

E-COMMERCE: A CRITICAL REVIEW OF SMME ORGANISATIONAL BARRIERS IN TOURISM

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ABSTRACT

The objective of this research study is to critically review organisational barriers of e-Commerce (electronic commerce) by SMMEs (Small Medium Micro Enterprises) in the tourism industry. Towards the late nineties a number of South African businesses launched dotcom ventures amid great International hype Web sites, in particular **travel.co.za** and **lastminute.co.za**, attracted noticeable attention. Revenue was very disappointing indicating that these ventures were too premature at the time. A number of online travel businesses reverted back to a more conventional brick-and mortar approach where many businesses merely maintained a Web presence. This will continue to be the case until the online B2C (business to consumer) market grows, matures, and finds acceptance offering stakeholders opportunities to participate and trade in the new economy. However, the most notable success was the launch of a no-frills airline which carried over 750 000 passengers over the last two years and has grown the domestic air travel market in South Africa by 12 percent. This is probably South Africa's largest revenue-generating B2C Web site claiming that 65 percent of bookings are done online. This is significant by comparison to the reported low Internet adoption rates in South Africa compared to European countries. This in contrast to other local airlines in South Africa where e-Commerce accounts for less than one percent of all sales.

e-Commerce adoption barriers reported in the literature are due to many factors for example: technical, organisational, economic, cultural, political and legal factors. In order for an SMME to become an e-Business, a traditional business model will have to be adapted to an e-Business model. This would enable SMMEs to consider organisational change and avoid organisational barriers before finalising the adoption process of e-Commerce.

The methodology used in this research study was qualitative to provide opportunities for in-depth exploration of viewpoints in the early stages of the adoption process, allowing the researchers to gain a better understanding of the problem and identifying phenomena, attitudes and influences. The researchers used a case study targeting tourism-related companies in South Africa. Personal interviews were conducted providing a tool to investigate a wide range of aspects. Case study research is particularly suited when *who*, *why* and *how* questions have to be dealt with, especially in business and management fields. Interviews afford opportunities to observe individuals and groups in action and to

learn facts, opinions, and beliefs, which may vary within an SMME. The evidence collected was analysed using content analysis.

The results indicate that organisational barriers exist in e-Commerce adoption initiatives of SMMEs in the South African Tourism industry. The primary conclusion reached is that these barriers could be overcome *early on* in the adoption process accepting the fact that organisational changes may be required. The researchers recommend further research in areas of other electronic commerce barriers that were not covered by this research

KEYWORDS

e-Commerce (electronic commerce), SMME (Small Medium Micro Enterprise), barriers, tourism, WWW (World Wide Web)

CLARIFICATION OF TERMS AND CONCEPTS

A barrier prevents people from getting past (Hawkins 2002). In the context of this study it is an obstacle, hindrance or a limitation to adopt e-Commerce.

e-Commerce is defined as any electronic interaction between an organisation and its trading community. It is a sub-set of electronic business that covers both intra-and inter-organisational electronic messaging and information management (Chesher and Kaura 1999). e-Commerce is the online interaction between a business and its customers, or a business and its suppliers, for the placement of orders and the associated funds transfer (Cloete 2002).

McNurlin and Sprague (2002) define e-Business as the use of telecommunication networks, particularly the Internet, to conduct business transactions.

e-Business can be divided into three categories, which map directly into the three strategic roles of Information Technology (IT) – inward, outward, and across:

B2E - Business-to-employee: Intranet-based applications internal to a firm

B2C - Business-to-consumer: Internet-based applications for a firm's customers

B2B - Business-to-business: Extranet-based applications for a firm's business partners

1. INTRODUCTION

e-Commerce adoption barriers are due to many factors and (Farhoomand *et al.*, 2000) find that technical, organisational, economic, cultural, political and legal factors are the main barriers. Superficial observation of online sales does not tell the entire story. The WWW has made real-time information, open communication and the results of online data processing more accessible to stakeholders. All players in the tourism sector – from airlines, hotels, B&Bs (bed and breakfasts) to GDS (Global Distribution System) services, have found either opportunities or threats, but none more so than travel agents. A few years ago, it was predicted that the demise of travel agencies was immanent. It appears that some travel agencies have transformed technology from being a chink in their armour to a new business weapon (Hartley and Worthington-Smith, 2003).

Smaller, independent travel agencies are undoubtedly under threat especially now that the Internet allows customers to find travel information themselves and conclude bookings

directly. Considering Porter's five forces, the opposing bargaining powers of suppliers and buyers is very real in e-Commerce (Porter, 1985).

Much as the case in other industry sectors, travel agencies can no longer survive simply by doing the job of matching demand and supply because the Internet can do that far better than they could hope to do (Hartley and Worthington-Smith, 2003).

1.1 e-Commerce and e-Business issues

It is important for a clear distinction to be made between e-Business and e-Commerce.

Damanpour (2001) states e-Business / e-Commerce is any "net" business activity that transforms internal and external relationships to create value and exploit market opportunities driven by new rules of the connected economy.

A more comprehensive definition of e-Business includes activities such as customer relationship management, customer profiling and the evolution of entirely new products and services, the realisation of a fully fledged virtual value chain as described by Rayport and Sviokla (1995). It is apparent that the reality of e-Business for most SMEs is often limited to the use of a subset of basic services such as e-mail, banking and a passive brochure-ware Web site.

Many authors agree about the differences of e-Business and e-Commerce and that they are two different concepts, with the exception of one author (Damanpour 2001) who makes less of a distinction between the two terms.

The target population for this research study are SMMEs in South Africa. For clarity. Internationally SMMEs are referred to as SMEs, (Small Medium Enterprises) where its classification is based on the number of employees and their income status, working for such an enterprise. A medium business has not more than 400 employees, earning less than \$100 million per annum, whereas a small business has fewer than 250 employees with revenue of less than \$30 million per annum. In this study small businesses are viewed as a subset of either SMMEs or SMEs.

1.2 Objectives Of The Research Study

- Review current literature to understand the potential organisational barriers
- Select a group of representative organisational barriers pertaining to SMME organisations in the adoption phase
- Gather evidence and compare it to the representative group
- Conclusion reached based on a case study conducted

2. BACKGROUND TO THE STUDY

There is a need to investigate the barriers to e-Business adoption by SMMEs in South Africa, and to make timely decisions how to avoid such barriers. Craig and Juthla (2001) state that a complete model, which may describe the e-Business phenomena concisely is lacking, and above all, people are not e-Business savvy. There is a need therefore to make a contribution to the body of knowledge in the field of e-Business and e-Commerce to avoid organisational barriers.

It is important to identify these barriers early in the adoption process in order to make recommendations to overcome them. These barriers are one of the many stumbling blocks retarding the adoption of e-Commerce.

The Internet has now become the main 'e-Business' infrastructure, a mutation in commercial relationships and transactions, emerging within organisations themselves. This includes SMEs that must adapt or re-engineer their business processes accordingly (Raymond 2001).

The travel industry is a prime example of a sector that has been profoundly impacted by Information Technology:

Firstly, through more traditional applications such as computer reservation systems (CRS), destination information systems (DIS), and global distribution systems (GDS), and

Secondly, through Web-based applications that allow consumers and corporations to obtain travel information and advice, compare prices, and reserve their own transportation, lodging, and phenomenon of disintermediation. This eliminates the need for traditional intermediaries such as travel agencies, and eventually one of reintermediation, where these once disintermediated organisations are able to fight back by adopting electronic commerce technologies to find new and innovative ways of maintaining and enlarging their customer base.

One of the main problems facing small travel agencies is the growth of large online travel companies such as Travelocity, Expedia, Biztravel, ITN, and Orbitz. Their Web sites double as virtual travel agents providing booking services for air travel, car rentals, hotels, or holiday packages, and also additional travel and tourism information services to individual and corporate customers. New infomediaries have also emerged in the travel industry; particularly in air travel where offline and online travel agencies must now compete with the major airlines' own Web portals. These are typically airfare consolidators such as Economytravel and Lowestfare, as well as auction sites such as Priceline. Travel agents still account for the great majority of all travel bookings, and most industry experts believe travel agents will still play a role in booking channels, be it GDS, Internet or telephone. The small travel agency basically retains the strategic strengths of most small businesses, namely its closeness to its market, and its innovation, quick response and reorientation capabilities in the face of changing environmental conditions. The diffusion and assimilation of e-Commerce in various sectors and organisations represents a key area of investigation. Within the context of disintermediation and infomediation, understanding what reasons are used for small businesses such as travel agencies to adopt electronic commerce technologies, and for what purposes, have become important research questions (Raymond 2001).

3 LITERATURE REVIEW

Five studies were critically reviewed, each study reporting to some extent on organisational and other barriers. This study only focused on organisational barriers. The first study reviewed by Rotchanakitumnuai and Speece (2003) on organisational barriers in the banking sector. These are: management negative attitudes, lack of IT resources, and lack of knowledge to the users (and potential users) of e-Commerce. These barriers are evident in some SMMEs in the tourism sector in the Western Province. The authors acknowledge the relevance of these barriers in SMMEs.

The second study by Bègin and Boisvert (2002) was on organisational barriers. They state that: culture, structures and systems, technology, expertise, and resources are the organisational barriers. Bègin and Boisvert (2002) also state other barriers from

individuals, which include perception, knowledge and leadership. This study is interesting, because the same barriers could be viewed as inductors. The very aspect that could be a problem could be turned around and be used for success. This study was not selected as a basis for this critical review because it did not provide substantial references.

The third study reviewed was by Chircu and Kauffman (2000). Their organisational barriers are vague and are discussed alongside industry barriers under valuation barriers. There were no clear organisational barriers stipulated and not accepted for this study.

The fourth study reviewed by Rao, Metts and Monge (2003) on organisational barriers. Rao *et al.* (2003) discussed organisational barriers at various stages of organisational progression. They proposed an initial stage, and an adoption / implementation stage. The organisational barriers were different for each stage. The authors do not agree with Rao *et al.* (2003) with regards to having the adoption and implementation stage as one stage and have the view that the adoption stage preceding the implementation stage. Rao *et al.* (2003) referred to: technological resistance within the organisation and expertise, acceptance of growth by managers, financial investment, and development of telecommunication infrastructure as initial organizational barriers. They further stated that: development of B2B interfaces, cultural and / or language issues are other organisational barriers at the adoption and implementation stage.

The fifth study reviewed was by Farhoomand, Tuunainen and Yee (2000). This is a framework of organisational barriers reported in a paper titled 'Barriers to Global Electronic Commerce: A Cross-Country Study of Hong Kong and Finland'. The paper comprises of organisational barriers and other (technical, economic, political, cultural and legal) barriers. The organisational barriers consist of *negative attitudes, lack of knowledge, resistance to change and lack of management commitment*. The most significant barriers (that have not been mentioned in the study conducted by Farhoomand *et al.* (2000) are implementation costs and operating costs, based on a study conducted by Barnes and Hunt (2001). Other barriers consist of establishment of infrastructure, integration of legacy systems, availability of applications and standards, capabilities and performance of the Internet security, governmental attitudes, and interagency coordination. This study was selected for this review as it also focused more on smaller organisations.

4 FRAMEWORK FOR THIS STUDY

All the studies, with the exception of Chircu and Kauffman (2000) proposed: lack of knowledge or expertise and lack of management commitment as common organisational barriers. Lack of IT resources or financial investment, was reported by Rotchanakitumnuai and Speece (2003), Rao *et al.* (2003) and Bègin and Boisvert (2002). Culture or language issues, was common to Rao *et al.* (2003) and to Bègin and Boisvert (2002). This is graphically illustrated in **Figure 1** below.

The framework used for this research is adapted from Farhoomand *et al.* (2000) and is depicted in **Figure 2**. An entity diagram illustrates the framework. A person / an employee (or a potential user of e-Commerce) adopts the usage of e-Commerce, in the tourism sector. The person / employee has a certain attitude. This attitude may be negative and / or have a resistance to change. The adoption of e-Commerce by the person / employee is part of the organisation's business processes in SMMEs. The organisational barriers

applicable to e-Commerce are depicted in **Figure 2** found to be fundamental in most studies.

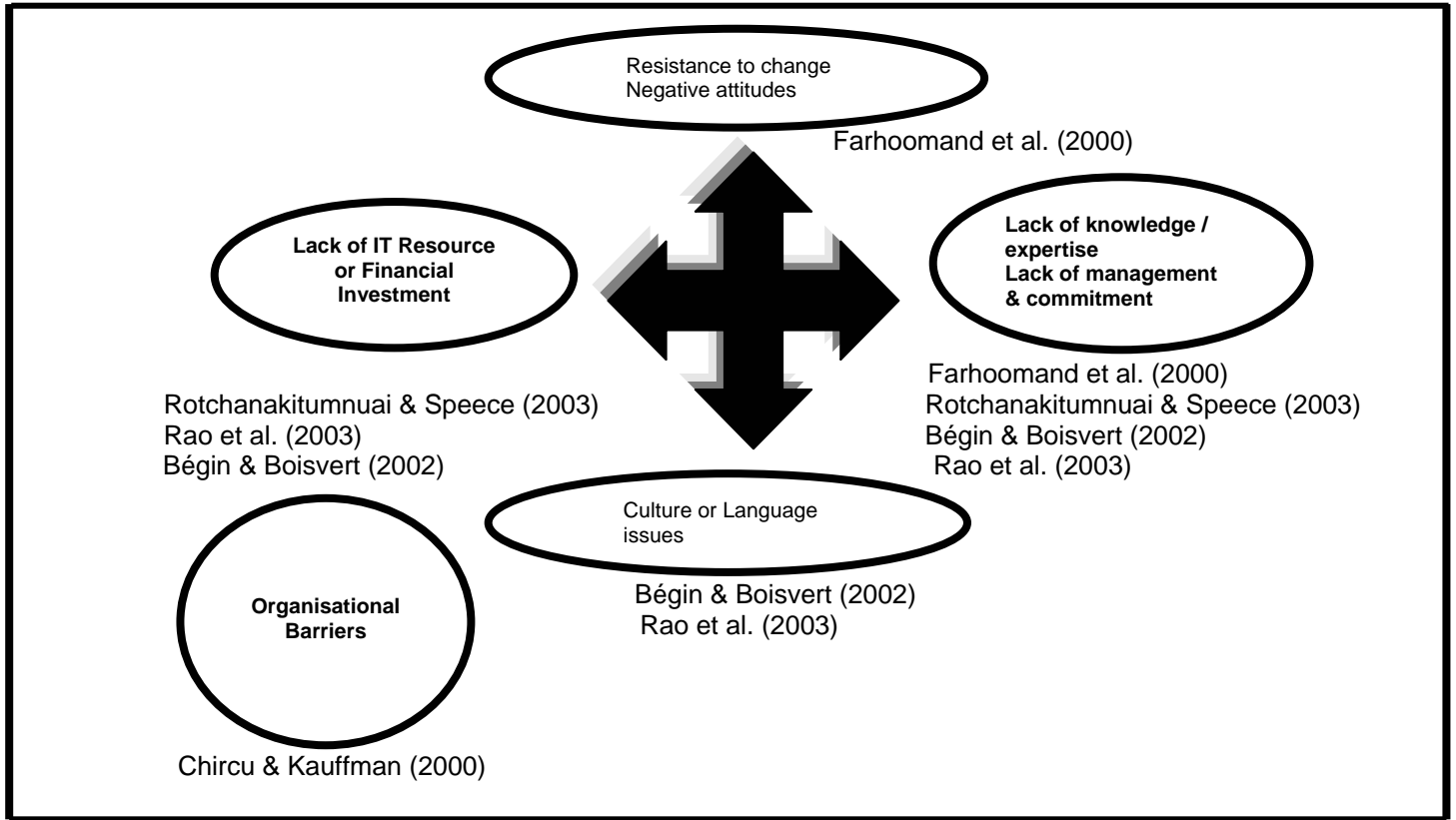


Figure 1: Illustration of studies with regard to organizational barriers

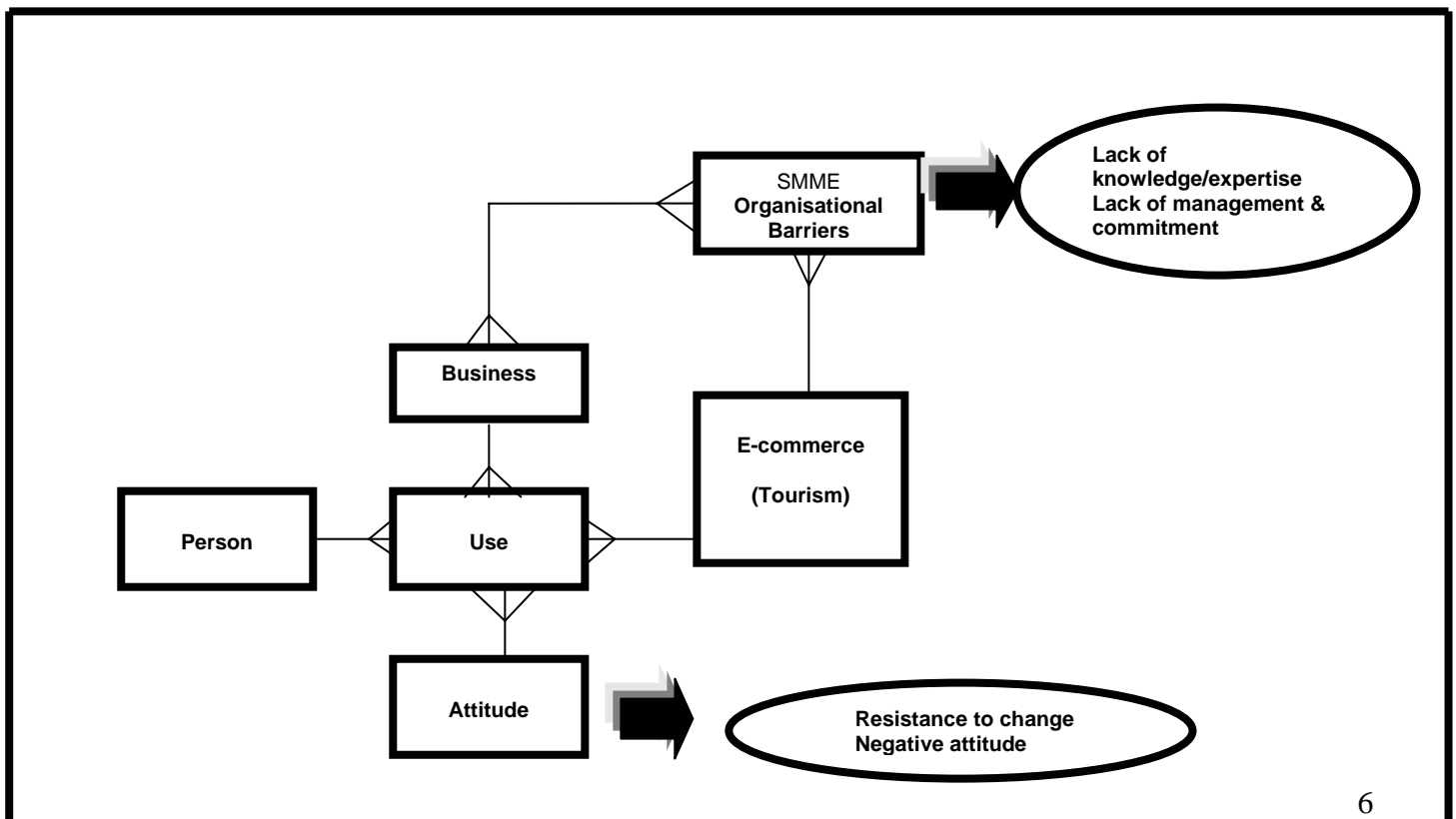


Figure 2: A new proposed framework for the e-commerce critical review

5. PROPOSED FRAMEWORK DISCUSSION

Several difficulties encountered during introduction of e-Commerce originate in the organisation itself (Bègin and Boisvert 2002). This section discusses various aspects of the selected framework from the reviewed studies.

5.1 Negative Attitudes

Negative attitudes generate many excuses not committing to e-Commerce (Farhoomand *et al.* 2000). The attitudes of small organisations are also influential in the diffusion of e-Commerce. Some people have an attitude of perceiving that if they use e-Commerce and have problems, it could cause them to have financial loss that sometimes could land the organisation in financial trouble (Rotchanakitumnuai and Speece 2003).

Many people are generally afraid of venturing into the unknown. They would rather hide behind the negative attitudes instead of dealing with, for example, learning about e-Commerce in order to deal with the challenge/s constructively. Fear and insecurity issues affect e-Commerce adoption in the organisation.

5.2 Lack of Knowledge And Expertise

Problems of poor Web site design ill-adapted to users' requirements, are inadequately referenced in search engines and bloated with useless information originating due to a company's lack of expertise and experience in the use of e-Commerce. Since the Internet is a relatively new distribution channel, expertise is still poorly developed. Learning often takes place by trial and error. The absence of solid expertise can prove to be an inhibitor to the development of e-Commerce activities (Bègin and Boisvert 2002). Farhoomand *et al.* (2000) believe that the problem is not with the system, but with the insufficient training of customer's personnel. Many companies still tend to think that only teenagers without credible buying power are using the Internet. General lack of education and understanding of ICT is often the source of excuses for not committing to e-Commerce. Computer literacy among SMEs is generally low; they usually do not have access to expertise for addressing complex telecommunications issues. Curiously, this lack of expertise and knowledge about the new technologies among SMEs in turn slows down the growth of e-Commerce among larger companies because of their business reliance on SMEs.

5.3 Resistance to Change

In general, people act in keeping with their perception of anticipated consequences following a new situation or change in their habitual work framework. If they perceive a threat to their current situation, they will have reactions of opposition and resistance. Therefore, when employees are afraid of losing their jobs because a number of tasks previously performed will be automated on the Internet, or carried out by customers

themselves, they will show little enthusiasm for implementation of e-Commerce (Bègin and Boisvert 2002).

5.4 Lack of Management Commitment

Farhoomand *et al.* (2000) believe that lack of top management commitment is still a considerable barrier to the development of electronic trading in many organisations. An organisation that plans to adopt an electronic trading system has to manage aspects of integrating the new technology during the implementation process.

Adjusting the labour force may be socially or politically problematic for a business, including managing the acceptance of workers to take training in a computerised technology. Problems may also arise as a result of inefficiencies in corporate information systems analysis and design or from a lack of top- management support.

The level of commitment among the organisations toward e-Commerce varies considerably. Interorganisational clashes are to be expected, as there will always be communication conflicts between business and ICT practitioners. Lack of top management commitment is still a considerable barrier to the development of electronic trading in many organisations. Smaller firms tend to lack management-level initiatives toward electronic commerce. Consequently they tend to direct their scarce resources to areas familiar to them. Quite often the top management and business functions of the organisation are interested, even enthusiastic, about the new possibilities of the Internet, but a conservative IT/IS department might be putting on the brakes on the development. Investments in telecommunications and networking on the whole are given a top priority at the highest level.

6. RESEARCH METHODOLOGY

A Case study was conducted using Software Colors (a company that offers computerised business solution), DMO (Destination Marketing Organisation) and Tiscover AG. These three organisations are collaborating on a project that empowers SMMEs in the tourism sector, by encouraging SMMEs to adopt e-Commerce. Software Colors provides services to enable users to realise benefits of online marketing. They, with the assistance of DMO, facilitate the ICT (Information and Communication Technologies) and e-Business training sessions for the SMMEs. DMO invested in the Tiscover system as a mechanism to market the Western Province via the Internet. Tiscover is the largest online destination-marketing organisation by providing online sales system for accommodation providers. In 2003, Tiscover had 57 million online visits (225 million web page views). They successfully completed 870 000 online bookings. The DTI (Department of Trade and Industry) plans to join the collaboration to fund further e-Business projects specifically focusing on SMMEs.

Structured interviews were conducted with owners, marketing managers and marketing directors of SMMEs who own B&Bs in the Western Province. The interviewees were selected on the basis of agreeing to adopt e-Commerce in their businesses. These organisations were all small (5-50 employees) or micro (1-4 employees) organisations (Williams and Warden 2003). A focus group was attended with owners, directors, and managers of the PDIs (Previously Disadvantaged Individuals) from the tourism sector, organised by Software Colors and DMO.

7. FINDINGS

There is great potential with the collaboration of Software Colors, DMO and the Tiscover AG to promote e-Business adoption within the SMME sector. Furthermore, Software Colors partnered with an Austrian team to produce a Tiscover Management System. Software Colors introduced a portal www.tiscover.co.za that is ideally suited for SMMEs in the tourism sector. The portal offers a high standard of professionalism. The SMMEs are trained to submit their content on a structured, e-Commerce web site template, on the Tiscover portal and are also trained to use ICT and e-Commerce. This collaboration is doing more than training SMMEs; it is empowering them!

This is a preliminary enquiry of the e-Commerce critical review. The authors found that more research is needed in the area of e-Commerce adoption in the tourism sector. Follow-up structured interviews are needed with the same group of respondents to track the growth and level of understanding of the e-Commerce adoption process.

Figure 3 illustrates factors that have caused barriers to individuals in the tourism environment in SMMEs where six individuals in different SMME were interviewed. As explained in the framework, the organisation is made up of individuals. The depicted factors are individual barriers found that play a role in the organisation. The main factors that were being inspected were: fear, lack of knowledge and lack of experience. The respondents also had an option of stating other factors that are causing them to have a negative attitude towards the adoption of e-Commerce.

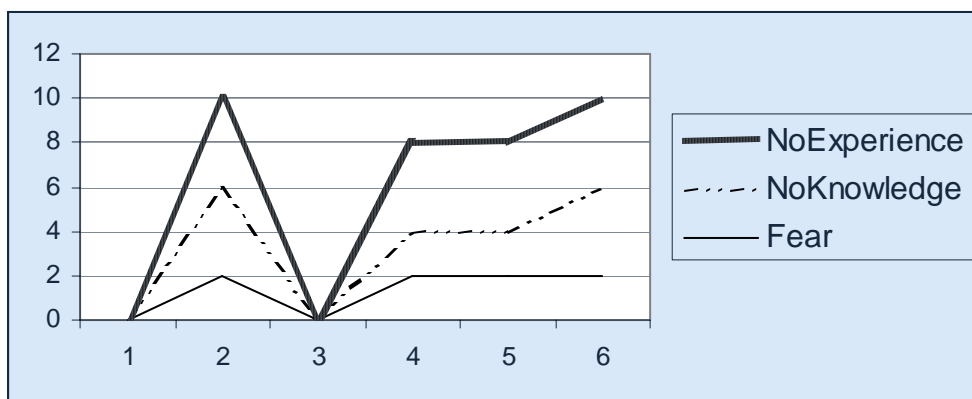


Figure 3: Factors affecting SMME individuals in the Tourism Industry

Figure 4 illustrates factors affecting organisational barriers in SMMEs in the tourism sector. The five organisations interviewed revealed eight factors that indicated the extent to which they agreed or disagreed. The factors were: fears and insecurity issues, inexperience, disinterest of management, lack of time, bureaucracy, hierarchical and rigid structures, nonexistent expertise, and lack of money. The organisations also had an option of telling the respondent of any other factors that have an impact on the company's stance on e-Commerce. Each series represents an organisation. The results of each organisation are depicted below.

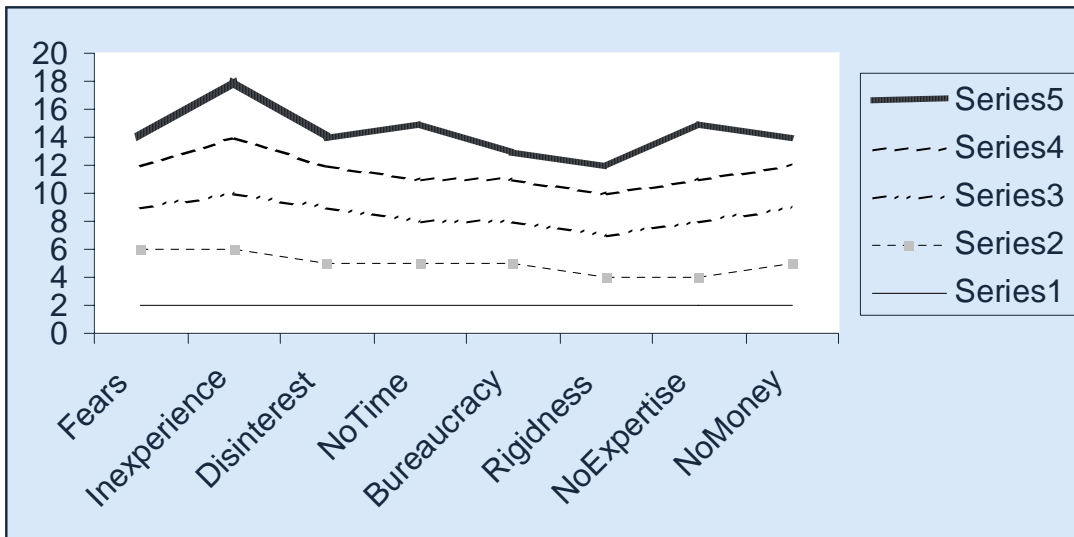


Figure 4: Factors affecting organisational barriers in SMMEs

7.1 Negative Attitudes

Many neutral attitudes were discovered on the responses. The various interviewees from the organisations are not certain of most e-Commerce aspects. Some respondents admitted a lack knowledge in ICT and e-Commerce developments. This in itself presents major barriers. Only twenty percent of the respondents did not have fears and insecurities with regards to e-Commerce adoption. Another twenty percent had fears and insecurities and sixty percent were neutral or were not certain on how to respond.

The e-Commerce developments may be poorly perceived by the customers and / or employees, if systems are not maintained effectively and eventually become a problem for the business (Barnes and Hunt 2001).

7.2 Lack of Knowledge And Expertise

Of the respondents interviewed, only twenty percent agree that they and their companies are well informed about ICT and e-Commerce in general. Forty percent were neutral and another forty percent admit that they lack the expertise and sufficient knowledge for e-Commerce initiatives. The forty percent that admitted to lack of knowledge suggested that there be more workshops and personal training session from computer literacy to e-commerce literacy, which DMO and Software Colors have initiated successfully. Other neutral companies agreed that personal training and education is necessary.

Many small businesses do not have a dedicated IT section - small number of employees in SMMEs (Barnes and Hunt 2001). It is therefore advisable for SMMEs in the tourism sector in the Western Cape to work together in sharing knowledge and expertise. It is also advisable for them to be part of a bigger picture, for example www.tiscover.co.za, for synergy and support.

7.3 Resistance to Change

The findings of this aspect in the critical review differs from the general literature review, due to the fact that all the organisations interviewed are in the adoption stage of e-Commerce. The majority of the respondents are open to e-Commerce initiatives. Small businesses are typically concerned with day-to-day issues. Many small businesses lack a long-term strategy. In today's rapidly changing environment all businesses need to spend time and effort to explore new opportunities for growth. The Internet provides such opportunities for cyber intermediation (Barnes and Hunt 2001). Encouraging though, the organisations interviewed are adopting e-Commerce and may secure competitive advantage.

7.4 Lack of Management Commitment

The findings of this aspect in the critical review differs from the general literature review, due to the fact that all the organisations interviewed are being trained to adopt and implement e-Commerce. The majority of managers in each organisation are open to consider e-Commerce initiatives.

The influence of management decisions related to technology adoption in small businesses is clearly revealed. Although there is a general consensus that top management is important in IT and e-Commerce adoption and implementation initiatives, especially in small businesses (Barnes and Hunt 2001).

8. CONCLUSION

The small travel agencies and other tourism related service providers must increase their competitiveness, responding in particular to the threat posed by large online agencies. This can be accomplished by using the WWW to provide better and more personalised services to its customers, and possibly to specialise in niche markets or to develop specialised travel services (Raymond 2001).

The results from the Barnes and Hunt (2001) study of the Internet and travel agencies indicate that this business sector is not coping well with a rapidly changing environment. Many travel agencies lack strategic business planning and have a poor understanding of the potential of e-Commerce.

Similar to the case of brakes and accelerators in the external environment, barriers and inductors to deployment of e-Commerce are relative to each company and its specific business context. That being said, several avenues exist to eliminate barriers, such as outsourcing, use of external consultants, training, restructuring, communication and recruitment.

Furthermore, inductors must be preserved, and actions must be taken to ensure that they continue to facilitate the adoption of e-Commerce. Introduction of rewards for incentives leading to improvement of online activities, involvement of senior management in the e-Commerce project, and creation of a climate of co-operation are a few of the elements that may reinforce positive attitudes toward changes created by e-Commerce.

Quayle (2002) identifies the potential need for embracing e-Business proficiency in order to secure the long-term well being of an organisation: Developing SME e-Commerce expertise is essential to sustaining (and in some cases achieving) competitive advantage. SMEs appear to be aware of the basic elements of e-Commerce. The challenge is getting

them to realise that the same elements are also prerequisite for developing an organisation's competitive advantage (Fillis *et al.* 2004).

8.1 Negative Attitudes

People may think that the adoption of e-Commerce would leave them unemployed. This is a valid concern in a large organisation, however, this should not be the case in SMMEs. It is advisable for employees to have more skills in SMME. From the preliminary results, the authors would encourage employees with negative attitudes towards e-Commerce to renew their mindset and view e-Commerce as a challenge that needs to be embraced. Employees need to be willing to attend ICT and e-Commerce courses so that they may understand the benefits of e-Commerce. People with negative attitudes towards e-Commerce need to understand the opportunities that e-Commerce may bring to personnel that are willing to learn more about it.

The PDIs focus group proved that people thought that they were too old to start learning more about ICT and e-Commerce; however they were encouraged to embrace the empowerment being offered and realise the benefits that e-Commerce may yield.

8.2 Lack of Knowledge And Expertise

There is evidence of lack of knowledge and expertise in SMMEs in the tourism sector within the organizations. There is also a lack of knowledge from the users and the potential users of tourism online services. The Tiscover Management System minimizes the lack of knowledge and expertise by offering ICT and e-Commerce aspects specifically for the needs of particular SMMEs. Training is customized and post-training support is offered.

This is effective, efficient and relevant. Sometimes, people do not need to learn about the technical aspects of IT; however they need to learn about how IT can maximize the potential of their organisation. There is no need to be bombarded with computer jargon; however they need to know, and what to do, to make their organisations function optimally.

Awareness programs for users and potential users of e-Commerce are needed, for e.g. television programs that educate South Africans about issues related to ICT, students should learn about ICT and e-Commerce in the early years of tertiary education and competitions and promotions on campuses should be launched to raise the awareness of ICT and e-Commerce.

8.3 Resistance to Change

Similarly to cope with negative attitudes, people need to renew their mindset with regards to resistance to change. Education and accurate information may reduce the resistance to change. Resistance to change in organisations need to be addressed - i.e. the root cause of the resistance should be identified and employees made to understand the benefits of e-Commerce adoption,

8.4 Lack of Management Commitment

In SMMEs there is a different scenario, where the owner of the organisation is also the manager. When the management team understands the benefits of e-Commerce; that makes it easier for them to commit to it. When there is a feasible plan and the financial issues are within the budget; the management team may commit.

There is a need for the government to fund the ICT and e-Commerce initiatives, due to the initial cost of establishing e-Commerce may be too high for the majority of SMMEs. When funding becomes available, the management team should commit to ventures that promise progress to the organization.

9. FURTHER STUDIES

The review of existing work to understand potential and useful organisational barriers was critically discussed in the five studies. Organisational barriers in SMMEs, in the adoption phase, were selected from the fifth study. A preliminary enquiry was conducted and the information gathered was compared to the literature that has been reviewed. Further research in this study is vital. Conclusions have been drawn based on the study. The objectives of this study have been carried out.

The next phase of this project is to enquire progress from the organisations that have been trained for e-Commerce adoption (and later on implementation). This phase of the study will inspect the perceived organisational barriers understood at the start, before implementation. After the training sessions the perceptions of the SMMEs will be determined. More guidelines to minimize (and possibly overcome) organisational barriers in SMMEs will be pursued and recommended.

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