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A Qualitative Study of E-Business Adoption in the Real Estate Sector in China

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Abstract

The purpose of this qualitative study is to investigate e-business adoption into real estate agencies in China. This research focuses on the advantages and disadvantages of IT/IS (Information Technology/Information Systems) integration through face to face interviews with property agency managers in Suzhou. Particularly, it looks into the real estate sector in China today and provides implications to improve service quality and stay competitive within local real estate agencies in Suzhou, China.

INTRODUCTION

The adoption of e-business in many industries has been seen to improve efficiency and productivity. However, "The benefits that the Internet is expected to deliver will not be realized unless a company adapts its organizational structure and methods to meet the radical new ways of working that this new technology makes possible."(Jackson and Harris 2003). In other words, It is also noted that there are some negative aspects associated with IT/IS integration such as downsizing of jobs, data corruption and information security etc.

In the case of the real estate industry that provides a specific service of bringing property buyers and sellers together relies heavily on information. According to Li and Chen (2006), the real estate brokerage business is a traditional service agency that conveys market information for facilitating trading of properties.

China, the biggest emerging market worldwide, has been showing dramatic increase in property price in recent decades. According to the National Bureau of Statistics of China (2013), the total amount of real estate investment reached 667.0 billion RMB (up by 22.8 percent), of which the investment in residential buildings was 458.3 billion RMB (up by 23.4 percent) in the first quarter. With a big population and massive market, the workload of real estate agencies which still follow the traditional face-to-face service pattern has become enormously challenging.

Furthermore, it is interesting and important to study the adoption of E-business and find out the impact of IT/IS in the real estate sector in China today. Contributions are made to improve service quality / business performance and understand customer's perception / market potentials in the Chinese context.

LITERATURE REVIEW

Suggested by Razali et al (2010), the internet provides a wide coverage to reach potential clients and plays a crucial role in successful business operation. Furthermore, e-business can create new business strategies that exploit higher level of interactivity between clients and suppliers while increasing opportunities for uniting business and market logics and also reduces production cost (Robeiro and Love 2003).

Amit and Zott (2001) stated that e-business has the potential of generating new wealth while Ifinedo (2011) stated that the advent of internet has brought about an enhanced revenue generation and improved performance for large and small business firms around the world.

Another benefit of e-business adoption was explained by Dixon (2005) who describes the business benefits in relation to the extent of organization change and sophistication when a company uses e-business. In particular, Li and Chen (2006) also stated that the internet has the ability to change a business operating model efficiently, enhances product quality, expands the market and provides more opportunities.

Studies by Yeh et al (2012) and Jack and Harris (2003) indicate that information systems have the ability to significantly affect the quality of information technology strategy implementation and companies have to be continuously restructured and reorganized to understand how to effectively manage change both internally and externally.

After considering the benefits of e-business, it is important to look at problems that caused by e-business, for instance the cost of setting up a website and system maintenance expense which varies depending on the characteristics of industries and business models. Despite the fact that e-business can improve business performance, it is also essential to evaluate how it has performed over time, also more important is to know how it can be improved upon and one of the ways this can be done is by periodic evaluation.

Another issue is security, Smith (2004) stated that the growth of e-business can be hindered by the increasing wave of cybercrimes and sensitive information would be at the risk if companies do not take reasonable actions to protect data (Lesjak and Vehovar 2005).

Learnt from previous studies, information is particularly important for a real estate firm, therefore when firms attempt to integrate e-business with their operations, proper attention should be given to the acquisition and management of information. Furthermore, real estate managers in China today recognize the need to provide better service to stay competitive among a large number of competitors.

As stated earlier, the real estate industry in China has been on an upward trend and this has led to an increase in the number of real estate agents throughout the country. A study by Rowley (2005) shows that an estate agency is essentially information based intermediary role that connects buyers and sellers of property. A similar view shared by Li and Chen (2006), that the internet provides an opportunity for real estate agents to make a difference in their practice that would give them an edge over their competitors.

With the flexibility of e-business technology, companies have the ability to expand their services to include more options available to the visitors of their website (Tuzovic 2008 and Zhang et al 2010). At the same time, China has become the largest internet market in the world and the amount of internet users reached 68 million already (Wong et al 2004). Hence, Chinese firms will be presented with the opportunity to adopt the e-business practice (Wong et al 2004, Zhang et al 2010, Tuzovic 2008).

This study is to propose business implications that can be used to extend the services of real estate agents that use e-business and suggestions will be made as follows: website optimization, priority query and personality profile.

METHODOLOGY

Face to face interview was applied in this qualitative study and a list of real estate agencies was randomly selected using the local business directory in Suzhou, China. Inquiry was made by telephone or in person to make sure that all the participants have been working in the real estate industry for about five years and are willing to participate in this study anonymously.

With the background research, it suggested that most real-estate agencies are starting to opt for e-business. In other words, they are switching to the internet gradually although their business / service focus on brick-and-mortar. Also, it is found that real estate agencies adopted various approaches in relation to e-business. Accordingly, all the participants were categorized into two groups: e-platform service users and website owners.

Participants that were engaged with this study have branches in major cities in China and they need to provide the necessary information about the activities of their agents across the country. Furthermore, these agencies serve domestic customers and international clients using both English and Chinese.

Ten agency managers were interviewed and each session took around one hour. The purpose is to find out how the e-business system has helped to improve their services / business performance and find out disadvantages / limits of e-business adoption in the real estate industry in Suzhou China via interview questions as follows:

Why they decided to use e-business?

What impact it has on their business in terms of creating awareness and profitability?

What problems that they experienced while using e-business?

What improvements can be made to enhance the performance of their websites?

Do they have concerns regarding e-business adoption?

What is their perception of e-business?

INTERVIEWS RESULTS ANALYSIS

As explained in the previous section, interview results are discussed from two aspects in relation to participant group and discussed in details as follows.

Interview group – platform service users
Learnt from the observation, 8 out of 10 real estate agencies currently use the platform services provided by professional IT companies to publish property information. Agencies pay a small amount of service charge monthly / annually to use platform service advertise their properties and release contact details.

The service charge is considerably lower than setting up a new company website independently according to observations. Advantages of platform service usage are summarized as follows:

Easy to use: One of the reasons why agents choose this platform is because they are not responsible for designing and maintaining the website. In addition, these websites have simplified the process of posting property listings making it easy for an average savvy internet user to be able to utilize their services which include uploading pictures and contact details.

Awareness and Exposure: agents are also convinced that these websites give exposure and awareness to their services because websites like 58.com can be said to be a one stop website for a myriad of products and services such as real estate, vehicle trading, education and training, match making, electronics, flight tickets etc. As a result, a lot of log on to this website and other similar websites to find goods and services. Therefore, agents are convinced that this platform can display their properties to a large population.

Post listings on different platforms: since agents are not restricted to posting their properties on one website, they can choose as many of these websites as possible to advertise their services. According to the agents, this will give them more exposure and reach a larger population.

Convenient for few listings: most of the agents that use these websites have few property listings and in their opinion, it will be convenient because setting up a website with just a few listings is not cost effective. It is also important to note that occasionally, these agents may not have any available property as a result they can choose these websites whenever they have listings.

The disadvantages of using these websites as stated by the agents are not significant. Agencies seem to be satisfied with the platform service citing the fact that they have been using this system for several years. But it is noted that these websites / platforms are designed and operated in Mandarin only and language option is not available so far.

Inevitably, agencies find that it is difficult to serve international clients via e-platform and based on information online. Learnt from interviews, most international clients they have served are recommended by domestic customers directly via telephone and branch visit. In other words, the increase of international clients is built on WOM (word of mouth) among domestic customers.

Additionally, several agencies showed their interests on building an independent website in the near future in order to improve their business image and keep competitive advantages in the market. In addition, some users of these websites complain about some dubious activities that a few sellers are involved in.

Interview group – website owners
The second phase of the interview was aimed at real estate agents with company websites. 5 of 20 managers were interviewed and these companies are based in Suzhou but with branches nationwide. When asked about their decision to deploy the services of an e-business system, their responses were similar citing the notion that e-business

provides a wide coverage to reach potential clients and this further supports the statements by Razali et al (2010).

In addition, they can modify their website to have multiple languages in order to reach more clients such as foreigners. Of course, availability and convenience, particular 24/7 customer interface have been mentioned again and again during the interviews.

When asked about the impact e-business has had on their business in terms of creating awareness and profitability, the agents all agree that the scope of their customer number has increased dramatically including foreigners and also some corporations.

In the issue of problems they faced, they complained about search engine page results and concerned about less high rankings when potential clients use search engines such as Google or Baidu for property listings.

Also, the cost of building an independent website has been raised from time to time. Besides, the website building, maintenance cost and administrative workload are two other big concerns. Outsourcing becomes a potential solution which would efficiently reduce labor cost and workload for agencies who have independent website but agencies are worried about data security and customer information protection. Generally speaking, real estate agencies are responsible for data / information security for both property sellers and buyers.

The next question was about the possible improvements that can be made to enhance the performance of websites.

Proposed solutions for real estate agencies

Website Optimisation
A Search engine is designed to locate information at users' request and this technique is based on keyword matches and occurrence which can lead to keyword spamming (Chen and Luh 2005, Garoufallou 2012). Therefore, optimizing a website is important in the integration of e-business because it is general practice for people to surf the web through search engines and yet most businesses do not have any strategy of obtaining a high ranking through search engines (Evans 2007, Gofman et al 2009).

It is important to realize that some people who search for information are mainly concerned with the results displayed on the first page of the search results bar. Sen (2005) stated that online users tend to trust and follow links that are displayed on a search engine results page. Agencies need to take necessary steps to get a high ranking on search engines by including relevant keywords that users are likely to type when searching for their websites.

Personal profile
Ball et al (2006) states that clients have relationships with service providers and these relationships can be simple or complex depending on the kind of service that is being rendered. This gives rise to service personalization which can be defined as the creation or adjustment of a service that would fit the individual requirements of a customer.

In a service business, particularly real estate industry, gaining the trust and loyalty of clients is crucial to stay ahead in the market. Individuals need to be treated as separate entities while understanding their needs and preferences in order to offer them maximum satisfaction rather than generalizing the firms' services and trying to accommodate all customers.

Although the real estate industry has been booming in recent decades in China, there are many players and the competition is fierce as always. In addition, since real estate as stated earlier is based on information, a particular house listing can be acquired by more than one agency which makes the competition even fiercer.

Creating a profile in this case will involve a list of simple basic questions that the clients would have to answer. These questions will be used to create a list of preferences for future use. For instance, the questions showed as follows attracted agencies' interests greatly:

Proximity to a certain type of Location / area or facilities, e.g. School district, Business District or natural surroundings (lake view). Citing the interview with real estate agents, some clients insist on houses that are close to a particular location, for example, students prefer accommodations near campus and some business executives choose houses close to commercial centrals.

Lease duration preference, e.g. some landlords prefer tenants to make a long term commitment to short term leases because they think that long-term tenants tend to maintain apartments more carefully. Another reason from a landlords' aspect is that long-term contract is to secure a steady source of income efficiently. On the other hand, other landlords are in the habit of changing rent prices according to market demand. If the demand for apartments becomes high, these landlords tend to increase the rent immediately and they opt for short term leases in order to capitalize on the market trend.

After a careful inspection of real estate websites in Suzhou, it was observed that recommendations come as a form of feedback which can take days instead of real time service. This suggests that the personal profile function is not integrated into the website design in the first place. Otherwise, service results / relevant listings would be generated in real time using customers' registration information.

Priority option
After inspection of real estate websites in China, priority to the search criteria is not generally supported. For example, if a customer is searching for an apartment using an online service, the results displayed will be sorted randomly which is not helpful and attractive to consumers. As seen in many search results, there are a lot of irrelevant results displayed as search results, and this is caused by the result selection process which is unknown to the user in some cases.

It would be challenging and expensive for real estate agencies to develop algorithms for search engines and database. A clever tip which would be able to help a great deal is called the function of sorting. Various criteria can be chosen by customers to modify searching lists and create more accurate results.

DISCUSSION

With a rapidly growing real estate sector in Suzhou, it is necessary for real estate agents to step up the level of their services to face challenges raised in the current competition and by new market entries (international corporations). The integration of e- business has been approved as an efficient approach to enhance revenue generation (Ifinedo 2011).

Although many agents in Suzhou have employed the use of e-business by using platform service and websites to enhance their performance, very few agencies could be able to understand e-business process professionally and works out relevant solutions in relation to problems confronted. More specifically, agencies need to enhance the functionalities of their e-service which is targeted in this study.

One main focus of any website design is to work compatible with search engines --- the need for search engine optimization. In other words, agencies need to ensure that their websites are fully optimized in order to get high page ranking. Continuing in this view, web designers need to know some keywords that potential clients are going to type in search engines to produce of their search. Therefore combining the rules of search engine to gain high page ranking and inserting these keywords in a website, a firm can have an edge over its rivals in the area of search engine optimization.

Another aspect comes from personalization in this study, which involved a simple registration process by the user and also two items were suggested on the list of questions (Proximity and Minimum Duration). Interviews with real estate agents revealed that some apartment listings are available for a specified period hence customers should be made aware of this information as quickly as possible. The result of this personalization will be displayed as a form of recommendations which is common to online shopping websites.

The third enhancement is an option that would give the users the chance to sort their results on a real estate website to conform to their preferences. Whereby the search results provided by the real estate website is numerous, users can spend a couple of minutes to re-sort the original list and find the ideal apartment that fit in their preference better.

CONCLUSION

The real estate sector in China is developing at a rapid rate, and as a result, there is an increase in competition between real estate agents and in order to be successful, these agents need to improve their services. Integrating e-business in any business can improve the services and increase revenue, although there are different levels of integration, to be able to have a competitive advantage, agents need to take a step further by enhancing their services to customers in order to gain customer loyalty. These enhancements include, Search Engine Optimization, Personalization and Priority Option. Future research would start studying individual customers who are using relevant service and functions. It would make a complete picture with stories from customers' side of real estate sector in China today.

REFERENCES

Amit R., Zott C., (2001) "Entrepreneurial Strategies for Wealth Creation", Strategic Management Journal, Vol. 22, pp. 493-520

Ball D., Coelho P.S., Vilares M. J., (2006)," Service personalization and loyalty", Journal of Services Marketing, Vol. 20 Iss 6 (2006) 391– 403

Chi-Hung Yeh, Gwo-Guang Lee, Jung-Chi Pai (2012)," How information system capability affects e-business information technology strategy implementation: An empirical study in Taiwan" Business Process Management Journal Vol. 18 No. 2, 2012 pp. 197-218

Chen L. C., Luh C. J., (2005 Web page prediction from metasearch results", Internet Research, Vol. 15 No. 4, 2005 pp. 421-446

Dixon T., (2005), "The impact of information and communications technology on commercial real estate in the new economy", Journal of Property Investment & Finance, Vol. 23 No. 6, 2005 pp. 480-493

Evans M. P., (2007),"Analysing Google rankings through search engine optimization data", Internet Research, Vol. 17 Iss: 1 pp. 21 – 37

Garoufallou E., (2012)," Evaluating search engines: A comparative study between international and Greek SE by Greek librarians", Program: electronic library and information systems, Vol. 46 No. 2, 2012 pp. 182-198

Gofman A., Moskowitz H.R., Mets T., (2009),"Integrating science into web design: consumer-driven web site optimization", Journal of Consumer Marketing, Vol. 26 Iss: 4 pp. 286 – 298

Ifinedo P., (2011), "Internet/e-business technologies acceptance in Canada's SMEs: An exploratory investigation" Internet Research Vol. 21 No. 3, 2011 pp. 255-281

Jackson P., Harris L., (2003),"E-business and organizational change: Reconciling traditional values with business transformation", Journal of Organizational Change Management, Vol. 16 Iss: 5 pp. 497 - 511

Lesjak D, Vehovar V. (2005), "Factors affecting evaluation of e-business projects" Management & Data Systems, Vol. 105 Iss: 4 pp. 409 – 428

Li L. H., Chen W., (2006),"Real estate agency in China in the information age", Property Management, Vol. 24 Iss: 1 pp. 47 - 61

Robeiro F. L., Love P.E.D., (2003),"Value creation through an e-business strategy: implication for SMEs in construction", Construction Innovation: Information, Process, Management, Vol. 3 Iss: 1 pp. 3 – 14

Rowley J., (2005),"The evolution of internet business strategy: The case of UK estate agency", Property Management, Vol. 23 Iss: 3 pp. 217 – 226

Razali M. N., Manaf Z., Yassin A. M., (2010),"Internet business strategies by property companies in Asia", Property Management, Vol. 28 Iss: 4 pp. 270 -289

Sen R., (2005)," Optimal Search Engine Marketing Strategy", International Journal of Electronic Commerce, Vol. 10, No. 1 (Fall, 2005), pp. 9-25

Smith A.D., (2004),"Cybercriminal impacts on online business and consumer confidence", Online Information Review, Vol. 28 Iss: 3 pp. 224 – 234

Tuzovic S., (2008),"Investigating the concept of potential quality: An exploratory study in the real estate industry", Managing Service Quality, Vol. 18 Iss: 3 pp. 255 – 271

Wong X., Yen D.C., Fang X., (2004),"E-commerce development in China and its implication for business", Asia Pacific Journal of Marketing and Logistics, Vol. 16 Iss: 3 pp. 68 – 83

Zhang X., Shen L., Wu Y., Peng Y., (2010),"Core competitiveness indicators: a study of real estate developers in China", Facilities, Vol. 28 Iss: 11 pp. 526 – 541