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Internet and Electronic Commerce in Developing Countries of the South Pacific: an exploratory study of SMEs in Samoa

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Abstract

The purpose of the paper is to report the findings of a recent research conducted in Samoa. Case studies were conducted in 12 Samoan small and medium enterprises (SMEs). All participants had access to the Internet and ten of them had websites. Participants verified the interview transcriptions while senior government officials including the Prime Minister validated the findings. Recent e-Commerce studies in SMEs concentrate in developed countries and highly populated developing countries. There are no existing studies of E-commerce in SMEs of the developing countries of the South Pacific. This paper aims to remedy this gap in IS literature.

Keywords

E-Commerce, developing countries, Internet, Case study, Diffusion, SME

INTRODUCTION

A number of studies have been conducted in recent years concerning the adoption and use of the Internet and e-Commerce in small-medium enterprises (SMEs) (O'Keefe *et al.*, 1998; Klein, 1998; Poon and Swatman, 1998; Huff and Yoong, 2000; Mehrtens *et al.*, 2001). There is considerable evidence that e-Commerce can benefit SMEs, and that the Internet can be a very important tool for such organisations (Bright, 1997). Corbitt *et al.* (1997) suggest that SMEs will adopt e-Commerce if they can understand how it can add value to their businesses and can identify clear benefits such as time savings, financial gains, and increases in competitiveness.

However, most of these studies focused on SMEs in *developed* countries. For *developing* countries, the few studies that have been done have focused on highly populated regions including developing countries in South East Asia, Eastern Europe, South America, India and Africa (OECD, 1998; 2001; World Bank, 2001; Corbitt and Thanasankit, 2000). Similarly, initiatives by international organisations to bridge the 'digital divide' has concentrated largely on highly populated developing countries.

There is a dearth of research examining Internet and e-Commerce adoption issues faced by SMEs in developing countries with smaller populations, such as the island nations of the South Pacific. Samoa is an independent country in the South Pacific, with a long history of political and economic stability. The country has a land area of approximately 2,934 square kilometres, and a population of approximately 169,195. The Samoan economy is made up of mainly agriculture, fishing, handicraft production, small manufacturing goods, and one automobile wiring manufacturing firm. Tourism is increasingly becoming a valuable contributor to the village economy. Samoa is an isolated, low population country, which could obtain great benefits from e-Commerce, but which must overcome significant risks and challenges to do so. It is important to note that SMEs in the Samoan context are much smaller than the SMEs in developed countries. According to the department of Trade and Commerce Industry, an SME is defined as a "company providing goods and services employing up to 5 employees and a manufacturing company employing up to 40 employees." The purpose of the paper then is to examine the adoption of the Internet and e-Commerce by Samoan SMEs. The objective is to better understand the key factors that encourage or impede the adoption of the Internet, and e-Commerce, by Samoan SMEs.

METHODOLOGY

A case study approach was adopted as an appropriate methodology for examining this emergent phenomenon (Yin, 1984; Benbasat *et al.*, 1987). Case studies were conducted within 12 SMEs selected from four industry sectors, namely manufacturing; tourism; retail; and consultancy, which were selected as being from the areas of the economy most likely to benefit from e-Commerce. SMEs were selected for the study based on a variety of criteria, including access to the Internet and existence of a company website.

Face-to-face interviews, guided by a simple interview protocol (see Appendix A), were conducted with the owner-manager of each participating SME. All interviews were tape-recorded. After the interviews were transcribed, hard copies were provided to the interviewees to verify accuracy (Yin, 1984). Additional interviews were also conducted with senior government officials, including the Prime Minister, to provide additional insights and data richness.

Data contained in the transcripts were used to determine the opportunities and threats posed by Internet-based e-Commerce, and the barriers to adoption faced by the Samoan SMEs. Once preliminary analysis of the interview data had been completed, the early findings were discussed with the participants at focus group meetings so as to achieve additional validation (Yin, 1984; Benbasat *et al.*, 1987).

Case Study Research Approach

The case study method is considered particularly appropriate where the theory in the area is not well developed (Eisenhardt, 1989; Ryan *et al.*, 1992). The contemporary nature of the Internet favours a case study approach. The case study can capture 'reality' in substantial detail and is particularly useful when a natural setting or focus on contemporary events is needed. It involves a particular individual, program, or event studied in-depth for a defined period of time (Leedy, 2001). This research methodology is where the researcher explores a single entity or phenomenon (the case) bounded by time and activity, and collects detailed information by using a variety of data collection procedures during a sustained period of time (Merriam, 1988; Yin, 1984; Creswell, 1994). This is supported by Benbasat *et al.* (1987) when they stated that a case study examines a phenomenon in its natural setting, employing multiple methods of data collection to gather information from one or a few entities (people, groups or organisation). The boundaries of the phenomenon are not clearly evident at the outset of the research and no experimental control or manipulation is used. Yin (1984) suggests that single case studies are appropriate if the objective of the research is to explore a subject that has not been researched previously. This research is the first ever study of e-Commerce adoption by Samoan SMEs.

RESEARCH FINDINGS

The case study data were analysed so as to discover and categorise the perceived benefits and opportunities, presented by e-commerce and the Internet, and also the perceived threats and barriers to adoption. Table 1 below summarises the findings; the following discussion elaborates upon the findings.

Summary of reported Barriers and Threats to Adoption		Summary of reported Benefits and Opportunities from Adoption	
Threats	Barriers	Benefits	Opportunities
Easy access to undesirable information	Poor telecommunication Infrastructure	Competing in a much larger consumer market	Allows SMEs with possibilities not previously available e.g. networking with international companies
Decline in employee productivity	Instability of the power supply	Effective and speed of communication	Allows Samoa to lift its current status of LDC with the World Bank and UNDP
Culture	Costs	Cheaper form of advertising	Increase knowledge and skills in SMEs
Security	Credit Card and Credit Risk Management	Making Samoa closer to the rest of the world	SMEs will significantly contribute to the economy

Summary of reported Barriers and Threats to Adoption		Summary of reported Benefits and Opportunities from Adoption	
		world	
	Knowledge and Skills	Exposing Samoan products to the world	Samoa can leapfrog to proven technology
	Low awareness of the power of the Internet		Added value to existing products or services
			Government deregulation strategy increases the number of SMEs
			Managing customer relationship

Table 1: Summary of the issues that impact on E-commerce adoption by SMEs in Samoa

Threats of the Internet

It was found that the main threats posed by adoption of the Internet by Samoan SMEs were:

1. Cultural threats
2. Decline in productivity
3. Exposure to undesirable information.

Hofstede (1980) defines culture as “the collective programming of the mind which distinguishes the members of one human group from another.” He emphasises that culture is not the property of individuals but of groups. It has to do with what is considered proper, civilised behaviour in that country. It includes, for instance, how to act towards strangers, colleagues, family; how to address somebody, whether to look them in the face and when to invite them home (Hofstede, 1980).

According to Hofstede’s (1980) classifications, Samoa falls under the high power distance culture that is defined as the degree of inequality among people that the population of that country accepts as normal (Hofstede, 1980). A high power distance culture expects different managerial behavioural responses to be accorded to persons with different ranks within the societal hierarchy.

The Samoan high power culture is reflected in organisational culture. This finding is confirmed by the example of the failure of the first overseas Internet Service Provider (ISP) in Samoa. A notable private sector official explained that the first ISP in Samoa was an overseas company that failed because it did not understand the Samoan culture. They were doing business the way they did in their country, which is totally different from the way business is done in Samoa. As one of the additional interviewers pointed out in reference to the first ISP in Samoa:

The reason why the first ISP failed was because they did not understand the business culture of Samoa. For example, they failed to understand that when a company does not pay the Internet access fee, you send the letter to the manager not the clerk. Everything has to go to the manager.

In order for an overseas company to operate successfully in Samoa, they need to understand that the organisational culture is influenced by the Samoan culture. In reference to a foreign organisation successfully operating in Samoa, Hon. Prime Minister Tuilaepa said “We have the SPPF¹ which is regionally based and has people who understand the way to do business here and are able to work effectively in these countries” (World Bank, 2001). This is very important as overseas companies run the risk of being ignored if their representatives meeting with Samoan organisations are not at a senior level. Inversely, the Samoan people will take note of and show the proper respect to any senior representative of an overseas company.

¹ South Pacific Project Facility http://sppf.ifc.org/SPPF_Publications/sppf_publications.html

Another instance of the Samoan culture reflected in organisational culture is that the manager of an organisation is seen as a father figure. Employees respect the manager and would not do or say anything that embarrasses the manager. A study of requirements elicitation in Thailand also found that the Thai culture has a similar impact on the organisational culture (Corbitt and Thansankit, 2000). Participants fear that overseas investors attracted to Samoa through the Internet may hinder the respect Samoan organisations have for its culture. Participants also fear that more and more young people are surfing the Internet in digital cafes until closing time; in which case, they are likely to miss out in the traditional evening prayers and family meetings. As the manager of SBEC said:

We do not want what happens in other countries where employees take a company to court. In Samoa, the manager is always the owner of a small business and any issues are often settled outside of court using our cultural protocols.

All the participants agreed that the Internet could reduce the productivity of staff that used the Internet because it is new and people are curious as to what this new technology can do. Moreover, participants felt that their employees may spend a lot of time typing emails to their families and friends overseas because most of them do not have PCs at home. On the other hand, frequently using the Internet can lead to increasing experience. The issue here is that managers lack the knowledge to monitor employees who use the Internet as part of their jobs. This lack of knowledge was reflected when one participant said:

The other issue we found once the website was developed was low productivity because of the Internet's 'newness'. How do I know the employee is not surfing the Net or writing emails to families and friends? What do I do there?

The Internet also provides easy access to pornography and paedophilia, money laundering and scams. It is already an established fact that pornography has been distributed through the email. Yet, we found that none of the participants had an email and Internet policy in place. In interviewing some senior government officials, it was found that no e-mail and Internet use policy was in place even in government departments. Samoan people will easily fall for money laundering and scams as they have a limited knowledge of these cyber crimes and are gullible at the promise of quick cash, as explained by the participants. When the issue of Internet and e-mail policies was discussed with the Prime Minister, he said:

Well, that is something that we will gradually develop. It's a kind of chicken and egg exercise of deciding, you know. My own thinking is that we take what comes and we must never be bogged down by the chicken-egg question of which must come first. We should in the interest of development, there will always be problems that we face across the way. And as we crossing that bridge, we solve the problems one by one. But it is not a good strategy to determine first the evils before we proceed. We will never proceed. So I prefer that we learn by experience as we go along.

Barriers to Adoption

1. This research found that the main barriers to adoption are:
2. Poor telecommunication infrastructure
3. Cost
4. Instability of the electrical power supply.
5. Lack of e-Commerce skills, knowledge and support
6. Credit cards are not available in Samoa

It was found that the state of the telecommunication infrastructure in Samoa is very poor. During the interview with the CEO of the Samoa Communications Limited (SCL) to validate this issue, he explained that this is due to the fact that it has not been upgraded for at least five years. The cables have a relatively short life because there are no casings to cover the cables. They are laid directly into the ground, which causes the cables to deteriorate quickly.

Not only that but most of the cables and other telecommunication assets have passed their use-by date and it too expensive to replace them. However, the government has stepped in to drive Internet adoption in Samoa by adopting a range of measures including, deregulating the Post Office, approving the first privately Samoan owned bank to focus on lending to SMEs, putting time, effort and money in improving its telecommunication infrastructure, and establishing an agency to provide assistance to SMEs. Work on laying fibre optic cables in the main town of Apia had already commenced during the data gathering phase of this study.

The cost of hardware and Internet access is another barrier to the adoption of Internet and e-Commerce by SMEs in Samoa. Internet access is much more expensive in Samoa than New Zealand. For instance, in NZ, the flat rate for unlimited Internet access is \$24.95 a month a month (<http://www.telecom.co.nz>) whereas in Samoa, as confirmed by Computer Services Limited (CSL, 2001), the rate for unlimited Internet access is WS\$330 per month which is equivalent to about NZD\$230.00 (CSL, 2001). The cost of PCs in Samoa ranges between WST\$3000.00 and \$5000.00 for the PC only, where as in NZ, one can buy a package of a PC, scanner and printer for \$2000.00.

One participant, owner of a computer retail business, explained that the high cost of computers is due to four main factors; 1) Samoa's remote geographic position resulting in high freight costs and delivery delays, 2) high handling and processing fees for imports such as duty, tax etc. 3) high cost of Internet access due to no pricing structure as confirmed by SCL and poor power supply. These four factors trigger higher costs of computer hardware in Samoa are barriers that cannot be remedied unless the government decides to freeze import tax for computer importers.

Power supply is one of the main barriers of Internet adoption in Samoa. The main cause of poor electricity supply in Samoa is that there are only three sources of electricity, which is hydro, solar and diesel. Since there has been a dry season in Samoa in recent years, the hydro has not been sufficient for power supply. The solar power system, though available, has not been upgraded of late and the diesel is costing too much.

Lack of skills and knowledge is another main barrier of the Internet and e-Commerce adoption amongst the SMEs in Samoa. However, CSL and the NUS are in partnership to provide training to the local businesses as well as individuals. Most of the computer technicians and computer lecturers are from other countries. This is costing a lot of money not only for the SMEs but for the government of Samoa as well. The ripple effect impacts on the economy. This study found that the lack of knowledge is due to the fact that the skills such as searching the Internet effectively using search engines and managing websites were not required before. Now that the Internet is widely adopted by SMEs, this lack of skills is the first barrier noticed. As the participant from the manufacturing industry sector explained:

The main issue is not knowing what you are getting in to. I tried to do it myself as it seemed easy to buy a disc then do it yourself, but it took me two years to try and do, to avoid costs. So in the end, I got people from Computer Service Ltd to develop the website for me. The other issue is once the website was developed, I realised that I needed the resources to manage the website. However, there is a lack of skills which means I have to spend money to get training for staff. We also found out from trying to develop the website ourselves that there are a lot of other things that we needed to understand, things that we did not know before such as search engines etc. We also found out that there is a need for the resources to manage electronic trading and to look for ways of sustaining doing business over the Internet.

While the Internet is widely adopted by SMEs, Internet shopping is not common because most SMEs do not have a credit card, because the banks in Samoa do not have a credit card facility in place. This is because Samoa has no central credit risk management system as they do in developed countries. For example, as explained by the CEO of SCL, "if a customer applies for a telephone line, SCL does not know if this customer owes money to the bank or to other corporations such as the Electrical Power Corporation (EPC)." In terms

of the bank's loan applications, a senior officer explained that they have established relationship with the major suppliers such as EPC and SCL whom they have to physically call to find out if the applicant owes money to them. Not only that, most SMEs have no major assets making them high risk as low credit availability.

This barrier minimises the ability of local SMEs and the general public to purchase goods over the Internet or conduct efficient B2C and B2B transactions. The only SMEs that have credit cards are those owned by people who used to live overseas.

Opportunities Presented by the Internet and E-Commerce

According to a senior official of the department of Trade and Commerce Industry, 98% of the economy of Samoa is made up of SMEs (Department of Trade and Commercial Industry, 2001). Such is the importance of SMEs to the country that the department is in its 5th year of hosting the SMEs business awards in various categories. There are only a few SMEs in Samoa that have access to the Internet and have a website. The use of the Internet by these SMEs is mainly limited to communication through email, advertising and information sharing purposes. When the Prime Minister was asked of his views of SMEs, he said:

They form a very large part of Samoa's economy and we have recognised that fact. Hence the reason why we have set up the SBEC. In terms of the Internet and e-Commerce, we are still working around developing a favourable electronic environment for SMEs to do business in.

It was found that while the Internet is widely adopted in Samoa, e-Commerce has not yet contributed to the economy of Samoa in a significant way. Although a lot of SMEs now have web sites, they are used mainly for advertising and information sharing purposes only. The key opportunities for e-Commerce in SMEs in Samoa are:

1. Cheaper advertising
2. Effective and cheaper communication
3. Exposure to a much wider market
4. Easier access to information
5. The possibility of attracting multinational organisations.

The participants in this study believed that the Internet has done wonders for their businesses. In the tourism industry, those that participated in this study but do not yet have a website said that the Samoa Visitors Bureau's² (SVB) website advertises their businesses together with their email addresses. Those who already have web sites are enjoying the business they receive over the Internet although they cannot make or receive payments online.

In the manufacturing sector, they are enjoying the business generated by customers from as far away as Germany, Canada, and the USA. One manufacturer has had to open a second branch in order to cope with demand. Through their web site, customers can now order online or through the email while payments are still being processed by the bank.

The consultancy firms who participated in this study stated that the speed of the Internet makes a big difference to the service they provide. The Internet has allowed them to compete with overseas consultancy firms for consultancy work required by the international organisations such as UNDP, WB and WHO.

The participants from the retail sector stated that for them, the Internet is used mainly for email and advertisements. However, the participants are enthusiastic about the fact that they can now order products that are not available locally from overseas vendors although they still have to visit the bank to pay for the goods using electronic money transfer system or bank drafts. It shows that the Internet and e-Commerce has an impact in the retail industry. That is, those with websites now stock goods not available but needed in Samoa giving them a competitive advantage over those that have not yet adopted the Internet. One of the local manufacturers said that:

² Samoa Visitors Bureau web site URL. <http://public-www.pi.se/~orbit/samoa/info.html>

The good thing about the Internet is that we can now order raw products cheaply from overseas. Not only that, but we are buying goods not available in Samoa then advertise it. As more and more Samoan people living overseas move back here, we find that if we order the goods they used to use overseas but not available locally, then we have a leading edge in the competition.

The Internet and e-Commerce issues in SMEs in Samoa are consistent with the studies conducted in other developing countries (Schmid, *et al.*, 2001; El-Nawawy and Ismail, 1999; Boalch and Bazaar, 1997). For example, El-Nawawy and Ismail (1999) in their study of e-Commerce adoption by SMEs in Egypt found that the main factors contributing to the non-adoption of e-Commerce in Egypt are awareness and education, market size, e-Commerce infrastructure, telecommunication infrastructure, financial infrastructure, legal system, government role, pricing structure and social and psychological factors. Schmid *et al.* (2001) in their study suggest that the main e-Commerce issues facing SMEs in Argentina are awareness, access to hardware, infrastructure, organisational culture and financial issues.

A comparison of the two studies in Argentina and Egypt, (both developing countries) suggests that the key factors of e-Commerce adoption in developing countries are awareness, telecommunication infrastructure, and cost. It also suggests that SMEs in developing countries share similar issues.

SME studies of e-Commerce issues in developed countries (Corbitt *et al.*, 1997; Huff and Yoong, 2000; Mehrtens *et al.*, 2001; Poon and Swatmann, 1998) indicate that e-Commerce issues faced by SMEs in developed countries can be totally different from those experienced by SMEs in developing countries. It could relate to the fact that developed countries already have sophisticated telecommunication infrastructures in place, which is not the case in developing countries. This paper then suggest that the issues experienced by SMEs in developing countries vary on a global basis and depend on the country the SMEs is doing business in.

The Samoan Culture Influences Organisational Culture

The Internet in Samoa is growing at a phenomenal rate as stated by the assistant manager of CSL, the largest ISP in Samoa. When the Internet hit Samoa in late 1997, an overseas ISP was the provider (CSL, 2001). However, they soon went bankrupt because they did not have the local knowledge and understanding of how to motivate the customer to pay their Internet access fees.

The structure of businesses in Samoa is top down. It does not matter how much knowledge an employee has about the latest technology, if the managers do not understand it or seemingly lack knowledge about it, it is very difficult for employees to push for it. If the manager says no, whether a reason is given or not, then the answer is no. The reason for this behaviour is because a manager in the Samoan context is equivalent to a father figure in a family. Employees do not do or say things that might embarrass the manager. The researcher found that this top down structure and the 'father figure manager' in Samoa is similar to business culture in Thailand (Corbitt and Thanasankit, 2000; Corbitt, 1999). Corbitt and Thanasankit explained that project consultants from overseas who work in defining business requirements in Thailand, need a good understanding of the Thai culture in order for an implementation to be successful.

Application of Hofstede Model to Organisational Management in SMEs in Samoa

The Hofstede (1980) model describes cultural value differences between nations using five bipolar dimensions. These dimensions are named power distance, individualism/collectivism, masculinity/ femininity, and uncertainty avoidance and later a fifth dimension was added. The different positions of countries on these dimensions helps us to understand how their differing systems of cultural values lead to different approaches in management practices. Samoa falls under the 'high power' category.

High power distance is defined as the degree of inequality among people that the population of that country accepts as normal (Hofstede, 1980). A high power distance culture expects different managerial behavioural responses to be accorded to persons with different ranks within the hierarchy. For example, when greeting a group from a Samoan organisation at a

meeting, the first greeting should be directed toward the person of the group that holds a high ranking 'matai' title, even if he or she is not the senior manager or actively participating in the business meeting itself.

All the participants of this study were SME owners and all but two held no matai titles. Thus for a foreign company to be successful in Samoa, they need to understand the organisational culture in Samoa. This is very important as overseas companies run the risk of being ignored if their representatives are not at a senior level. Conversely, the Samoan people will take note of and show the proper respect to any senior representative of an overseas company.

Using the Diffusion of Innovation Theory to Understand Internet Adoption

The diffusion of innovations theory purports to describe the patterns of adoption, explain the mechanism, and assist in predicting whether and how a new invention will be successful (Rogers, 1995). Since the 1960s, a wide variety of disciplines applied the DOI model in their studies. These disciplines included education, public health, communication, marketing, geography, general sociology, IT, and economics (Fliegel and Kivlin, 1962; Kotler, 1983; Prescott and Conger, 1995; Clark, 1999; Huff and Barnes, 2001).

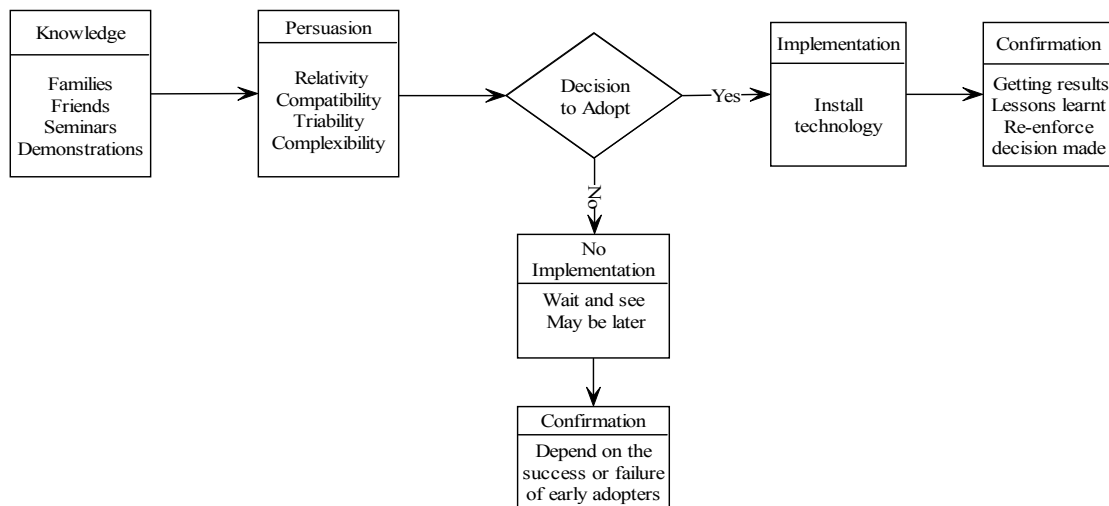


Figure 2: Conceptual model of Internet and e-Commerce adoption by SMEs in Samoa

When the Innovation Decision Process was applied to this study to better understand the diffusion process SMEs went through, the researcher found that the participants, after being aware of the Internet through family and friends, immediately wanted to know more about this phenomenon. They attended Internet seminars that were run by the NUS and the CSL.

According to the DOI theory, this is the process of *knowledge* about the innovation occurring. They were *persuaded* that the Internet was a very valuable tool to have, after they attended seminars. At this stage, the SME owner managers made their *decision* to adopt the Internet. Once they decided to adopt, they contacted the ISPs to *implement* the Internet. Having the Internet installed and used to communicate with families and friends overseas is *confirmation* of the *knowledge* that *persuaded* them to make the *decision* to *implement* the Internet. In this case, the diffusion process that SMEs went through before they decided to adopt the Internet were:

- Knowledge (SMEs learnt from families and friends overseas and attended seminars)
- Persuasion (SMEs believed that the Internet was a valuable tool to the business)
- Decision (SME owner/ managers making up their mind to install the Internet)
- Implementation (SME owner/ managers requesting the ISP to install the Internet)
- Confirmation (SMEs actual use of the Internet and agreeing of the usefulness of the Internet)

Based on the DOI theory, a conceptual model to understand the factors those influences the diffusion of the Internet and e-Commerce by SMEs in Samoa is illustrated in Figure 2.

CONCLUSION

While Internet development in Samoa is still at a very early stage in terms of numbers of connections and overall use, the promise it offers for increased productivity and enhanced economic growth in the future is likely to be significant. Most benefits are likely to come from business use of the Internet for both internal control and for dealing with business customers and suppliers, not from local consumer use due to the unavailability of a credit card system. In particular, for example, global connections will be much enhanced by Samoa's liberalised access to international Internet gateways and to the use of fibre optic cables to replace the copper cable. This access alone could offer Samoan SMEs business opportunities that otherwise would flow to large corporations.

Unlike other developing countries of the South Pacific, the Samoan government has strongly encouraged development and improvement of the telecommunication infrastructure, and the Internet more specifically, through various incentives to encourage SMEs to adopt the Internet. As the Prime Minister said:

In fact my dream is that we (Samoa) lead the Pacific in terms of IT diffusion, the Internet and e-Commerce. So that is why I have taken over the Telecommunication as my portfolio and forced the corporatisation issue through Parliament because I want to move things as fast as possible. I know from attending various conferences overseas that a country that rapidly adopts the Internet and e-Commerce is the country that will quickly realise the benefits of Information technology and will not be left behind...

One apparent result has been the deregulation of the Post Office and the development of ISPs in Samoa leading the way for other technological developments to facilitate rapid Internet expansion. More importantly, a rapid adoption of the Internet and e-Commerce by SMEs will result through exempting the industry from many burdensome regulations and controls. While the Internet is now widely adopted by SMEs, a full e-Commerce system has not yet been implemented in Samoa and it has not yet contributed to the economy of the country in a significant way.

There is much to learn about the dynamics influencing Internet and e-Commerce adoption by SMEs in developing countries. Although international organisations are developing initiatives to help developing countries, to maximise access to the Internet in an effort to bridge the 'digital divide,' such initiatives have focussed largely on highly populated developing countries. According to Johnston and Acquaah-Gaisie (2001), the UN development programs are biased towards Africa and neglect the developing countries of the Pacific. The relatively small population of the South Pacific makes it a less attractive proposition for investment. Further research focussing on such countries should help improve our understanding of the special barriers, threats and opportunities they face.

APPENDIX 1: INTERVIEW PROTOCOL

Information Required	Question
<p>Organisational and current IT Background</p> <ol style="list-style-type: none"> 1. Nature of the business 2. Establish if its an SME 3. Establish Business Process 4. Level of Computer usage 5. Establish if Findings an issue 6. Level of PC support 7. Frequency of service 	<p>After Introductions:</p> <ul style="list-style-type: none"> • Please explain the nature of your business. • How many employees do you employ? • Please give a brief explanation of the current process. • Are you currently using a computer? • What do you use the Computer for? Do you have Internet? • What is your view on the cost of computers and Internet access? • If your PC breaks down, whom do you call? • How long do you usually wait till it's fixed?

Information Required	Question
	<ul style="list-style-type: none"> • What is the estimate cost?
E-commerce awareness and mode of acceptance <ol style="list-style-type: none"> 1. Establish Internet Access 2. Establish if Internet were a future option 3. Establish knowledge of E-commerce 4. Access cost 5. Factors that influenced acceptance of the Internet 	<ul style="list-style-type: none"> • Do you or have you had access to the Internet • If Yes, What did you use the Internet for? • Does your company have a web site? • If No, Why not? Do you plan to have Internet in future? • Would you develop a web site? • Please explain what you know about E-commerce • If not a lot, explain what its all about • How much does it cost you monthly to use the Internet? • How did you arrive at the decision to adopt the Internet? That is what motivated you to buy into the Internet and develop a Website? • What were the main factors that influenced your decision? • Explain where you first heard about the Internet and what you did about it.
Barriers <ol style="list-style-type: none"> 1. Identify the Barriers 2. Establish ways to break the barriers 	<ul style="list-style-type: none"> • What do you see as the main difficulties for you to do business on the Internet? • What do you think is the best way to eliminate these difficulties? • Who in Samoa do you think can help with eliminating these barriers?
Opportunities <ol style="list-style-type: none"> 1. Establish perception of E-commerce opportunities 2. Competition and E-commerce 	<ul style="list-style-type: none"> • What do you think are the benefits of doing business over the Internet for your company? • What about benefits to you personally/ family? • Who are your competitors? • What is different between your business and your competitors?
Threats <ol style="list-style-type: none"> 1. Find out what they perceive as threats 	<ul style="list-style-type: none"> • What do you as a negative impact of doing business over the Internet? • What about your family/ community? • Do you think doing business over the Internet will impact on your culture? • How? • What would your company do in order to eliminate these threats?
Role of the Government <ol style="list-style-type: none"> 1. Establish Government help 	<ul style="list-style-type: none"> • Are you aware of any government programs to help small business like you to buy PCs perhaps and to develop a Webster for your business? • If yes, please explain the process
Business Strategy <ol style="list-style-type: none"> 1. E-commerce plan 	<ul style="list-style-type: none"> • In moving forward, would you consider adopting E-commerce? • If there were a government agency to help SMEs, would you consider their offer?
Focus Group	<ul style="list-style-type: none"> • Are you available for ½ day on _date_ place for half a day? The documented analysis was sent to you on _date_. Morning tea were provided
Future Research	<ul style="list-style-type: none"> • Would you be happy to participate in future research?

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