive option but in the long run probably the most productive because the SMTE will have a tailor-made system that is completely suited to its needs. In addition to the actual online booking system, managers of SMTEs will also need to consider two other important issues: 1) how the SMTE will accept payment for bookings; 2) how the SMTE will make the site secure (Briggs, 2001).


World Hotel & Tours (www.hotelpass.com) and Chanbrothers.com (www.chanbrothers.com) provide Internet-based hotel reservation services with a real-time booking system.

[Figure 4- 11] www.hotelpass.com

Company	World Hotel & Tours co., LTD. (www.hotelpass.com)
Business Type	Internet-based hotel reservation service
Contents	<ul style="list-style-type: none"> <li>✧ “Resnet”: Whole world hotel reservation system</li> <li>✧ Real-time transaction system</li> </ul>
Features	<ul style="list-style-type: none"> <li>✧ Improved effectiveness based on on-line hotel reservation</li> <li>✧ High speed hotel reservations and competitive prices</li> </ul>
Website Image	



[Figure 4- 12] www.chanbrothers.com

Company	Chanbrothers.com (www.chanbrothers.com)
Business Type	Real-time booking system
Contents	Analysis, consulting and provision of travel products & services
Features	<ul style="list-style-type: none"> <li>✧ One-stop reservation system</li> <li>✧ Travel product &amp; service searching system for personalized service</li> </ul>
Website Image	

Building trust and confidence of e-consumers

Lack of trust and confidence has been identified as one of the major obstacles to the growth of Internet start-up SMTEs. However, previous research shows that security issues as a barrier decreased as firms developed more advanced e-commerce capabilities and knowledge and suppliers and consumers became more aware of security technologies (PricewaterhouseCoopers, 1999). In the stages before an SMTE gains certain customer groups, ‘about us’ or ‘firm introduction’ information is important to gaining customer trust. Sustainable email responses to consumers for questions and answers (Q&A) or frequently asked questions (FAQ), ‘contact details,’ and ‘call center’ service build trust with customers.

For example, Go Bush Tours (www.gobushtours.com.au), which is designed to target special interest groups, independent travelers and backpackers, presents ‘about us’ early on regarding who they are and what they offer.

[Figure 4- 13] www.gobushtours.com.au

Company	Go Bush Tours (www.gobushtours.com.au)
Business Type	Safari and Tag-a-long Tour Industry
Contents	✧ Safari and Family Tag-a-long Tours
Features	✧ Designed to target special interest groups, independent travelers, and backpackers
Website Image	

***Established SMTEs***

Strategies for established SMTEs in the follower/laggard group can be similar to ones in the leader/contender group but with some differences. Again, SMTEs in this stage should focus on two key strategies: 1) expanding the range of services and products; 2) upgrading quality.

Strategies of established SMTEs in the follower/laggard group should focus on establishment of target market segments, building trust, and expanding e-commerce activities.

**Target market segments**

If SMTEs have been established in local markets, they should expand into international markets. For example, according to Briggs (2001), travel services are already the largest consumer e-commerce category in mature markets such as the United States, which accounts for 30% of all online retail. There is an increasing expectation from consumers that they should be able to buy or make bookings on tourism and leisure web sites. Alliances with recognized sites should be considered.

Formed in 1975, PEMPENA's Malaysian tourism portal site *malaysiamydestination.com* is a good example. The site has multilanguage services, including English, Italiano, Deutsch, and Arabic, and provides a variety of tourism products and services to international travelers.

[Figure 4- 14] *www.malaysiamydestination.com*

Company	Malaysiamydestination.com ( <a href="http://www.malaysiamydestination.com">www.malaysiamydestination.com</a> )
Business Type	Tourism Portal Site
Contents	<ul style="list-style-type: none"> <li>✧ One-stop information center, interactive engines, travel packages, last minute specials, search engines, newsroom, libraries, bulletin boards</li> </ul>
Features	<ul style="list-style-type: none"> <li>✧ Offers benefits such as availability of information &amp; service, feedback &amp; query, most current &amp; up-to-date information, easy transaction, convenient travel at your fingertip</li> <li>✧ Benefits to community such as low start up cost, leverage existing infrastructure, presence on www, increase in potential revenue, equal opportunity</li> </ul>
Website Image	

#### Building trust and confidence of e-consumers

Trust and confidence of users in using e-commerce are very critical to

maintaining successful e-commerce. According to a 1999 PricewaterhouseCoopers study, as firms become more advanced and gain a better understanding of security issues and the appropriate technologies to address them, the level of relative concern about security decreased. It reports that firms are less concerned about security once they become engaged in transaction-related e-commerce and take appropriate security measures. As mentioned in the 'building trust with customers' section, managers should maintain user trust through various measures, such as encryption technology, digital certificates, secure commerce servers, and authentication, to ensure confidentiality of personal information.

#### Expanding e-commerce activities

SMTEs in this stage can find more opportunities by expanding e-commerce activities such as business to business (B2B) transactions. There are three general types of B2B activities: 1) solution provision; 2) e-procurement; 3) Net marketplace and Net exchange activities (Rayport and Jaworski, 2002). There is increasing demand for back office e-commerce applications such as supply chain management (SCM), enterprise resource planning (ERP), human resource development (HRD), operational control, and product development. For example, in the hospitality services, e-commerce applications can be e-procurement for SCM, customized accounting systems for ERP, online recruitment and IT training services for HRD, property management systems for operational control, and room technology for product development. In the case of travel agencies, examples include reservation systems for SCM, customized accounting systems for ERP, IT training services for HRD, agency management systems for operational control, and package assembly for product management (WTO, 2001).

The extent to which e-commerce is integrated throughout the business value chain is crucial to determining the benefits that can be gained. Adopting e-commerce technology for a specific function (e.g., ordering goods and services or receiving orders) is far less beneficial than making a more proactive and comprehensive utilization of the technology. Strategies involving SMTEs participating in partnership projects, in which e-commerce solutions can be SME-tailored and fully integrated in their business value chains, are usually successful (OECD, 2000). E-commerce activities should be performed for a wider variety of reasons such as marketing activities, market research, competitor analysis, after sales service, B2B transactions, and so on.

## 4.2 Government Policy

For both the leader/contender and follower/laggard groups, the role of government is very important even though the priority of policy is somewhat different.

Government policy should follow the principle that the private sector leads the market. Government should avoid undue restrictions on e-commerce and it should support and enforce a predictable, minimal, consistent and simple legal environment if governmental involvement is needed. Active government support to foster an entrepreneurial culture is important. Key policy agendas include; 1) improving the legal and regulatory framework, 2) moving government procurement online, and 3) facilitating e-transformation in industry sectors.

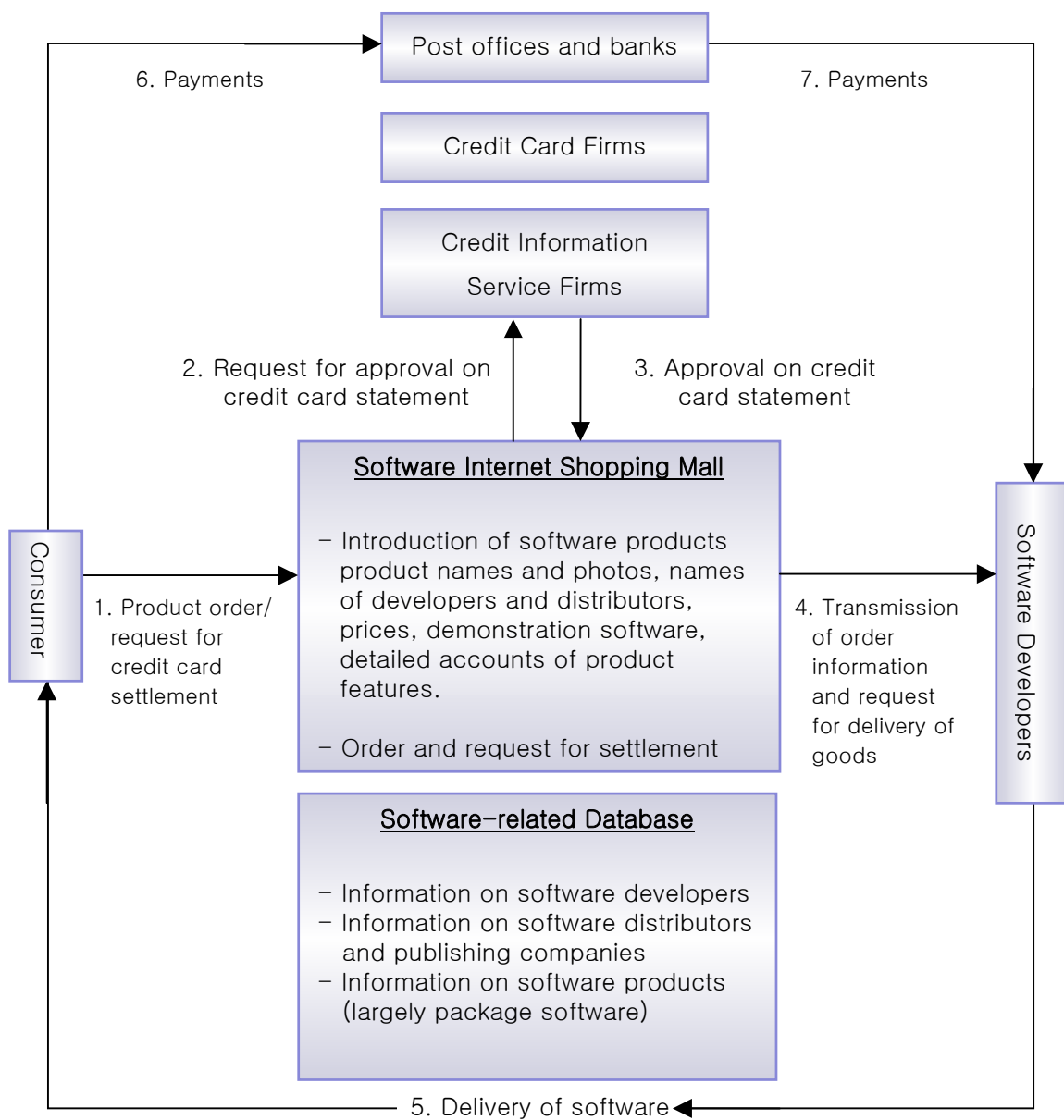
Legal and regulatory issues include consumer protection, legal resource mechanisms in disputes (e.g., e-commerce mediation committee), intellectual property protection, and validity and enforcement of contracts. In addition, the leaders/contenders group is more concerned with the development of fair taxation policies on e-commerce transactions than the follower/laggard group. The policies cover issues such as what taxes should apply to internet transactions, the identification and residence of users, and the problem of tax avoidance (PricewaterhouseCoopers, 1999). The guidelines of international organizations such as APEC and OECD can be a basis for e-commerce laws and regulations. To support consumer trust and confidence, a program of e-trust certification could be effective. Online government procurement and government participation in e-transformation of industry sectors should be planned and implemented in the medium- and long-term. Government support can be provided in tax reduction, monetary support, and sharing of knowledge and information between industries and research organizations.

As an example in Korea, a pilot project is being performed to construct a B2B network in all key industries. Also, the government has implemented a 'Venture Tourism Business Certification System,' which indirectly supports the industry. After implementation in 2001, eleven companies were selected, as venture tourism businesses, to receive various support and benefits. Applications for the status of venture tourism are evaluated twice a year.

In addition, most domestic software companies in Korea do not have distribution

channels of their own. Therefore, they pay a commission of almost 40% to distributors of their products. This is a major competitive disadvantage. To solve the problem, the government established a software cybermall. The Internet shopping mall, which opened in 1998, provides product demonstrations and the ability to purchase products electronically. The mall is linked to the sites of many vendors. The process of making a purchase in the mall is shown in **Figure 4-15**. Note that the software is downloaded rather than delivered physically.

[Figure 4- 15] Software Cybermall in Korea



\* Source: Turban, E., Lee, J., King, D., & Chung, H.M (2000). *Electronic Commerce: A Managerial Perspective*. p 451.

Finally, government should help the growth of e-commerce in various ways such as formulating definitive plans, creating legal and regulatory framework, building information technology (IT) infrastructure, skill formation and manpower planning, and by undertaking promotional and incentive measures. It functions as a facilitator, promoter, educator, and ‘anchor tenant’ for testing and pilot deployment of new applications. It is expected that APEC member economies facilitate international strategic alliances at government-to-government (G2G) and industry-to-industry (I2I) levels and help local firms to grow, regionalize and globalize. Government can also help create markets in emerging areas at the initial stage and help remove regulatory obstacles that may impede the growth of markets and businesses. Again, the ultimate objective of the government remains the promotion of private sector initiatives in e-commerce development (Kahn, 2002).

## 4.3 Technology

### 4.3.1 Deploying ERP and E-business Systems

For startup SMTEs, it is important to decide whether to deploy ERP first or e-business first, or to deploy them simultaneously. The decision will largely be determined by what the enterprise wants to achieve by implementing the e-business architecture.

In the case of an enterprise that has enough resources and is big enough to invest in the establishment of an information system, building the information system to improve the efficiency of business processes is more urgent. Building the system is also necessary considering that it is back office systems that help the front office systems enable the exchange of useful information with other players. If a company wants to use the web site, however, simply for promotion or advertisement of its products, establishing a website without the back office systems is possible. In this instance, e-business systems will be phased in.

Strategies of Internet startup can build the information system while keeping in mind the possibility of integrating e-business systems and enterprise resource planning (ERP) systems from the design and establishment stage.

As for startups, there are certain advantages in deploying all e-business systems at once. As companies that have had legacy systems in place will have difficulties

building e-business capabilities on the existing systems, startups are in a better position to implement an e-business system because they will use entirely new hardware in a new system environment. Startups can also build the information system while keeping in mind the possibility of integrating e-business systems and enterprise resource planning (ERP) systems from the design and establishment stage.

### 4.3.2 Outsourcing and Hosting

SMTEs that usually do not have enough resources to invest in an information system can build an e-business system through outsourcing. In most cases, the main type of outsourcing an information system is getting hosting service from hosting companies. Total cost of ownership (TCO) is the factor that drives outsourcing and hosting services. TCO dictates that it costs less to lease information resources than to own them.

#### 1) Types of outsourcing information systems

- Enterprises can outsource systems ranging from hardware to application software to many other hosting services including:
  - Hardware leasing service
  - Network access service
  - Application software leasing service
  - Call center software leasing service

In most cases, the main type of outsourcing an information system is getting hosting service from hosting companies.

#### 2) Internet Data Center(IDC)

In Korea's case, the services provided by the IDC are mostly hardware leasing services such as web hosting (19.4%), storage backup(12.7%), application hosting(11.2%), co-location service(10.5%), and security(8.2%). IDC operators are increasingly expanding into business application software leasing services.

The technical issue SMTE managers should consider is to what extent the company should own its hardware system and to what extent it should lease the services from the IDC. Companies should keep data related to security and their core competencies and weigh the cost of owning the hardware system.



### 3) Application Service Provider(ASP)

In Korea, the application service software enterprises use; ERP(17.5%), groupware(11.5%), system management(9.3%), CRM(7.1%), networking services(5.5%), and many enterprises lease ERP systems from ASPs.

### 4) Service Level Agreement(SLA)

The two most important things to consider when hiring outsourcing or hosting services are the understanding and measurement of the quality of services provided by the companies specializing in these services, and stating these in the contracts. Therefore, SMTE managers must know what is included in the technical provisions in the SLA and what the system's performance indicators that are important for the firm's e-business services must be. The general provisions for measuring the quality of services and technical provisions that can be used as criteria for selecting the most proper service providers are as follows:

- A. Availability: How long will the service be available?
- B. Reliability: How often is the service disrupted?
- C. Responsiveness: Can it differentiate between priority business transactions and general ones?
- D. Capacity: What is the maximum number of users it can support?
- E. Transaction volume: How well can it support the volume of transactions?

#### 4.3.3 System Configuration

A web system divides the functions of applications between the server and the client to enhance the capacity of the applications and to increase management efficiency. Many servers exist on the system including the web server that deals only with processing web information, the application server on which the company's business processing components are established, and the DB server on which the data base system for data processing is installed.

An STME Chief Information Officer(CIO) should make a decision on the hardware configuration of the server/client structure.

Therefore, an STME Chief Information Officer(CIO) should make a decision on the hardware configuration of the server/client structure. Companies that want to differentiate video services to enhance competitiveness should consider establishing a video data storage device for reliable data services and a server to process it all. In the

end, depending on which business model the SMTE pursues, different types of tier-heirarchies are demanded. This results in different costs, hardware, and levels of services. Following are the basic formats of client/server tier-structures:

- 1) 1-tier: every component is located in one physical software. All the functions, including presentation and business logic, are processed on a large computer.
- 2) 2-tier: easy to develop, with communications and functions located on the client side, and data management on the server side. This serves as a user system to support a small number of people and as a simple database searching tool.
- 3) 3-tier
  - a. logical 3-tier: physically it has 2-tiers and its communications are located on the client side, and its applications and data management on the server side but logically it functions as a 3-tier. It is hard to develop but can easily be extended to a physical 3-tier and facilitates exchange of business logic because the server manages the business processing module.
  - b. physical 3-tier: it separates communications, applications, and data management both physically and logically. Since client programs and application servers have to be developed in this structure, it is a more complicated structure. On the other hand, it can manage data from multiple servers by allocating them properly and business logic can be easily shared.

#### 4.3.4 Technological Issues of Front Office Applications for SMTEs

Front office systems are a part of the information system enabling the direct interactions with external players such as customers, partners, and suppliers. The web system is the most basic system for any SMTEs. Such systems as personalization and configuration that are built to facilitate the exchange of information over the web with other external players are front office systems. The manager of an SMTE should consider the deployment of various systems and the technical issues involved in doing so based on which market and customers the company plans to target and what goal the company wants to achieve.

The manager of an SMTE should consider front office systems such as personalization, recommendation, configuration, content management system, and customer relationship management for information exchange over the web.

## ***Personalization***

Recently many online shopping malls have introduced personalization functions. Personalization, as it enables differentiating the website from others and carrying out one-to-one marketing, is being used as one of the main tools to enhance customer loyalty for web site or brand loyalty. For this reason, personalization can be considered as a component of the front office systems. In order to provide personalization functions, the following technical elements must be considered.

### **1) The range of personalization services**

Personalization services can be implemented at various steps any time the customer is logged on to the web site. To which degree personalization functions would be included in the site's personalization services will determine the kind of configuration and functions the front office application system will have and the solutions to be used.

#### *Personalization Functions*

- Personalizing the web page
- Configuring the entire listed products
- Configuring the recommended products
- Managing members' personal information
- Personalizing e-mail marketing

### **2) Database requirements**

The database must store not only the general personal information of registered members (age, gender, address, family members, income level, etc), but also track the customer's buying habits, the categories and products the user shows interest in, and the customer response to past marketing activities. In order to do this, the database should be systematically interconnected or integrated with either the data warehouse, which is connected with CRM, or the sales system of the web site.

### **3) User authentication**

There are personal digital authentication methods such as Log-in and Cookies to identify the person visiting the site. Most web sites identify users by both Log-in and Cookies. Most e-commerce applications are providing functions that make use of Cookies.

### ***Recommendation***

Although recommendation functions can be understood as a sub-category of personalization, it should be remembered that the decision on whether to implement them or not significantly alters the requirements of the system. With regard to tourism products, in many cases customers lack proper information about them. In this respect, recommendation functions are strategically important for the industry.

#### **1) Collaborative Filtering**

Collaborative filtering, which Amazon currently uses on its site, is a typical recommendation function. More information about specific system requirements for solutions can be obtained at the websites of the vendors. One solution offered is:

- Net Perception's Real Time Recommendation Engine

This solution collects real-time data regarding the user's interests by tracking the user's behavior while on the Internet. Providing recommendation functions, collaborative filtering is stored and operated on a web server while the application that stores and retrieves user information is located on the application server. Personalization services can be offered many times to users throughout the entire process of using the website.

#### **2) Rule-Based Recommendation Solutions**

Since rule-based solutions clearly state why recommendation is needed, they make recommendation-related management knowledge easy. However, due the fact that the several steps of inference may delay user response, technical bench marking tests should be implemented. One of the solutions is Multi Logic's Exsys Web Runtime.

### ***Configuration***

If a product comes with many options and alternatives, a company should consider implementing a front office application that has configuration functions. Currently, websites selling manufactured goods such as computers, automobiles, or network equipment, which are assembled with various parts and come with a number of options, provide configuration functions. Websites selling non-physical financial products (such as insurance, lending and mutual funds) also need to take into account customer's situations and preferences, and they provide configuration functions as well. As mentioned earlier, tourism products, like financial products, are complicated information-based products that must offer a number of options. For this reason,

tourism sites that offer configuration services will achieve strategic differentiation. In the past, configuration was used as the main function of sales force automation(SFA). Today, on an e-commerce system which has to serve as a sales force itself, configuration came to serve as a major tool for customer support. Among the front office applications that support configuration are PersonalLogic, Selectica, Trilogy Software's Selling Chain Suite.

### ***Content Management System (CMS)***

The manager of a SMTE needs to decide if a special software solution for the management of diverse contents of the website is required. The most widely used CMS among e-commerce sites is the electronic catalogue system. Recently, electronic catalogue functions have been added in most e-commerce applications.

#### **1) The entities of content management**

One of the critical decisions a manager has to make is about who should have access to register, alter or delete the pricing information or product information registered in an electronic catalogue and by which procedure. If an SMTE is to display online not only its own products but also those of other travel operators, the other operators that are the providers of the products in the catalogue should have the equal right to decide and, if necessary, alter the pricing information or contents. In this case, the company's web system has to be linked to the network in the form of an extranet and have improved security functions by which the level of access to the database varies. The major catalogue management system solutions are Harbinger's Knowbility, Mercado's Catalogue Builder, Aspect Development's Component and Supplier Management.

#### **2) Video Content**

Providing maps or video clips of a tourist destination is an important tool that enhances the quality of the information the site offers. However, running video clips demands more hardware and network system requirements, which means higher cost of establishing and maintaining the system. CDN(Content Delivery Network) is a solution particularly designed for providing reliable streaming media services. Major suppliers of Content Delivery Network services include Akamai, Cisco Systems, Inktomi.

### ***Customer Relationship Management (CRM)***

CRM systems help companies focus their marketing activities on enhancing the life time value of the customer by pulling together customer information from different departments of a firm. Recently, many application solutions for CRM have been developed which are being introduced and implemented aggressively by numerous banks, credit card companies and telecom companies. The manager of an SMTE must keep in mind the following technical issues with regard to CRM:

#### **1) Online and offline integration**

Generally CRM is built as a system encompassing both online and offline systems because CRM performs as a system to manage all online and offline marketing activities which a firm usually carries out simultaneously. Therefore, both online and offline systems must be included when designing the CRM system's functions and determining the amount of data CRM will handle.

#### **2) The technical elements of CRM**

The key role of CRM is to gather the firm's scattered information in one place, a data warehouse, and do various kinds of analyses of the collected information. As the technology to integrate information and the ability to analyze it are necessary, the manager of an SMTE must look into whether the CRM system supports the needed analysis or not. As the analysis relates to marketing, the manager should cooperate with the marketing director or the CIO for better analysis.

#### **3) Solutions**

Having a clear strategy about which customer data to collect, how to analyze them, and how to use the results in marketing strategy will help determine what kind of CRM solution the firm needs. CRM software packages offered at Siebel and Vantive have many functions, including marketing, sales, and customer service and can analyze marketing activities from a consistent perspective. Another company called SPSS offers Clementine, a tool with a strong ability to analyze statistics. Recently, e-CRM which targets the 'pure player,' or online retailers who have only a virtual presence, became available.

#### **4) Call Center**

An SMTE manager should consider integrating CRM systems and existing call centers to optimize the effect of building CRM. For those companies which don't use

call centers, it is recommended that an integrated call center be set up at the same time the CRM system is being introduced. The telemarketers at the integrated call center can more efficiently do marketing activities such as recommending products and services by using the customer information and analysis results in CRM.

The call center service that CRM provides uses Computer Telephony Integration(CTI), technology that integrates the telephone and the computer. The call center searches the database for customer information using the information the customer gives through the phone, and then sends the search results on to the computer screen of a customer service agent. The new information a customer gives through the phone service is also sent to the computer, stored and analyzed.

#### 4.3.5 Technological Issues of Back Office Applications for SMTEs

The back office system is the opposite concept of the front office system. External players such as customers, partners, suppliers are found nowhere in this system and the back office system's main purpose is facilitating internal business processes from the back-end of the web system. In other words, the system focuses on increasing the efficiency of the business processes rather than seeking better interaction with customers. Today's leading back office system is ERP(Enterprise Resource Planning). ERP systems handle most of a business' marketing, finance, sales, accounting, production, material management, operation, and human resource management SCM, payments, and logistics are also handled in the back office systems.

The manager of an SMTE should consider back office systems such as ERP, SCM, electronic authentication, payments and logistics systems for facilitating internal business processes.

#### ***ERP system***

The most important decision the manager of an SMTE has to make regarding ERP is how to integrate ERP systems, which are the basis of back office systems, with front office systems like the web system. For companies with Legacy systems instead of ERP, a complex technical and business process that integrates e-Business systems, changing to an ERP system is necessary.

ERP based on a single integrated DB interconnects all the businesses in the enterprise in real time. This means optimization at the enterprise level, rather than the

optimization at the department level of the past, is now possible. Moreover, ERP enables customer-oriented processes with the seamless connection from the purchase at the customer point in the front office to the logistics of the back office.

With the integrated system, information that doesn't need to be stored more than once is shared throughout the enterprise, thus eliminating overlapping work. This in turn raises the speed of business processing, reduces the lead time of internal activities, such as production, so that a market-oriented production system could be set up. On top of that, system integration helps achieve value management by presenting real-time performance results, assessments, and reports about business activities to executives and outside stake holders who have access authority to such information. The manager of an SMTE must consider the following for the establishment and implementation of ERP systems.

#### 1) ERP

**Table 4-1** below shows the module of the function of business transaction provided by a leading ERP system, SAP R/3. The manager must decide whether to adopt the Big Bang Approach by which all the modules listed below are adopted at once, or the Phased Approach by which the modules are introduced one at a time. As for the manufacturers, production-and accounting-related modules must be adopted first.

[Table 4- 1] Module of function of business transaction

Module Name	Acronym of Module
Sales & Distribution	SD
Material Management	MM
Production Planning	PP
Quality Management	QM
Plant Maintenance	PM
Project System	PS
Human Resource	HR
Financial	FI
Controlling	CO



Treasury	TR
Investment Management	IM
Real Estate Management	RE

## 2) Extended ERP

Extended ERP systems strengthen the interconnectivity between the extended solutions of SCM, CRM, and e-Business.

### ***Other Back Office Systems***

Other back office systems the manager has to consider include SCM, electronic authentication, payments and logistics systems.

Information exchange between the enterprise and its suppliers is key to SCM. For this reason, the enterprise must build a communication channel that guarantees security between it and suppliers through a virtual private network (VPN), which is a base technology for extranet technologies. While Internet service providers (ISP) provide most of the VPN services, enterprises still need additional investment in acquiring network equipment such as VPN-enabling routers.

A company can get a third party to perform its authentication and payment services. The manager should check in advance what functions are needed for the company's B-to-C and B-to-B payments.

### 4.3.6 Technological Issues of Standardization for SMTEs

SMTE standardization issues the manager has to consider include the standard formats of documents for information exchange and business processing between partners in B-to-B transactions. Currently, XML has become widely accepted as the standard for information or document formats and data integration.

Currently, XML has become widely accepted as the standard for information or document formats and data integration.

The manager must take a close look at the results of standardization efforts made by many leading tourist companies and make sure that the results are reflected when designing and implementing the information system in his company. Today, an

increasing number of information systems are becoming open systems. As a result, systems that can be implemented regardless of the types of platforms and OS are increasingly being welcomed in the market. Accordingly, the manager should make sure that the information systems, from hardware networks to solutions, that the company chooses to implement are all open systems.

### ***OTA's ebXML***

Open Travel Alliance (OTA) is an organization of 150 influential firms in all sectors of the travel industry, comprised of airlines, car rental firms, hotels, leisure suppliers, service providers, tour operators, travel agencies, etc. OTA develops specifications for the efficient exchange of travel-related information among various companies via the internet. OTA has currently developed 2001A, 2001B, and 2001C specifications that are released on the internet.

OTA has endorsed ebXML, a standard method for exchanging business messages. ebXML is sponsored by UN/CEFACT and OASIS. Since tourism products and services are configured through the participation of a number of players from various sectors, increased efficiency in B-to-B e-commerce is essential in enhancing the overall competitiveness of the tourism industry. It is important for SMTEs to look closely at how the standardization process led by large companies is unfolding, decide whether it is in their best interest and to participate in one way or another to ensure that their interests are reflected in the process of forming standards.

#### **4.3.7 Technological Strategies for SMTEs**

##### ***Strategy for partnership***

SMTEs should consider forming a partnership with either a horizontal portal such as AOL or a vertical portal that offers travel information. In addition, SMTEs should also have specific plans to get involved in a strategic partnership with many other players in the tourism industry, and accordingly the necessary information system should be in place.

Unlike traditional firms, activities of strategic partnerships in the e-business environment, such as interaction with external players like customers, as well as other business processes, take place through the information systems of concerned companies. Under a strategic deal between e-businesses, business activities can be

linked through the use of a software application or with a bigger database.

For example, if two companies forged a strategic partnership in which they agreed to put each company's banners up on each other's web site, either the banner can be included in the web server application that will put it up on the site for an allotted time or the file of the banner can be stored in the database. An SMTE decision on establishing a strategic partnership must be based on the implications for its information system.

### ***Integration Strategy***

A strategic approach is needed in deciding the level of system integration such as SCM integration between the partners and implementing the integrated system. For example, a company can consider strengthening cooperation with its supplier whose products and services have been supplied consistently over a long time so that better information can be exchanged. By doing so, the efficiency of the entire system can be improved. Therefore, it is important for an SMTE to decide to what degree it wants to collaborate with whom under the strategic partnership. And then it must choose a proper integration system and finally, implement it.

## 5. Conclusions, Recommendations and Further Research

### 5.1 Conclusions

E-commerce technology provides a highly effective new market access channel. However, e-commerce depends on SMTE ability to access technology and the availability of skilled human resources to manage implementation of the technology.

This project is related to the APEC SME Electronic Commerce Study (1999) conducted by the APEC Telecommunication Working Group (TEL WG). It is designed to facilitate the exchange and dissemination of information on APEC SMTEs' e-commerce infrastructure, and to promote e-commerce strategies. The project was undertaken in response to the APEC Tourism Ministerial Meeting's Policy Goal 1, referred to as "Remove Impediments to Tourism Business and Investment" and Policy Goal 2, referred to as "Increase Mobility of Visitors and Demand for Tourism Goods and Services in the APEC Region in the APEC Tourism Charter" endorsed by APEC Ministers of Tourism in July, 2000.

For achieving these goals, this project examined situations, problems, and solutions related to electronic commerce of small and medium tourism enterprises in all 21 APEC member economies. It employed quantitative methods, reinforced by a meeting of experts on theory and best practices, to elicit the views and perceptions of a wide range of SMTEs with regard to potential opportunities, benefits and perceived barriers to the adoption and use of electronic commerce.

The analytical framework of this project enabled us to explore and examine the similarities and different perspectives of SMTEs in different of APEC economies and at different levels of e-commerce readiness. Twenty one APEC member economies were divided into two groups (leader/contender group and follower/laggard group), based on the results of research in 2001 by the Economist Intelligence Unit (EIU), a country and market research institute of the United Kingdom.

The EIU proposed different levels of development as e-readiness indicators, which means the extent to which a country's business environment is conducive to

Internet-based commercial opportunities. EIU suggested that e-readiness depends on a wide range of factors from the sophistication of telecom infrastructure to the security of credit card transactions to the literacy rate of the population.

Dividing 21 APEC member economies into two groups based on EIU results, the project simplified the context of e-commerce strategies for SMTEs in the APEC region and its research issues. The project explored three elements of SMTE e-commerce strategies: strategic management, government policy, and technology. The stages of e-business development, ranging from start-up to established SMTEs, were also investigated.

It is believed that SMTEs in the 21 APEC member economies have shown their strong interest and participation in e-commerce, recognizing that the potential benefits of e-commerce significantly outweigh the disadvantages and risks. The potential benefits included 'business to business transactions,' 'online ordering,' 'market research,' 'after sales service,' 'competitor analysis' and 'electronic payment.'

A 2001 UN report stated, "it is not the cost of being there, on the on-line market place, that must be reckoned with, but the cost of not being there." Embracing digital communication and information technology is no longer an option, but a necessity. Thus, one of the most important characteristics of electronic commerce is the opportunity and promise it holds for SMTEs to extend their capabilities and grow.

This research, however, found that barriers to adopting e-commerce for SMTEs were identified as 'limited knowledge of available technology,' 'lack of awareness,' 'cost of initial investment,' 'lack of confidence in the benefits of e-commerce,' and 'cost of system maintenance.' In particular, the follower/laggard group experienced more serious barriers than the leader/contender group in adopting e-commerce in terms of internal firm capacities. These barriers included 'limited knowledge of available technology,' 'cost of system maintenance,' 'cost of securing skilled human resources for e-commerce,' 'difficulty with integrating e-commerce & existing system,' 'shortage of skilled human resources,' and 'resistance to adoption of e-commerce,' and market situation, such as 'lack of awareness of e-commerce,' 'insufficient e-commerce infrastructure,' and 'small e-commerce market size.' Moreover, the follower/laggard group considered one of their perceived barriers, 'lack of government support,' as more significant than the leader/contender group did.

It was found that SMTEs in the APEC region consider ‘skilled human resources,’ ‘security of the e-commerce system,’ ‘user-friendly web interface,’ ‘trust of customers,’ and ‘top management and government support’ as most important for e-commerce. However, they said that ‘skilled human resources’ and ‘top management and government support’ are not performed or managed well, relative to their importance. In addition, it was found that most SMTEs do not recognize the importance of ‘sharing knowledge and information between SMTEs’ and ‘business partnerships’ as e-commerce strategies, even though the two elements are critical for SMTEs.

It is suggested that making a more proactive and comprehensive utilization of e-commerce is far more beneficial than adopting e-commerce for a specific function such as receiving orders or ordering goods and services. SMTEs can use more advanced solutions that are applied to B2B and B2C transactions with reasonable prices of business solutions in the Internet. Regarding perceptions of benefits from e-commerce, most SMTEs recognized the benefits of B2C transactions, such as ‘providing easy access to information on tourism,’ ‘providing convenience for customers,’ ‘creating new markets,’ and ‘expanding choices by customers’ more than they recognized the benefits of B2B transactions such as ‘simplifying business process,’ ‘reducing operation cost,’ ‘interacting with other business partners,’ and ‘founding new business partners.’ It implies that managers of SMTEs should be more aware of many other benefits of e-commerce including ‘B2B transactions,’ ‘improving quality of service,’ and ‘establishing interactive relationships with customers.’

This research confirms that SMTEs in the follower/laggard APEC member economies in particular, believe that governments have an important role to play in enabling firms to be competitive by promoting the development of electronic commerce. To boost e-commerce, government policies should focus on 1) the development of information infrastructure, 2) commencement of e-commerce activity, and 3) a legal enforcement system in e-commerce. Sufficient access to information infrastructure at reasonable cost is fundamental for e-commerce. Also, it is suggested that governments should provide a variety of policies to enhance sharing knowledge and information between SMTEs, and business partnerships.

Finally, it is confirmed that the application of e-commerce strategies to SMTEs in the APEC region will enhance competitiveness, improve profitability, and increase

mobility of visitors and demand for tourism goods and services.

## 5.2 Recommended Individual Actions for APEC Member Economies

This project makes recommendations to all APEC member economies and their small and medium-sized tourism enterprises (SMTEs) for promoting e-commerce in general. These recommendations can be applied to both leader/contender and follower/laggard groups simultaneously developing on their particular situations.

- 1) Develop a national vision, plans and policy guidelines on e-commerce of SMTEs and involve tourism stakeholders in developing e-commerce strategies and products within the context of overall tourism marketing strategies.
  
- 2) Establish appropriate laws and regulations and service standards in order to build trust and consumer confidence. It is also important to address security issues to build trust and confidence in the electronic marketplace, and to enact measures to ensure the authenticity of electronic documents, and the privacy and confidentiality of personal and corporate records. In addition, it is necessary to ensure that fair taxation is applied to electronic commerce transactions, including measures to ensure that transactions, conducted via electronic commerce receive neutral tax treatment relative to non-electronic transactions.
  
- 3) Adopt appropriate information technology to improve business and consumer access to the Internet and to electronic commerce. Solutions must be appropriate for both consumers and producers. Technology adoption may be incremental. A small or medium tourism enterprise may start with an ‘e-mail only with next day booking confirmation’ system and work up to full on-line booking and payment.
  
- 4) Raise awareness of e-commerce through training and education. E-commerce cannot be implemented without empowering and enabling tourism stakeholders to take advantage of new Internet and e-commerce technologies. The quality of information provided and how it is structured depend on the skills of tourism stakeholders in the SMTEs. It is important to promote greater awareness of the opportunities and benefits of e-commerce for SMTEs, such as training and skills development programs. The governments of APEC member economies should take steps to enhance the confidence of small and medium-sized tourism

enterprises in using electronic commerce.

5) Implement appropriate mechanisms in APEC member economies for the safer use of electronic payment in tourism transactions at the local, regional, and global levels. Electronic payment methods must be transmitted using secure means to reassure customers. SMTEs can work with vendors to provide this service. Also, payment methods must be flexible, to accommodate different levels of users. Some prefer to mail or fax a form or talk to a live agent as opposed to transmitting a credit card number over the Internet.

6) Implement e-marketing strategies to take advantage of interactivity, mass customization, real time, and a database of customers. The process of implementing marketing strategies should focus on; 1) customer acquisition, 2) customer cultivation, and 3) customer retention. Customer acquisition is seeking potential customers. Customer cultivation relates to what they need and how to encourage them to purchase services or products. Customer retention focuses on how to create repeat customers.

7) Integrate SMTEs into industry-wide associations. This works best when e-commerce is used proactively as part of a set of strategies to increase SMTE competitiveness in global markets. The development of Destination Integrated Computer Information Reservation Management System will enable destinations to development networks of SMTEs and promote them under their brand name. This will encourage SMTEs to stop competing so strongly at the destination level, and to develop networks of wealth creation and mutual benefits in order to deliver seamless tourism products and to compete against remote destinations and SMTEs.

8) Manage digital brand. Brand power is more important in on-line than off-line because e-business is a virtual world where consumers are more dependent on recognized brands. Promises must be translated into specific interactive functions and web design features collectively giving consumers a seamless experience. Such design features as one-click ordering help deliver the promise of convenience or collaborative tools such as chat rooms or ratings functions make it possible to realize the promise of belonging. Smaller firms do not necessarily have to establish their own reputations for quality and reliability when branding can be provided by third parties. The key to building trust on the web for both B2C and



B2B organizations is to learn to use the Internet to relay information about reputation, competence, quality, and reliability.

9) Formulate and implement e-business strategies through partnerships with other SMTEs or large firms, especially in the area of brand management (BM), customer relationship management (CRM), and human resources management (HRM). Combining forces through partnerships between SMTEs is important. SMTE business partners should be carefully selected around the globe and exhibit the principles of relationship building, caring, and providing exceptional value to customers.

10) Take business models appropriate for SMTEs' own e-business objectives and environments. SMTEs can perform e-business combining two or more of models in the commerce model, media model, usage fee model, dynamic-pricing model, information service model, and do-it-yourself trip design model. External service providers have great potential to assist SMTEs.

11) In the established stage, re-design website to focus more on 'customer retention' to ensure quality of service than 'customer acquisition.' Also, develop strategies to expand into international markets.

12) Associate with e-shopping malls. It allows SMTEs to conduct Internet-based e-commerce without bearing all the start-up costs or the costs of improvements, advertising and technical difficulties, which are instead shared by all merchants in the mall.

### 5.3 Recommended Collective Actions for APEC Member Economies

Collective recommendations may be taken by groups of APEC member economies to enhance the environment for electronic commerce and support its adoption by SMTEs. This project followed several recommendations made by the APEC SME e-commerce study (APEC TEL 1999) for collection action plan because a digital divide still exists in the APEC region. Their recommendations are applicable to developing an e-commerce of SMTEs. Recommendations include:

- 1) Improve the information infrastructure for electronic commerce across the APEC region. This action plan might include enhanced efforts to implement Asia Pacific Information Infrastructure (APII) programs that help to develop the common APEC information infrastructure required for regional and global electronic commerce for SMTEs (APEC TEL 1999).
  - 2) Ensure that fair taxation is applied across jurisdiction and that value-added tax is transparent and consistent when applied to e-commerce transactions for SMTEs (APEC TEL 1999).
  - 3) Develop and maintaining common standards to facilitate e-commerce among APEC members, including collective measures to facilitate an international, voluntary and consensus-based environment for standards setting wherever appropriate (APEC TEL 1999). For this, an effective regulatory system should be created based on the premise that the same regulations will apply to both e-commerce and traditional commerce.
- Other recommended action for APEC member economies includes:
- 4) Work towards facilitating international electronic commerce, through organizations such as the World Trade Organization (WTO), the Organization for Economic Co-operation and Development (OECD), and the World Tourism Organization (WTO). All APEC member economies are encouraged to participate in helping shape the emerging international consensus and to contribute to the preparation of various legal instruments being considered in international meetings.
  - 5) Build e-community across the APEC region to utilize their resources. E-community provides multiple tools including discussion forums, online chat, and instant messaging.
  - 6) Develop capacity-building through training and basic education in e-commerce in relevant fields, such as informatics and telecommunications, and conduct awareness campaigns about SMTEs e-commerce.
  - 7) Build cybermalls to help SMTEs in the APEC region that do not have distribution channels of their own. Most SMTEs that do not have their own

distribution channels must pay almost 40% in commission to distributors promoting their products and services to end users. This is a major advantage and barrier to e-commerce by SMTEs. In order to solve the problem, it is recommended that APEC should establish a software cybermall.

8) Facilitate international strategic alliances at government-to-government (G2G) as well as industry-to-industry (I2I) levels, and help local firms to grow, regionalize and globalize.

9) Help create markets in emerging areas at the initial stage and help remove regulatory obstacles that may impede the growth of markets and businesses.

#### 5.4 Issues for Further Research

There are several issues that must be addressed in the future. Further research should focus on both macro- and micro-analysis.

1) There is a need for further research on selected legal and regulatory developments in SMTEs e-commerce. A legal and policy infrastructure that is supportive and conducive to electronic commerce is an important prerequisite for the growth of e-commerce by SMTEs. Further research should focus on e-transactions that are given the same legal effect as traditional paper-based transactions. Thus, APEC member economies collectively should examine their legal infrastructure to ascertain whether paper-based form requirements prevent laws from being applied in an e-commerce.

2) More research needs to be undertaken as to how e-commerce situation changes periodically. Thus, time series analysis of SMTE e-commerce opportunities and challenges should be undertaken with a periodic survey of SMTE capabilities and perceptions of e-commerce opportunities and barriers in the APEC region. This research will help member economies to develop efficient and productive strategies for e-commerce, keeping abreast with the rapidly changing IT environments.

3) There is a need for further research on exploring e-commerce strategies of SMTEs by sector, including hotel, travel agents, DMO, MICE, etc. Moreover,

research is needed on partnerships between SMTEs and larger tourism corporations. As the APEC TEL study (1999) pointed out, “an examination of business-to-business e-commerce and new supply chain relationships between SMTEs and large firms that are facilitated through e-commerce would provide important guidance for APEC member economies to foster and encourage these relationships (p.37).”

4) Further research needs to focus on behavioral topics in the future. This research will focus on consumer behavior in e-commerce, building consumer behavior profiles and identifying ways to utilize them, seller’s behavior and motivation (i.e., resistance to change and how to overcome it), issue-oriented research (i.e., why there is a slow adaptation of some applications and others are rapid), and mental mode of consumer product search process, comparison process, and negotiation.

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# Appendix 1

## **Survey Questionnaire**

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# Survey on the Application of E-Commerce Strategies to SMTEs (Small and Medium-Sized Tourism Enterprises) in the APEC Region

This survey is a part of the APEC project 02/2001T "Application of E-commerce Strategies to SMTEs (small and medium-sized tourism enterprises) in the APEC Region." The objective of this survey is to determine e-commerce strategies which are most applicable to the SMTEs in APEC member countries. We would like to ask for your valuable opinions on e-commerce strategies of SMTEs in your country. Your responses will be kept confidential. Your kind and prompt reply would be highly appreciated.

- **Contacts**

If you have any questions regarding this survey, please contact Dr. Yong Kun Suh or Chulwon Kim at: \*Telephone: 82 2 3704 0621 \* Fax: 82 2 3704 0690 \* E-mail: [yong@ktri.re.kr](mailto:yong@ktri.re.kr) or [cwkim@ktri.re.kr](mailto:cwkim@ktri.re.kr)

E-commerce is the process of buying and selling or exchanging of products, services, and information via computer networks including the Internet. (Turban, Lee, King & Chung, 2000)

Small and medium sized tourism enterprises in this survey are defined as businesses that have 300 or fewer employees or sales from US\$ 2 million to 20 million, depending on the characteristics of business.

<b>Section A:</b>				
<b>1. To what extent are the small &amp; medium sized tourism enterprises in your country currently involved in the following e-commerce activities ?</b>				
	Well below		Average	Well above
a) General marketing activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Communication with customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Market research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Competitor analysis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Online ordering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Electronic payment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g) After sales service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h) Business to business transactions	<input style="width: 100%; height: 20px;" type="text"/>			
<b>2. To what extent can the adoption or implementation of e-commerce strategies be critical to the success of the tourism industry, in particular, the small &amp; medium sized tourism enterprises in your country?</b>				
	Well below		average	Well above
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Section B:

**3. How important is each of the following benefits regarding e-commerce in the small & medium sized tourism enterprises in your country?**

	Un- important	Average			Most- important
a) Creating new markets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Reducing operating cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Providing customized and specialized tourism products and services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Saving time for providing tourism services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Improving image and public recognition of the small & medium sized tourism enterprises	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Improving customer services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g) Providing better information on tourism products and services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h) Establishing interactive relationship with customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i) Founding new business partners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j) Simplifying business process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k) Providing convenience for customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l) Expanding choices by customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m) Providing easy access to information on tourism products and services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n) Interacting with other business partners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Section C:

**4. Please indicate which of the following factors are the main barriers to adopting or implementing e-commerce by the small & medium sized tourism enterprises in your country. Please check all that apply.**

- a) Lack of awareness of e-commerce
- b) Limited knowledge of available technology
- c) Lack of confidence in the benefits of e-commerce
- d) Shortage of skilled human resources
- e) Cost of initial investment
- f) Cost of system maintenance
- g) Cost of securing skilled human resources for e-commerce
- h) Cost of training human resources for e-commerce
- i) Relatively small e-commerce market size
- j) Insufficient e-commerce infrastructure
- k) Difficulty with integrating e-commerce and existing system
- l) Resistance to adoption of e-commerce
- m) Fear of changes in corporate culture
- n) Lack of government support

## Section D:

**5. Please rate the importance of the following factors for the successful implementation of e-commerce by the small & medium sized tourism enterprises in your country.**

	Un- important		Average		Most- important
a) Specific tourism products or services for e-commerce	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Top management support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Information Technology Infrastructure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Customer acceptance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) User-friendly Web interface	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Integration with the existing corporate system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g) Security of the e-commerce system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h) Market situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i) Corporate knowledge, culture and acceptance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j) Internal communication	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k) Cost of establishing and maintaining e-commerce system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l) Level of trust between customer and company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m) Government support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n) Skilled human resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
o) Sharing knowledge and information between the small & medium sized tourism enterprises	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
p) Relationship with other business partners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Section E:

**6. In relation with the above critical success factors, how does your country perform regarding e-commerce? Please rate each of the following factors based on the performance of e-commerce by the small & medium sized tourism enterprises in your country.**

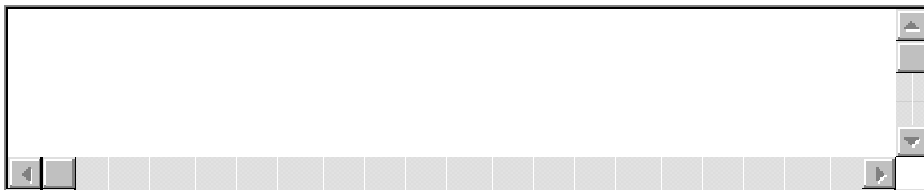
	Un- important		Average		Most- important
a) Specific tourism products or services for e-commerce	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Top management support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Information Technology Infrastructure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Customer acceptance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) User-friendly Web interface	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Integration with the existing corporate system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g) Security of the e-commerce system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h) Market situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i) Corporate knowledge, culture and acceptance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j) Internal communication	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k) Cost of establishing and maintaining e-commerce system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l) Level of trust between customer and company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m) Government support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n) Skilled human resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
o) Sharing knowledge and information between the small & medium sized tourism enterprises	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
p) Relationship with other business partners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



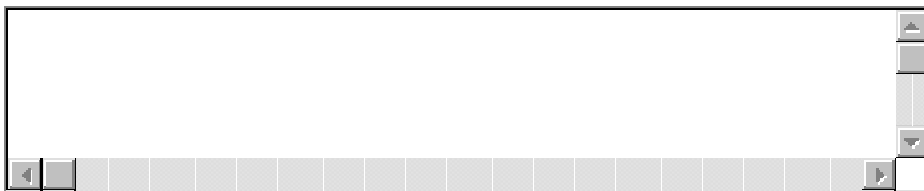
**7. Please describe any successful practices and cases of e-commerce of small & medium sized tourism enterprises in your country.**

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**8. Please describe the critical success factors for e-commerce in your country.**

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**9. Please input any comments on e-commerce in the tourism industry.**

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**■ Please provide the following information. This information will be used only for the purpose of this survey.**

* Your e-mail address:	<input type="text"/>
* Your Country	<input type="text" value="Select your country"/>
* Working areas	<input type="text" value="Select working areas"/>
(Others: specify)	<input type="text"/>
* Your job position :	<input type="text"/>
* Your gender:	<input type="text" value="Select your gender"/>

■ If you wish to change a single response, please select a new response for that statement.

■ If you wish to clear ALL of your responses to begin the survey again please click the [Reset] button.

■ When you have completed this survey please click the [Submit] button.

■ Thank you for taking the time to complete this survey. Your input is appreciated. You will be sent a copy of the final report.

Submit

Reset

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## Appendix 2

### **APEC International Tourism Symposium**

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# **Asia-Pacific Economic Cooperation (APEC)**

## **International Tourism Symposium**

### **E-Commerce and Tourism in the APEC Region**

Date: 5 – 6 Feb 2002

Venue: The Westin Chosun Hotel (Orchid Room, the 2<sup>nd</sup> floor)

Seoul, South Korea

Hosted by: Ministry of Culture and Tourism Korea

Tourism Research Institute

*An Invitation Message from the Host*

It is a pleasure to extend a cordial invitation to all of you to participate in the APEC International Tourism Symposium "E-Commerce and Tourism in the APEC Region." The symposium will discuss cases, applications and strategies of e-commerce for small and medium sized tourism enterprises (SMTEs) with the distinguished speakers and panelists.

It is anticipated that the symposium will help SMTEs achieve competitive advantages, producing a significant value to increase mobility of visitors and demand for tourism goods and services in the APEC Region. Moreover, the symposium will contribute to achieve one of APEC goals "Trade and Investment Liberalization and Facilitation (TILF)."

We have the pleasure to invite you to the symposium. Your participation would be highly appreciated.

Jan 23, 2002

Youn -Taek Lee, President  
Korea Tourism Research Institute

## PROGRAM

**1<sup>st</sup> day: 5 Feb (Tuesday)**

09:00 – 09:30	Registration
09:30 – 10:00	<p>Opening Remarks Youn -Taek Lee, President, Korea Tourism Research Institute, Korea</p> <p>Welcome Speech Yangwoo Park, Director General, Ministry of Culture and Tourism, Korea</p>
<b>Main Session I : General Session</b>	
<b>Principles, Processes and Policies of E-Commerce Strategies for SMTEs</b>	
10:30 – 12:20	<p>Overview of E-Commerce Strategies for SMTEs (Chulwon Kim, Senior Researcher, Korea Tourism Research Institute, Korea)</p> <p>Policies of E-Commerce Strategies for SMTEs (Dong-Woo Cho, Senior Deputy Director, E-Commerce Policy Division, M.O.C.I.E , Korea)</p> <p>E-Commerce and Tourism in the APEC Region: An Australian Perspective (Sarah Clough, Manager, Department of Industry, Tourism and Resources, Australia)</p> <p>Panel Discussion</p>
<b>Main Session II : General Session</b>	
<b>Best Practices on E-Commerce Strategies for SMTEs in the APEC Member Economies</b>	
14:00 – 17:20	<p>E-Business &amp; E-Commerce for Hospitality Industry (Dong Sik Kim, CEO, MICROS Fidelio, Korea)</p> <p>Best Practices on E-Commerce Strategies for SMTEs in Malaysia (Sharifah Zainah, Head, Tourism Division of the Ministry, Malaysia)</p> <p>Best Practices on E-Commerce Strategies for SMTEs in Australia (Pramod Sharma, Professor, University of Queensland, Australia)</p> <p>Best Practices on E-Commerce Strategies for SMTEs in Korea (Nam Jae Cho, Professor, Hanyang University, Korea)</p> <p>Best Practices on E-Commerce Strategies for SMTEs in Singapore (Habibullah Khan, Professor, National University of Singapore, Singapore)</p> <p>Panel Discussion</p> <p>Closing Remarks</p>

**2<sup>nd</sup> day: 6 Feb (Wednesday)**

10:00 – 12:30	<b>Main Session III: Experts Session</b> <b>Application of E-Commerce Strategies to SMTEs in the APEC Region</b>
	Open Discussion - Successful E-Business Models for SMTEs - Internet Marketing Strategies for SMTEs - Value Chain Model for E-Commerce Strategies of SMTEs
	Further Discussion for the APEC Project, “Application of E-Commerce Strategies to SMTEs in the APEC Region”
	Final Brief Presentation by Moderator

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● **Moderator**

- **Main Session I, II**  
Jae Young Shin (Professor, Kyungwon University)
- **Main Session III**  
Youn -Taek Lee (President, Korea Tourism Research Institute)

● **Panelist**

- **Main Session I**  
Ki Hong Kim (Senior Researcher, Korea Institute for Industrial Economics & Trade)  
Ic Keun Oh (Professor, Keimyung University)  
Jai Bumm Kim (Professor, Sungkyunkwan University)  
Sukho Lee (Senior Researcher, Korea Tourism Research Institute)
- **Main Session II**  
Yong Gu Suh (Professor, Sookmyung University)  
Hong Bumm Kim (Professor, Sejong University)  
Hyun Suk Choi (Executive Director, Hana Tour Service Inc, Korea)  
Sarah Clough (Manager, Department of Industry, Tourism and Resources, Australia)

- Contact Point : Jung-Eun, Kim (Researcher, Korea Tourism Research Institute)

Tel: 82-2-3704-0645, e-mail: [jekim@ktri.re.kr](mailto:jekim@ktri.re.kr)

Session I

**Overview of E-Commerce Strategies  
for Small and Medium sized Tourism Enterprises  
(SMTEs)**

Dr. Chulwon Kim  
Senior Researcher  
Korea Tourism Research Institute  
Korea

APEC Project: TWG02-2001T

- Application of Electronic Commerce to Small & Medium Tourism Enterprises (SMTEs) in APEC Member Economies
- US\$89,000
- Aug 2001 – July 2002
- Contribution to APEC Trade and Investment Liberalisation and Facilitation (TILF).

Objectives of this Project

- To examine problems and solutions related to electronic commerce in SMTEs
- To review best practices of electronic commerce which could be applied to SMTEs in APEC region
- To develop strategies for electronic commerce for SMTEs in the APEC member economies

E-Commerce for SMEs in Tourism

- Unprecedented opportunities and Challenges
- Stringent impediments to the adoption of e-business by SMTEs
- Scale and affordability of some ITs
- Facility to implement them
- New solutions have little strategic fit

E-Commerce for SMEs in Tourism

- More than sufficient to encourage SMTEs to formulate new strategies, adopt new management practices, and invest in new IT solutions.

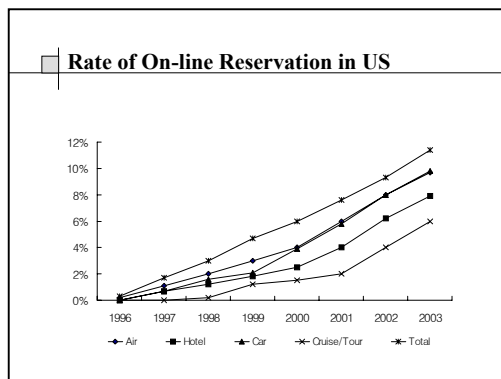
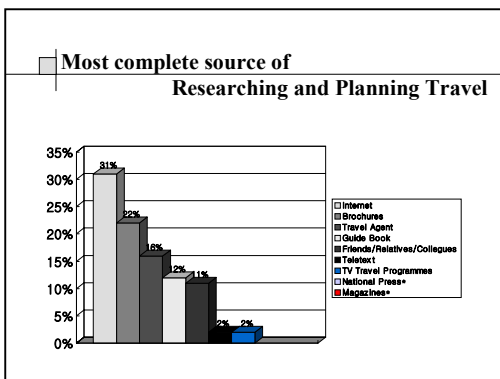
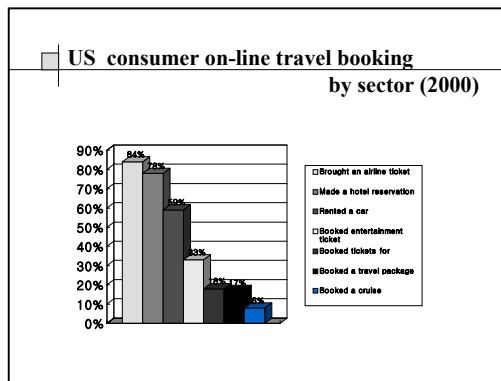
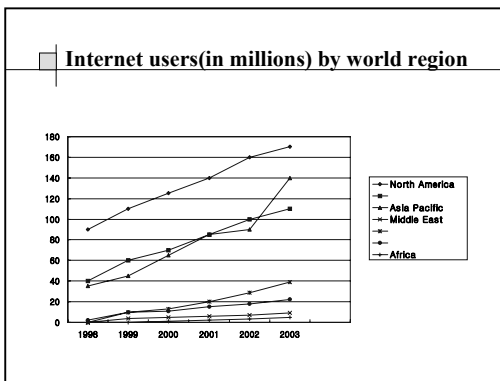
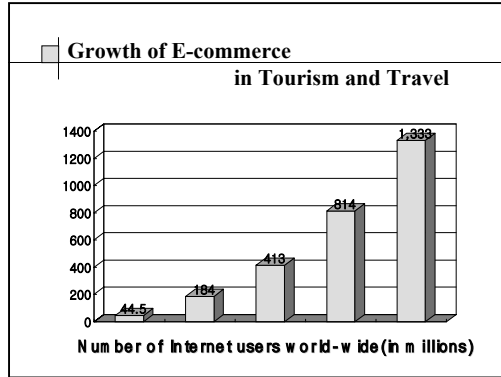
Questions

- 1) Will SMTEs be able to capture new tourism e-business customers?
- 2) How can SMTEs effectively sustain the competition of new entrants and larger firms?
- 3) Is there a clear path for SMTEs in various sectors to evolve into a profitable business?



**Three Issues for SMTEs**

- 1) To understand where the growth of e-commerce of the tourism industry is heading
- 2) To understand the strategic importance of practicing e-commerce
- 3) To stop investing in inferior solutions and target their efforts at more strategic e-commerce technologies

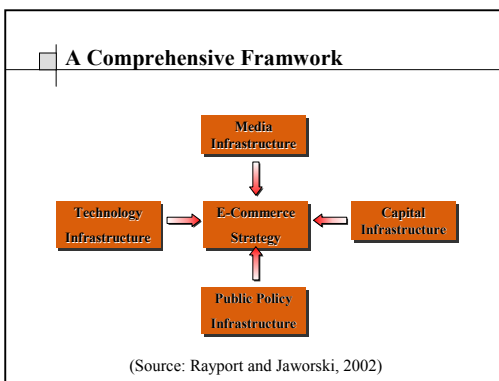


**Strategic Importance of E-commerce for SMTEs**

- However, it is not clear how each sector of SMTEs will respond and how e-commerce strategies will differ among firms
- SMTEs represent a tiny proportion of total turnover and have below-average “value added per employee”

**Strategic Importance of E-commerce for SMTEs**

- The survival of existing SMTEs will depend on adequate use of innovative e-commerce applications
- Depend on overcoming the barriers to the implementation of e-commerce
- Require SMTEs to develop a more strategic approach



**E-commerce Applications to Tourism Businesses**

- Front Office Applications
  - 1) Marketing and Advertising
  - 2) Distribution Channel
  - 3) Reservation and Payment
  - 4) Customer Relationship Management
  - 5) Loyalty Programs

**Front Office**

	Hospitality Service	Travel Agencies	Tour Operators	Visitor Attractions
Marketing & Advertising	• Individual Web Site • Destination Management System	• Catalogue Referencing • Affiliates Programs	• Package Lists on Travelmarts • Package Customization	• Catalogue Referencing • Online Previews
Distribution Channels	• Inclusion in Packages	• Network-Based Portals	• Direct Access for Agencies	• Inclusion in Packages
Reservation & Payment	• Online Accounts	• Reservation Systems	• Payment Processing	• Online Ticketing
Customer Relationship Management	• Front Desk Automation	• Client profiles	• Call Centres	• Automated Guidance
Loyalty Programs	• Frequent Client Points	• Customized Deals	• Over-Commissions	• Frequent Client Points

Source: WTO Business Council (2001), E-Business for Tourism.

**E-commerce Applications to Tourism Businesses**

- Back Office Applications
  - 1) Supply Chain Management
  - 2) Enterprise Resource Planning
  - 3) Human Resources
  - 4) Operational Control
  - 5) Product Development

**Back Office**

	Hospitality Service	Travel Agencies	Tour Operators	Visitor Attractions
Supply Chain	- E-Procurement	- Reservation Systems	- Inventory Management	- E-Procurement
Enterprise Resource Planning	- Customized Accounting Systems	- Customized Accounting Systems	- Customized Accounting Systems	- Customized Accounting Systems
Human Resources	- Online Recruitment - IT Training Services	- IT Training Services	- IT Training Services	- Online Recruitment - IT Training Services
Operational Control	- Property management Systems	- Agency Management Systems	- Tour Operator Systems	- Attraction Management System
Product Development	- Room Technology	- Package Assembly	- Package Assembly	- Content Production

Source: WTO Business Council (2001), E-Business for Tourism.

- Conclusions**
- **Brick-and-Mortar SMTEs: a lack of responsiveness to technological change**
  - **1) Fear of the unknown, complex, not affordable**
  - **2) No focus on growth, lack of resources to invest**
  - **3) Too late to enter**

- Recommendations**
- **Targeting e-commerce strategies**
  - **E-business applications and functionality**
  - **Step-by-step guide to implement e-commerce strategy**
  - **Critical success factors for e-commerce strategy**
  - **Case Studies**
  - **Future of e-commerce**

**Session I**

**Policy of e-Commerce and its Application for SMTEs in Korea**

**February 5, 2002**

**Dong Woo Cho**  
 Senior Deputy Director, e-Commerce Policy Division  
 Ministry of Commerce, Industry and Energy  
 Korea

**Contents**

I. e-Commerce Environment

II. Policy of e-Commerce

III. Application of e-Commerce Policy for SMTEs

**I. e-Commerce Environment**

**1. IT Industry Trends**

- Growth in the IT Sector has become a Great Contributor to Overall Economic Growth

Year	1996	1997	1998	1999	2000	Average annual growth rate
(US\$ billion, %)	54.0	68.7	80.1	104.6	128.8	24.3

The share of the IT industry in the GDP (%)

Year	1997	1998	1999	2000
Share (%)	8.6%	9.3%	11.2%	12.9%

Contribution of the IT output to the Growth of GDP (%)

Year	1990	1996	1999	2000
Contribution (%)	4.5%	14.1%	32.8%	50.5%

Trade of IT Products (US\$ billion)

Year	1997	1998	1999	2000
Exports (US\$ billion)	31.3	30.5	39.9	51.2
Imports (US\$ billion)	21.9	18.2	26.5	35.5

**2. e-Commerce Environment**

- Well-established IT Infrastructure**
  - broadband network with fiber optics: 144 areas (End-2000)
  - Nation-wide High-Speed Information Network: by 2005
- Number of Internet Users (End-Mar 2001)** million persons

Country	Korea	Germany	UK	Japan	USA
Number of users (million)	20.9	30.9	42.8	43.5	174.9

- Average annual growth rate(1994-2000): Korea 134%, World 63%

**Subscribers of Broadband Internet Services (End-2000)**

- More than 4 million Subscribers

\* **Reuters:** ... the leading country for broadband Internet connections, according to as OECD report ... South Korea is well ahead of Canada and the United States...the 4.3 million broadband connections in South Korea were a result of fierce competition between providers of cable internet and DSL, a technology for turning ordinary telephone line into broadband pipes (4/23/2001)

\* **Financial Times:** ... 57.3 percent of Korean [Internet users] regularly use high-speed Internet services... the highest rate of broadband Internet penetration in the world... (4/03/2001)

**■ Number of Mobile-phone Internet Users (End-2000)**

- ▶ 15.8 million persons
- Mobile-phone users: 26.6 million persons

**■ Favorable Legal Framework for e-Commerce**

- ▶ In Feb. 1999, 'The Basic Act on e-Commerce', 'The Electronic Signature Act' were established
- ▶ At least one year earlier than any other countries

**3. e-Commerce Market**

**■ Growth of the e-Commerce**

Year	US\$ billion
1999	8.3
2000	15.8
2001	26.7
2005	170.6

**■ Investment in e-Business (200 major companies)**

- ▶ (2000) US\$ 2 billion → (2001) US\$ 2.5 billion (25% Increase)

**■ e-Marketplaces (End-2001): More than 300**

**II. Policy of e-Commerce**

**1. Policy Principles**

- The private sector should lead
- Government should avoid undue restrictions on electronic commerce
- Where governmental involvement is needed, its aim should be to support and enforce a predictable, minimal, consistent and simple legal environment

**2. Adoption of e-Business Initiative**

- On Feb. 15, 2000, President Kim Dae-jung issued "Comprehensive Policies for e-Commerce Development"
- 40 action programs within 5 key categories:
  - To revise law and regulations;
  - Expanding infrastructure;
  - E-Procurement within the public sectors;
  - E-Commerce promotion within the industries; and
  - E-Trade infrastructure establishment
- Committee on Electronic Commerce Policy

- On Apr. 27, 2001, "e-Business Initiative in Korea" was announced
  - 5 strategies toward development
    - Facilitation e-Transformation in Industry sectors;
    - Moving Government Procurement On-line;
    - Improving Legal & Regulatory Environment;
    - Connecting the Globe; and
    - Establishment to nation-wide facilitating system
  - By grafting world-class IT infrastructure on the traditional industries, e-transformation will be boosted to the level of advanced countries within 3 years

**3. Key Policy Agenda**

- Facilitating e-Transformation in Industry Sectors
  - Construction of B2B network in all industries
    - Pilot project in the key industries (50 sectors)
  - Construction of digitalized Industrial Complex
    - Common D/B, on-line information network, B2B, etc.
  - Support SMEs
    - Digitalization of 30,000 SMEs
    - Operation of 43 ECRCs
    - Supporting use of the high-speed internet

- **Moving Government Procurement On-line**
  - Over 95% of the government procurement is to go through e-commerce by 2003
  - Streamline documents & procedure of procurement
  - A single window for procurement information
- **Improving Legal & Regulatory Environment**
  - Consumer protection
    - Related laws & regulations are to be revised, in accordance with OECD Guidelines
    - e-Commerce Mediation Committee has been operated
    - "e-Trust" certification mark program has been operated

- **Standardization**
  - e-Commerce Standardization Integration Forum (June 2000)
    - Most standardization-related organizations & leading companies participated
  - In May 2001, Standardization Road Map was established for 6 areas, including e-catalogs, e-documents, e-payment, etc.
  - Seamless interoperability of e-business network should be secured by setting up standards through the initiative of the private sector
- **e-Payment**
  - Various kinds of electronic money are to emerge
  - Consortium of banks is to develop and run B2B e-payment system by the end of this year
  - 'The Electronic Fund Transfer Act' is being studied by MOFE for introduction

- **e-Business Experts**
  - In Dec. 2000, a 3-year plan to train e-commerce resources was formulated
  - Based on the survey on each industry's shortage of e-commerce resources
  - Encourage universities & private institutions to;
    - establish e-business course
    - introduce "e-Business Master" qualification system
  - 'Gold Card' system was introduced to attract skilled foreign IT & e-business experts
  - Exempt them from some requirements in the Immigration Control Act

- **Connecting the Globe**
  - **Completing global paperless e-trade system**
    - All export & import related workflow, including contracts, fulfillment and settlement, are to be processed on-line
    - Trade network of 6 countries, namely, Korea, China, Japan, Singapore, Taiwan and Hong Kong are to be connected
  - **Strengthening the cooperation activities with major strategic countries, such as China, India, EU, etc.**
    - Korea-U.S. joint Statement on e-Commerce (Nov. 1998)
    - Korea-Japan IT Cooperation Initiative (Oct. 2000)
  - **Hosting the 1st ASEM Seminar on e-Commerce in Seoul in Oct. 2001**
  - **Supporting for IT industry's advancement to overseas markets**



III. Application of e-Commerce Policy for SMTEs

1. Challenges and difficulties in Cyber-Tourism Industry

- Findings of BSI Survey (Nov. 2001) on cyber-shopping malls
  - Excessive competition and economic depression are the biggest difficulties
  - High level of payment
  - Lack of information systems establishment
  - Lack of consumer confidence

2. Policies regarding Governmental Support

- **Strengthened Tax support**
- **Tax is exempted when investment is made in CRM systems in order to manage customers**
  - Currently, 10% tax exempted from the investment in ERP systems of SMEs and 3% for large companies' investment
- **Upgrading payment(and settlement) system**
  - To include use of Internet banking and electronic money, etc. for personal income tax exemption
    - Currently, credit card payments are exempted from personal income tax.
    - To standardize the payment form on e-Commerce to enable consumers to conduct electronic transactions more easily
  - To induce further reduction of credit card settlement fees: currently 3-5%

 <ul style="list-style-type: none"><li>▪ <b>Establishment of new unit for SMTEs' e-Commerce development</b><ul style="list-style-type: none"><li>- To promote establishment of a special unit on e-Commerce within a tourism-related association to enhance competitiveness of SMTEs</li><li>- To support SMTEs' e-Commerce promoting projects of the Unit</li></ul></li></ul>	 <ul style="list-style-type: none"><li>▪ <b>Consumer Confidence</b><ul style="list-style-type: none"><li>- To apply the current B2C eTrust Mark to cyber-tourism enterprises to enhance their public awareness</li><li>- To introduce the 'On-line Mediation System' to the 'Cyber Mediation Committee' so as to resolve disputes on e-commerce transactions in a speedy and transparent way.</li></ul></li><li>▪ <b>Expanding Infrastructure of e-Commerce such as human resources</b><ul style="list-style-type: none"><li>- To further nurture human resources related to e-Commerce</li><li>- To expand support for development of solutions related to e-Commerce</li><li>- To identify and disseminate success models of e-Commerce</li></ul></li></ul>
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**Session I**

**E-Commerce and Tourism in the APEC Region:  
 An Australian Perspective**

Sarah Clough  
 Manager  
 Department of Industry, Tourism and Resources  
 Australia

**ICTs and globalisation**

- **Information and Communication Technologies (ICTs) shaping globalisation**
  - Information and knowledge central to economic growth
  - ICTs underpin productivity improvements in industry
  - Declining costs
  - Development of new, high-growth industries

**APEC and the ‘new economy’**

- **Diversity in economic conditions and ICT uptake**
- **APEC Action Agenda for a New Economy**
  - Strengthen market structures and institutions
  - Develop a policy environment for infrastructure investment
  - Encourage innovation, entrepreneurship and human capital
- **Regional cooperation and partnership required for APEC to engage in ‘modern economy’**

**Australia well positioned in the ‘new economy’**

**Australia well positioned in the ‘new economy’**

**Australia well positioned in the ‘new economy’**





- Australia well positioned in the 'new economy'**
- Goldman Sachs study
    - B2B e-commerce to contribute 0.24 per cent annually to growth over the decade
    - B2B cost savings to contribute 0.25-0.30 per cent to labour productivity growth
  - NOIE study
    - Widespread adoption of e-commerce to lead to 2.7 per cent increase in national output
    - E-commerce take up to enhance consumption by \$ 10 billion over the decade

- Australia well positioned in the 'new economy'**
- Australia's progress in the 'new economy' facilitated by government policy
    - National Office for the Information Economy (NOIE)
    - Strategic Framework for the Information Economy
    - Government Online
    - Business assistance programs
    - Promoting online consumer confidence

- Australian tourism to benefit from the 'new economy'**
- Tourism highly suited to take advantage of the 'new economy'
    - Impacts on production, marketing and distribution practices
    - Operators can deal with consumers and other businesses directly
      - Potential tourists can research, book and pay for tourism products online
      - Supply chain efficiencies
  - NOIE study findings

**Australian e-tourism: A snapshot**

Business use of selected information technologies<sup>(a)</sup>

Industry	Businesses with		
	Computers	Internet access	Web site or home page
Agriculture <sup>(b)</sup>	49	18	n/a
Mining	82	70	30
Manufacturing	79	60	23
Electricity, gas and water	85	79	56
Construction	68	46	6
Wholesale trade	83	62	22
Retail trade	68	42	15
Accommodation, cafes and restaurants	61	40	19
Transport and storage	64	46	14
Communication services	77	42	17
Finance and insurance	81	71	19
Property and business services	88	76	19
Health and community services	83	57	9
Cultural and recreational services	81	63	26
Personal and other services	60	39	19

(a) Proportions are of all businesses in each category.  
(b) Percentages apply to farms only. See ABS, 2000, *Use of Information Technology on Farms 1998-99*, ABS Cat. No. 8150.0.  
Source: ABS, 2000, *Business Use of Information Technology 1999-2000*, ABS Cat. No. 8129.0.

- Commonwealth e-tourism policies**
- National Online Tourism Strategy
    - Whole-of-government framework
    - Initiatives include:
      - awareness programs
      - infrastructure development
      - improved statistics
      - regional online program
  - Regional Tourism Program
  - CRC for Sustainable Tourism
  - National Online Tourism Forum

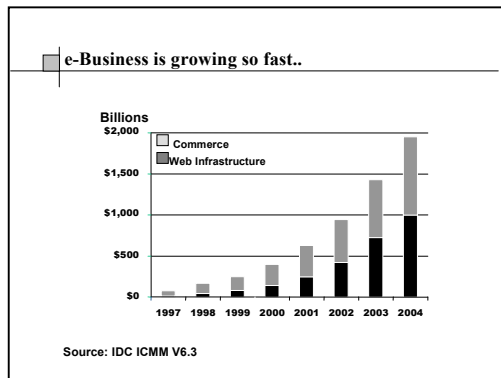
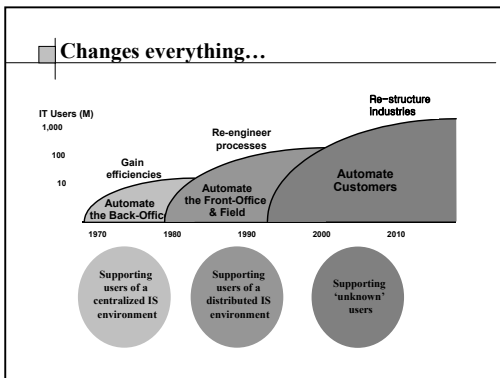
Session II

## E-Business & E-Commerce for Hospitality Industry

Dong Sik Kim  
 CEO, MiCROS Fidelio  
 Korea

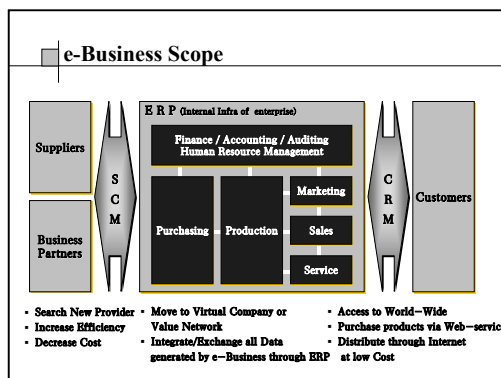
Agenda

- e-Business and e-Commerce
- Industry adoption for hospitality industry
- The immediate future
- Forecasting the future



What is e-Business...

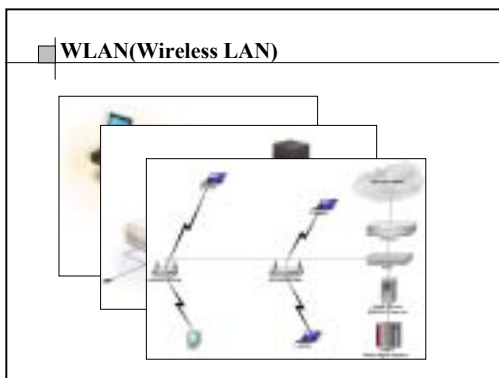
- All economic activities with use of Internet
- Integrated e-Commerce of CRM, SCM, BI, KM, CT
- Content, Communication, Community & Commerce
- e-Commerce: **Marketing, Sale and Purchase for products and service in Internet**
  - CRM : Customer Relationship Management
  - SCM : Supply Chain Management
  - BI : Business Intelligence
  - KM : Knowledge Management
  - CT : Collaboration Technology



**ERP and e-Business**

ERP	e-Business
<ul style="list-style-type: none"> <li>•Transaction processing</li> <li>•Generating historical reports</li> <li>•Answers “What did we do?”</li> <li>•Designed for internal company use</li> </ul>	<ul style="list-style-type: none"> <li>•Planning and optimization</li> <li>•Execution with velocity and intelligence</li> <li>•Answers “What should we do?”</li> <li>•Enables multi-enterprise e-Business</li> </ul>

- Industry Adoption**
- WLAN(Wireless LAN)
  - Mobile computing
  - CRS(Central Reservation System)
  - CIS(Customer Information System)
  - GDS connection
  - Web Building
  - e-Procurement(SCM)
  - Interactive TV



**WLAN(Technology trends)**

New business road warriors are all equipped with the latest technological gadgets and demand for internet accessibility  
 Laptop computers will have integrated WLAN  
 PDA now has WLAN capability  
 Corporation increasing their VPN  
 E-mail and internet access had become a necessity  
 All high end hotels will eventually have to install this kind of infrastructure

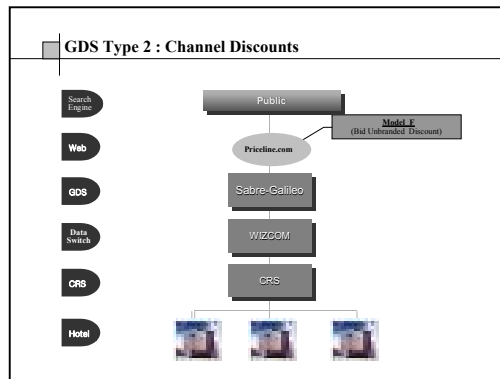
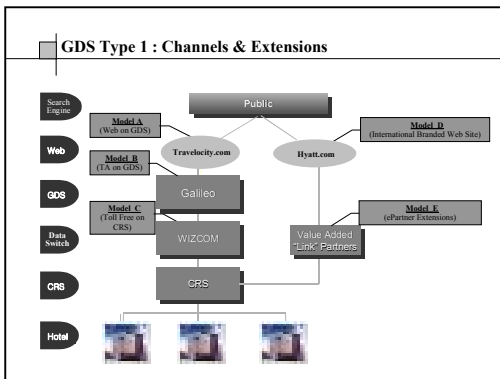
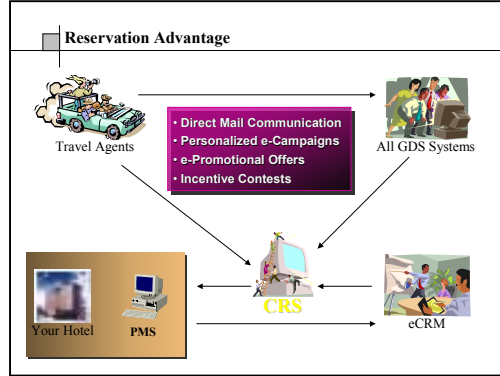
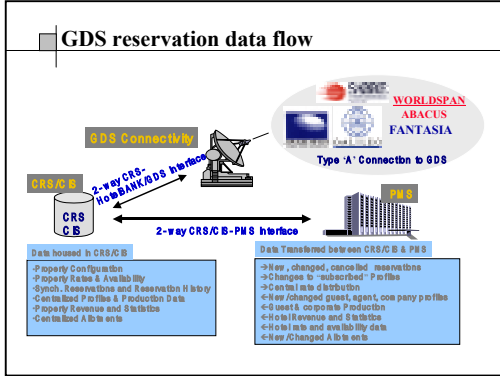
**WLAN(Products and services)**

High speed wireless Internet and LAN access.  
 Enhanced value added service for Hotel Guests.  
 Allows guests to move around the hotel and access the Internet and their corporate LAN.  
 Increased revenue stream for the hotel.

Wireless is a total building solution:  
*Conference Rooms*  
*Public areas such as lobby lounge*  
*Guest Rooms -*  
*Business Travelers often have to work late at night because of time differences*

**WLAN(Future potential)**

Hotel Industry Portal  
 On-line shopping for hotel guest  
 Video and audio streaming content services  
 Multi media guest service includes voice and video  
 Remote check in and check out service including printing  
 Booking system : Rest. Airline, rent car..  
 Cyber tour guide including GPS  
 KSS(Key service system)  
 Post transaction(Mini Bar, order service) and room status change via PDA



Session II

**Best Practices on E-Commerce  
Strategies for SMTEs in Malaysia**

Sharifah Zainah  
Head, Tourism Division of the Ministry  
Malaysia

Introduction

- E-Commerce is the fastest growing area of the Internet
- E-commerce has already revolutionised the way we buy products and services
- Travel, the most purchased product online
- More than US\$ 30 billion was spent at travel websites in 2001
- *"If you are not on-line, you are not on sale"*(WTO, 1999)

Role of Government

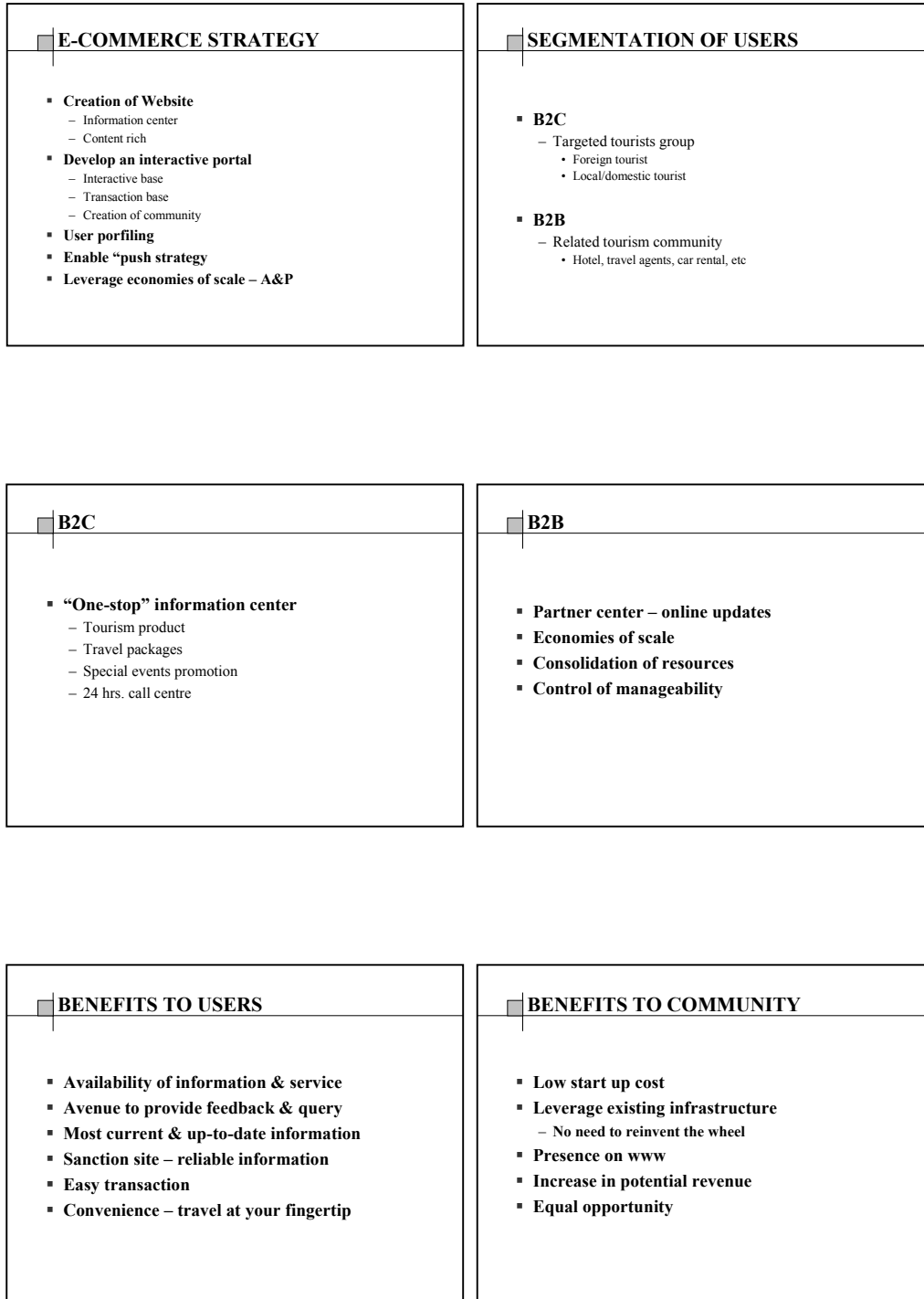
- Should first create an enabling environment
- *Information Age*
- Vision 2020 Development Plan Programme in 1991
- Established the Multimedia Development Corporation (MDC)
- Multimedia Super Corridor (MSC)

- The MSC provides physical and information infrastructure
- MSC-status to establish operation in the corridor for e-commerce
- SMTEs have mushroomed into e-businesses
- Role of the Ministry of Culture, Arts and Tourism
- Objectives of on-line e-commerce :
  - e-commerce service for the promotion and marketing of Malaysia
  - world class customers services
  - avenue for the growth of e-business enterprises
  - Win-win partnerships with local and foreign companies

PEMPENA's tourism portal called  
*malaysiamydestination.com*

PEMPENA - SMTE

- Formed in 1975
- Tourism consultancy
- Operational Secretariat for the Malaysian Mega Sale Carnival
- Venture on on-line service provider through *malaysiamydestination.com*. Fully operational in 2001



# **Towards E-Commerce Best Practice: Promoting SMTE Migration to the Online Economy in Australia**

Pramod Sharma,  
Professor, University of Queensland  
Australia

## **Abstract**

Available evidence indicates that while the larger players in the Australian tourism industry (the airlines, hotel chains etc.) have embraced all aspects of online technologies at a fairly rapid rate, the smaller players (the SMTEs) have reported a significantly slower uptake of e-business opportunities. The broad aim of the research reported here was to address some of the concerns relating to the uptake on online technologies by the SMTE sector; the key objective was to develop a model of technology transfer that could be used to encourage sustainable uptake of online technologies by SMTEs.

*Keywords:* Business planning; SMTEs, online technologies; Australia; technology transfer.

## **1 Introduction**

Online technologies have had an enormous influence on communications and product promotion and distribution for the tourism industry worldwide (see: Sheldon, 1997; Buhalis 1998; O'Connor, 1999; Werthner and Klein, 1999; World Tourism Organisation, 1999). These technologies have contributed to expanding potential markets for tourism product, and improving the efficiencies in managing relationships

between enterprises and industry, government, and consumers (Sharma, Carson and DeLacy, 2000). In Australia key consumer markets are already using the Internet as a primary source of information about tourism product, and are increasingly looking to book and purchase that product online (Australian Bureau of Statistics, 2000).

However, despite the considerable progress, there are concerns that access to tourism products is likely to be impeded if online technologies are not effectively employed by the whole tourism industry in Australia (Department of Industry, Science and Resources, 2000). These concerns include:

- Overly optimistic assumptions about the utility and beneficial impact of online technologies for ALL tourism businesses. These assumptions run the risk of ignoring the real 'divides' of the Australian tourism industry e.g. between large and small players, between major centre enterprises and regional rural enterprises, and between Indigenous enterprises and others.
- Concern that small and medium tourism enterprises (SMTEs) may be deterred from participating in the online economy.
- Concern about the processes used to move online. SMTEs are perceived to have poor business planning skills generally; much of the impetus to adopt technologies comes from technology vendors; planning advice for online technologies focus on design rather than utility. As a recent study has observed "...the key to a wider use of information, its analysis and application, should not just rely on educating the SME sector on the benefits of IT adoption, but also in fostering a planning orientation which will encourage management to utilise their existing capabilities more fully" (Bridge and Peel 1999:86).
- Previous research has concentrated largely on the 'usability'(effectiveness) of the website from a consumer perspective (e.g. Weeks and Crouch, 1999) rather than 'usability' (effectiveness) from the business perspective of the enterprise i.e. contribution to the 'bottom line'.

While these concerns impact across the whole Australian tourism industry it is their impact on the SMTE sector (around 110,000 enterprises) that has attracted research and policy interest - the *Tourism dotcom* program (launched in August 2000) is, in part, the Federal Government's initiative to address some of these concerns. The *Tourism dotcom* program focuses on increasing e-commerce capacity of the tourism industry in general and of SMTEs in particular.



The broad aim of the research reported here was to address some of the concerns relating to the uptake on online technologies by the SMTE sector through the identification of 'success strategies'. The key objective was to develop a model of technology transfer that could be used to encourage sustainable uptake of online technologies by SMTEs. The research, in the main, is based on case studies of 'champions' and the data was collected by detailed interviews and workshops. To the extent it is not based on a structured sample the usual limits to generalisation apply; however, we would argue that it does provide a wide ranging perspective on the state of engagement of online tourism by SMTEs in Australia.

## **2 Theory/Issues**

Online technologies have the capacity to help SMTEs address many of the challenges they face in participating in the tourism industry. Milne and Nowosielski (1997) noted that information technology in tourism provides an environment in which small operators can increase their voice. Traditional distribution channels have been dominated by large mainstream tourism businesses (especially airlines and accommodation chains) and it has been difficult for small operators to participate in these systems. The capacity for individual businesses to choose what information they present and to have that information presented to a global audience is undeniably an enormous opportunity brought about by online technologies. Milne and Nowosielski (1997) further see online technologies as assisting small businesses in identifying, creating and maintaining the business partnerships required to succeed in tourism. For SMTEs, these partnerships may be with suppliers of transport, marketing, and intermediary services.

Buhalis (1998) has a very positive view of the impacts of online technologies, suggesting that those technologies will be increasingly relied upon in maintaining critical relationships within an organisation; between a supplier organisation and its consumers; and between a supplier organisation and its key business partners. To realise this objective, however, SMTEs will need to be able to manage: information flows; the need to ensure that messages delivered online are consistent with offline marketing messages and the reality; the product skills and training required to use technologies; the financial cost of accessing technologies.

There are a number of significant barriers to SMTEs taking advantage of these Internet based opportunities to implement sophisticated communication, sales, marketing, and research initiatives. In the first instance, while costs of technology are decreasing, there are still substantial investment in technology required to effectively engage in the online economy. This is especially true in relation to e-commerce, where start-up and maintenance costs are high. Costs are not limited to financial costs, but include: time; personnel; and the need to instigate a workplace culture which supports a 24 hour, 7 day venture. Even where costs are manageable, many SMTEs do not have access to the physical technology required to implement online business models. There is even greater shortage of access to skills and knowledge required to implement technologies. Many regions of Australia continue to be under-serviced in terms of electricity and telecommunications infrastructure.

The generally low profit margins of SMTEs have prevented their involvement in previous online technologies. Similarly, despite changes in computerised reservation systems (CRS) and online destination management systems (ODMS), SMTEs continue to be priced out of these product distribution systems. SMTEs are unaware of the need to establish effective partnerships and networks for product promotion and distribution (Centre for Regional Tourism Research, 2000). SMTEs will need to identify partners and networks which allow them to participate in the online economy despite cost and infrastructure barriers.

Lack of an appropriately skilled workforce will greatly reduce the capacity for SMTEs to engage in the online economy. Skills are required not only to implement online business models, but to manage day-to-day interaction with online technologies. Such skills would include: Internet literacy; online inventory management; web page design; and database management.

In assessing the business 'usability' of online technologies, then, the literature points to the need to take into account a number of enterprise functions beyond e-commerce. Broadly speaking, these functions may be defined as:

- communications – the capacity for online technologies to contribute to the formation and maintenance of partnerships through effective communication;
- research – the capacity to use online technologies to collect, collate, and interpret information which can contribute to a better understanding of the enterprise;

- promotion and product distribution – the capacity for online technologies to raise awareness of individual product and the capacity for small business to increase its ‘voice’ in managing distribution channels through the use of online technologies; and
- management – the capacity for online technologies to contribute to management roles such as: recruitment; training; rostering; compliance; and reporting.

Within the current research, these functions are collectively referred to as ‘online architecture’ (Carson & Sharma, 2001). They represent a framework for assessing the effectiveness of the application of online technologies for SMTEs. The ‘degrees of engagement’ in this online architecture may include:

- No involvement – no online capability at all
- Email only
- Email + ‘brochureware’ website
- Website with e-commerce capabilities
- Website with full e-commerce capabilities including inventory management

### **3 Methods/Procedures**

The research included semi-structured in-depth interviews with fifteen identified ‘champions’ of online technology adoption in SMTEs. The ‘champions’ were identified through consultation with State Tourism Organisations, Regional Tourism Associations, and industry associations. Champions were considered by these groups to be innovator SMTEs who were making successful and appropriate use of online technologies in their businesses. As the research was specifically looking for ‘success strategies’, this procedure for enrolling respondents was considered more appropriate than a structured sampling procedure. There are some limitations, therefore, to the generalisations from the study, however, the experiences of the champions we have selected do represent industry perceptions of online ‘success’. As the outcomes of this research are directed towards industry education and technology transfer, and the research method is considered to be appropriate.

The research that was undertaken

- Examined the benefits and impediments of online technologies to SMTEs
- Proposed the hypothesis that function and utility are more important than design and

technology

- Postulated that five key functions (communications; research; promotion; e-commerce; and management) could be the basis for function driven planning.
- Identified SMTE online ‘champions’ and conducted in-depth, semi-structured interviews to:
  - Evaluate the perceived utility of web based initiatives for these ‘champions’
  - Evaluate whether the five key functions were applicable to ‘champions’ perception of the web experience
  - Test if the five function approach could be worked into a model for assisting technology transfer.

Table 1: Some Assessment Cues for Developing an Online Architecture

Business Function	Assessment Cues
Communication	<ul style="list-style-type: none"> <li>- HAVE ONLINE TECHNOLOGIES IMPROVED MY ABILITY TO MANAGE OR EXTEND COMMUNICATION NETWORKS?</li> <li>- Who are the targets?</li> <li>- How often and when do I communicate with them?</li> <li>- What is the format of the communication?</li> <li>- What technologies do my targets have, and what technologies do they plan to use?</li> <li>-</li> </ul>
Research	<ul style="list-style-type: none"> <li>- HAVE ONLINE TECHNOLOGIES IMPROVED MY CAPACITY TO ACCESS AND INTERPRET BUSINESS CRITICAL INFORMATION?</li> <li>- What information do I need?</li> <li>- When do I need it?</li> <li>- How reliable/credible is the information?</li> <li>- What are the costs I incur currently in getting that information?</li> <li>- Is the information available online?</li> <li>- What are the costs of getting this information online?</li> </ul>
Promotion/ advertising/ publicity	<ul style="list-style-type: none"> <li>- WHAT HAS BEEN THE IMPACT OF ONLINE TECHNOLOGIES ON THE EFFECTIVENESS OF MY PROMOTION STRATEGIES?</li> <li>- Who is the intended audience?</li> <li>- What is the message?</li> <li>- What action do you expect the audience to take having received the message?</li> <li>- Can they take this action online?</li> </ul>

	<ul style="list-style-type: none"> <li>- How do you measure the impact of the message?</li> </ul>
Product distribution	<ul style="list-style-type: none"> <li>- HAVE ONLINE TECHNOLOGIES MADE A SIGNIFICANT CONTRIBUTION TO BUYING AND SELLING PRODUCT?</li> <li>- What am I selling or buying?</li> <li>- Who am I selling it to or buying it from?</li> <li>- When is it normally paid for?</li> <li>- What are the costs of accessing e-commerce models (in-house, out sourcing etc.)</li> <li>- What inventory management systems do I have?</li> </ul>
Management	<ul style="list-style-type: none"> <li>- HAVE ONLINE TECHNOLOGIES HAD A SIGNIFICANT INTERNAL ROLE IN MY BUSINESS?</li> <li>- What management functions do I need to perform (banking, recruitment, staff training, compliance etc.)</li> <li>- How often do I perform them?</li> <li>- Are there resources online?</li> <li>- What is the cost of accessing them compared to the current cost?</li> </ul>

Table 1 presents the broad topics covered in the interviews with SMTE ‘champions’. Businesses were asked to comment on the perceived value of each of the online architecture functions to their growth or success (presented in Table 1 in CAPITALS). The interviews then identified specific aspects of those functions that were considered critical to the ‘champions’.

## 4 Results

Our study of the ‘champion’ SMTEs yielded the following key findings:

### Communication

Most Champions developed their online business to take advantage of the communication and promotion functions. More sophisticated applications, such as e-commerce and personnel management, were approached once the basic functions were mastered. Champions strongly advised against an ‘everything at once’ approach. (This incremental approach is a combination of risk management as well a reflection of limited financial resources).

While costs in setting up and maintaining the e-commerce facility is a consideration, SMTEs tend not to employ the total e-commerce package until they have some proof that there is a tangible benefit. For this reason implementing e-commerce facilities is not an immediate priority for the SMTE.

## **Research**

There is little or no research by SMTEs on existing customers to determine their needs; this is partly due to the fact that for many SMTEs customers are generally not a repeat business. The same situation also applies to investigating business partners' needs – this generally happens only if a supplier is fully automated and starts putting the squeeze on the SMTE to order/pay by email/online.

It is difficult to determine whether the reason most SMTEs do not carry out any research is because they do not have the time (the majority response), or because they believe 'they know what is best for their business'. As many SMTEs 'happen by default' so not much, if any, research is undertaken prior to their establishment. Also prevalent is a conditioned attitude predisposed towards reinventing the wheel (i.e. doing it 'their way' instead of adopting best existing models). These findings are consistent with findings of other small business studies (e.g. Bridge and Peel 1999, Monk 2000, Perry 2001).

## **Promotion and Product Distribution**

SMTEs with existing 'bricks and mortar' business moved online because they believed that it would generate more business through national and international exposure. However, often they are disappointed when they discover they are not getting visitors in hoped for numbers to their website as they cannot be found easily by prospective visitors. They either do not understand or have been misled to believe that setting up a website is all they need do – a disappointing finding especially when this is after they have made a considerable financial commitment.

All SMTEs have the issue of not being found on the net or of low prominence, if found. Most do not understand search engines and ISPs either mislead or overstate the chances of being found. Mistaken belief that once they have a website

no further promotion is required i.e. web presence is sufficient promotion. Most champions admit that the whole process is a huge learning curve and they had bad experiences along the way.

## **Management**

SMTEs generally, don't understand the need for promoting a credible operation and treat their website like a (static) printed brochure. There is a reluctance to accept the need for frequent updates of content; don't appreciate that on a well designed site they can easily change the overall look, presentation and content.

SMTEs recognise the need to be better informed about contracts with site designers, ISPs and online service providers in general - unhappy paying more money every time a change is needed to the website

## **Overall**

Champions identified a lack of knowledge of the business implications as an issue in the utility of their web initiatives. This included issues such as the site conveying a message that the enterprise was a credible business to operational aspects such as procedures for processing emails. They saw the need and the value of a function-based planning model for improving their current initiatives, and for informing new entrants into the online economy.

Champions felt that utility of their web initiatives was dependant on ownership of the planning process – there was resistance to technology driven planning. Champions were able to assess their web initiatives in terms of the impact on: profit; customer base; partnerships

Champions were concerned with maintaining their core business 'off line' and gradually migrating functions as the benefits became clear and their skills developed. This approach enabled champions to manage the perceived risk involved in developing online initiatives.

Impacts on business performance was expected to be initially small, but progressive over the anticipated life of the initiatives.

The results of this research clearly indicate that different businesses can exploit online technologies in different ways to contribute to 'bottom line' performance. While there appears to be a focus on e-commerce applications from a policy perspective, businesses are more aware of balancing the costs of online activities with the benefits.

## 5 Conclusions

While the literature has identified a number of business functions which may be impacted by the use of online technologies, few studies have attempted to assess enterprise perceptions of the effectiveness of online technologies over each of those functions. The research reported in this paper has been largely exploratory and has involved the experiences and 'success strategies' of business 'champions' in relation to five key business functions. The online architecture framework not only serves as a useful model for assessing the success of online initiatives for individual businesses, but can be used by those businesses to improve planning processes.

Better planning avoids reinventing the wheel and can help to reduce business failures. If SMTEs perceive that online technology can be implemented in a low risk, high utility manner, they can be expected to have greater confidence and this will support the Australian vision of the industry as expressed in *Tourism dotcom* (Department of Industry, Science and Resources, 2000). Clearly, those SMTEs who have already embraced online technologies have experienced 'success' in a number of forms. In delivering messages about the advantages of moving online, then, strategies such as the *Tourism dotcom* policy may be better served by considering a range of positive business outcomes rather than focusing excessively on e-commerce.

The Australian Government places considerable emphasis on the value of tourism and the role of SMTEs. It is important that the government understands the issues of SMTEs enabling the assistance or support which will maintain and grow the Australian tourism industry. The results of this study can be used to provide more realistic assessments of the impacts of online technologies, and the methods which can be used



to promote the uptake of such technologies. Specifically, the Cooperative Research Centre for Sustainable Tourism has used the results of this research to further develop its 'Tourism Online – Getting Value' (TOGV) program. TOGV provides a range of resources to SMTEs through workshops, a web site, and printed material. These resources provide guidance for planning and managing online initiatives.

This research was somewhat limited by the relatively low uptake (beyond the very basic implementations) of online technologies by SMTEs. While many businesses appear to use online technologies to promote their businesses, it has been difficult to locate businesses who have actively incorporated these technologies into their enterprise models. Few SMTEs appear to have developed approaches to monitoring the success of their online initiatives, and few appear to have an appreciation of the full range of business functions with which online technologies may be involved. Further research will consider specific functions, and provide more information about how businesses use these functions, and the impact that online technologies may have.

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**"Best Practices on e-Commerce Strategies for SMTEs in Korea"**  
 2002. 2. 5  
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**e-Commerce in Travel Industry**

- 2001, overseas tourism in Korea was sluggish
- 2002, overseas tourism forecast
  - Arrivals in Korea will increase by 6.5% to 5.45millions,
  - Departures to overseas will increase by 3.6% to 6.28millions
  - Expected tourism revenue is 6.1 billion won.
  - Expected tourism expenditure is 7 billion
- Factors of Korean in-bound tourism in 2002
 

positive factor	negative factors
<ul style="list-style-type: none"> <li>government support and interest</li> <li>"Visit Korea" Campaign promotion</li> <li>World-cup soccer game</li> <li>Busan Asian games</li> </ul>	<ul style="list-style-type: none"> <li>low profile world economy</li> <li>political issues: terrorism sensitivity and safety concern</li> <li>strike in airline companies</li> </ul>

**The high speed network infrastructure**

High Speed Internet Usage

	DSL	Cable Modem	B2	Total
1 Korea	4,205,813	2,310,330		13.91%
2 Canada	702,267	1,194,700		6.22
3 Sweden	122,000	78,400	199,000	4.52
4 United States	3,334,491	5,500,000		3.24
5 Netherlands	97,000	336,000		2.74
6 Austria	68,000	122,300		2.36
7 Denmark	69,740	54,000		2.33
8 Belgium	92,000	140,264		2.27
9 Iceland	4,764		750	1.99
10 Luxembourg	6,920			1.60

(By June, 2001, unit : # of users out of 100, OECD)

- The percentage of high speed internet users per 100 people was highest among 30 countries examined by OECD
- The charge for the high speed ISP services are relatively low compared to those of other countries

**The Advanced high-speed access of Internet in Korea**

	June, 2001	End of 2005
Households with High-speed access	6 Million	13.5 Million
High-speed Internet Access (Average Speed)	1.5 - 2 Mbps	20 Mbps
No. of Mobile Users (Highest speed)	26,808,000 (Max: 64Kbps)	30,849,000 (Max: 2Mbps)
User Access Networking	ADSL, Cable TV Modem, Satellite	ADSL, VDSL, HWT2000, High-speed Cable Modem, High-speed LAN, High-speed Satellite FTTH
Backbone	Tens of Giga level WDM, Giga level Router, Tens of Giga level ATM	Tens of Giga level WDM, Giga level Router, Tens of Giga level AT

Technological evolution of Internet Access Network  
(Electronic Times, July 6, 2001)

**e-Commerce in Travel Industry**

- Online travel support service positioning
  - Online travel service market growth rate is expected to be 200+ %
  - Off-line based travel agencies enter into online market

	traditional	Internet	improvement
Airline Ticket:	\$8 per distribution	\$1	87%
Bill Payment:	\$2.22-3.22	\$0.65-1.10	67-71%

- Nextour.co.kr  
Out-bound tourist increase to 1,116 per month in 2001 from 350 in 2000
- webtour.com  
monthly revenue growth rate(compared to last year) : 300%
- Hanwha tourmall.com  
monthly revenue growth: 200% in one year to 1,700 million won

**IBM experience**

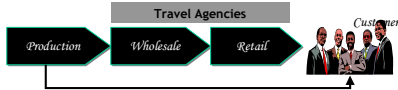
- Error rate for Travel and Entertainment Transaction: 93%
- Travel and Entertainment Cost out of total expenditure: 83%

**Effects of Electronic Brokerage**

The diagram illustrates the impact of E-Transformation on the travel industry. It shows a shift from 'Traditional Brokerage' (represented by a horse-drawn carriage) to 'Emergence of electronic intermediation' (represented by a modern car). This transition is marked by 'Brokerage War I' and 'Caused Dis-intermediation'. A subsequent 'Brokerage War II' is shown, leading to 'Partial Re-intermediation from IT-based transformation'. The entire process is labeled as 'E-Transformation'.

### Defining 'Dis-' & 'Re-' intermediation

- ❖ **Dis-intermediation**
  - Replacement of old trading mechanisms with alternate mechanisms that is managed by supplier or by new, IT-enabled intermediaries.
  - Direct trade between manufacturers and customers using electronic infrastructure



- ❖ **Re-intermediation**
  - Re-activation of traditional players in the marketplace
  - Enabled by IT-based innovation and business transformation

### SABRE system evolution

**IOS Interaction & Control**

**By the end of 1970s**

- AA Process control
- Large travel agencies Data sharing
- Other airlines Data sharing
- AA Process control
- Travel agents Minimal process control


**After 1990s**

- Other airlines Data sharing
- AA Process control
- On-line Information providers Network control
- Business/ Pleasure travelers Minimal process control
- Travel agents Minimal process control
- Corporate business units Process control





### Travelocity.com and SABRE

- Sabre: world's #1 CRS (40% of tickets sold by travel agents worldwide)
- Over \$71 billion booked annually
- Over 400 million bookings annually (1.25 million daily)
- Process over 7,950 messages per second

- Travelocity.com launched 1996 partnership with Preview Travel
- #1 B2C Internet travel site (#3 e-commerce site)
- 19.2 million membership by early 2000
- 2000 First quarter: \$504.3 million booking
- Partnership with AOL, Yahoo!, Lycos, Time Warner, Priceline etc.
- 95% of airline, 47,000 hotels, 50 car rental, 5,000 travel/cruise packages




### I-D-R Process Framework

	Strategic Phases			
	Traditional	Intermediation	Dis-intermediation	Re-intermediation
<b>Description</b>	No electronic transaction performed.	E-commerce only players enter the market	E-commerce only replace traditional intermediaries by capturing market share.	Traditional intermediaries become e-commerce able, and recapture lost market share
<b>Market Shares</b>	 Traditional Intermediaries	 Traditional Intermediaries	 Traditional Intermediaries	 Traditional Intermediaries

### Transformational Contingency

- ❖ **Contingency**
  - Re-intermediation by the traditional intermediaries happens not in all business situation (e.g. eBay's effects in auction industry: aggressive activity caused traditional intermediaries hard to imitate)
- ❖ **Value Appropriability** (Teecce, 1992)
  - The capability of a firm to capture advantages consistent with the nature of the innovations
  - Appropriability of innovation value is important
  - Weak appropriability
    - Easy to imitate it
    - Dis-intermediation will not occur.
  - Cospecialized asset
    - Hard to imitate it
    - Dis-intermediation will occur.



### Asset Co-specialization

- ❑ **Conditions for Reintermediation**
  - **Imitation and Weak Appropriability**
    - Reintermediation is likely to occur when an EC innovation can be readily imitated by traditional members
    - Thanks to the openness of EC solutions, technological switching cost is almost zero
  - **Co-specialized Assets**
    - E-commerce-only intermediaries can't easily acquire the necessary industrial network-based co-specialized assets
    - Traditional intermediaries still lack their ability related to the development of e-commerce applications
  - **Economies of Scale**
    - E-commerce-only intermediaries will not succeed if they do not achieve economies of scale
    - Many traditional intermediaries have already achieved economies of scale in traditional markets

**CASE 1 : Computer Reservation System**

**Company** World hotel & tours co., LTD.

**Business Type** Internet-based hotel reservation service

**Contents**

- Develop "Resnet" : Whole world hotel reservation system
- Developed real-time transaction system

**Business model**

**Feature**

- Improving effectiveness based on on-line hotel reservation.
- Offering high speed hotel reservation and competitive price.

**CASE 2 : Computer Reservation System**

**Company** AKS CO.,LTD

**Business Type** Real-time Tour Package consultation & reservation engine

**Contents** Provide tour guide through internet and consult the product.

**Business model**

**Feature**

- The advantage of differential product.
- Reduction of advertising costs in tour industry.
- Offer customer relationship management and customized service.

**CASE 3 : Computer Reservation System**

**Company** travethow.com

**Business Type** Travel product comparison engine/ one-stop solution

**Contents** Analysis, consulting and provision of travel products & services

**Business model**

**Feature**

- cooperate with medium and small companies to provide diverse types of products.
- supply reservation system service to other travel agencies.
- offer one-stop solution, reservation, auction, and travel information system.

**CASE 4 : Travel Information & Tourism Guidance**

**Company** Jay map

**Business Type** Field oriented travel information & tourism guidance

**Contents** Map-like interface provides various design, function, and rich contents from field-oriented travel information & tourism experience

**Business model**

**Feature**

- Overcome limitations of existing maps, e.g. description and service offering, by providing extended tourism & geographical information
- Extend the scope of service using both cable and wireless internet infrastructure

**CASE 5 : Travel Information & Tourism Guidance**

**Company** seoulnavi.com

**Business Type** Provide Japanese with travel information, tour guidance, and shopping contents through on-line

**Contents**

- run internet website on travel information and tour guidance in Korea using the Japanese language
- manage on-line shopping store for travelers

**Business model**

**Feature**

- capture Japanese niche market through on-line
- help off-line travel business to overcome challenges and allow to start new business model
- provide distinctive quality of information based on detailed data on Japanese favorites & tastes

**CASE 6 : Travel Information & Tourism Guidance**

**Company** condortour.com

**Business Type** Meta vision 2004: tour and shopping

**Contents**

- in-bound tour business
- internet duty-free shopping mall
- tour contents business

**Business model**

- develop and provide thematic tours e.g. "the theory of division based on topography", "joining the native festival", "visiting mother country", "promoting international goodwill," etc.
- internet duty-free shopping mall provides Korean local products, traditional products, health foods, and electronic products online.
- provide rich contents on the theory of division based on topography, travel information, industry information, customized information, etc.

**Feature**

- by providing Korean traditional products online, take initiative in service quality improvement
- realize business model in the new paradigm


**CASE7 : Translation, Guide Book**

**Company** Easy Say.Co.Ltd

**Business Type** Translation service, real-time tour information

**Contents** Offering translation service to tourist resorts by telephone, mobile, and web-services.

**Business model**



**Feature**

- ❑ Provide services beyond the limit of personal contact service
- ❑ offer translation service anytime, anywhere.


**CASE8 : Translation, Guide Book**

**Company** Japanesehelpdesk.Co.Ltd

**Business Type** Premium money exchange services for Japanese

**Contents** Publishing complimentary tickets that serve as the money exchange for Japanese and other foreigners.

**Business model**



**Feature**

- ❑ Increase cash income by publishing complimentary tickets .


**CASE9 : Tour Consulting**

**Company** Koreatravers.Co.Ltd

**Business Type** Gift certificate of tour products

**Contents** Publishing and circulating gift certificate that can be used in many tourist resorts.

**Business model**



**Feature**

- ❑ Development of the reliable and secure system which is directly managed by financial institutions .
- ❑ Technically similar information system as the one used for publishing checks in financial institutions.


**CASE10 : Tour Consulting**

**Company** IC&S Korea

**Business Type** Offering an all-round service for foreigners living in Korea.

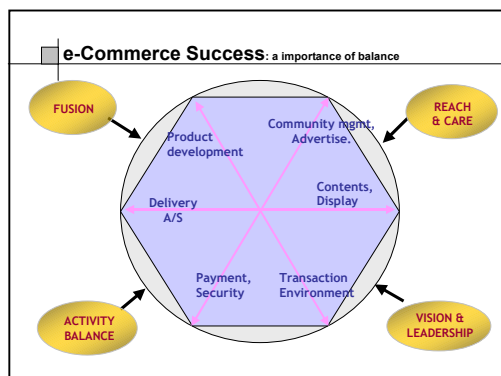
**Contents**

**Business model**



**Feature**

- ❑ Offer off-line membership service on settlement,tour, etc.
- ❑ Offer on-line service via magazine (i.e. EXPATOWN) and the web-site (i.e. expaTown.com, expaTownmailt.com).



Session II

**THE BEST PRACTICES ON E-COMMERCE**  
**STRATEGIES FOR SMALL AND MEDIUM SIZED**  
**TOURISM ENTERPRISES IN SINGAPORE**

**Habibullah Khan**  
**Professor**  
**National University of Singapore**  
**Singapore**

**Introduction:**

*If you are not on-line, you are not on sale* (World Tourism Organization, Marketing Tourism Destinations Online”, 1999, p. 4)

Tourism is an information-sensitive industry that is likely to be benefited from internet revolution and e-commerce. The satisfaction or utility derived by a tourist (consumer) from the consumption of tourism products/services will depend largely on the quality of information provided by various intermediaries such as tour operators or travel agents. A tourist pays up-front for the reservation of a hotel or a resort depending on his personal interest and the information provided by the booking agents. Until the product (service) is actually consumed (enjoyed), the tourist must be confident that the reserved attractions will meet his expectations. While price and customer service during the booking procedure are important factors, tourism service providers are increasingly competing on the confidence inspired in the customer directly through the quality of information they provide. Tourism therefore is regarded by many as a “confidence good” (Hannes Werthner and Stefan Klien, 1999).

The use of internet for purchasing travel products has been rising significantly in developed countries. Of the total e-commerce sales of US\$64 billion in 1999, travel, transport and hotel reservations as a group represented the largest category of internet transactions, accounting for 38.5% of all online sales. Not surprisingly, US is the major

user of internet transactions. More than half (53%) of all travelers in the United States of America use the internet and are responsible for approximately three-quarters of online sales. Online sales in Europe are also predicted to increase substantially. In 1999, only 0.1% of the European travel market, worth GBP 540 billion, was sold online and it is expected that internet sales will grow six-fold by 2002. For UK, there are estimates that 30% of flight-only bookings will be made online by 2003, as well as sales of 15% of standard packaged holidays and 20% of last-minute and late packaged holidays (UNCTAD, Background Report "Electronic Commerce and Tourism: New Perspectives and Challenges for Developing Countries", July 2000).

The internet revolution presents opportunities as well as challenges for developing countries to improve their relative positions in the international tourist market. The question is not whether they would adopt new technology or not but what type of IT and telecommunication policy governments should pursue for seizing this new opportunity by overcoming different barriers. Tourism business (travel agencies in particular), by its very nature, is run by Small and Medium Enterprises (SMEs) at least at the national levels. How are these SMEs responding to the challenge? What are the main obstacles for SMEs? What has Singapore done to promote e-commerce in SMEs? What are the lessons of experience so far? This short paper aims to address these questions.

### **SMEs in the Internet Economy:**

SMEs in Singapore include firms having fewer than 200 employees and less than S\$15 million fixed assets. In a country where development is spearheaded by large-scale MNC investments, the role of small businesses is understandably not that significant, but the presence of SMEs can be strongly felt in the tourism sector. Although the Association of Small and Medium Enterprises (ASME) is currently in the process of compiling its membership directory, it can be assumed that the bulk of travel and tour operators in Singapore will fit into the definition of SMEs.

Although bigger enterprises usually enjoy certain advantages due mainly to economies of scale in funding as well as operations, smaller companies tend to enjoy more advantages in the internet world. First of all, the cost of the infrastructure is spread across millions of users, which is more of a strategic advantage to the smaller players than to the larger ones. For example, to start a daily newspaper, one has to buy a multimillion dollar printing press but to start a website for the circulation of the same newspaper, one perhaps requires leasing a hosting service for only a nominal monthly



rental. The marginal cost of doing business therefore has fallen with the introduction of internet system. Secondly, the internet has expanded the market (customer base) and the small players can most economically reach customers worldwide with little or no marketing costs. The marginal revenue is therefore likely to increase in the virtual world. Finally, the internet world offers many new opportunities and new kinds of businesses and any company (small or big) with necessary enterprising spirit and creativity can flourish by seizing these opportunities. FarEastFlora, a small orchid firm in Singapore that was established by three brothers in 1965, has now expanded its network worldwide for delivering fresh-cut flowers through internet commerce (for details, see Eduardo da Costa, 2001).

The growth of internet has created both opportunities and threats for travel agents. It is expected that travel will be the largest online product by 2002 and that the industry will account for nearly 35% of all online sales by the end of the year. The travel agents can now use the internet for the following: (1) to build customer relationships by having customers interact directly with the website (2) to gather information from both actual and potential customers in order to create customer profiles that can be used as marketing and product development tools (3) to develop information partnerships by cooperating with other organizations with a view to improve the customer service, and (4) to allow transactions involving the selling of the products and services.

The major threat comes from airlines and virtual travel companies (such as Yahoo Travel) that offer their products and services directly to the customer without assistance of travel agencies. Many airlines (such as Northwest) are currently developing web-based transaction systems that allow booking of air tickets, checking of flight status and seat availability. Internet commerce is having a profound influence on travel distribution channels. Previously, travel agencies played a leading role in the retailing of travel products (through systems such as Sabre, and Amadeus) on behalf of airlines and travel wholesale companies. Internet commerce has now created “disintermediation” by eliminating the middleman role of travel agents between the airlines and wholesale companies that can now directly distribute their services to the customers.

Recent studies of travel agencies and their use of the internet show that those that do not take the opportunity to reposition their business via some form of internet commerce will find the competition increasingly fierce. Travel agents see the impact of

World Wide Web as being significant on the industry but they have not utilized it as a major catalyst for change. Travel agents see the World Wide Web as an add-on to current business operations. This add-on mentality is further substantiated by the lack of detailed planning and enterprise-wide perspective taken. The Web site's functions are mainly concerned with providing information and email reservations. Even fewer travel agency websites allow credit card transactions to be performed. A cultural transformation does not appear to be taking place either. Very few travel agencies take on a new staff member to help in the new initiative, and training on the use of internet, even when available, is rarely given (Craig Standing, 2000, p 191-92).

### **Main Obstacles to SMEs:**

Although new opportunities are emerging for small businesses in the international market, there remain many obstacles (infrastructure, legal, cultural, and so on) that might hinder the process of growth. Contrary to popular belief, computers are not available everywhere. The distribution of PCs, for example, is quite uneven even in the richest countries. The number of PCs per 1000 population in developed countries in 1999 was only 264 and that for East Asia and Pacific was only 7. Populations in backward areas (even in advanced countries) have limited access to computers. Just as computers are not evenly distributed worldwide, neither is telephone access. In fact half of the globe's people have never made a phone call and live more than 30 miles away from the nearest telephone (Eduardo de Costa, 2001, p80). In 1999, telephone lines per 1000 population in developed countries were 506 and that for East Asia and Pacific was only 50. Internet access is mostly done through the fixed-wire network and until recently more than half the users of internet were in the United States. It is predicted that world's internet population will grow everywhere and by year 2005, nearly 25% of total population in Asia and Pacific region will use internet (*Computer industry Almanac, 1999*).

Goods and services offered on the Web can be either "bit products" or "atom products". Bit products are created and stored in a digital format (such as software, music, electronic literature, and so on) that can be downloaded, provided the internet system has necessary bandwidth. But most products currently offered on the internet are atom products that are material and tangible. Delivery of these goods to the end user depends on a logistic network that is not still in place on a global scale. Existing

transport structures were developed to accommodate business-to-business (B2B) needs and are generally expensive. They are viable only for large quantities of goods that characterize B2B e-commerce. But for business-to-consumer (B2C) e-commerce, which generally involves small quantities and low-price items (in a multistage cross-border transaction), transport infrastructure is yet to be created in most areas. The use of credit cards (most important for e-purchases) is concentrated primarily in developed countries (half of all credit cards issued till date is in USA) and the use of foreign currency for cross-border business involves strict government controls in many countries.

E-commerce is still not perceived to be safe by many. Although the security systems (such as Secure Electronic Transaction or SET) have been developed to take care of *Authentication* (allows one party to certify another's identity), *Integrity* (guarantees that original message has not been altered during transmission), *Non-repudiation* (guarantees that message was sent and received), and *Privacy* (prevents third party from reading the transmitted message), many business houses still do not have access to such secure environment. It is also difficult for small companies to have all necessary internet support services (such as Web hosting, Web server, database support, electronic payment and security services) and these services are still sparse (and not cost effective) in many countries. There is also a worldwide shortage of skilled manpower for handling growing internet commerce. Lack of access to capital (venture capital or others) is also an obstacle for launching and expanding e-businesses particularly for SMEs. Besides, there are legal (relating to consumer protection, intellectual copyright, and so on) and cultural (for example, language diversity, and sexual content) barriers that impede the growth of internet commerce.

Infocommunications Development Authority of Singapore (IDA) in its recent survey (can be downloaded from <http://www.ida.gov.sg>) found that three out of five homes (61%) in Singapore have at least one computer in year 2000. Comparative data shows that Singapore remains ahead of Australia (56%), United States (51%), and Hong Kong (50%) in terms of home computer ownership. Computer ownership continues to be higher in the private housing (78%) than in the public housing (58%) but penetration rate for public housing seems to be growing at a faster rate. The survey also shows that more homes are now having more than one computer and in year 2000, 23% of homes had multiple computers. Two out of five homes do not have a computer and the main reason cited was "no need to use" (45% said that), followed by other

reasons such as “don’t know how” (19%), “too costly” (14.3%), and so on. Only 12% of the homes without a computer have plans to buy one in the next three months. Half of Singapore homes currently have internet access (showing six-fold increase in the past five years) and this figure is higher than those for United States (42%), Australia (37%) and Hong Kong (36%). Home internet access in public housing has increased to 46% in 2000 compared to only 6% in 1996. Among the homes with computers, only 18% of them do not have internet access compared to 28% in 1999. The main reason cited by those who still did not acquire internet access is that they do not see the need for it (41% said that).

There are presently about 1.9 million computer users in Singapore (roughly 47% of total population including non-residents). The majority of them use computer both at home and elsewhere (59%), 26% use it at home only, and 15% use computer elsewhere that includes places of work and school. 55% of the population aged 15 years and above are computer users. Currently, there are about 1.3 million internet users (33% of total population) and the majority of internet users access internet both at home and outside (54%). 42% of the population aged 15 and above are internet users and 73% of homes with internet access have multiple users. Among the types of usage, it was found that email/chat and information retrieval/search rated very high in terms of both awareness and actual use/adoption. The awareness level for online shopping/e-commerce was also found to be very high (81%) though the number of actual users was rather negligible.

There has been considerable discussion amongst local experts on the factors that are currently hindering the spread of internet commerce in Singapore and the region. A panel of experts, for example, identified ten perceived barriers (in order of importance) namely unclear business model, lack of skills, existing technological barriers, understanding online buyers, small market scale, lack of content, erosion of current advantages, too much hype, legal and policy infrastructure, and weak consumer protection ( Lee Gilbert et.al., 1999). A number of case studies (such as ABACUS International and Ken-Air Tours) in Singapore cited shortage of skilled manpower as the critical obstacle to the growth of e-commerce in the island Republic (Thompson Teo et.al., 2000).

## State of E-commerce in Singapore:

In January 1999, the Centre for Management of Innovation and Technopreneurship (CMIT) at the National University of Singapore, in conjunction with IDA, conducted a survey of 1000 companies (Small, Medium, and Large) in order to find out the state of B2B e-commerce (that currently accounts for more than 80% of total e-commerce activity globally) in Singapore. The results (can be downloaded from <http://www.ec.gov.sg>) showed a high level of internet readiness among the companies in the selected industrial sectors. Nearly three-quarters of the companies had internet access and over a third of the companies owned corporate websites. More than 16% of the large companies (having more than 100 employees) are currently using the internet for B2B e-commerce. Less than 8% of the small (less than 10 employees) and medium (10 to 99 employees) companies are currently trading with their partners on the internet. Among companies that have not started to use e-commerce, the larger ones appeared to be generally more enthusiastic about adopting e-commerce. Companies that were interested in adopting e-commerce cited security (59%), initial setup costs (37%) and ongoing operational costs (28%), as main barriers. Those who were not interested in e-commerce saw no need for it (65%) and these were predominantly (76%) small companies.

Among companies currently procuring through internet, more than 95% reported actual purchase volumes of less than S\$100,000 per month. Those who were currently selling through the internet, over 92% reported monthly sales revenue of less than S\$100,000. In general, companies buying and selling through internet expressed optimism about growth prospects of e-commerce and almost all of them expected an increase in their business over the next twelve months. The survey also showed that the bulk of internet commerce is done locally and most companies that planned to use internet for procurement transactions (nearly 71%) expected that none of their e-commerce purchases would be from overseas suppliers.

Another study conducted recently (February and March 2001) by the Centre for Best Practices (in conjunction with Productivity Standards Board or PSB) at the National University of Singapore on e-commerce usage by SMEs (that included Tour and travel operators) revealed that there is a high penetration rate (internet access) of 73% at present. The poll also shows that nearly 22% of SMEs are e-commerce enabled, meaning that these companies at least subscribe to an e-commerce service or use other

network services such as EDI. It was also found that about 48% of the e-commerce enabled companies made at least one transaction (via internet or other networks) in the past twelve months. The number of e-commerce transactions has increased over the past one year (transactions more than doubled in the past six months) and more than half of the companies (about 57%) surveyed perceive that internet is important (or will be important) to their businesses. Although there is a reasonably high rate of e-commerce transactions done over the past twelve months, the dollar value of transactions remains quite low. For more than half of e-transacting companies, the total value of transactions in the past twelve months amounted to less than S\$5000 in total. In considering the adoption of e-commerce in future, the SMEs expressed concerns on security issues (cited by more than 64% of companies) and the cost involved (over 63%).

The National Association of Travel Agents in Singapore (NATAS) has just released the results of its travel industry IT survey conducted from June to August 2001. It was found that while all companies used computers in their daily operations, very few used advanced technology such as video conferencing and the intranet. The level of IT usage was found to be affected by the size of travel agency as well as cost involved. More than 80% of travel agencies used external companies for IT support and maintenance. ABACUS was found to be the most widely used global distribution system (GDS) with 58% market share. The survey also found that most travel agents were still trading with their partners in the traditional way. However, 75% of respondents used email and 16% used internet. More than one third of respondents reported having a website and another one third intended to have a website within the next three years. The cost of using technology, lack of confidence in using technology and lack of IT knowledge by management were three main reasons cited as deterrents to IT usage. Most respondents however expressed their positive attitudes towards e-learning.

### **Role of Government:**

Government of Singapore has been helping the growth of e-commerce in various ways such as formulating definitive plans, creating legal and regulatory framework, building IT infrastructure, skill formation and manpower planning, and by undertaking promotional and incentive measures. In 1998, the government launched an “Electronic

Commerce Masterplan” (see <http://www.ec.gov.sg> for details on the Plan) in order to bring e-commerce to mainstream businesses as well as the public, and to attract international e-commerce activities to Singapore. It announced a target of S\$4 billion worth of electronic transactions throughout the Republic and 50% of businesses to use some form of e-commerce by the year 2003. The Plan has five main thrusts: (1) to develop an internationally linked e-commerce infrastructure through well-connected logistics development (2) to jump-start Singapore as an e-commerce hub, especially in B2B services (3) to encourage businesses (particularly SMEs) to use e-commerce strategically (4) to promote usage of e-commerce by the public and businesses through mass education, and (5) to harmonise cross-border e-commerce laws and policies by putting in place internationally consistent legislation and through international cooperation.

In order to facilitate the implementation of the above Plan, IDA has recently launched “Infocomm 21”, a strategic framework and guide for industry, that will help develop Singapore into “a vibrant and dynamic global Infocom Capital with a thriving and prosperous e-Economy and a pervasive and infocomm-savvy e-Society” (<http://www.ida.gov.sg>). Although it provides a detailed blueprint for implementation at industry-level, government will have to play the role as a catalyst for success. The government will function as a facilitator, promoter, educator and ‘anchor tenant’ for testing and pilot deployment of new applications. It will also create a business-friendly environment by bringing people together and sharing new ideas and insights, and will facilitate international strategic alliances at Government-to-Government and industry-to-industry levels and help local companies to grow, regionalize and globalize. The government may also help create markets in emerging areas at the initial stage and help remove regulatory obstacles that may impede the growth of markets and businesses. But the ultimate objective of the government remains the promotion of private sector initiatives in e-commerce development.

In order to create the legal framework for e-commerce transactions in Singapore by addressing the well-known problems of authentication, non-repudiation, confidentiality and integrity, the government enacted “The Electronic Transactions Act’ on 10 July 1998. The Act has four main objectives: (1) to enact a Commercial Code for supporting e-commerce transactions by defining the rights and obligations of transacting parties in line with best international practices (2) to provide a Public Key Infrastructure (a combination of software, encryption technologies, and services that

enable enterprises to protect the security of their communications and online business transactions) in order to ensure the highest level of security on the internet (3) to enable electronic applications and licenses for the public sector, and (4) to clarify Network Service Provider's liability for third party content. Once fully implemented, this Act will bring Singapore to the forefront of international e-commerce developments and will help achieve the vision of turning Singapore into an international e-commerce hub.

The government has also taken special measures for the promotion of e-commerce amongst the SMEs as a part of its SME 21 program that aims to double the productivity of domestic sectors (such as retail and construction) so that they will be comparable with the best in the world by 2010 (see *PSB Annual Report 2000/2001* for details). With effect from January 2001, PSB has introduced the "Jumpstart Programme", as an assistance package" (by helping them adopt "ready-made" e-commerce solutions, and supporting up to 50% of e-commerce development cost) to help SMEs adopt e-commerce. Besides, PSB in conjunction with National University of Singapore set up the "NUS-PSB Centre for Best Practices" in October 2000 with a view to help SMEs improve their productivities and competitiveness through the adoption of best practices (i.e., efficient, effective and quality driven strategies).

### **Concluding Remarks:**

Although the volume of internet transactions remains fairly low, Singapore's legal and physical infrastructure for e-commerce development is already in place. In terms of internet readiness (home ownership of PCs, telephone lines, and internet access), Singapore is even ahead of many developed countries such as Australia, and United States. The government is currently taking systematic steps to position Singapore as a centre for e-commerce development as a part of its overall strategy for moving the Republic into the ranks of "Super League" of the Net age. It should be noted that the development of internet commerce has also an important bearing on Singapore's tourism sector. Tourism 21 (STB,1996), a long-term strategic plan for the development of tourism sector, has announced the vision of turning Singapore into a 'Tourism Capital' in the 21<sup>st</sup> century and one of the major thrusts of the plan is to promote high value-added tourism-related businesses (pertaining to tour and travel agency sectors, airlines, hotels, food and beverage, retail, telecommunications,



professional conference/exhibition organizers, events management companies, and so on) besides continuous efforts for attracting more tourists from traditional as well as niche markets.

What are the best practices for SMEs in tourism sector? At the macro level, they should try to take advantage of government's support and incentive programs with a view to enhance their competitiveness and productivity. The government is moving cautiously and strategically in promoting e-commerce and SMEs are provided with simple and easy to use trading platforms. To ensure a steady flow of skilled manpower, the government is encouraging the small and medium sized companies to retrain their manpower through various incentive programs (for example, Strategic Manpower Conversion Programme by IDA and Ministry of Manpower for converting non-infocomm professionals and re-skill them as infocomm professionals). At the same time, government is trying to create an e-commerce savvy culture through various educational and publicity programs. E-commerce will be taught at Universities and Polytechnics. The government itself is taking the lead to proliferate the use of e-commerce through its electronic Public Services initiatives. Key Public Services will be delivered electronically by the year 2003.

At the micro-level, the SMEs should gradually try to put in place efficient and user-friendly e-commerce techniques to enhance their productivity. They should seize the opportunities provided by the government under Jumpstart Programme and seek assistance from the Centre for Best Practices (CBP). The Centre currently organizes seminars and workshops to educate SMEs on best practices adopted by successful companies at home and abroad, assess the performance of new management and business practices, and help individual companies to successfully and quickly implement efficient business models. While such practices will meet certain quality criteria and business standards, the SMEs should also try to be economically efficient by adopting economic efficiency criterion (for example, marginal cost pricing) that considers not only explicit costs but also hidden costs. New technologies and production methods should not be implemented for the sake of modernization alone. They should rather be based upon productivity and efficiency considerations. At the same time, it should be remembered that the competition in the region is becoming intensified day by day and SMEs in Singapore should try to take "first-mover advantages" by promoting e-commerce at their earliest opportunities.

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## *E-Commerce and Tourism in the APEC Region*

### **Internet Marketing Strategies for SMTEs (Small and Medium sized Tourism Enterprises)**

by

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## **INTRODUCTION**

### **Internet Marketing and e-CRM (electronic-Customer Relationship Management)**

Internet marketing means applying traditional marketing to the Internet and incorporating Internet-only marketing, including market research, advertising, promotions, and public relations. The biggest advantage of Internet marketing is that the consumer interacts with the online sellers, for instance, when requesting more information by sending an email or clicking on a link and answering a questionnaire.

After the 1980s, relationship marketing for consumers gained attention as a service sector, which had significantly grown, and CRM (Customer Relationship Management) became regarded as one of the most important issues in the Internet era. CRM is a strategy that focuses on providing and maintaining quality service for customers by effectively communicating and delivering products, services, information, and solutions to address their problems. E-CRM is the application of CRM to an e-business' strategy and includes the personalization and customizing of consumers' experiences and interactions with a web site, call center or any other method of customer contact with the e-business.

According to a WTO report (2001), marketing is the field where web sites have been used the most, regardless of the type of tourism business. However, very few tourism enterprises have exploited the diversity of resources available to advertise their services and attract new customers online. CRM is considered the most strategic but least understood e-commerce application. The report pointed out that the problem remains one of defining a strategy to exploit the quality-value-loyalty chain on the Internet for SMTEs. As for other e-commerce and e-business applications, the report includes distribution channels, reservation and payment, and loyalty programs as Front Office applications (meaning directly relating to customers), whereas SCM (Supply Chain Management), ERP (Enterprise Resource Planning), human resources, operational control, and product development are Back Office applications, which are related to operations and BPR (Business Process Reengineering). With such a diversity of applications, it is necessary for each firm within the tourism industry to formulate and implement an Internet marketing strategy that fits into its management environment.

## **Internet Marketing Elements**

Traditional marketing elements involve product, price, promotion, and place (in addition to physical surroundings, participants, and processes for service marketing). These, however, do not fit into the Internet marketing paradigm. Seven design elements of customer interface have been suggested, including content, customization, community, commerce, context, communication, and connection (Rayport and Jaworski, 2002). Content is defined as all digital subject matter on the site, including text, pictures, sound, video, and information that the web-site contains. It focuses on “what” is presented. Customization means the site’s ability to tailor itself to different users or to allow users to personalize the site. It involves both tailoring and personalization.

Community is defined as the interaction that occurs between site users. User-to-user communication can occur between two users (e.g., e-mails, joint game-playing) or between one user and many (e.g., chat rooms). For instance, Landsend.com has an innovative community feature that allows two users to shop simultaneously on its site. This service termed “Shop with a Friend”, enables two users to view the site at the same time, browse together, and purchase products. Commerce means the site’s capability to enable commercial transactions. For example, many e-shopping sites have

a shopping-basket feature along with shipping information. The shopping basket usually provides information including quantity, description, size, prices, and availability.

Context involves the site's layout and design. It has both aesthetic (pastel colors; simple, warm visuals) and functional (crisp, uncluttered) design elements to communicate the site's main benefits. Communication refers to the dialogue that unfolds between the site and its users. This communication can consist of three types: site-to-user communication (e.g., email notification), user-to-site (e.g., customer service requests), or two-way communication (e.g., instant messaging). In many shopping sites, this function enables the user to talk directly with the customer service representative while shopping on the site. Connection is defined as the number of formal linkages between the site and other sites. It involves a program that supplies affiliated sites with banner advertisements to link visitors from the other sites to this particular site. Finally, the factors of fit and reinforcement play a critical role in gaining synergy among the 7Cs. Fit means the extent to which each of the 7Cs individually support the business model. Reinforcement refers to the degree of consistency between each of the Cs.

## **TYPES OF E-COMMERCE AND MARKET SEGMENTATION FOR SMTEs**

### **Methods of Using E-Commerce in Small and Medium sized Enterprises**

Basically, each segment of the tourism industry, including hospitality services, travel agencies, tour operators, and visitor attractions, requires a customized e-business strategy, as suggested by a WTO report (2001). Internet marketing strategies for SMTEs should be formulated and implemented within customized e-business frameworks that can be matched to various firms. That is, an e-CRM strategy that optimizes the resources of a given SMTE should be set up and used. Consumers' trust and the firm's reputation are critical to its success.

According to a OECD report (2000), small and medium sized enterprises carry out e-commerce in three different ways. First, "Internet start-ups" are small businesses which begin on the Internet and invent new ways of creating value added products,

new services and new business models. They set up and shut down quickly and those that endure are sometimes acquired by other firms. Financing the initial investment can be a major problem. Also, “established small firms” are using the Internet and developing their own e-commerce strategies to expand their business by entering new markets, often internationally. The Internet is undoubtedly the medium of choice to put such a strategy to work for many firms in the service sector. However, when implementing e-strategies in international markets, small and medium sized enterprises are more vulnerable than large firms to problems related to taxation, authentication of partners, data security and confidentiality, the settling of commercial disputes, and overcoming logistics hurdles, especially if they are targeting the public at large. However, small and medium sized enterprises that do business within extremely narrow geographical confines are able to overcome the problems which affect international e-commerce. These companies exploit the Internet’s potential to deliver more and better services locally. Some sites are designed specifically for local clients and markets. The international market is regarded as a later target. Finally, some small firms are entering into electronic partnerships with large firms, which are their customers or suppliers, or with industry-wide associations. This works best when e-commerce is used proactively as part of a set of strategies to increase small and medium sized enterprises’ competitiveness in global markets.

### **Five Success Factors for E-Marketing**

Kierzkowski, et al (1996) argued that five apparent factors for success in e-marketing include: 1) attracting users, 2) engaging users’ interest and participation, 3) retaining users and ensuring they return to the site – based service, 4) learning about their preferences, and 5) relating back to them to provide customized interactions that represent the true “value bubble” of e-marketing. This last factor is crucial, as in most cases it will require managers to make an e-marketing initiative part of the current business system or environment.

The types of e-marketing opportunities available involve providing better service to consumers at lower cost by delivering information about a product or service, building relationships with on-line consumers, and using a new channel. As an example of a new channel, airlines are increasingly bypassing travel agents to sell tickets themselves, thus saving significant commission costs. For instance, United Connections of the US, a disk-based service allowing travelers to make their own

bookings, is estimated to save airlines up to \$50 on a typical \$500 round-trip fare. This trend has enticed travel agents to seek other opportunities to make the profits.

## **E-Market Segmentation for B2C (Business to Customer)**

Market segmentation and target marketing are essential for managers of SMTEs. Empirical research in the US shows that current active on-line consumers are categorized into six segments, including Simplifiers, Surfers, Bargainers, Connectors, Routiners, and Sportsters (Forsyth, et al., 2000). Each of these segments has different characteristics and needs, and managers should distinguish which segments that their sites attract and match their site strategies to the needs of the target audience. Each segment is different in terms of its on-line behavior and traits, such as the amount of time they actively spend on-line, the number of sites and pages they access, the time they spend actively viewing each page, and the types of sites they visit.

“Simplifiers” are the most attractive consumers, since they account for more than 50 percent of all on-line transactions. They occupy 29 percent of the total user population but are challenging to serve and easy to lose because they want ease of access and convenience. They prefer readily available product information, reliable customer service, and easy returns. They respond positively to any feature – conveyed through advertising or on-site messages – that allows them to do business easier or faster, both on- and off-line. The one click ordering process in Amazon. com is a good example of a feature designed for “Simplifiers”. Other research indicates that even heavy on-line shoppers consider off-line customer service to be better than its on-line counterpart. SMTEs (Small and Medium sized Tourism Enterprises) should cater to their customers with more personalized services.

“Surfers” spend the most time on-line among the segments – 32 percent of all time – even though they only occupy 8 percent of the user population. They access upward of four times more pages than average users. They use the Internet for several reasons, such as to explore, shop, find information, and be entertained. They move quickly among sites, however, continually seeking new on-line experiences. To attract and retain them, a site should have a strong on-line brand, cutting-edge design and features, constant updates, and a rich variety of services.

“Bargainers” are mainly concerned with getting a good deal. They generate 52 percent of all visits to eBay, which is the busiest auction site, although they make up just 8 percent of the active on-line population and spend less time on-line than average

users do. Their favorite sites include Priceline.com and uBid, as well as financial information sites, such as Quote.com. They enjoy searching for a good price, controlling transactions, and a sense of community. Sixty-four percent of all “Bargainers” indicate that they have made on-line purchases from standard categories which include books, compact discs, and software. To get them to repeatedly visit, a site should appeal to them on both a rational and emotional level. For instance, eBay devotes an entire section to a newsletter, chat groups, a library, and opportunities to make donations to charities.

“Connectors” use the Internet mainly to relate to other people through chat services and e-card services. They tend to be Internet beginners: 40 percent have been on-line for less than two years, and only 42 percent have made purchase on-line, compared to 61 percent overall for all Internet users. They consider what is available to them and what they think of as valuable. Managers should focus on ways to shape the habits of “Connectors” so that they can turn them into members of a more attractive segment, such as “Simplifiers”. One approach is to help “Connectors” find their way around the Internet, in the meantime gaining their trust. Readersdigest.com is a good example, because it gives special help to subscribers over the age of 50. The site includes features explaining how users can protect themselves on-line and how e-mail works, as well as simple explanations of technology, and netiquette lessons.

“Routiners” use the Internet for content, usually news and financial information, and spend more than 80 percent of their on-line time surfing through their ten favorite sites. The Wall Street Journal interactive edition and the MSNBC on-line site are among the most popular sites for the members of this group. The superior and exclusive content of those sites is regarded as their major attraction.

“Sportsters” are similar to “Routiners”, but are attracted to sports and entertainment sites. Sites should be fresh, colorful, and interactive to attract them mainly because they view content as entertainment. ESPN.com, for example, is one of the most popular sites for them because it features sports results, polls, chat rooms, fantasy games, news, and radio broadcasts.

Among the user segments, the method of making a business model for “Routiners” and “Sportsters” is the most unclear. An obvious way to generate revenue is to attract visitors of free content sites to ones which require paying subscriptions. For instance, Quote.com provides some information free of charge but offers considerably more inside the site for paid-up subscribers. ESPN.com generates significant revenue from subscription fees for its sports leagues. Other options include the creation of links to transaction-based sites and the use of targeted advertising and



promotions to influence the off-line purchasing behavior of visitors.

Consultants suggest that managers should avoid trying to span all segments with a single offer. They are better off cultivating core-segment customers who repeatedly purchase items of greater than average value. Also, new technologies will allow managers to display the contents that appeal most to particular user segments.

For SMTEs acquiring information related to market segmentation is a time-consuming and costly process. A recent McKinsey study presents an easier way to segment B2C consumers, which SMTEs can adopt and implement. The study used cases of pay-TV companies, which face similar problems, and found that pay-TV companies could best uncover the interests and preferences of consumers by using basic socio-demographic variables such as age, employment status, family role, and household structure. These variables are regarded as a better indication of the broad content preferences of large groups of consumers than any combination of widely tracked factors, such as occupation, income, and attitude toward technology.

The study results suggest that age, employment status, family role, and household structure organize site visitors into segments based on life stages. As target customers successively enter each new life stage, they demand a different kind of service and product. Tourism businesses tend to find their most profitable customers concentrated in certain life stage segments, which, of course, vary from business to business in the tourism sector. Creating appealingly differentiated content for each segment is a relatively simple task for B2C. Life stage segmentation allows a B2C to focus on improving its overall offers to its most valuable customer groups from the start, as well as to work out a long-term strategy.

## **STRATEGIC E-MARKETING FOR SMTEs**

### **Strategy as Simple Rules**

The traditional framework for strategic management involves vision (mission), goals (objectives), strategy formulation, internal and external analysis, implementation, control and monitoring. In the Internet era, the speed of change and adaptation should be figured into this strategy framework (Rayport and Jaworski, 2002). There are three approaches to strategy, including the positioning, resource, and simple rules approaches (Table 1).

Table 1. Three approaches to strategy

	<b>Position</b>	<b>Resources</b>	<b>Simple Rules</b>
<b>Strategic Logic</b>	•Establish position	•Leverage resources	•Pursue opportunities
<b>Strategic Steps</b>	•Identify an attractive market •Locate a defensible position •Fortify and defend	•Establish a vision •Build resources •Leverage across markets	•Jump into the confusion •Keep moving •Seize opportunities •Finish strong
<b>Strategic Question</b>	•Where should we be?	•What should we be?	•How should we proceed?
<b>Source of Advantage</b>	•Unique, valuable position with tightly integrated activity system	•Unique, valuable, inimitable resources	•Key processes and unique simple rules
<b>Works best in...</b>	•Slowly changing, well-structured markets	•Moderately changing, well-structured markets	•Rapidly changing, ambiguous markets
<b>Duration of Advantage</b>	•Sustained	•Sustained	•Unpredictable
<b>Risk</b>	•It will be too difficult to alter position as conditions change	•Company will be too slow to build new resources as conditions change	•Managers will be too tentative in executing on promising opportunities
<b>Performance Goal</b>	•Profitability	•Long-term dominance	•Growth

Source: Eisenhardt and Sull (January 2001), *Strategy as simple rules*, Harvard Business Review

Because of rapidly changing and unpredictable business environments, as a perspective on strategy, the organization needs to focus on ‘simple decision rules’ rather than complex strategic planning exercises (Eisenhardt and Sull, 2001). The simple-rules approach focuses on the organization process within the internal

environment, the positioning approach emphasizes the external environment, and the resource approach stresses the internal environment. In formulating e-marketing strategies, it is recommended that SMTEs focus on the simple-rules approach, although it may be that all three approaches have important contributions to the strategy formulation and execution process. Building trust on-line between the site and user is the most important factor in on-line businesses. In light of this fact, an e-travel agency can set up 'building trust on-line' as a simple rule for strategy thus, its marketing activities focus on constant and interactive value exchange for the consumers.

### **Process of E-CRM (Electronic - Customer Relationship Management)**

Repeat customers can have a higher lifetime value than one-time buyers. A customer's lifetime value means the expected amount of profit derived from a customer over a designated length of time. If a firm can turn a first-time buyer into a repeat customer, it can spread initial acquisition costs over the lifetime of the person as a customer (Deitel and Steinbuhler, 2001). Bain & Company's research showed that repeat shoppers accounted for 57 percent more revenue than customers who purchased only one time (Baveja, 2000). The research of the Boston Consulting Group demonstrated that the cost of acquiring a new on-line customer is approximately thirty-four dollars, while using an on-line channel to market to a current customer costs around seven dollars. It is also known that usually 20 percent of customers contribute 80 percent of total revenue, which emphasizes the importance of platinum customers.

The e-CRM process basically includes strategy formulation, system construction, and execution. As the first step, strategy formulation involves 1) the analysis of the business environment, 2) customer analysis, 3) strategy choice, 4) deciding on specific marketing activities (or offers), 5) personalization design, and 6) communication design. The second step, system construction, should proceed in the stage when decisions are made on marketing activities. If the strategy and system are built, the third step is the execution of the CRM.

As the first stage of a strategy formulation, the analysis of the business environment is largely conducted at the external and internal level. The external level includes the customer, competitors, and macro-business environments, while the internal level involves the company's strategic validity, and its adaptation capacity to the external environment. Customer analysis as the second stage involves customer evaluation (or scoring) and segmentation. Customer evaluation can be calculated by

several methods, including profitability scoring, risk scoring, coverage scoring, and RFM (Recency, Frequency, Monetary) scoring.

Customer segmentation is based on the customer evaluation and can be performed by services, prices, responses on promotions, demographics, and buying patterns. On-line customers are segmented and grouped according to their loyalty to the company's service. The following case is not a tourism enterprise but cites many managerial implications for SMTEs when applying e-CRM. In the instance of Dell, which is one of the leading computer companies on-line, its competitive advantage in CRM lies in its integration of customer data.

Its integrated database contains all collected customer data from various channels, such as whether they made contact through a web site, call center, customer card by mail or face-to-face. In addition, Dell ranks customers in four categories, including 'all customer', 'registered', 'contracted', and 'platinum' and provides different services to each group. All customer categories are included in a simple visitor group. General information is provided to this group, such as information regarding the product, price, employment, customer support, and ordering methods. A registered customer group is one who registers their ID in the site and receives newsletters and email services. A contracted group includes customers who buy or have bought products. Dell provides different discount rates according to the customers' purchase record. Platinum group is composed of customers who have bought Dell's products consistently. This group receives the best services, such as web hosting, and discussion participation for the development of Dell's new products and services.

After the analysis of the business environment and customer, a strategy of CRM is formulated. In this stage, the purposes and activities of CRM and target customers should be decided. Then, specific marketing activities (or offers) that will be directed at customers are decided on. Marketing offers largely can be divided into service, the product itself, and additional benefits, which include pre-inducement and post-reward. The next step is to design personalization. Personalization generally proceeds through the use of customization and recommendation. It is important when designing personalization to decide personalization rules, which include demographics, preferences, combinations, constraints, and similar case-based rules. 'My stuff' of Travelocity.com is a good example of personalization.

The final stage of strategy formulation is to design communication, which is the notion of "how", (while personalization is related to "what" to offer the customer). Communication channels on the Internet include e-mail, text messages, web contents,

and traditional channels include DM (Direct Mail), telephone, cellular phone, and personal contact. The important aspects in communication design are dialog and packaging.

A CRM system requires the construction of both analytical and operational CRM systems. The analytical CRM system is composed of a database and analytical tools. A database can be called a dataware house or a data mart. A data mart is a small dataware house for a specific market. Analytical tools include query, OLAP (Online Analytical Processing), and data mining. The purpose of an operational CRM system is to enhance the efficiency of customer management through the automation of the customer interface. The operational system consists of a personalization system that provides differentiated content to customers, mobile computing to improve efficacy for customer contact, a call center, and SFA (Sales Force Automation), etc. After the strategy formulation and system construction, the execution of CRM follows. Pre-tests with sampling should be performed in order to find the best practices.

## **Implementing e-marketing strategies for SMTEs**

There are numerous benefits offered by CRM applications to SMTEs. The major advantages of e-marketing involve interactivity, mass customization, real time, and a data base of customers. The challenges for Internet businesses include a lack of reliable consumers and a lack of standardization.

E-marketing strategies are formulated and implemented with elements which include 1) content, 2) customization, 3) community, 4) commerce, 5) context, 6) communication, and 7) connection. Investing in a web site is much more affordable than it was a few years ago, thus SMTEs can now easily design or renovate this important means of client interface. For web site promotion, a variety of options are opened to SMTEs, from joining affiliate programs or a DMS (Destination Management System) that will list their site in a fully integrated catalogue, to planning a systematic advertising campaign to make SMTEs known to specific market segments in some specific period of the year (WTO, 2001).

The process of implementing strategy should focus on 1) customer acquisition, 2) customer cultivation, and 3) customer retention. Customer acquisition is seeking potential customers. Customer cultivation relates to what they need and how to make them purchase services or products. Customer retention focuses on how to retain customers.


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**Session III**

**The Value Chain Model for E-commerce Strategies of SMTEs in Australia**

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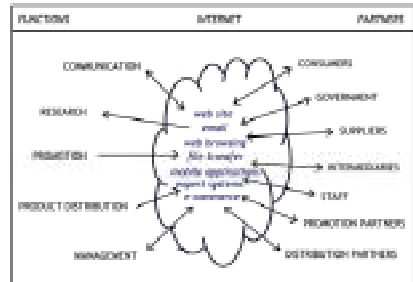
**Value Chains: The Issue**

- Supply Chains and Value Chains
- Do the big players have it all ? Is it a done deal ?
- SMTEs: victims ? Action ?
- A methodology for action: easier if SMTE is online

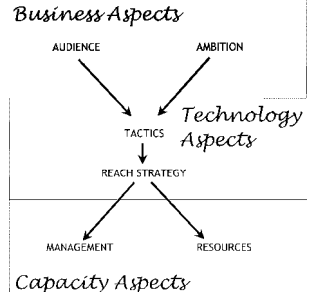
**Presentation**

- The planning process
  - Using Online architecture
  - To Maximise the value chain
- What are some outcomes of improving value chains
- Using a SMTE ('Dag Station') as a case study

**The Online Architecture**



**Value Chain Management Model**



**VCP Business Aspects**

**Audience (Distribution Network)**

Purpose:

- Identify critical partnerships in the value chain

Application:

- Prioritise WHERE you can have an impact e.g.: Tour operators/ travel agents

<p><b>VCP Business Aspects</b>  <b>Ambition (Business Plan)</b></p> <p>Purpose:</p> <ul style="list-style-type: none"> <li>Identify components of the business plan to implement on-line</li> </ul> <p>Application:</p> <ul style="list-style-type: none"> <li>Describe WHAT impact you would like to have</li> </ul> <p>e.g.: Increase profile in tour operator's product suite</p>	<p><b>VCP Technology Aspects</b>  <b>Tactics</b></p> <p>Purpose:</p> <ul style="list-style-type: none"> <li>Identify what you would like the technology to do re: ambitions</li> </ul> <p>Application:</p> <ul style="list-style-type: none"> <li>Use this section as briefing document for technology developers</li> </ul> <p>e.g.:</p> <ul style="list-style-type: none"> <li>Reciprocal links</li> <li>Content management of presence on tour operator's site</li> </ul>
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<p><b>VCP Business Aspects</b>  <b>Reach Strategy</b></p> <p>Purpose:</p> <ul style="list-style-type: none"> <li>Describe how you intend to ensure that your audience receives this tactic</li> </ul> <p>Application:</p> <ul style="list-style-type: none"> <li>Use this section to develop performance indicators/ evaluation criteria</li> </ul> <p>e.g.: Achieve a specified number of requests for your product to the tour operator from people booking online</p>	<p><b>VCP Capacity Aspects</b>  <b>Management</b></p> <p>Purpose:</p> <ul style="list-style-type: none"> <li>Develop a 'critical path' for implementing and evaluating tactics</li> </ul> <p>Application:</p> <ul style="list-style-type: none"> <li>Ensure that you have reasonable priorities and achievable ambitions</li> </ul> <p>e.g.: Need to update content on tour operator's site every six months</p>
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<p><b>VCP Capacity Aspects</b>  <b>Resources</b></p> <p>Purpose:</p> <ul style="list-style-type: none"> <li>Internal budgeting and resource allocation</li> </ul> <p>Application:</p> <ul style="list-style-type: none"> <li>Ensure that you have reasonable priorities and achievable ambitions</li> </ul> <p>e.g.:</p> <ul style="list-style-type: none"> <li>Will need to manage the relationship with tour operator so they allow content management tactic</li> <li>Will need to train staff member in HTML and allocate time for content development</li> </ul>	<p><b>Outcomes</b></p> <ul style="list-style-type: none"> <li>Level of entrepreneurship is raised</li> <li>SMTEs more active rather than passive</li> <li>Adapt better to changing environment</li> </ul>
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