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Abstract

From 2005, 12 telecentres were implemented in the rural villages of Samoa as part of the national information and communication technology (ICT) strategy for development. The aim for the telecentres is to ensure the people of Samoa can be connected locally and globally. The telecentres provide access to ICT tools in villages where many have never seen a computer before. For the most, villagers take pride in the telecentre, praising the convenience of its services to the local people. However, the newly provided ICT tools also bring about some concerns, especially having access to the internet. Local villagers are now exposed to a vast amount of information whereby access is practically unlimited. While we cannot discount the fact that the internet makes available useful information, the question of how and to what extent this computer-mediated information may affect their traditions deserve some attention. Will local villagers use it to build up their society or will it compromise their cultural values? This research, which adopts an interpretive approach, focuses on the influence of telecentres on three rural villages in Samoa. The findings so far provide an insight into the encounter between the global environment and the local values, customs and beliefs of Samoans.

Keywords
Telecentre, cultural values, ICT for development, Samoa, internet and rural villages

1 Introduction

Digital divide commonly refers to the gap between those who do and those who do not have access to ICT (Gamage & Halpin, 2006). To some extent this concept has been recognised to widen the perceived inequality gap between the developed and developing countries. Bridging this gap has become a growing trend that governments, non-government organisations and donors have invested their resources, in making sure the developing countries and disadvantaged groups have access to ICT. One of the ways to achieve this is in the form of telecentres, which provide access to ICT. The World Bank (1998) recognise these centres as "powerful engine of rural development and a preferred instrument in the fight against poverty" (p. 72). The Samoan government has followed suit and starting from 2005 implemented twelve telecentres, locally known as feso'otai centres,

located in the rural areas of the country. They were implemented to fulfil the National ICT Strategy to ensure the people of Samoa can get connected, provide access to, awareness of and skills in ICT (Ministry of Communications and Information Technology, 2010).

This research is not concerned with whether or not the objective of bridging the digital divide or that local development of ICT has been achieved. However, the focus is on how local people make sense of and utilise the information acquired through the feso'otai centres in relation to traditional life in rural Samoa. Is the content that individuals are exposed to compromising their cultural values? Does the way individuals interact online differ from how they interact face-to-face? Are they conscious about how their written words may be portrayed? Therefore this research focuses on the effect on cultural values as a result of ICT.

As MacPherson (1999) observes, western ideas seem to have been changing the community sense in Samoa from a communitarian society to a more individualistic one. Therefore, the research question of this study can be phrased in the following terms: Will these new technologies change the way Samoans communicate with each other? How will ICT influence va – the notion of relationship in Samoa – between age groups, gender and social hierarchy?

This paper is organised as follows. In the next section, we provide a review of the current literature on ICT for development and a discussion on cultural identity in terms of ICT. Subsequently, we present a brief account of the Samoan society. Then, we outline the methodology approach adopted for this research. Lastly, since the analysis has not been completed yet, we present the findings obtained so far. We close this document with preliminary conclusion.

2 ICT, development and identity

In this section, we present an examination of the relevant literature on ICT and development along with a discussion with cultural identity.

Avgerou's (2008) critical review summarises the past and current literature around the distribution of information systems (IS) in developing countries in three discourses. The first set of studies is based on the assumption that IS was introduced in developing countries to catch up with technologies already made available in the developed countries, as described in some literature as the "leapfrogging effect" (Steinmueller, 2001, p. 194). Some researchers have gone beyond this and assess the implementation of ICTs as social embeddedness (Orlikowski, 1996). This second discourse assumes that IS development is about the interplay between information technology and the existing institutions and social practices (Avgerou, 2008; Sahay & Avgerou, 2002). The third discourse, however, builds from social embeddedness and assesses how IS can be a transformative tool to bring about change for the developing countries (Akpan, 2003; Bhatnagar, 2000).

Although much research has been conducted under each of these three discourses, depth in the contextual background unique to each developing country is still lacking (Walsham & Sahay, 2006). This study aims to develop on the social embeddedness literature by scrutinising the unique Samoan culture in the presence of ICT, as a result of the establishment of feso'otai centres.

"We know of no people without names, no languages or cultures in which some manner of distinctions between self and other", says Calhoun (1994, p. 9). Individuals are made up of different composites that define who they are, that characterise their identity. Castells (1997) conceptualises identity as "people's source of meaning and experience" (p. 6). What is important to highlight is that identity must be separated from the roles people are in

everyday – e.g., a taxi driver, father, village-chief, church member and uncle at the same time. In essence, identity is the continuity of self across time and space (Giddens, 1991). However, Castells (1997) re-iterates that ICT is enabling a network society upon which is influencing identity building. In a network society individuals may adopt or adapt traits from other cultures they are exposed to. Their interaction with other cultural expressions may shape their individual values and resulting in the construction of new identities (Castells, 2000).

In this day and age, due to the growth of and access to ICT tools, people are no longer restricted to physical location to know about global activities and trends. Giddens (1991) symbolises these changes as late modernity, in which worldwide events shape local circumstances and vice versa. ICT exposes individuals to more information than ever before. As a consequence, expression of individuals' identity is likely to take place in a wider global community, where interactions and relationship occurs outside of the local context. Thus, identity is not fixed but rather an "ongoing lifelong project in which individuals constantly attempt to maintain a sense of balance" (Block, 2006, p. 44).

Poststructuralists like Derrida and Foucault believe that technology gives birth to multiple creations of identity, which can be expressed through written words. The expression of oneself is no longer restricted to face-to-face interactions with others (Lamb & Davidson, 2005). Through the use of written words individuals are inherently, without knowing, expressing their identity. Written words are powerful in the sense that others can disassemble and recreate them into multiple identities to reflect their originator. Moreover, the intended recipient for the message may interpret the words in a different way; therefore, the originator has no control over on how the other person perceives them. Other than being viewed differently, individuals can easily produce fictitious identities either on their own website or on social networking sites. As supported by Katz (1997) "We are headed toward something virtual and that a life in text has the ability to compete with the life experienced by the rest of the body" (p. 307).

3   The background: Samoa

Samoa is a group of four inhabited small islands located in the South Pacific: Savaii, Upolu, Manono and Apolima. It has an estimated population of 188,000 (Samoa Bureau of Statistics, 2010). *Gagana Samoa* is the spoken language for all, while English is the second language that is used predominantly in education, businesses and organisations.

3.1   The Samoan way of life: faa - Samoa

The Samoan society thrives on the idea that no man is an island. In a village it is common to find families sharing resources from land to food to shelter to transport. To prosper and survive on the land, one must work for the common good not only for their immediate family but that of their extended family, the *aiga,* which includes uncles, aunts, cousins and so on. Some researchers claim that "family and village security was achieved by sharing resources and labour in acts of reciprocity" (Fairbairn-Dunlop, 1991, p. 65).

The village structure is governed by the chiefly system known as the *faamatai.* This system institutes the division within the village between men, women and children. Each sub group have their own duties and responsibilities to perform the tasks that make the village function. Governance belongs to the chiefs. Untitled men, known as *aumaga*, are assigned to serve the council of chiefs and provide for their families through agriculture production. Local women, called *aualuma*, are the daughters of the village and are in charge of hosting

visiting parties and conducting activities during village events. Women from other villages become the in-marrying wives, who are known as the *faletua ma tausi*; they carry out domestic tasks. The aualuma and the faletua ma tausi form the village's Women's Committee. This committee focuses on sharing ideas and knowledge on how living standards can be improved in the village.

The division of tasks and responsibilities reflects the aspiration of a community working together for the good of everyone in the village. Respect for the older generations is an observed tradition. In terms of ranks, the untitled men are expected to serve the chiefs. As Linkels (1997) states, "obedience and subservience are key concepts in the Samoan culture" (p. 17). Given that chief titles hold different ranks, the village council makes the distinction between a high chief (*alii*) and an orator (*tulafale*). The later have to speak with respect to the former. This aspect of the Samoan way of life is not limited in the villages but can also be observed in public places with the way people address each other.

3.2   Implementing the feso'otai centres

In 2002, the Samoan cabinet approved the setting up of the National ICT Steering Committee to develop the national e-Strategy. In August of the same year, the government reviewed the draft and approved the ICT Strategy. Later, in 2005, the first feso'otai centre was opened.

Eventually, 12 feso'otai centres were implemented. The first two centres were launched in December 2005 and the rest were launched in September 2006. Ten of them were funded by the International Telecommunication Union, one by VIA Technology – a Taiwanese manufacturer of computer hardware components – and one by Global Knowledge Partnership Foundation – an international multi-stakeholder organisation. Each centre was given five computers, one fax machine, one digital camera, one data projector, one printer, one DVD player, one TV and one photocopier. This contribution was matched by the village by providing an air-conditioned room furnished with computer desks and chairs.

At present, there are only eight centres operating, as two of them were washed away by the devastating tsunami that affected Samoa in September 2009, and two others were closed down due to management problems. Of the eight currently operating centres, three are on broadband and the other five are on dial up or using general packet radio service (Ministry of Communications and Information Technology, 2010).

4   Methodology

For this research, we adopt a qualitative interpretive approach as we believe this will give us the opportunity to understand meaning of people's actions and opinions (Myers, 2010). Therefore, we analyse the social actions vis-à-vis the social and cultural background of the participants (Bryman & Bell, 2007). We emphasise that obtaining knowledge of a phenomenon requires understanding participant experiences.

The first author conducted the fieldwork for six weeks in Samoa between October and November 2011. Observation and interviews were used to collect the data. Data collection was conducted in three villages; two from Upolu Island and one from Savaii Island. Since these were amongst the first centres established, their degree of maturity justifies their inclusion on this study. Our assumption is that the villagers have had time to familiarise themselves with the centre in these communities.

A total of 17 participants were interviewed who represented the following groups of stakeholders: (a) six village leaders – chiefs and Women's Committee representatives (b) four feso'otai centre managers (c) four feso'otai centre users and (d) three non-users. As

regards the non-users, instead of apathetic individuals we targeted those opposed to the implementation of the feso'otai centre in the village. However, no one that expressed opposition to the implementation of the feso'otai centres could be found. All the participants were over 18 years old at the time of the fieldwork. A snowball approach was used to help identify information–rich participants. This approach begins by asking well-situated people in the context of the study (Patton, 2002). In this case the process started with the feso'otai centre managers and village leaders by providing an insight of who are the users and non-users of the centres.

At this stage, we are in the process of analysing the collected data using thematic analysis. By doing thematic analysis, we proceed in an inductive fashion trying to identify emergent theoretical themes that can explain the process under investigation. Coding has not only allowed us to reduce the data (Shank, 2006) but also identify concepts from the participants' words and notes taken during the fieldwork. These concepts reflect the theoretical interests of the study. In this paper, we are using pseudonyms to keep the confidentiality of the participants.

5 Analysis in progress

It has been six years since the telecentres entered Samoa and, despite the intended benefits of social and economic development ICT should bring, reality paints a different picture. Outlined below is a brief overview of the current situation found on the telecentres. This will be followed by a discussion on the emergent categories and the prevailing theme that explains the problem under study.

5.1 Current status

The feso'otai centres are managed and looked after by the Women's Committee of each village. There is a user pay policy at every centre for all the services provided. The charges are the standard rates set out by the Ministry. The 2010 financial reports indicate that the main usage of the centres are photocopies of documents – mainly of family and church matters as well as primary school activities – followed by computer training.

Of the three feso'otai centres visited, only one generates enough income to cover its operating costs and pay the wages for the manager at the end of the month. The other two generate an income that partially covers the expenses, leaving to the Women's Committee to make up the difference, while the managers work on a voluntary basis. According to the participants, the feso'otai centres have survived this long due to the support provided by the Ministry of Communication and Information Technology. This support includes free technical service, bi-monthly visits by technicians and free computer courses offered to the centre managers. This ongoing relationship between the Ministry and the feso'otai centres has contributed to the survival of the latter. It was found during the fieldwork the services offered by the centre are not fully utilised one in particular is the internet. The centre is left for most part of the day closed. Across the centres, when someone wants to use the centre, the manager is contacted to come and open the place. In the case of Village B, the only other time you find the place open is when there is a computer class.

5.2 ICT use is dictated by local traditions

Following the inductive process, five emergent categories were found (Table 1): Expanding skills and capabilities, efficient tool for document production, virtual connectivity, eagle eye surveillance and communal life. Through these a higher level of

abstraction was sought as a result a theme emerged: ICT use is dictated by local traditions. This theme aims to address the question: How and to what extent computer-mediated information may affect local traditions? This is further discussed below.

Codes	Categories	Theme
Computer training, job opportunities, motivating users	Expanding skills and capabilities	ICT use is dictated by local traditions
Computer enthusiasm, presentation of documents, limitations	Efficient tool for document production	
Communication, networking, media and information dissemination, tourists users	Virtual connectivity	
Monitoring computer use, guarding the place, internet protection	Eagle eye surveillance	
Village council, development projects, family responsibilities, urban experience, upbringing, cultural values	Communal life	

Table 1: Construction of the theme

5.2.1 *Expanding skills and capabilities*

The general view by the villagers is that the centre can assist in the children's education. The centre is without a doubt seen as an educational place to train primarily the children. A centre manager, Nina, shares that computers are the future and there is a need to *"train the children on how to use them"*. Each centre had a story to tell about students who excelled at school after attending computer training at the centre. During the fieldwork none of the centres had afternoon training classes since it was exam weeks for the schools.

The managers interviewed either never used a computer before or had little understanding of how it works. The free computer course provided by the Ministry has allowed the managers to become more skilful in the use of computers. A number of times, it is the manager who uses the computer instead of the villagers. Like the school teacher who shared *"most of the time I give the manager the [church] songs or report I need to get printed"*. A mother echoes this view *"I come here and give my Bingo sheets for the manager to type up and print... I want to learn but I do not have the time"*. The managers have also become proficient in producing edited photos which is something *"that is very popular in our village...printing of photos with fancy background"* says a manager. At one of the centres photo printing is the highest source of income.

Villagers believe majority of the jobs on the market requires computer skills and it is no longer enough having a qualification and work experience. The overall perception by the men interviewed is that the feso'otai centre is a place for the women. One of the managers expressed *"you hardly see men using the centre unless they are a church minister or a teacher"*. In fact, young people who are unemployed either do not have the money to use the centre or just not interested in learning as firmly express by a young man interviewed *"I rather spend my time with my friends"*.

5.2.2 *Efficient tool for document production*

The computers are used for various reasons, training individuals, producing documents, editing photos, internet access and playing games. As we have already discovered, the

centre is mainly used for computer training. However producing documents has become more common in the villages. The documents produced are for church, school, fundraising and family occasions like funeral and weddings. To the individuals the computer has allowed for easy and convenient production of multiple documents compare to writing. These include church songs, programs, reports, school exams, invitations and school assignments.

A particular document to focus on is invitations, since traditionally – and it is still a common practice – invitations are by word of mouth. In actual fact the only person that needs to be contacted are the family chiefs who will call a meeting to discuss what needs to be carried out by the extended family. Written invitations have brought about an option for villagers to be selective in who they choose for an occasion. However, written invitations are seen as a formal way to invite dignitaries' who are church ministers and leaders, school principals to name a few. But this has not limit the number of people who attend an occasion. When there is a wedding or birthday celebration in the village, all the families are involved. It is a community affair *"when there is a funeral or wedding the untitled men and girls of the village come and help out with the family chores serving the food and cleaning up"*, as a village chief expressed.

5.2.3   Virtual connection

As highlighted before, the internet receives little use at the centre. According to the managers, the majority of the internet users spend their time on email and networking websites. Any form of research on the internet and accessing information is done by students but only for school assessments. One participant interviewed is a keen internet user; she spends most of her time on Facebook – a networking website – and on email. She found this mode of communication to be very useful given her long distant relationship with her husband who travels on a fishing boat she says *"My husband is always on email, when he is on his fishing trips. I just got a reply (email) from him he is at Rarotonga (Cook Island)"*. The networking sites she found convenient in keeping in touch with families and friends overseas. As one participant confided, *"I do not need to call my friend and see how she is doing I can just look at her photos online"*.

In providing access to computers this may have, to some extend minimised the gap in the so called digital divide. However this did not bridge the gap between languages. This is a barrier that was discovered which limits the use of computers. The users interviewed all agree that people must understand English in order to make sense of the computer. *"If you do not know how to read in English then you might as well turn of the computer"*, a computer user shared.

5.2.4   Eagle eye surveillance

The feso'otai centre is given the same importance as school facilities and church buildings. For this reason the place is tightly monitored. The whole village works together in keeping the place safe even though the Women's Committee is given the responsibility to maintain and look after the place. As a village chief shared, *"we (village council) penalise anyone that will try and damage the centre or steal the equipments"*.

Monitoring of computer use is common among the centres. *"We do not leave the people especially children to use the computers freely"*, a manager mentioned. The Women's Committee have strict rules while there are users at the place; a member from the committee must be present, if the centre manager(s) is not available. The view across the participants is summed by Siaki, a non-user and village leader, *"the centre here is well looked after by the Women's Committee. They do not allow people abusing the place. It is*

not like the places [internet cafés] in Apia [the capital], where people can do whatever they want”.

In comparison to the internet cafés in Apia, the internet use at the centre is much more controlled. The concern for users accessing what might be considered inappropriate materials over the internet has lead to a watchful eye by the manager(s): *“if we see they are opening websites that we do not think is appropriate they are asked to stop using the machines”.* Users are cautious on how they use the internet. As one of the managers’ shared, *“they]internet users] probably know how to look up other websites apart from emails and Facebook, but they do not want to because they know I am in the room”.* In the main, the use of the internet is for communicating with relatives and friends overseas.

5.2.5 Communal life

When the centres were first opened, the celebration was a village affair. The village council together with the Women’s Committee came together to host the guests from the government who opened the place. Prior to this each village had to build a space for the centre; this work was done by the local untitled men along with a village builder. At first, villagers were anxious to use the place since it was something new, but after awhile family responsibilities and the village life took over. Eseta from the Women’s Committee expressed, *“we [women] all use to come for [computer] training offered by the project coordinator [an official from the Ministry] but we found that this takes up time”.* A similar view is shared by Lina, from another village, *“we are just busy with family responsibilities I have no time to come and sit in front of the computer”.*

The culture is centred on families and the village is treated as an extended family. Some of the participants interviewed chose to return to the village to look after their families. Their daily lives see them at the plantation for the men and managing the household for the women. The centre receives little attention in terms of its use on a daily basis in the village. The centres use to run paid movie nights using the data projector and screen; however, this did not last long. The projectors at two of the centres no longer work and the Women’s Committee found the equipment expensive to fix. The third centre no longer runs movie nights, since the venue is used by village groups for Bingo fundraising almost every night. In hindsight, movie nights never took flight because it was competing with television programs and family’s DVD players. In Samoa, when neighbours are showing a video, their neighbours are invited to watch. It is a collective entertainment, where people laugh together. Therefore individuals would rather watch at a neighbour’s house since because it is free compare to watching a paid movie offered by the centre.

The role of the centre manager is controlled by the Women’s Committee. Any changes to be made at the centre will need the approval of the committee. *“These machines are here for the villagers and we do not want people to abuse it and just because the centre manager is in charge does not mean they own it”,* a village leader shared. This was the case at one of the centres where the manager was dismissed by the committee due to the mismanagement of funds. This issue caused a division amongst the committee and the centre was closed for almost a month. This incident eventually led to the intervention by the village council. They requested that the Women’s Committee come together to talk about the issue and work through their differences in order to keep the peace and the centre. In response to the village council’s request, the Women’s Committee held a meeting to discuss the matter as a result new boundaries were put in place to prevent theft from the centre. Village issues are resolved through discussions, negotiating boundaries, finding common grounds and through the act of forgiveness.

Computer-mediated information is yet to receive attention at the rural villages. The common sources for information are the local television, newspaper and radio stations. Traditional channels are also used to communicate information to the local villagers. The village council and the Women's Committee are advised of government projects, health and environmental issues and development projects. Through these village groups, information is then passed on to the villagers. As a village mayor expressed, *"if the government wants to come run educational programmes about agriculture and fishing, they come through the village council and if we agree then a village meeting is called"*. Mataio, a farmer shared, *"if people knew that they can find information on how to treat a plant disease on the internet, I guess more people will be using it [internet]… not only will you get information locally but you can get it from other countries"*. Yet browsing for information online to some extent limits the access of the local people. Firstly, the language used over the internet is predominantly English; secondly, is the cost of using the internet. In an opinion of a non-user, *"some of us [young people] do not come and use the centre because we do not work and so we do not have the money to pay for the service"*.

6   Preliminary conclusions

This research paper attempts to bring in to light an analysis on how ICT tools are received and used in the context of the Samoan culture. This study represents a pioneering endeavour since little or no research has been conducted on ICT for development in the small Pacific nations. Although the analysis is still underway, the findings so far are telling us that ICT use is guided by local traditions.

The implementation of feso'otai centres in the rural villages gave rise to a concern whether the cultural values will be lost through access to ICT. However, the fact is that the centres are seldom used by the villagers. It was found that on a daily basis people have other responsibilities (e.g., family, work, school, etc.) that prevent them from using the centres. On the whole, villagers view the centres as training hubs for the children; an educational place where they can further developed their skills to gain better opportunities for finding paid employment. At times, the place is used to produce documents for families, church and schools. Occasionally, the villagers have the opportunity to network and keep in touch with families and friends via the internet. However, the use of the internet is closely monitored by the mangers where individuals do not have privacy to browse.

To that end it can be said that the cultural traditions in the rural villages has continued to maintain its strong hold regardless of the implementation of the feso'otai centre. The way the centre is used is for traditional means and it is fair to say that offline customs overrides online global trends.

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