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## **THAI E-TOURISM BUSINESS PROGRESSION CLASSIFICATION**

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### **ABSTRACT**

This research aims to investigate the progression of e-business adoption in Thai tourism enterprises in order to define the progression levels. The levels of E-tourism business progression are determined in four stages: online presence, interactive online presence, electronic transactions, and enterprise integration. The survey results reveal that e-business progression of most Thai tourism enterprises remain in online presence stage. Most Thai tourism enterprises which adopted e-business have not progressed further to stage 2, 3, and 4. There are more hotels which have reached higher stages than travel agents for almost every web features. This can be implied that the tourism enterprises have not paid careful attention to details of their websites, nor do they perceive usefulness and importance of informative websites. We conclude that the lack of perceived usefulness and an importance of e-business could impede the progression to further stages.

Keywords: E-tourism, E-tourism progression, Thailand

### **INTRODUCTION**

The Internet and web technologies have become an important component in today firm's success. A large number of businesses have deployed the Internet through their website as the selling and advertising channels. Electronic commerce thus becomes a value-added channel which allows global reach to customers [13]. The tourism industry is one of many industries which benefits tremendously from such technologies [2]. In fact, e-business technologies are fundamental to the tourism industry [3] as they possess characteristics and capabilities that compatibly support business processes in the industry. The

major potential of e-business for the tourism industry lies in its capability of being networks of information and distribution channels. Such a capability is considerably helpful because the tourism industry extensively involves diverse information and products (reservations or tickets), all of which can be delivered in digital format [1].

In Thailand, the tourism industry both directly and indirectly contributes approximately 21.3% of the country's GDP. This contribution varies from tourism employments and demands for other related supplies [20]. In 2011, domestic tourism is expected to generate almost 14,400 million USD, while expected revenue for inbound tourism is approximately 20,000 million USD [10]. Therefore, the adoption of e-business adoption by Thai tourism enterprises to the level which allows long-term competitive advantages is important to the country's overall economy.

Website development is considered an important initial step for firms to fully benefit from electronic business, as website is a channel or portal in which customers come to look for information they need for their traveling related decision-making. If Thai tourism enterprises can appropriately exploit e-business technologies, they will be able to reduce transaction costs and also create ample business opportunities, which in turn contribute to the country's economy.

This research therefore attempts to investigate the progression of e-business adoption in Thai tourism enterprises in order to define adoption levels (e.g. Information Presence level, Integration level [11]) at which most enterprises are. Such findings will be helpful in defining e-business progression levels in Thai tourism enterprises and proposing appropriate guidelines on how and what Thai tourism enterprises should implement to progress to the e-business adoption level which provides long-term strategic benefits.

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## LITERATURE REVIEW#

### E-business technologies in the tourism industry

The majority of the tourism enterprises adopted e-business technology for marketing and sales purposes [6]. These encompassed promoting the products/services, providing information and rates, facilitating booking processes online, and delivering the products/services through email. Additionally, e-business technologies allow travel agents to further add value to their services by empowering the customers to not only search and book single components, but also to assemble and book the whole travel arrangements in real-time through web-based technologies [2]. Such concept is called dynamic packaging, which is highly complex as it involves various data sources and pre-determined packaging rules set differently by suppliers. Therefore, the dynamic packaging is provided by larger and technologically advanced travel agents such as Expedia and Travelocity.

While the Internet enables the hotels and other tourism suppliers to link to countless online distribution channels, at the other end of the value chain it also facilitates the linkages between the suppliers and innumerable partnerships [2]. However, different from those for marketing and sales activities, the e-business technologies for supply chain activities are almost always exclusively utilized by larger

suppliers, such as chain hotels and global travel agents [19]. In the travel agent sector, the large agents apply the e-business technologies to integrate with suppliers. Driven by the need for a variety of products, the large agents provided a web-based interface that links to their inventory system and allows the hotels to browse the interface and input their room rates and allotments to the inventory system of the agents. E-business becomes critical for the tourism industry, particularly in the Thai context which main revenues are from foreign travelers. Having websites and online booking channels is important for both hotels and travel agents to provide their services to customers around the world. This provides the basis for this research.

### E-Business Progression

A large number of tourism enterprises have implemented and used website to drive their business [7] [16]. Some only used static website and email, while others have advanced their e-business technologies to the extent that business process reengineering was conducted for higher efficiency. Such various stages of advancement in e-business adoption have been addressed by many researchers [4] [5] [8] [9] [11] [12] [17] [18]. Table 1 shows different e-business progression stages from past researches. These researchers have proposed similar stage models of electronic business as shown in Table I.

**Table I: Stage models of electronic business from prior literature**

Costello and Tuchen (1998)	McKay <i>et al.</i> (2000)	Willcocks <i>et al.</i> (2000)	Rayport and Jaworski (2002)	Rao <i>et al.</i> (2003)
	No Presecne (Wait-and-see)	-	-	-
Online Presence	Static online presence	Web presence	Broadcast	Presence
Interactive online presence	Interactive online presence	Access Information	Interact	Portals
E-transaction	Internet Commerce	Further integration of process and technologies	Transact	Transaction Integration
	Internal and External Integration	E-business	Collaborate	Enterprise Integration

This kind of e-business stage models is deemed appropriate and helpful in identifying e-business

progression of a firm. The models by [11] and [9] are selected and adapted as a conceptual

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framework for this research. Four levels, including 1) Online Presence, 2) Interactive Online Presence, 3) Electronic Transactions, and

4) Enterprise Integration are identified in our framework. Details are delineated in Table II.

**Table II: The research conceptual framework (adapted from [11] and [9])**

<b>Progression level</b>	<b>Description</b>	<b>Example</b>
<b>Level 1 – Online Presence</b>	<ul style="list-style-type: none"> <li>○ Firms present themselves and their information in a static one-way communication format</li> </ul>	<ul style="list-style-type: none"> <li>○ Website</li> <li>○ Product/service information</li> <li>○ Contact information (e.g. address, email, map, etc.)</li> </ul>
<b>Level 2 – Interactive Online Presence</b>	<ul style="list-style-type: none"> <li>○ Firms provide two-way communication channels online for their customers (B2C) or suppliers (B2B)</li> </ul>	<ul style="list-style-type: none"> <li>○ Online feedback form</li> <li>○ Online order form (without e-payment)</li> <li>○ Virtual tour</li> <li>○ Online inventory database</li> <li>○ Web2.0 services e.g. Facebook, Youtube, Twitter, etc.</li> </ul>
<b>Level 3 – Electronic Transactions</b>	<ul style="list-style-type: none"> <li>○ Firms are able to offer advanced electronic transactions, such as electronic payment, electronic auction, etc.</li> </ul>	<ul style="list-style-type: none"> <li>○ E-auctions</li> <li>○ Online payment service</li> </ul>
<b>Level 4 – Enterprise Integration</b>	<ul style="list-style-type: none"> <li>○ Firms are able to integrate supply chain activities with their suppliers and customer relationship management activities with their customers</li> </ul>	<ul style="list-style-type: none"> <li>○ E-loyalty or E-reward programme</li> <li>○ Extranet systems integrating travel agents and hotels</li> </ul>

## RESEARCH METHODOLOGY

We employed research triangulation as our main methodology for our study. First, we started out with a content analysis where we accumulate all relevant needed data such as the list of tourism businesses who has at least one feature; a website to promote their businesses. Second, conducted extensive literature review to come up with the features that are associated with each e-business progression stages. Third, we tried to normalize our list to ensure that there were little or no redundancy amongst the features selected. So, we consulted with three experts and practitioners from within the industry to help identified all the relevance feature listing. Fourth, after we conduct the content analysis of the website, we also distributed the survey to confirm our result with various tourism business to ensure the validity of our findings. The population includes hotels and travel agents which have established their own

websites. Due to difficulty of obtaining full list of hotels and travel agents in Thailand, we assume that enterprises which register with the Association of Thai tourism Authorization and Thai Hotel Association are the population for this research. The two organizations hold 1,300 and 633 tourism members consecutively.

However, some tourism enterprises are members of both associations. After eliminating redundancies, 1,140 enterprises are remained. As a result, we decided to survey all 1,140 websites. In terms of survey questionnaire, the conceptual framework proposed in section 2 is used as a template. We developed questionnaire items for the four level of e-business progression investigating some successful, multi-national hotels and travel agents' websites, for example Hilton and Sheraton for hotel business and Expedia.com for travel agent business. Then, we conducted in-depth interviews with experts in both online and traditional tourism businesses.

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The interviews were very helpful in revising the questionnaire items to be more practical and complete.

To increase validity, a training session was set up for all research assistants. It was to explain to them in detailed on what to look for and which items in websites count as which items in the questionnaire survey.

## FINDINGS

Of 1,140 tourism websites, 129 websites (11.32%) were found inaccessible and excluded from the survey. The rest 1,011 websites can be normally accessed. They composed 602 hotels (59.5%) and 409 travel agents (40.5%). Table III shows percentages of websites which appear to have certain items or features classified in each progression level and industry.

**Table III: Website features of e-business tourism progression classified by hotels and travel agents**

Web items/ features	Hotels		Travel Agents		Pearson Chi-Square		
	N	%	N	%	Value	Df	Sig.
<b>Stage 1: Online Presence</b>							
1. Company Information (e.g. About us)	417	41.4	323	32.0	12.375	1	.000
2. Information in foreign language	578	57.3	342	33.9	46.084	1	.000
3. Tourist attraction information	209	20.7%	247	24.5%	63.855	1	.000
4. Transportation Information	428	42.4%	249	24.7%	11.761	1	.001
5. Map	526	52.0%	181	17.9%	213.357	1	.000
6. Service conditions	329	32.6%	198	19.6%	3.910	1	.054**
7. Privacy conditions	200	19.8%	97	9.6%	10.567	1	.001
8. Contact email	540	53.4%	367	36.3%	.000	1	1.00**
9. Telephone number	572	56.6%	393	38.9%	.644	1	.000**
10. Contact address	565	55.9%	360	35.6%	10.651	1	.000
11. Frequently Asked Questions (FAQ)	65	6.4%	68	6.7%	7.242	1	.008
12. Product pictures	535	52.9%	327	32.3%	15.418	1	.000
13. Tour package information	135	13.4%	279	27.6%	211.172	1	.000
14. Travel tips	96	9.5%	177	17.5%	92.281	1	.000
<b>Stage 2: Interactive and emerging online communication</b>							
15. Virtual tour	70	6.9%	17	1.7%	17.286	1	.000
16. Facebook	196	19.4%	66	6.5%	34.206	1	.000
17. Youtube	54	5.3%	23	2.3%	3.877	1	.053**
18. Twitter	102	10.1%	35	3.5%	14.559	1	.000
19. Online chat	65	6.4%	56	5.5%	1.937	1	.168**
20. Online feedback form	267	26.4%	182	18.0%	.002	1	1.00**
<b>Stage 3: e-Transaction</b>							
21. Online payment	292	28.9%	84	8.3%	81.546	1	.000
22. Online request form	295	29.2%	144	14.2%	18.866	1	.000
23. Foreign currency calculation	162	16.0%	53	5.2%	28.313	1	.000
24. Availability of payment options	107	10.6%	53	5.2%	4.240	1	.043
25. Member registration system	91	9.0%	102	10.1%	15.213	1	.000
26. Stored customers' information for future use	65	6.4%	21	2.1%	10.083	1	.001
27. Online mileage system	12	1.2%	4	0.4%	1.601	1	.305**
28. Check booking status online	75	7.4%	39	3.9%	2.080	1	.157**
29. Product search engine	79	7.8%	85	8.4%	10.513	1	.002
30. Checking availability online	264	26.1%	55	5.4%	104.257	1	.000
31. Offer last minute bookings	38	3.8%	10	1.0%	8.054	1	.004
32. Top deal program	75	7.4%	51	5.0%	.000	1	1.00**
<b>Stage 4: E-tourism system integration</b>							
33. Online instant confirmation booking	248	24.5%	54	5.3%	91.100	1	.000
34. Dynamic packaging	65	6.4%	71	7.0%	9.008	1	.003

Web items/ features	Hotels		Travel Agents		Pearson Chi-Square		
	N	%	N	%	Value	Df	Sig.
35. Integration with partners' or suppliers' databases	172	17.0%	159	15.7%	11.620	1	.001

Overall, hotels and travel agents' websites are quite similar. Only 8 items are found significantly different results as the followings:

- Privacy condition: 32.6% of the hotels provide this information on their website, while 19.6% of the travel agents provide this information on their website
- Contact email: 53.4% of the hotels provide contact email on their website, while 36.3% of the travel agents provide the information
- YouTube: 5.3% of the hotels use YouTube to promote their products, while only 2.3% of travel agents use YouTube
- Online chat: 6.4% of the hotels provide online chat service on their website, while 5.5% of the travel agents do so
- Online feedback form: 26.4% of the hotels have an online feedback form on their website, while only 18.0% of the hotels provide the form
- Online mileage (reward) system: 1.2% of the hotels implement an online reward system, while only 0.4% of the travel agents do so
- Check booking status online: 7.4% of the hotels enable their customers to check booking status online, while 3.9% of the travel agents implement such feature
- Top deal program: 7.4% of the hotels provide top deal information, while 5% of the travel agents provide such information

## DISCUSSION AND CONCLUSION

Considering each progression levels, the survey result reveals that e-business adoption of most Thai tourism enterprises still remain in stage 1 or 2. Comparing between hotels and travel agents, it can also be seen that percentages of travel agents' websites which progress to stage 3 and 4 drop quite sharply.

At stage 1, almost all website provide basic information, namely contact address, email, product information and pictures. Information which have not been found much in surveyed websites are FAQ and travel tips.

At stage 2, interactive and emerging online communication, such as Facebook and Twitter, is found in a far less proportion compared to features/items in stage 1. Less than 50% of the hotels

and travel agents have provided online feedback form for customers to make any contact, request or complain. Less than 30% of the hotels and travel agents have utilized Facebook. The lowest utilized channel is YouTube; only 7.5% of the surveyed enterprises have used the channel.

At stage 3, an online request form is provided by 43.2% of the surveyed enterprises, while 37.2% of the surveyed enterprises also provide online payment option for their customers. The figures reveal a small proportion of enterprises which are ready for e-business. There are more hotels which have reached this stage than travel agents for almost every feature in this stage.

At stage 4, similar trend to that of stage 3 is revealed. There appeared to be more hotels than travel agents whose websites have reached stage 4, except only the dynamic packaging feature which is normally not a focus of hotels.

Overall, the result reveal that most Thai tourism enterprises which adopted e-business have not progressed further to stage 2, 3, and 4. Besides, basic important information, such as e-mail address and product pictures, which should have been provided, was surprisingly found in only 89.4% and 85% of the websites consecutively. This can be implied that the tourism enterprises have not paid full attention to details of their websites, nor do they perceive usefulness and importance of informative websites. This could impede the progression to further stages.

Moreover, the lower percentages of websites appeared to be in stage 3 and 4 points out that many websites are adopted as a product catalogue or online presence channel only. About 30 – 40% of the surveyed enterprises attempted to implement features which are classified as in stage 3 and 4. This reveals a lack of an understanding on the full potential of e-business by Thai tourism enterprises. However, given the fact that main tourism revenues in Thailand are from European, American, and Asian travelers, websites should be of greater help to Thai tourism enterprises in acquiring these customers. Therefore, government and other relevant organizations should play a more proactive role in encouraging and supporting the Thai tourism enterprises to progress to the e-transaction and e-tourism system integration stage. A failure to develop to such stages could turn travelers to book their trip to Thailand from large-sized multinational travel agents, such as Travelocity

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and Expedia, and make it difficult for Thai travel agents.

Small percentages of enterprises, which used other social networking channels, highlight the need for more support on how to utilize and fully benefit from such media. Appropriate use of the social media has been proved useful by a large number of prior studies (e.g. [14] [15]). Moreover, as these media are free or relatively low cost, an understanding of how to use them well will be of great benefit to the tourism enterprises.

Future Research could study in-depth on the situation in which travel agents are becoming less and less important to hotels. As our survey result shows that hotels seem to be more advanced than travel agents, such situation could lead to disintermediation or the removal of intermediaries from the tourism value chain as hotels can outperform their intermediaries. This is a serious issue which could impact a large number of travel agents in Thailand. Besides, it is interesting to investigate if such situation holds true in other countries. This could help demonstrate a clearer picture of the tourism industry as a whole.

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