

Information and Communication Technology for
Development in Samoa:
Exploring the interaction between the local
traditions and information found on computer
technology.

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Attestation of Authorship

“I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.”

Signed  _____ Date: 30 June 2012

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Abstract

In 2005 telecentres were introduced in 12 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. Reports indicate that villagers take pride in their telecentre, praising the convenience of its services to the local people.

However, the introduction of ICT raises some concerns, especially having access to the internet. Compared with before, local villagers now have the potential to access a vast amount of information. While we cannot discount the fact that the internet enables villagers to access information which they see as useful to their daily life actions, the question of how and to what extent this computer-mediated information may affect local traditions deserves some attention. Will local villagers use these services to access information which will help develop their communities or will the information they access compromise their cultural values? This research, adopts a qualitative approach, focuses on the interaction of three rural villages in Samoa with the telecentres.

Seventeen semi-structured interviews were conducted among residents from three villages. Data was also collected by observing the context of each village lived by the villagers. Together these methods collected rich data that was later analysed in an inductive fashion. The findings provide an insight into the encounter between the global environment and the local values, customs and beliefs of Samoans. This led to the identification of five categories of impact: expanding skills and capabilities, efficient tool for document production, panopticon-surveillance, virtual connection and community networks. The one theme emerging out of these five categories was that ICT is entwined in the social fabric of the Samoan culture.

1 Chapter 1: Introduction

The digital divide commonly refers to the gap between those who do and those who do not have access to Information and Communication Technology (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 (NGOs) and donors have invested their resources in, ensuring that the developing countries and disadvantaged groups have access to ICT. Telecentres have been seen as a way to achieve this, particularly for those living in rural communities. The World Bank (1998) recognises these centres as a “powerful engine of rural development and a preferred instrument in the fight against poverty” (p. 72). The Samoan government has followed suit and from 2005 implemented 12 telecentres, locally known as *feso’otai* centres, located in the rural villages 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, 2010b, p. 1). *Feso’otai* centres offer ICT services, such as internet connection, colour printing, photocopying, access to fax, telephone, data projectors and CD burning. This strategy gave Samoan people the opportunity to keep in touch with families and with people over the internet while local businesses also have the chance to gain access to worldwide information and communicate with people locally and abroad.

This research study is not concerned with whether or not the government objective of bridging the digital divide or that of the local development of ICT has been achieved. Rather, the focus is how local people make sense of and utilise the information acquired through the *feso’otai* centres in relation to life in Samoa’s subsistence societies, known for the endurance of the customary ways and where families are the main organisational system. ICT is said to be the tool that will assist with the social and economic needs of developing countries (Batchelor et al., 2003). ICT has not always been used in this way, as individuals often use ICT for either educational or social purposes (Parkinson & Ramirez, 2006). To the extent that Richards (2004) claims that ICT tools like the internet are bringing about a cultural change in the Asian educational system. Leaning (2005) further elaborates on this presumption indicating that ICT presents different

modes of communicating information and that the internet will allow modality of cultural transmission.

The *feso'otai* centre offers a plethora of new communication technologies, and based on the assumptions put forward by previous researchers (Harris & Harris, 2011; Leaning, 2005; Richards, 2004) one could presuppose that these technological changes will challenge Samoan traditions. Macpherson and Macpherson (2009) state that western ideas and tools like the internet may change the community sense in Samoa from a communitarian society to a more individualistic one. That, the internet will allow individuals to interact in a virtual environment, access information when necessary they will no longer need to wait for the village leader. In essence, the people of Samoa can gain access to “ideas that directly challenge values at the heart of Samoan worldview and lifestyle” (p. 183).

Avgerou (2008) reviewed studies within ICT for development discourse identifying three discourses within the literature. The first set of studies is based on the assumption that Information Systems (IS) was introduced in developing countries to catch up with technologies already made available in the developed countries, described in some literature as the ‘leapfrogging effect’ (Steinmueller, 2001). Some researchers have gone beyond this and assessed the implementation of ICTs as social embeddedness (Orlikowski, 1996). This second discussion assumes that IS development is about the interplay between Information Technology (IT) and the existing institutions and social practices (Avgerou, 2008; Sahay & Avgerou, 2002). The third discourse, however, builds on social embeddedness and assesses how IS can be a transformative tool to bring about change for developing countries (Akpan, 2003; Bhatnagar, 2000). Seen in the context of this review, this study will add to the literature by addressing the second discourse on ICT as social embeddedness, by examining how individuals in the rural villages are using the information they are accessing online.

Although much research has been conducted under each of these three discourses, any in-depth examination of the contextual background unique to each developing country is still lacking (Walsham & Sahay, 2006). This study aims to further develop 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. Therefore, this research focuses on the interaction of ICT and the local cultural values and norms. The research question of this study can be phrased in the following terms: *What is the interplay between computer-mediated information produced elsewhere and local traditions?*

This thesis is organised as follows. Chapter Two will provide a review of the current literature on ICT for development and a discussion on cultural identity in terms of ICT. Chapter Three presents a brief account of the characteristics of the Samoan society relevant to this study. The methodology approach adopted for this research is described in Chapter Four. A discussion of the findings is presented in Chapter Five. Chapter Six presents an analysis and concludes this thesis with, a summary of findings and offers a way forward for future studies in this field.

2 Chapter 2: Literature Review

2.1 Introduction

This chapter provides an insight in the past and current landscape of the field of ICT for Development (ICT4D). Section Two explores the concept of ICT and development in detail. Section Three engages focuses on ICT and cultural identity, the issue that is the focal point of this study. Section Four will summarise the key points raised in the literature review.

2.2 Conceptualising ICT and Development

ICT and development are broad concepts and are used in different contexts. Therefore, I start by uncovering the concept of ICT4D by first defining ICT, and looking at the development of the concept ICT. The development of ICT can be classified in four stages all the way through human history. The efficiency of communication technologies in terms of speed, distance, reliability and volume has greatly improved throughout these four stages.

The first stage of ICT took place during the time when information was communicated through fast-running couriers, pigeons, smoke signals and the sound of drums. This stage was presumably the longest before the discovery of telegraphic transmission , by Samuel Morse in 1838 (Barr, 1989) . During the second stage, starting from the 1870s and subsequent years electricity was utilised in, making possible the production of telephone, radio, telegraph and eventually television. The third stage started with the invention of transistors in the 1940s which lead to the creation of, integrated circuits, semi-conductors and eventually electronic computers. These new technologies allowed for the integration of telecommunication and computer technologies. Prior to this, these two technologies had been used in different ways. Telephones, television systems and facsimile machines were utilised for transmission between people. Whereas computer technology, was a result of an electro-mechanical calculator produced in 1939 that lead to the production of the very first, electronic computer during the Second World War.

It was not until the late 1940s that transistors were invented, these made it possible to design smaller computers with higher speed (Riordan & Hoddeson, 1998). In the 1950s

the integration between telecommunications technologies and computers slowly gained momentum. This enabled computer-communications networks which made it possible to link computers and other terminals. The fourth stage in the development of ICT involves the shift from analog modes to digital systems making the technologies faster, more powerful and reliable (Hamelink, 1997).

Hamelink (1997) conceptualises the term ICT as:

“...those technologies that enable the handling of information and facilitate different forms of communication among human actors, between human beings and electronic systems, and among electronic systems. These technologies can be sub-divided into: capturing technologies, storage technologies, processing technologies, communication technologies and display technologies” (p. 3)

Information is converted into digital form made possible with input devices (keyboards, voice activators, bar code readers, image scanners) that captures the information. Information can be stored and retrieved in digital form, made possible with devices such as hard drives and CD-ROMs. There are processing systems and application software that run the digital ICTs. Devices such as digital cellular networks, broadcasting, integrated services, wide area networks, modems, fibre optics and many more devices facilitate communications. The output devices, such as display screens, digital television and printers enable the display of digital information.

However, Orlikowski and Iacono (2001), based on their research on Information Systems Research articles published between 1990 and 2000, and concluded that ICT is more than what Hamelink (1997) claims it to be. Table 2.2 outlines the five categories conceptualising ICT which Orlikowski and Iacono (2001) identified in their study.

Table 2.2: Views conceptualising ICT

View	Description
Nominal	ICT is absent, in name only with no specific meaning.
Tool	ICT is the engineered artefact, a tool for enhancing productivity, a tool for information processing, and a tool for changing social relations.
Proxy	ICT focus is on one or a few key elements in common that are understood to represent or stand for the essential aspect, property, or value.
Ensemble	ICT is more than a tool but a package which also includes the components required to apply that technical artefact to some socio – economic activity.
Computational	ICT is as the technology that manipulates, stores, retrieves, and transmits information that processes, supports, models or simulates aspects of the world.

The categorisation of the different concepts in ICT by Orlikowski and Iacono (2001) captures the essence of this study, whereas the definition offered by Hamelink (1997) only focuses on the nominal and computational views. The tool and ensemble view for ICT has been widely used in the context of development, whereby ICT will assist in improving the socio-economic status of developing countries (Harris & Harris, 2011; Mamaghani, 2010; Steinmueller, 2001; Ward & Ashcroft, 1998). ICT to that extent is a tool composed of many devices that enables various functions and usage, making communicating information more efficient. ICT has been perceived by governments, international development agencies and donors to be one of the tools to revolutionise and accelerate development.

Development is a broad term. Previously, development was measured based on the economic growth and the modern standards (according to Western ideas) of the country. The dominant view has been that developing nations need to leapfrog their standard of living to be at the same level as developed nations, in terms of economic growth and modernisation. According to this view, developing nations lack the knowledge and the understanding to improve on traditional methods (Madon, 2000). It is assumed that, since developed nations (mainly Western countries) have utilised the industrial revolution and are applying modern technologies to their way of living, the developed nations are at an advanced stage of living in comparison to developing nations.

Sen (1999) contributed to the literature by taking a different view on development. He argues that defining the development status of countries should not be limited to monetary value but should be inclusive of people's way of life. The focus is on making the individual autonomous within the groups they belong to. He recognises that within developed nations they too have "deeply disadvantaged people, who lack basic opportunities of health care or functional educational or gainful employment..." (p. 15). His argument focuses on development as freedom and he distinguishes five types of freedom (1) political freedoms (2) economic facilities (3) social opportunity (4) transparency guarantees and (5) protective security. When these are integrated together, "it will directly enhance the capabilities of people" (p. 40). According to Sen (1999) social opportunity is "the arrangement that society makes for education, health care and so on, which influence the individual's substantive freedom to live better" (p. 39). One

of the ways to achieve such arrangements is by having access to information. ICT has been accepted to be the platform that provides access to unlimited information. Individuals can learn how to read and write through ICT tools, since being illiterate can limit a person's freedom or development. ICT will enable individuals to express themselves privately or publicly and to conduct economic and political activities. Individuals will not be limited in expressing their views but are free to explore and gain information on how to improve their standard of living, and, in turn, developing their status.

As it stands, the diffusion of ICT for development dates back to 1956, when the first digital computer was installed in Calcutta, India, at the Scientific Calculation Works. The aim was to enhance the efficiency of the work as part of the administrative function of the public sector (Heeks, 2008). This ICT4D project is classified by Avgerou (2008) as the technology transference discourse, whereby ICT will assist in narrowing the gap in productivity between the developed and developing countries. The World Bank in 1995 introduced the *infoDev* project, the aim being to use ITs (precursor of ICT) as a tool for development (Batchelor et al., 2003).

The birth of the internet to some extent saw a surge in support to advance ICT4D. The United Nations (UN) in particular adopted and cultivated ICT4D as part of the Millennium Development Goals (MDG) introduced in 2000 (Hayes, 2011; Heeks, 2008). As a result, telecentres (computer centres) became one of the many strategies for ICT4D. The purpose of the telecentres was to assist in bridging the perceived digital divide, and the focus was on giving rural and urban communities around the world, access to ICT. Telecentres first appeared in the mid-1980s in a farming community in Sweden, a place that offered computer and telecommunication services to the local people (Couldry, 2007). The goal for the telecentres is to allow those who live in urban and rural areas to gain access to ICT "for economic, personal, social and economic development" (Kumar, Harris, & Balaji, 2003, p. 124). The World Bank Group's ICT Department (1998) claim that ICT is the key in accelerating the development progress of developing nations, ultimately leading in achieving the MGD goals set by the UN. However, the enthusiasm of these international agencies to promote the awareness of ICT and its link to socio-economic development is questionable. Studies (Dysart-Gale,

Pitula, & Radhakrishnan, 2011; Madon, 2005; Nangit & Ranga, 2007; Obra, Camara, & Melendez, 2002) have found that achieving such assertions requires more than implementing the technologies. People need to know how to use the technology, interpret and disseminate the information found on ICT to their community in order for any progress in development to occur.

As discussed earlier, development is much more than providing a tool, whether this is ICT or other resources. The optimism by the World Bank has been criticised in the extant literatures, about the benefits telecentres bring to a society (Gamage & Halpin, 2006; Krishnapillai, 2006; Sahay & Avgerou, 2002). One of the major problems encountered with telecentres is sustainability (Kumar et al., 2003; Mtega & Malekani, 2009). The equipment requires continual maintenance, with costs proving to be expensive. Harris & Harris (2011) highlighted another important factor, i.e. that people need the necessary training in order for the community to fully utilise ICT and the equipment provided at the telecentres. Furthermore, the local context should be considered at the planning and adoption phases for ICT interventions, since this will influence the way ICT is successfully implemented and used in the community (Garofalakis & Koekeris, 2010; Heeks, 2002; Kumar et al., 2003; Mtega & Malekani, 2009).

Despite the challenges faced with the implementation of telecentres, the initiative has allowed for people to gain new skills and capabilities in modern technologies. Additional to this people will now have the opportunity to access an unlimited amount of information through the use of the internet. As McLuhan (1967) observed, technology determinists once predicted there will come a time when what was once an industrial society will give way to an information society. The expansion and improvement of ICT as mentioned earlier, has certainly fuelled this assertion by technology determinists. Nowadays ICT tools such as satellite television, the internet, cell phones and Bluetooth (to name but a few) are enabling faster communication and unlimited access to information. Webster (2006) observes that “we exist in a media – saturated environment” (p. 20) in which optimistic futurists believe and predict that the creation of a new information society is in order. Bell (1973) may have been among the first sociologists to explore the implication new communication technology would have

on society naming it the post-industrial society with others later referring to this era as the information society (DiMaggio, Hargittai, Russell, & Robinson, 2001). Bell (1973) argues that the new invention of communication and computers will bring about social consequences. In his trilogy *The Information Age* Castells (1996, 1997) makes a bold assertion, about the creation of a new society: the network society, as a result of digital information technology. His assertion is a result of globalisation where people are grounded locally but are connected in the virtual realm. Economists like Porat (1977) discuss that the world is at a new stage of development known as the information economy, given that one-third of the human race are employed in information related work.

2.3 Cultural Identity

Within the business context, culture has been widely studied in terms of organisational culture. However, cultural studies go beyond the examinations of organisations as a unit of analysis. When it comes to defining the term culture, scholars, many of them from Western societies, have been exploring this concept in depth by analysing different communities. However, culture is also crucial in the adoption of ICT and how it is utilised. Culture must be taken seriously when implementing ICT in the business context (Walsham, 2000). This section seeks to uncover the issues of culture that are central to ICT for development.

Individuals are made up of different composites that define who they are, and that characterise their identity. Calhoun (1994) argues that individuals belong to a culture that distinguishes them from one another. Castell's (1997) perception of identity is "people's source of meaning and experience" (p. 6). What is important to highlight is that identity must be separated from the roles people play in everyday life – 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). People define themselves through their culture. They place a lot of value on their traditions and customs. Culture can have many forms and meanings, Hofstede's (1984) study on culture summarised it as an internal programming of the mind that differentiates one group of people from another. According to Kroeber and Kluckhohn (1963), culture is transmitted by symbols and behaviour that consist of patterns, distinctive to human

groups. Geertz (1973) outlines the factors that encapsulate the depth and the complexity of culture that defines a society:

“ (1) the total way of life of a people (2) the social legacy the individual acquires from his group (3) a way of thinking, feeling and believing (4) an abstraction from behaviour (5) a theory on the part of the anthropologist about the way in which a group of people in fact behave (6) a store – house of pooled learning (7) a set of standardized orientations to recurrent problems (8) learned behaviour (9) a mechanism for the normative regulation of behaviour (10) a set of techniques for adjusting both to the external environment and to other men (11) a precipitate of history and turning, perhaps in desperation to similes, as a map, as a sieve, and as a matrix” (pp. 4-5).

In order for the local culture to survive through time, the local group invest their time in passing on their knowledge about the traditions and culture to the younger generations. The transference of culture is not genetic or biological but it is rather taught by involving the young people in the various local traditions, allowing them to experience the culture through participation. Harris and Harris (2011) found in their study on ICT for cultural transmission among indigenous peoples, that individuals value the way their culture is communicated to others, in order to retain their identity. Nonetheless, despite the efforts of the older generation in transferring traditional skills and customs to the younger generation, Kroeber (1948) highlights an important point, which is that culture can change overtime. Retaining one’s culture has become extremely difficult in the growth of globalisation. According to D’Mello (2005), globalisation will “disrupt the temporal and spatial certainties offered by community, place, stable employment, class structures, and institutions of religion, state, and the family” (p. 4).

ICT to some extent has stimulated the expansion and growth of globalisation, since ICT allows the transferring of cultural knowledge from one society to another (Harris & Harris, 2011). The internet provides a medium where people can use websites as a depository place to publish videos, voice recordings and written materials about their culture. Having cultural materials available online will not limit the transmission of culture to the young people that live in the country but others will be able to access it as well. Local people who have migrated to other areas of the world will be able to extract this information for their use. Cultures will be exposed to other societies, where they can take what they see and read, manipulate, change and adapt the information to their social norms and also vice versa for the local cultures. This is mirrored by Castells’ (1997) view that ICT is enabling a network society 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 result in the construction of new identities (Castells, 2000).

Turkle's (1995) assertion is that the internet "links millions of people in new spaces that are changing the way we think, the nature of our sexuality, the form of our communities, our very identities" (p. 9). The internet is changing the way people interact, town hall meetings and street gatherings will be replaced by the individual's contact with computer screens. Individuals correspond through electronic mails and join interest groups from around the world. The people they come into contact with are from other countries, and in effect meeting people in physical location is slowly diminishing (DiMaggio et al., 2001; Wynn & Katz, 1997).

"But it is on the Internet that our confrontations with technology as it collides with our sense of human identity are fresh, even raw. In the real-time communities of cyberspace, we are dwellers on the threshold between the real and the virtual, unsure of our footing, inventing ourselves as we go along" (Turkle, 1995, p. 10).

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). As a consequence, expression of individuals' identity is likely to take place in a wider global community, where interactions and relationships occur outside of the local context. Thus, identity is not fixed but rather an "on-going lifelong project in which individuals constantly attempt to maintain a sense of balance" (Block, 2006, p. 44). Through the use of written words individuals are inherently, without being aware of it, expressing their identity. Written words are powerful in the sense that others can disassemble and recreate them into multiple identities to reflect the original authors. Moreover, the intended recipient of the message may interpret the words in a different way; therefore, the originator has no control over 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 stated by Wynn and 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).

Through the telecentres and by having access to ICT individuals in Samoa will be exposed to more information than ever before. Information will be from global sources as Giddens (1991) who suggests that globalisation is a result of late modernity, in which worldwide events shape local circumstances and vice versa. ICT will allow local people to communicate globally gaining information from many sources other than the Samoan government. Given Samoa's location the country is no longer isolated from the world due to ICT connections. A concern however, is raised by a member of the Samoan society when her view was asked on what she thought about internet connection.

"One of the things that I worry about is how this exposure is going to impact on the culture... we are exposing ourselves to a whole lot of philosophies and ways of life, bringing in a lot of western values." (Prosser, 2004, p. 1)

Pacific cultures are largely oral, the social norms in Samoa value family, the community and the village, and everyone sharing whatever means they have. As it is with the exchange and sharing of information, this interaction is carried out within the community. In particular, the *faamatai* system as depicted in Figure 3.2 (described in detail in Chapter Three) is the socio-metric wheel that determines the flow of information into the village (Vaai, 1999). In this hierarchical type system, information about Government changes and development projects are firstly given to the village council or the Women's Committee. Depending on which group the information was passed onto, the group will then decide whether the information is worth sharing with the whole village. The village council or Women's Committee are the information holder, it is up to these groups how the information is passed on. The exchange of information is face-to-face interaction where a village meeting is summoned in each group to share the information.

This traditional form of communicating information will now be challenged with access to ICT where access to information is unlimited and village people are exposed to democratic ideas. Each individual has the right to information that may be at odds with the social norms of traditional information exchange. In the closely knit Samoan society, the focus is on family. Information shared among the villagers deals with local community issues rather than global matters. There is a likely chance that the telecentre manager will become an expert in information exchange, consequently challenging the role of the village council and Women's Committee in the village. In addition, those

individuals who obtain information via ICT will not be obligated to share information with the wider community. The interaction will be limited to the individual or immediate family. Apart from the way information will be shared, another concern is the type of information individuals will be exposed to. Individuals may be influenced by the ideas and philosophies they read about and in turn adapt this to the Samoan way of life.

2.4 Chapter summary

So far, this chapter has presented the literature relevant to the foundation of this study. ICT is nominal, a tool, it is proxy, an ensemble and it is computational and with its intervention has been linked to development. ICT4D is contested on whether its purpose is fulfilled. The proposed benefits ICT brings into a community may be hard to identify or predict, especially when it comes in the form of a telecentre. The potential users may use it for reasons other than those anticipated by the project donors. The implementation of ICT4D in parts of the world where the Samoan culture and customs are observed may present some challenges in terms of acceptance. The norms and traditions are continually adapting and changing with time, but the spirit may remain the same. Access to new information from many different websites may have an impact on the local culture. The context of this study will be discussed in the following chapter, highlighting the Samoan traditions and customs.

3 Chapter 3: Contextual background of this study – Samoa

3.1 Introduction

The independent state of Samoa sits in the central South Pacific ocean, with an approximate population of 188, 000 (Samoa Bureau of Statistics, 2010). The country was formerly known as Western Samoa up until 1997 and it is composed of four inhabited islands: Savaii, Upolu, Manono and Apolima. Samoa belongs to a 15 island archipelago that includes the eastern islands namely Tutuila and Manono which are the territories of United States of America. *Gagana Samoa* is the spoken language for all, while English is the second language that is used predominantly in education, businesses and organisations.

This chapter will focus on setting the Samoan context of this study, the *faaSamoa* way of life, changing times including economic way of life and the role of ICT in the socio-metric system of the *faaSamoa*. Section Two discusses the *faamatai* – the chiefly system that has governed and dictated the way of life in Samoa for centuries. Section Three explains the *faaSamoa* - the way of life of the Samoan people. Section Four will depict the journey of telecommunications in Samoa. Section Five describes the implementation of the *feso'otai* centre project. Sections Six to Eight will give an account of the villages selected for this study. A summary of this chapter is provided in Section Nine.

3.2 Chiefly system – village structure

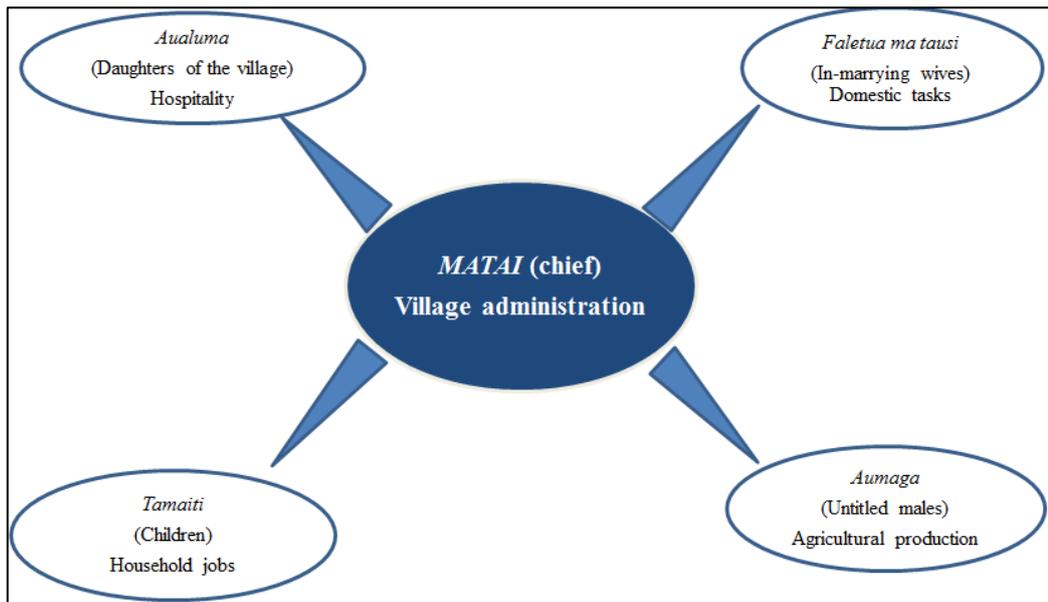
The traditions, values and principles in Samoa are influenced by the rule of the *faamatai* (chiefly system). The *faamatai* sets the basis that links all aspects of Samoan society whereby individuals are aware of where they belong, their rights and responsibilities (Vaai, 1999). In this system, one renders service (*tautua*) and respect (*faaaloalo*) to those of higher rank and seniority. Through the *faamatai* system the Samoan way of life - *faaSamoa* is observed, in which individuals perform tasks aimed at ensuring the basic needs of all family members are met. The *faaSamoa* is a testament to the unity of family, village and society (Fairbairn-Dunlop, 1991; Meleisea & Meleisea, 1987).

The foundation of the *faamatai* system links back to the Samoans ancestral origins of *Tagaloa-a-lagi* (God of creator). In this system there are two categories of chiefs: the *ali'i* (high chief) and *tulafale* (orator). The *ali'i* titles are the most revered given their ancestral connection with *Tagaloa-a-lagi*, the closer the title to its origin the more sacredness it carries. Although orator titles originated from the same ancestral connection, they hold different responsibilities in society from that of high chiefs (Vaai, 1999). *Ali'i* titles carry with them authority, while *tulafale* enact on the decisions made by the *ali'i*. However in families, the chiefs have authority over family matters, regardless of whether they are *ali'i* or *tulafale*.

The concept of *aiga* - family is not limited to immediate relatives but also includes *aiga potopoto* – the extended family. This means relationships with maternal and paternal relatives are recognised and are included in the *aiga* activities, decisions and biddings. In essence the *aiga* has control over the appointment of the chiefly titles which they are associated with. The selection of the chief holders is not necessarily inherited but rather a decision made by senior family members with the exception of paramount chiefs (Meleisea & Meleisea, 1987). This method of selection is reflected by the Samoan saying “*o le ala i le pule o le tautua*” which simply translates as – “the way to authority, one must serve”. Paramount chiefs (*papa, ao* or *tamaaiga*) are superior to that of *ali'i* and *tulafale*. These titles are at a district or national level, where villages within a given territory select one title holder at a time. Paramount chiefs are the most respected in their province of origin. The Head of State of Samoa is selected from four paramount titles, however they are not limited to these four, because, as Vaai (1999) observed, there are seven others that carry the same level of importance.

The hierarchy placement of chiefs is also reflected in the village structure as shown in Figure 3.2. The village is divided into groups according to the gender, status and age of the villagers. Each sub group has its own duties and responsibilities to perform the tasks that make the village function. The *faamatai* institutes the division within the village between men, women and children, all of whom have appointed roles in the political and economic function of the village. Specifically there are five groups that constitute this socio – metric of *faamatai*: (1) *saofaiga* – village council (2) *aumaga* – sons of chiefs (3) *sa'oao ma tamaitai* – daughters of chiefs (4) *faletua ma tausii* – wives of chiefs (5) *tamaiti* – children (Vaai, 1999).

Figure 3.2: The hierarchy of the *faamatai* system - village structure in Samoa



The untitled men of the village, known as the *aumaga* are divided into two groups based on their age. This separation is to encourage the value of respect between the different age groups. The senior members are in direct communication with the chiefs, by which junior members follow instructions from the senior members. Any young men who have finished school (college or university level) will automatically join the *aumaga*. This group also includes spouses of the village women. The *aumaga* are also known as the “*malosi o le nu’u* – strength of the village” (Vaai, 1999). Their role includes tasks that require physical strength such as cultivating plantations, fishing, preparing meals for the family. They are assigned to serve the council of chiefs (*fono a matai*) and provide for their families through agriculture production. They also have an important role to play in the house of chiefs, like conducting the *Ava* ceremony – the traditional greeting ritual, as well as preparing and serving the meals. Basically they are the hands and feet of the chiefs.

The Women’s Committee or the ladies village is divided into two sub-groups: *tamaitai* – daughters of chiefs who live in the village, young ladies who have finished school, single or widowed women. In some villages this group is known as the *aualuma*. The hierarchy in this group is dependent on the seniority of the lady, and the family’s *matai* position in the village’s protocol – *faalupega*. The task of this group is to manufacture traditional wealth, like producing Samoa’s fine mats and crafts. They are responsible for

hosting visiting parties by making sure family homes are well equipped for visitors. An important role for the *tamaitai* as highlighted by Vaai (1999) they are “being peacemakers and mediators over disputes, not only within families but in the village” (p. 40). The second sub-group *faletua ma tausī* are the wives of the village chiefs who originate from other villages. The structure to this group in the committee is also in accordance with the seniority of their husband’s title. Since majority of the *faletua ma tausī* are from other villages, their contribution to the Women’s Committee is minimal.

The role of the women in the Samoan custom is very important as they are responsible for the well-being of the family, keeping homes in order and in control. There is a Samoan saying about women “*O oe o le pae ma le auli- O le fa’alelei aiga ma fa’afealofani ona tagata*” simply translated as “women make things right in the family and [are the ones] who keep everyone in harmony”. The Women’s Committee also focuses on sharing ideas and knowledge as to how living standards can be improved in the village. There is a monthly meeting for each group as well as a combined committee meeting once a month. Each group has *asiasiaga* where members bring items for inspection. The purpose of these inspections is to encourage families to invest in items that will help improve their standard of living. The items range from kitchen utensils and cutlery to beddings to handicrafts like mats and emergency equipment like tarpaulins. Appendix Four (Samoa Bureau of Statistics, 2008) shows the status of the population who are economically active which is 32 percent in comparison to 65 percent of the population who are not economically active. This statistic puts into perspective the economic activity of the country, where men deal with income earning activity like plantation, farming and fishing. The women on the other hand deal with mainly non-economic activities like household chores.

3.2.1 Dissemination of information

The *faamatai* system determines how information is introduced and passed onto the villagers. As stated previously, traditionally, before the introduction of media broadcasting such as newspapers, radio and television, the village mayor (and council), the church Ministers and later the Women’s Committee were the first groups of people in the village to have access to any information. The main source of the information was the Samoan Government. Depending on the topic, either of these groups was provided

with the information, a village meeting then being summoned to share the issues raised by the information given. The information provided ranged from Government relations, current news, wellbeing of the people, and how to manage their plantation and crops as well as health related issues (Macpherson & Macpherson, 2009; Meleisea & Meleisea, 1987).

At present, important information related to Government changes, health and environmental issues are still being passed onto the villagers, through village meetings. There is a system in place with how information is given. Government officials seek the permission of the village mayor and its council, to address the village before any action is taken. This is also how the *feso'otai* centres were introduced to the villages. The Ministry of Communication and Information Technology (MCIT) officials sought consent from the village council to discuss the topic with the Women's Committee. MCIT officials visited numerous villages to propose the *feso'otai* centres, however only a few agreed to accept the project. It was the Women's Committee who managed the *feso'otai* centres, by setting the rules and regulations on how the Centres were to be used. Each Centre is assigned a manager by the relevant Women's Committee. This person however, does not have control over of how the *feso'otai* centre is operated, as any changes she wants to make at the Centre needs to be discussed with the Women's Committee first. The unique Samoan cultural traits have thus defined how the *feso'otai* centres were implemented.

The introduction of the *feso'otai* centres and specifically having access to ICT, will allow the villagers to find and retrieve information at their leisure. This may change the social norms of how information is passed onto the villagers. The challenge however, will be the type of information individuals will have access to, as Turkle (2004) states:

“Information technology is identity technology. Embedding it in a culture that supports democracy, freedom of expression, tolerance, diversity, and complexity of opinion is one of the next decade's greatest challenges. We cannot afford to fail.” (p. 28).

Through the use of ICT, individuals will express thoughts that may oppose the existing cultural norms. There are ways in the Samoan society to express ones opinion, and it is usually done through family meetings and if worth sharing it is discussed in the sub-group (as shown on Figure 3.2) this person belongs to. However, with ICT, expressing

opinions does not restrict individuals to interact with others in their sub-group but rather allows them to address the issue with anyone. The actions taken by the individual on ICT will not be limited to the way they are expected to act in society. Individuals can use ICT to be a voice that informs them instead of the village council or the Women's Committee.

3.3 The Samoan way of life – *faaSamoa*

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 one's immediate family but also for that of the extended family, the *aiga*, which includes uncles, aunts, and cousins and so on. Researchers claim that "family and village security was achieved by sharing resources and labour in acts of reciprocity" (Fairbairn-Dunlop, 1991, p. 65)

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 latter have to speak with respect to the former. This aspect of the Samoan way of life is not limited to the villages but can also be observed in public places with the way people address each other. Meleisea & Meleisea (1987) make a point about the ranking system in the Samoan society. That regardless of the hierarchy structure in the villages "this inequality was not economic – everybody had access to food and other important resources" (p. 26)

The arrival of Christianity in the 1830s proved to be an era that has since shaped the Samoan customs. Samoans adopted Christianity with a passion and the village rules incorporated the Ten Commandments (Meleisea & Meleisea, 1987). The village with its hierarchical structure revered the church ministers, who are referred to as *faafeagaiga* – covenant, in which the pastors hold a special covenant between the people and God. The Christian beliefs lead to the discovery of the Samoan's motto *faavae i le Atua Samoa* –

Samoa is founded on God. Worship is an integral part of Samoan life whereby people attend church either on Saturday or Sunday. In the rural villages there is an observed village curfew for evening worship during the week. A horn is sounded to mark the end and beginning of the curfew. The *aumaga* dress in their uniform, line the village street to ensure sure that people do not leave their homes until the horn is sounded again signalling the end of the curfew. The Samoan people have learnt to integrate Christianity into their way of life.

However, the missionaries had an impact on how Christian values and ways would be imposed. Given that the missionaries who arrived in Samoa were from the lower and middle classes of England, bringing with them the mentality that life was hard work and they perceived the Samoans' way of life to be lazy and unmotivated (Meleisea & Meleisea, 1987). The missionaries encouraged the Samoans to be more productive and to engage in paid employment. Their European/Western way of life, together with the teachings of the Bible, changed the way some of the Samoan customs were practised. Chiefs were no longer allowed to have more than one wife as it was in their traditions, as this was considered adulterous. People were made to wear clothing that covered their entire body since the Samoan people of that time only wore clothes below their waist. Prior to the arrival of the missionaries, it was the duty of the men to prepare family meals. While women were encouraged by the missionaries to carry out this task, the young untitled men have continued to help prepare meals for their families. In some ways this situation is best articulated by Meleisea & Meleisea (1987) "although there is evidence that Christianity revolutionised Samoan culture during the mid-nineteenth century, these changes were absorbed and Samoanised" (p. 69).

To highlight, ICT is allowing access to information where individuals can retrieve when they want to, this will eliminate the current hierarchical way of getting information. People can access information from more sources through ICT. There is a strong emphasis on face-to-face interaction in the rural villagers, everyone knowing what is said. However, with ICT there may be a possibility of people withholding information, they no longer need to interact face-to-face and tell others what they know.

3.4 Telecommunication path in Samoa

Until the introduction of ICT in Samoa communication nationally and internationally was slow and costly. Brief overview of the telecommunication path in Samoa shows an improvement. In 1972 the Samoan Government administered a Telecom and Postal service under the Post Office Act. Up until this time high frequency radio and Morse code had been widely used for basic communication locally and overseas. The first automatic exchange for telephone service linking to New Zealand was established in 1977. By 1980 international communication was improved when the country connected with Standard B Satellite Earth Station. Not without problems, a fire broke out in 1986 destroying the Telecommunications Head Office, the operations centre, the Apia Radio for communication with ships and the Postal service. Another event took place 10 years later affecting the telecommunication services to Samoa, there were two devastating cyclones hit the country causing major damage to the equipment.

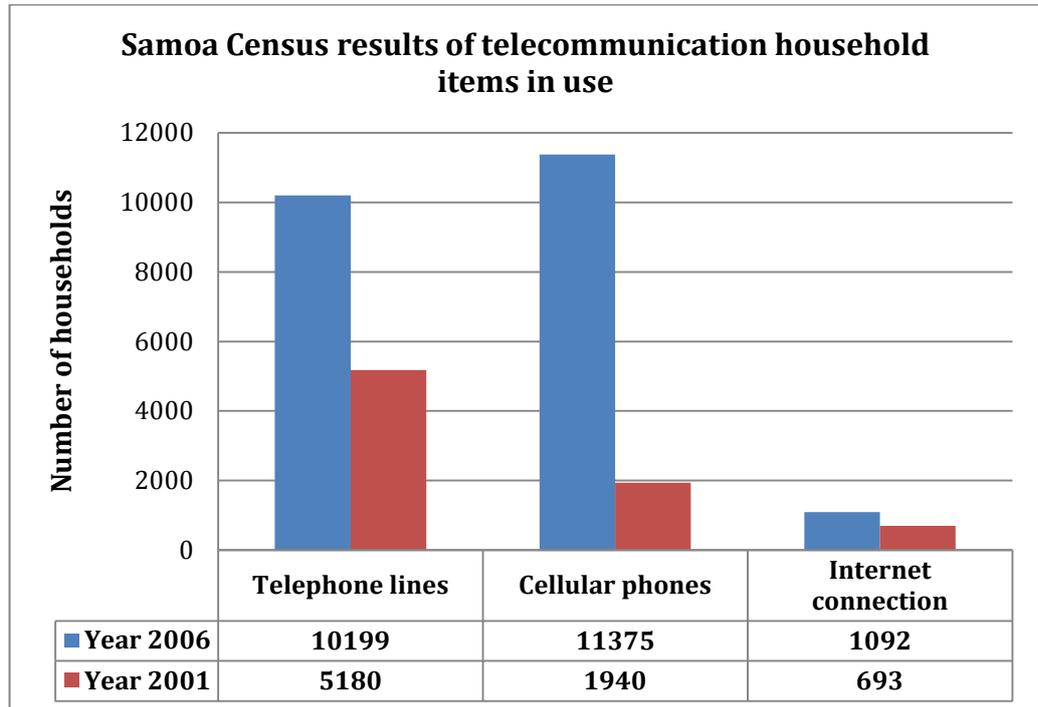
From 1990 to 1994 Samoa's telecommunication infrastructure received funding from the Asian Development Bank and the World Bank. The purpose of this major funding was to aid the expansion and upgrading of the telecommunications network in Samoa. This project laid the foundation necessary to develop the telecommunication connections for rural areas. The project allowed for 7,000 more telephone lines, from the previous 3,000 already built. As a result, by the end of 1992 more people had access to telephone lines, consequently improving the communication facilities in the surrounding districts.

A new Standard A Satellite Earth Station was established in 1994 which made possible an increase in more than 90 international circuits, from the 46 provided by the old Station. The new Satellite enhanced the quality of communication on the telephone lines. In 1995 there was a joint venture arrangement between the government of Samoa and Telecom New Zealand for the provision of a mobile service to the country. Four years later in July 1999 the government established a Ministry of Post and Telecommunications for policy development. In the same year a state owned enterprise, Samoa Communication Limited, was licensed as the main provider of fixed line services and international telecom and postal services (Ministry of Posts and Telecommunications, 2000).

In April 2003, the World Bank funded a Telecom and Postal sector reform project that has since transformed the communication sector in Samoa. This project led to the privatisation of Samoa Communication Limited to SamoaTel. In 2006 Digicel (a cellular mobile provider) entered the Samoan market and it initiated competitive rates, not only making cellular phones affordable but also by offering low-priced rates. The following year, SamoaTel offered GoMobile, a mobile phone service to compete with Digicel. To date there are 13,000 subscribers of landlines while the majority of Samoans use cellular services, numbering 103,000 subscribers. According to the Ministry of Communication and Information Technology Samoa (2010b), the country is following international trends with more mobiles and less landline services.

The internet was introduced to Samoa by a private company called Pacific Internet Company in the mid-1990s but later went into receivership in 1997. The Samoa Government took control of the situation and assigned the then Post Office Department to manage internet services to the country. This move by the Government was necessary in order to ensure reliable internet connection (Ministry of Posts and Telecommunications, 2000). This was especially crucial at the time when Samoa was increasing its profile with international businesses and organisations. Therefore, there was a need to stress the national and local economic value of ICT. The Post Office continued to be the main provider for internet connection. However in 1998 two companies, Computer Services Limited and Lesa Telephone Services Limited, proposed to become internet providers and were both granted authorisation to provide this service for the country. Later, in 2000, iPasifika became the third internet provider for Samoa (Ministry of Posts and Telecommunications, 2000). Figure 3.4 illustrates the growth of telecommunication usage in households in the course of five years, as Census results shows.

Figure 3.4: 2006 Samoa Census – Telecommunication usage in Households



Main internet user in the late 1990s and early 2000s were international organisations, local businesses, the education sector and the government. There was little use by individuals (Ministry of Posts and Telecommunications, 2000). Samoa’s 2001 census (Samoa Bureau of Statistics, 2001) reported that approximately 1,200 homes owned computers and only half of the recorded homes had access to the internet, with the majority of these homes being located in the Apia district.

The Samoan Government has given priority to making the internet accessible to the country, not only for the convenience of instant communication but also the access to information that will prove beneficial for education and health. In July 2008, the Samoan Government signed an agreement with American Samoa and Hawaii to connect Samoa to the international fiber optic cable, linking three countries and allowing faster online connection. In May 2009, the Samoan Government held a special ceremony to launch the submarine project, marking it as a milestone in the telecommunication history of Samoa (Ministry of Communications and Information Technology, 2010b).

3.5 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. One of these strategies is to provide ICT for all “to harness ICT as an enabler of social and economic development for Samoa” (Ministry of Communications and Information Technology, 2006, p. 14). As a result of this meeting, seven developments were identified, one of which was the Rural Connectivity Project. The Project was funded by the Government of Samoa, International Telecommunication Union (ITU), United Nations Development Program (UNDP), Asia-Pacific Telecommunication (APT) and VIA Technology. Part of achieving this project was the establishment of *feso'otai* centres in the rural villages. So in 2005, the first *feso'otai* centre was opened.

Eventually, 12 *feso'otai* centres were established. The first two centres were launched in December 2005 while the remainder 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. As seen in Appendix 5, each centre was given five computers, one fax machine, one digital camera, one data projector and screen, one printer, one scanner, one DVD player, one television, one photocopier, and internet connection. 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, four in Upolu Island and another four located on Savaii Island. Two of the *feso'otai* centres 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, 2010b) for internet connection. MCIT officials have a Project Co-ordinator that keeps in contact with each *feso'otai* centre. The Project Co-ordinator makes monthly visits to the *feso'otai* centre, along with a Computer Technician to check the equipment and see whether the centre is

still in operation. The Women's Committee of each village were given the chance to select a manager for *feso'otai* centre. The *feso'otai* centres are managed and looked after by the Women's Committee of each village. The Women's Committee sets the rules and regulation on how the *feso'otai* centre is used. The managers role is to keep record of who uses the place, what is been used and how much was earned each day. This record is given as a report to the Women's Committee and to the Project Co-ordinator. There is a user pay policy at every centre for all the services provided. The charges are the standard rates set out by MCIT (Ministry of Communications and Information Technology, 2010a). The 2010 financial reports indicate that the main usage of the centres involves the photocopying 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.

The first three villages to implement the *feso'otai* centre were examined for this study. In order to keep the anonymity of the participants, the villages were assigned labels – A, B and C. Villages A and B are located on Upolu Island and Village C is on Savaii Island. In all these villages the local people currently rely on the radio, television and newspaper, video tapes and DVDs for information, other than the information provided by the Women's Committee or the village council. A short description of each village

3.6 Village A

Village A is located on the west coast of Upolu Island with an estimated population of 1,100 (Samoa Bureau of Statistics, 2010). The *feso'otai* centre is situated by the seaside together with the Women's Committee building on a securely fenced site. The latest village development involves the establishment of new residential land, inland from the former coastal site. Given the new land, Village A requires improvement in terms of water and electrical power supply. The tar sealed road also needs upgrading. Figure 3.6, shows a picture of the *feso'otai* centre at Village A, showing two operable computers and a television which no longer works. Of the three centres visited, this one had the highest income earned for the year 2010.

Figure 3.6: Village A – feso’otai centre



3.7 Village B

Village B is situated to the west of Apia and was the second location visited, with 675 inhabitants (Samoa Bureau of Statistics, 2010). In comparison to the other villages, Village B is set out in a more traditional way. The meeting house is at the centre of the village *malae* (field) and family houses surround the meeting house in a circular formation. The village *malae* (field) in front of the meeting house is the place where the young people congregate late afternoon, usually playing sport or just socialising with their friends. Most of the housing features a Samoan *fale* with a modern house at rear. Figure 3.7 show one of the computers at the *feso’otai* centre in Village B.

Figure 3.7: Village B – Computer at the feso’otai centre



The *feso’otai* centre at Village B is located between the village meeting house and the local primary school. There is a billboard on the side of the main road providing information about the centre, but at the actual site there were no identifying mechanisms to identify the building as a *feso’otai* centre. The initial visit to the *feso’otai* centre sought assistance from the local dairy owner for directions. The dairy owner referred to the *feso’otai* centre as “*the school*”. The centre is in a small air-conditioned room just

big enough to fit the necessary equipment. When compared to the centre at Village A, this centre is slightly smaller.

3.8 Village C

This village is located on the Island of Savaii and it has an approximate population of 720 (Samoa Bureau of Statistics, 2010). There are two ways for transport to Savaii: one can either catch the forty-five minute ferry one way or fly there by airplane. Locals prefer the use of the ferry since this is the cheaper option. The village of Salelologa is both the access point and the main shopping venue on the island. The township of Salelologa has the main market place and in 2009, the market was relocated with new improvements. The traditional customs and cultures in Samoan society, remain strong in Savaii, equally Salelologa does not echo the metropolitan look and feel of Apia. Figure 3.8 shows the newly built *feso'otai* centre room connected to the meeting house.

Figure 3.8: Village C – A view inside the feso'otai centre



The centre at village C was opened in 2005 using a room at the old courthouse. The Women's Committee received funding from Canada to rebuild their meeting house. It was then decided that an additional room would be built in the meeting house for the *feso'otai* centre. When the place is not in use, the computers and machines are covered to prevent dust from settling on the equipment. The Women's Committee sought financial help from the village council in building other furnishings needed for the room like the chairs and tables. Building the Women's Committee house and its contents was a village project, *aumaga* assisted with the work while the chiefs collectively attended the location in support. This village has four churches, a primary school, the district High School and a special education school.

3.9 Chapter summary

This chapter has described the *faaSamoa* system and sets the context for the ICT intervention. As seen, there are likely to be differences between the ways information is introduced in past and to how it will be now given the introduction to ICT. The brief history of telecommunications in Samoa provides an insightful view as to how the country has evolved with the communication technologies of the time. This chapter has set the background necessary for this study and will assist in understanding the research methodology adopt which will be discussed in the following chapter.

4 Chapter 4: Research design

4.1 Introduction

I will start this chapter by explaining in depth the methodological procedures used for this research, in order to answer the research question: *What is the interplay between computer-mediated information produced elsewhere and local traditions?* Section Two will clarify my ontological and epistemological assumptions which guided the research design along with the justification of the interpretive approach adopted. The fourth section will discuss the data collection method and the processes that were involved in obtaining the data. In Section Five I explain my choice of data analysis. Lastly, I conclude this chapter with a reflection on the methodology used.

4.2 Ontological and epistemological assumptions

How we perceive the reality of life determines the way we learn about it. Prior to conducting this research I had to ask the question: What is the existence of reality? In my assumption reality is socially and locally constructed (Guba & Lincoln, 1994) so that “the social world is produced and reinforced by humans through their action and interaction” (Orlikowski & Baroudi, 1991, p. 14). To investigate the Samoan culture and the implementation of *feso’otai* centres, I needed to understand this from the worldview of the local people without imposing my own ideas and beliefs. Therefore, the participants are the experts in their knowledge and understanding of their local context and environment.

What is knowledge and how is it acquired? This question evokes my epistemological assumption that findings are created through the interaction between the researcher and participants (Guba & Lincoln, 1994). In essence, the researcher is not relying on any hypothesis to make sense of the social process (Orlikowski & Baroudi, 1991) but rather the process “involves getting inside the world of those generating it” (Rosen, 1991, p. 8). The aim is to understand with a holistic view how the Samoan people interact with ICT and their local cultural values and norms. Therefore given my world view and the research question it was only appropriate that an interpretivist approach was adopted. Through this lens I attempted to “understand phenomena through the meanings that people assign to them” (Myers & Walsham, 1998, p. 1)

The interpretive standpoint seeks to understand the physical and social reality through the villagers' experience. In this case villagers were viewed as experts in their context "where the phenomenon of interest was examined in its natural setting and from the perspective of the participants; and where researchers did not impose their outsiders' a priori understanding on the situation" (Orlikowski & Baroudi, 1991, p. 5). In this study the attempt was to explore the operation of the *feso'otai* centre in Samoa's rural villages and the meaning these communities assigned to these centres. There were no predefined values, philosophical ideas that were defined, but rather questions and subjects were discussed in relation to local people's experience of the centre.

For this research, I adopted a qualitative interpretive approach in my belief that this would allow me the opportunity to understand the meaning of people's actions and opinions (Myers, 2010). I analysed the social actions vis-à-vis the social and cultural background of the participants (Bryman & Bell, 2007). I agree with the idea that 'getting inside the world' and obtaining knowledge of a phenomenon requires understanding of the participants' experiences. This was achieved by conducting one-on-one interviews, and observing how the participants interact with others at the *feso'otai* centre. Even though I am Samoan, can speak the language fluently and have a good understanding of the customs, I was still viewed as an outsider by the villagers. At times, I was referred to as the *malo*, which simply translates as guest. Being viewed as a guest, to some extent, limited my interactions with the participants. I was on the borderline of being an insider as well as an outsider (Bishop, 2005). As my relationship developed with the centre managers, they felt more comfortable about sharing personal information about private issues, regarding the centre and the village and this gave me a clearer idea about the *feso'otai* centres.

4.3 Data Collection

4.3.1 Gaining access into the fieldwork

The fieldwork was conducted for four weeks in Samoa between October and November 2011. Initially the aim was to examine the first three centres that were implemented. This was based on two assumptions. Firstly that these were amongst the first centres established at the end of the year 2005 to the beginning of 2006 and their degree of

maturity might justify their inclusion in this study. Secondly, villagers will have had time to familiarise themselves with the centre in their communities.

Before embarking on the journey to find the *feso'otai* centres, approval and consent was sought from the Ministry of Communication and Information Technology (MCIT). Just to make it clear, MCIT has the overall control over centres although they are maintained by the villages. Initial contact was made with MCIT in early July 2011, after which approval was given by the CEO to allow access to conduct the research. On the 6th of October 2011, I had a meeting that had been previously arranged with the manager of the Rural Connectivity Project. We discussed my planned itinerary for the coming weeks for visiting the *feso'otai* centres. The Project Coordinator from MCIT was to contact the centre managers, and seek their availability for the study. Since the Project Coordinator was the middle person between the centres and MCIT, it was appropriate that she made the initial contact. This built a mutual trust between the research and participants, thus minimising an outsider stance (Bishop, 2005).

During the meeting with the Rural Connectivity manager it was found that only two of the first three *feso'otai* centres established was still operating. According to the Rural Connectivity Manager the third centre had been closed soon after its implementation in 2005. The centre had been shut down due to management issues between the villagers. Therefore the next centre that had been opened was selected for the study. Two of the centres researched were located on Upolu Island while the third was situated on Savaii Island. As already mentioned in Chapter Three the villages were assigned labels A, B and C, to preserve the anonymity of the participants. Furthermore pseudonyms were used to replace the participants' real names, to keep their identity confidential.

4.3.2 Conducting the fieldwork

The intention had been to spend one week visiting the *feso'otai* centres but this proved to be difficult. The visits had been planned around the availability of the *feso'otai* centre manager who had access (a key) to the centre, the location for the interviews. I stayed with relatives and caught the bus to and from the villages involved in the study. My visit to Village A took from the 11th to the 14th October 2011. During this time, I had the chance to conduct my interviews with the participants, and interacted with other

villagers at various locations such as the local dairy shop, during my bus rides and at the Women’s Committee lunch room. At Village B, I visited the *feso’otai* centre during the 18th to the 21st of October 2012. On the 22nd of October 2012, I took a 45 minute ferry ride to Savaii Island, to the third *feso’otai* centre selected for the research. However, my visit to Village C did not commence until the 28th of October 2012, since the *feso’otai* centre managers were attending computer training workshops held at the town area of Salelologa on Savaii Island from the 24th to 27th of October.

The data for this study was gathered through notes collected from observations while at the village and travelling around Samoa. Appendix 3 was used as guide in conducting observation during the fieldwork. I was interested in observing how the villagers used the computers at the telecentres, and how they interacted with each other at the centre and the equipment they used. Data was also collected from the series of interviews that were conducted. Each interview was digitally recorded which took approximately 45 minutes on average per interview. Other sources of data included interviews with MCIT officials and their documentation about the *feso’otai* centre project.

4.3.3 Semi structure interviews

A total of 17 participants who represented the following groups were interviewed: (a) six village leaders – chiefs and Women’s Committee representatives (b) three *feso’otai* centre managers (c) three *feso’otai* centre users and (d) five non *feso’otai* centre users. Table 4.3.3 shows a summary of the participants, from each village.

Table 4.3.3: Summary of participants

Groups	Upolu Island		Savaii Island
	Village A	Village B	Village C
Village Leaders	2	2	3
Feso’otai centre manager	1	1	1
Centre Users	1	1	1
Centre Non – users	1	2	1
Total	5	6	6

With regards to the non-users, I had thought to target those who were opposed to the implementation of the *feso’otai* centre in the village. However, no one could be found that was opposed to the establishment of the *feso’otai* centres. 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 (Patton, 2002). This approach begins by asking well-situated people in the context of the study whether they might be able to direct the researcher towards others who might be able to contribute information to the study. In this case the process started with the *feso'otai* centre managers and village leaders who assisted in identifying users and non-users of the centres.

Prior, to the interview process, each participant was given a chance to read through the research information sheet and ask questions for clarification. The participants were then asked to sign a Consent Form (Appendix 1) to indicate their agreement to be part of the study. All the interviews were conducted in the participants' preferred language, which was the Samoan language in each case. I prepared a set of indicative questions (Appendix 2) to help guide the interview process. These questions were flexible enough to encourage participants to voice other issues. All but one of the participants agreed to the interviews being held at the centre. One participant requested that the interview be done at the local school, given her busy schedule as a teacher. Prior to each interview, formalities were addressed as appropriate according to Samoan customs and traditions. For example, at the end of every interview, each participant received a gift, to show my gratitude as well as keeping with the *faaSamoa* traditions. This was especially appropriate given participants' hospitality during my visit. Table 4.3.4 provides a summary of the participants' pseudonyms, ages, occupations and backgrounds.

Table 4.3.4: Village A, B and C interviewees' background information

Village	Participant (age)	Occupation	Background
Village A	Ana (51)	Feso'otai Centre manager Secretary of Women's Committee	Owns a small shop in the village, worked in a factory in American Samoa. Completed high school education.
	Sione (53)	Taxi driver, Part time chef, Orator chief	Completed a Diploma in Teaching
	Sina (26)	Fisherwoman	Mother of two
	Ioana (65)	President of Women's Committee, Senior teacher	Sunday school teacher for Congregational church of Samoa (CCS)
	Iosefa (58)	President of the district high school, A church elder at CCS	High chief Involved with the village council
Village B	Olive (24)	Feso'otai Centre manager, Runs computer training for high school students	Mother Completed a Certificate in Office Administration, First started using computers in New Zealand while working in a warehouse. Completed high school
	Ula (58)	Village chief	Involved with the village council, Deacon at CCS, A member of Parents and Teachers Association for the local Primary school
	Felila (45)	President of the <i>feso'otai</i> centre, Member of the village Women's Committee	Holds various roles in the CCS as secretary for Women's Ministry, Youth advisor. Assists with the church's Pre-school
	Maria (64)	Retired,	Involved in Women's Committee, Previous <i>feso'otai</i> centre manager
	Lina (40)	Involved in the Women's Committee	Single mother, Caregiver for her sick father, Member of the Small Business Enterprise Centre
	Mataio (35)	Works on the family plantation	Involved in the <i>Aumaga</i> , Completed a Certificate in Welding and Plumbing
Village C	Nina (36)	Feso'otai centre manager	Member of the Women's Committee
	Pua (23)	Feso'otai centre manager	Member of the Women's Committee Completed high school education
	Eseta (67)	Retired	She belongs to the <i>Sa'oa ma Tamaitai</i> group in the committee, whom among other things they oversee the workings of the Women's Committee
	Tina (52)	Involved in the Women's Committee	Involved in Women's Committee Mother – looks after her family
	Iakopo (28)	Involved in the <i>aumaga</i> .	Works on the family plantation, carries out daily chores around the house. Completed high school
	Tasi (45)	Village mayor	Holds an orator chief title, Involved in the village council

4.4 Data Analysis

I adopted a thematic analysis in an inductive fashion. As Patton (2002) notes, “the strategy of inductive designs is to allow the important analysis dimensions to emerge from patterns found in the cases under study without presupposing in advance what the important dimensions will be” (p. 56).

The coding process started by transcribing the interviews in the Samoan language. The transcripts were then translated into English, where I did the coding for each participant. The translated transcript added to the existing field notes. It was found in some instances that the Samoan phrases or words were best maintained in their original language, so their meaning was not lost through translation. Using Village A as a starting point, each participant’s transcript was analysed while formulating the initial codes. This activity required “force analytic thinking whilst keeping you close to the data” (Gibbs, 2007, p. 57). This task proved to be time-consuming and tedious so it required much patience. However, this was necessary as it set the precedence for consistency in coding for the other villages to follow. After much time spent on the initial coding, the task was then to group the similar codes together as suggested by Gibbs (2007).

Identifying the categories was not as easy. During this process, it was found that some codes can “be nested or embedded within another, can overlap and can intersect”(Coffey & Atkinson, 1996, p. 36), consequently making the categorising process more difficult. I started this process by identifying patterns amongst the data as suggested by Patton (2002). This was an iterative process where classifying the data was continuously reviewed to assess whether they accurately reflected the significance of the data. In some instances data that was initially assigned to a category was later removed or combined to create new categories. Table 4.4 shows the concepts found from the initial coding these were later refined into what is now seen on Table 5.1 (Chapter Five).

Table 4.4: Summary of concepts and categories

Initial Categories	Initial Concepts
Communications	Cell phones – Wireless communication, TV and Radio, Finding information.
Computer Use	Computer use, Positive of computer and internet, Negative of computer and internet, Convenience, Language barrier.
Feso’otai Centre	Use of the place, Surveillance, Services provided by MCIT, Success stories of the <i>feso’otai</i> centre, computer training, Users of the Centre, Eagle-eye panopticon.
Values and Customs	Culture, Influence from Apia and Other Countries, Upbringing, Behaviour of this generation, Influence of Government rules.
Perception of the centre	Educational purposes, Job opportunities.
Village Life	Changes to the village, Roles and occupation, village council, Projects, Village Issues, Church, Education, Family responsibilities.

The last stage in the analysis involved going beyond the categories to develop a more abstract and theoretical understanding of the data. This was the development of themes which assisted in describing the fundamental meaning of the categories. For this study, one theme was found - ICT is entwined in the social fabric of the Samoan culture. This theme essentially aided in answering the research question – What is the interplay between computer-mediated information produced elsewhere and local traditions?

4.5 Chapter summary

This chapter outlined the methodological foundations for this research. It commenced from the discussion on philosophical assumptions which guided the direction of action for both data collection, analysis and the focus on peoples’ views. An elaboration of the analysis and the findings is discussed in the following chapter.

5 Chapter 5: Findings

5.1 Introduction

This chapter presents the findings from the *feso'otai* centres at Village A, B and C. Following the inductive process, five emergent categories were found. These were expanding skills and capabilities, efficient tool for document production, panopticon surveillance, virtual connection, and community networks. Table 5.1 presents the list of the concepts that defined each category. These will be discussed in detail in the Sections Three to Seven. Section Two highlights the current status of the *feso'otai* centres.

Table 5.1: Summary of concepts and categories

Concepts	Category
Relationship with education, Expectations regarding future job opportunities, <i>Feso'otai</i> centre as a social venue, Encouraging users, Convenience.	Expanding skills and capabilities
Empowering individuals, Document elaboration, Challenges to the use of <i>feso'otai</i> centre.	Efficient tool for document production
<i>Feso'otai</i> centre supervision, Monitoring of computer use.	Panopticon-surveillance
Connecting with others, Media and information dissemination, Extensive use of mobile phone for communication and ICT connectivity.	Virtual connection
Village council, Operations in the villages, Exposure to urban lifestyle, Power of traditions, Changes in the upbringing environment.	Community networks

5.2 Feso'otai centre current status

Findings were that *feso'otai* centre has been well received in these three villages. The Centre has become one of the icons these villagers identify themselves by. For the most part, villagers take pride in the telecentre, praising the convenience of its services to the local people. The presence of the centre within the village also makes the locals immensely proud to be associated with the *feso'otai* centre, as one of the participants expressed it: “*having the Centre in our village makes us known (famous)*”. However, after visiting the Centres at Village A, B and C, it was observed there was a lack of use by the villagers. The centre is left closed most of the day closed as the villagers go about their own duties and responsibilities. The Centre manager was found to be the main user of the equipment, since most of the villagers are computer illiterate. It was

found that the initial centres were not as productive as other centres that had been opened at a later stage.

According to the participants, the *feso'otai* centres have survived this long due to the support provided by MCIT. 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 MCIT and the *feso'otai* centres has contributed to the survival of the latter. It was found during the fieldwork the services offered by the *feso'otai* centre are not fully utilised one in particular is the internet. The *feso'otai* centre is left closed for most of the day. All the *feso'otai* centres were the same in that the manager was contacted to come and open it up, whenever someone wanted to use the centre. In the case of Village B, the only other time the centre is open is when there is a computer class. The next section will present an in-depth discussion of each of the following categories – expanding skills and capabilities, efficient tool for document production, panopticon-surveillance, virtual connection and community networks.

5.3 Expanding skills and capabilities

This category was discovered based on the following emerging concepts – educational purposes, expectations regarding future job opportunities, the *feso'otai* centre as a social venue, encouraging users and convenience. The participants viewed the *feso'otai* centre as a place where individuals can train and acquire new skills. The new skills will assist with the local children's education, along with the assumption among the participants that having computer skills will allow villagers to find paid employment. In addition, the participants shared the view that the use of ICT would provide villagers with a new form of entertainment. Table 5.3 outlines the viewpoints of some participants towards computers, as well as their attitude towards the *feso'otai* centre in relation to expanding skills and capabilities.

Table 5.3: Interviewees' attitudes towards computer and feso'otai centre

Participant (age)	Attitudes towards computers	Attitudes towards the feso'otai centre
Village A Ana (51)	Positive. She thinks this is useful for students.	She wants people to use it more often.
Village A Iosefa (58)	He strongly supports the use of computers for educational purposes. He enjoys playing Solitaire on the computer, provided the manager opens the game for him. He is interested in being educated about further uses of the computer but finds it hard to find time to learn, given his responsibilities.	He considers the services offered by the centre as beneficial for the village and the young people.
Village B Felila (45)	Uses the computer and thinks it is good for the villagers to use them. She owns a personal computer.	Felila sees the value in the centre, she believes that this is the equipment for the future and soon everything will be computerised.
Village C Nina (36)	Thinks computers are useful for producing documents.	She is happy with the centre because she now has new skills in using this modern equipment.
Village C Pua (23)	Confident with using the computers after receiving training from the Apia Institute of Technology	Pua supports the centre. She is thankful for the <i>feso'otai</i> centre since it has given her village recognition.

None of the participants were against having the *feso'otai* centre in the village as most saw the educational benefits it would have for the children. Each of the concepts that form this category will be discussed below, presenting the findings from each Village.

5.3.1 Relationship with education

Village A

Ana the *feso'otai* centre manager is very enthusiastic about the centre. She said she only started using computers when the *feso'otai* centre was established at the village.

“I never used a computer before I only started learning when I was assigned as the manager. I enjoy using the computers. There will come a time when pens will no longer be used and everything will be computerised”.

The majority of the users at Village A are students, who come for computer training after school. *“Children as young as nine come and learn how to use the computers. We get about five to ten children a day”* Ana said. However during the week of the

interviews, children did not come by to use the centre other than delivering a message for someone at the Women's Committee. Ana explained that the students are preparing for final year exams and it is most likely that there will be no after-school computer training.

This was later confirmed when visiting the local primary school late one afternoon, there was a tutorial session being held for the year eight students preparing for final year exams. Ioana who was teaching the class said *"these children would probably be at the centre if it was not for our extension class"*. Ioana later shared with me that two of the students that came to the computer training classes received high achievement awards at school:

"One received the dux award at an information technology school and the other student came first in her typing class at high school. The teachers were amazed at how well she used the computer".

The manager and others that were assigned to look after the centre received free computer training from an information technology institute in Apia, where they attended the classes in Apia. At the end Ana *"received a scholarship to continue with a Diploma in Information Technology at the local University"* but due to family commitments and her health she had to withdraw from the course. A vision by Iosefa:

"We (the village) want to make this school (centre) bigger, more computers... we want to turn this (centre) into an information technology school for this District".

Village B

The centre at village B is the only *feso'otai* centre that was visited which conducted computer training classes for children. According to Olive, the training sessions are held three days a week, with each day dedicated to a specific age group. At the time of the research only the Saturday class was on, which was taught by Olive. She explained that halfway through the year the other two trainers stopped coming to conduct the classes. One of the trainers started a paid job in town while the other went away to have a baby. Lina mentioned that she wants to send her son to the training sessions but that the class for his age group is no longer available.

The aim of the computer training sessions *“is for children, to help them with school”* Olive said. She explained that two students who attended these training sessions received top awards at their school *“their parents were very happy with the result they praised and thanked the centre for the help with their children’s education”*. The centre is seen more by locals as an educational institution, an extra school for the village. In Olive’s opinion, if the young people learn how to use computers now *“it’ll make it easier for them to apply for a job in the future”*.

Maria agrees by saying,

“I strongly support the centre, because it is important for the children’s future, if they do not finish school they can come here and get computer training it will give them another chance at finding a job”.

Olive’s class has twelve students aged between 13 and 15 and the students take turns on the computers since there are only five computers. The students are taught basic functions on how to use programs like MS Word to create documents and Microsoft Excel to create spread sheets, improving their typing and data entry skills. The internet is yet to be explored by the students that attend the trainings.

Village C

The general view of the villagers is that the centre can assist in the children’s education. Nina told me that computers are the future and therefore there is a need to *“train the children on how to use them”*. Although this centre does not offer computer classes, they do have computer training programs available for anyone willing to learn. As Pua said

“We do not give a time for computer training if the children want to learn they come and we put them on the typing game or mouse trainer program on the computer”.

On average about three to four children come and use the *feso’otai* centre in a week but as Pua observed *“whoever that has one dollar comes”*. Iakopo, who sent his 12 year old son to the centre to receive computer training, believes the extra learning opportunity has helped his son at school:

“I think his time spent here has also helped improve his marks at school. Because here you have to learn quickly, recognise the keys and so I think this has caused his mind to be active”.

The centre managers conveyed their enthusiasm about the centre as an educational provider by saying, *“if there are more users in the future it will be good if we can get more machines so we can expand the school”.*

The *feso’otai* centre at Village C had a Peace Corps volunteer at one stage. Peace Corps is a volunteer program, run by the United States of America and other agencies. The individuals involved with the Peace Corps, carry out work that is related to a country’s social and economic development (Peace Corps, 2011). The Peace Corps volunteer’s role was to offer computer training to the Centre managers. Nina recalled how *“he taught us how to use Word”*. In 2011 the centre managers were able to attend free computer courses (offered by MCIT) in the township of Salelologa as Pua experienced, *“I learnt more from the course this year. Now I know how to use Excel, Publisher, Access and Database”*. Despite the extra training received by the managers, the villagers still considered it insufficient to qualify them as teachers for the centre as Tina expresses:

“We (the village) need computer trainers (qualified) to teach the young people how to use computers, yes the managers are here but they do not have all the knowledge necessary to offer computer courses”.

Eseta also thinks there is still a need for a qualified teacher at the centre, saying:

“The problem with these machines [is] no one comes and teaches computer courses. You know some parents cannot afford to take their children to Polytech but if they can bring them here then that will help them a lot with finding a job. Even though we have the feso’otai centre managers but they cannot teach others because they are not qualified teachers”.

Tasi who is a non-user of the centre thinks the place is useful for office workers and children who are at school *“I think the only people who talk about these (computers) are the ones that have office jobs or those at school. But people like my generation that*

stay in the village we do not really care about them". This is something Pua shared, and had noticed:

"Hardly any men come and use the centre; mainly women and children. There is no pressure for villagers to use the place unless there is a need to like Nina said "People come if they know how to use the computers".

5.3.2 Expectations regarding future job opportunities

Village A

The centre has provided an opportunity for the villagers to receive computer training in the hope of finding jobs. A view shared by Sione who supports the centre *"nowadays computers are used almost everywhere with office jobs, if you don't know how to use the computers then it is hard for you to find a job"*. Sina agrees with this view *"the centre is beneficial for the children because they need to know how to use the computer to help them with school and finding a job"*.

The centre is supported by the villagers because they believe this will give their children an opportunity to learn a skill that is needed so secure future job prospects. Mataio thinks the computer is an important part of modern society and is the tool for this generation especially in finding paid employment *"we should accept these machines in our society because it is very hard to find a job if you do not know how to use a computer"*. There is a strong belief by the participants that computer skills are a must in order to find a job. Mataio, one of the interviewees, expressed it like this: *"these days they do not use the sharp pen they use computers, having a Certificate (qualification) is not enough you have to know how to use the computers"*. According to Ula, work experience no longer has the same value in finding a job unless you have computer skills:

"The children should learn at an early age how to use them... if you apply for a job today and you do not know how to use computers you do not get the job even if you have experience".

Village B

Village B participants concurred with those at Village A, in their view of the *feso'otai* centre as a training hub. In the formers' view, the villagers, especially the children, would be able gain the necessary computer skills for future job opportunities. Olive expressed her opinion as follows:

“Nowadays computers are used to find jobs. So the kids should learn at an early stage how to use them. These days if you apply for a job and you don't know how to use computers you don't get the job even if you have experience... the emphasis of the use is on school children to help them advance with high school and university. It'll make it easier for them to apply for a job in the future”.

Lina a mother and a non-user said *“I strongly support the Centre, because it's important for the children's future. If they finish school and if they cannot find a job they can come here and get computer training, it will give them another chance at finding a job”.* Mataio added: *“We (the village) should accept these machines (computers) in our village because it is very hard to find a job if you do not know how to use a computer.”*

Village C

One of the Villagers at Village C, Iakopo, agrees with this wholeheartedly after hearing a family member express their opinion, that in the future, only computers and no other medium would be used:

“So if I get my children to train now I know that when they go looking for a job in the future they will be easily hired. I think most offices/jobs are now using computers, more people know how to use the computer now. I think that is the other reason why some people were made redundant because they did not know how to use the computers”.

This is something Eseta and Tina are strongly advocating for on behalf of the young people of the village: *“Young people should come and get computer training from here so they can go and find jobs”.* Eseta further emphasises her view that the centre managers should make use of their training and seek employment in an office environment, she said:

“Pua and Nina are receiving their Certificate for office administration they should go and look for a job. I just feel sorry for them: they come and look after this but they do not get paid. They should look at how they can get financial help for their families”.

5.3.3 Feso’otai centre as a social venue

Through the use of the data projector for movie nights and through the computer training classes for students, the *feso’otai* centres are creating a place for the villagers to congregate and socialise.

Village A

According to Ana the centre used to run movie nights using the data projector which saw an increase in their income, she said:

“It was a dollar for entrance the villagers supported our movie nights, the place was always full and there was a lot of laughter. We had to make sure we showed movies that finished before the village curfew at 10pm”.

But it has been a year since the data projector has been out of order with the cost of repair proving to be beyond the Women’s Committee’s budget. Iosefa, who has limited computer skills, enjoys using the computers for *“playing solitaire”*. He is not alone in this enjoyment, Ioana and other women like coming to use the centre to *“play the typing and mouse training games”*. The mouse training games helps a new computer user familiarise with moving the mouse around and clicking the buttons. Ana thinks this is the way to use the centre *“even if they are only playing games at least they are making use of the computers”*

Village B

Movie nights did not last long either as an alternative source of income for the centres. This evening pastime had to compete with the programmes already on national television leading naturally to the question of why one would want to pay a dollar to see a movie when the same movie is shown on television for free. Another factor in the lack of success of the movie nights was the fact that almost every family in the village owned a DVD player. Hence, in Village B too, it had been a few years since the village

had had movie nights and the more common fundraising activity of Bingo is viewed as more profitable than a movie night. As Olive explained:

“We (the village) use to have movie nights but not anymore because the village meeting house we used is now taken by the Women’s Committee and other village group for their Bingo nights... we have Bingo almost every night of the week”.

Village C

The centre at Village C no longer holds movie nights due to a technical problem with the data projector and now the television no longer works either. Nina notes that the data projector was out of order when she arrived on the scene in 2007. Repairing these machines is not a priority for the Committee since they see no immediate need for it and the projectors are too expensive for the centre to maintain. Pua shared with me that when they used to have movie nights *“it was quick cash for the centre, we made quite a lot of money from it... a lot of people came”*. Currently the *feso’otai* centre in Village C is no longer used for any social activities. However, the Women’s Committee runs Bingo nights that attracts some of the villagers, mainly the women and children.

5.3.4 Encouraging users

Village A

Ana, the *feso’otai* centre manager, understands that the villagers are always busy with their daily chores and have little time to learn how to use computers. As an incentive Ana offers special prices on the centre’s services to entice the villagers to visit the centre. She said:

“We (feso’otai centre) have special offers for photo printing during special days like Mother’s day or Children’s day... we also offer a discounted price on computer training for students during the week leading up to Children’s day”.

Ana encourages the women on their Committee to come and use the computers *“I tell them if I can learn it so can they, I did not start learning computers until I was 45”*. To encourage the children to use the Centre she gives them a chance to play computer games, saying: *“If they have been really good I will give them the chance to play a*

computer game at the end of the class". Ana is also active in promoting the *feso'otai* centre by advertising it to the local district high school "*they do not teach computer at school because the school only has one computer, so I tell the school about the computer trainings the students can get at the centre*". Ana also highlighted the importance of word of mouth, stating:

"The easiest way for people to know about the centre and to come and use it is by word of mouth... once some of the parents heard about these two students they started bring their children for computer training".

Village B

The role Olive has as a trainer is very significant for the centre: she is not only passing on her knowledge but she is also promoting the use of the centre. She makes the computer training classes interactive by having debates and impromptu tests that invoke the interest of the students. Olive made use of the data projector one week to watch a movie with her students. She recalls:

"We finished our class outline two weeks early so I showed a movie, some of the mothers came and watched it with us. I think if we had had a bigger room more people might have come".

Maria who was the previous *feso'otai* centre manager shared one of highlights she experienced when one of the students who had attended her training sessions managed to find employment at an internet café, saying:

"It was great hearing about the young people putting their training into practise, he gave the centre a good name and now his parents are encouraging others to come and use the feso'otai centre".

Maria not only had an impact on her students, she is now also having an influence on other villagers to come and use the centre. The computer skills she learnt from the computer course gave her the additional ability to create special documents such as wedding invitations as well as the ability to edit photos. Olive knew one of the ladies who asked to have a passport photo edited had previously not had a good opinion of the centre so she worked really hard in making sure the picture turned out better than

expected. Olive recalls how *“she was so happy with how her picture turned out she said she wanted the centre to stay. She now often comes to get pictures edited or printed”*.

Village C

The centre is promoted at the Women’s Committee monthly meetings, Tina recalls the special offers by the *feso’otai* centre: *“Sometimes they have specials promoting photo printing and encouraging the members to come for computer training”*. Nina said:

“When I give my monthly reports to the committee I add in a promotional section at the end, advertising our special for the centre... sometimes I have specials for days like Children’s Day when the training classes went for half price”.

Eseta also assists in encouraging others to come and use the centre. She said:

“I always tell the committee to bring their children to train at the centre. Maybe in the next ten years or so all the things we use will be computerised, you know, at school and work”.

Users of the centre at Village C, share the he positive experiences of villagers in Village A and B in that they have found their children improving at school. Nina shared with me how: *“there are a few children who have improved their marks at school because they come and get some training from here. Not only that but it has helped improved their internal assessments”*. The experiences of these villagers have only encouraged others from the village to bring their children to the centre. One of these is Tasi who said:

“I send my son to the feso’otai centre when we have an extra \$1 for him because I now see other children improving at school... the computer makes you think fast and it has helped my son with his thinking... he has improved his marks at school after attending computer training”.

5.3.5 Convenience

Village A

The centre is not exclusively used by the local village members but is open to anyone who needs to use the facility. According to Ana the centre is another way to attract

tourists to the village: *“There are a lot of tourists who come here from nearby hotels to use the centre, because internet is cheaper and faster”*. Ioana also agreed *“internet is used by the tourists and it is good that we have broadband”*.

Iosefa says that having computers in the village is convenient for the local high school he explained: *“The school only has one computer and if that breaks down we don’t have to travel to Apia; we can come here”*. Sina who is a regular user of the centre, especially to use the internet, is thrilled with having the centre located in her village saying: *“It saves me time from going to town”*. Transport in to town takes approximately forty minutes (whether travelling by personal or public transport) and if you catch the bus after the school rounds you have to wait at least forty minutes for a bus. Sina prefers to use the centre since she does not have to *“wait in line like the internet cafe in town”*. Ana said: *“Family members from overseas come to the centre to book their airline flights they no longer need to go to Apia”*. Ioana observed that the centres are also very convenient in that *“the students can do research and get computer training”*. According to the Centre’s financial report (Ministry of Communications and Information Technology, 2010a) the photocopying machine brought in nearly as much income. Ioana explained how *“Church clerks come here often to print and make copies for reports, songs and programs”*.

Village B

In Village B the *feso’otai* centre has received users from other villages, who were in search of a computer centre with photocopying facilities. They were on their way to the airport when they came across the *feso’otai* centre billboard on the side of the road. Olive believes the centre is convenient for the local people saying that *“the centre saves the villagers time and money from going to Apia”*. Ula agrees with this point adding that *“we can print passport photos her: so easy for us to come here [rather] than going to Apia”*. He also added that the centre is allowing:

“Children (...) to get computer training, fast communication with families overseas... a chance for the villagers to use computers and help raise some funds for the Women’s Committee”.

However some of the centre services, such as the internet, are unreliable at times. During the time I visited Village B, the internet had not been operating for three weeks. Maria had a niece who was visiting from Australia and who wanted to check her emails. Maria had to take her niece to Apia since she could not reasonably rely on the centre's internet connection. She said: *"I told my niece to go to the internet café at Apia, in case we wasted our time going to centre and the internet is not working... and I was right"*. Maria also recalls one time when the Women's Committee had outstanding phone bills and the phone was disconnected which also affected the ability to provide a reliable internet service. According to Olive this last time the problem was more related to the connections from the service provider.

Village C

The participants see the convenience of having the *feso'otai* centre at the village and on Savaii Island. Although the nearest computer centre is about a 20 minute drive to town, the villagers express their view that the service is sometime unreliable and very expensive. The *feso'otai* centre is convenient, especially for the local high school students, the church ministers and villagers who need to use the computers. In Pua's experience student users find the place useful when *"typing up internal assessments for school and emailing their family and friends from overseas"*. Nina identifies other users as well, including *"church ministers who come and type up their sermons and church clerks who type up reports and songs... they say they are glad they do not have to go looking for a computer place"*.

5.4 Efficient tool for document production

This category was defined by the following concepts: empowering individuals, document elaboration and challenges to the use of *feso'otai* centre. The general view here is that in the future everything will be computerised. Therefore the villagers, especially the children, should start learning how to use the computers immediately. The teachers at the local high school and church ministers in particular recognise the convenience of having the centre in the village. This is summarised by the view of one participant who said: *"I think in this life we do not stay in one place it moves forward. I think computers are very useful"*. Table 5.4 highlights some of the participants' views towards computer and the *feso'otai* centre that shaped this category.

Table 5.4: Interviewees' attitudes towards computer and feso'otai centre

Participant (age)	Attitudes towards computers	Attitudes towards the feso'otai centre
Village A Sione (53)	Computer illiterate, he sees the value of this technology when they are used for the right reasons. He does not encourage the use of the internet	Important place for the villagers to get computer training.
Village B Lina (40)	Lina has never used a computer before, she is very much interested in learning but she has too many responsibilities at home to have the time for training sessions.	She is happy about the centre, especially using the computers to print out her raffle tickets. She encourages her son to attend the computer training.
Village B Ula (58)	Supports the use of computers for school children.	Thinks it is important training for the children
Village B Maria (64)	Very positive. During her time at the centre she ran computer training workshops for children. She was approached to assist in typing up documents for the villagers.	Thinks the centre is useful for developing the skills of the villagers, especially the children.
Village C Pua (23)	She was hesitant to use computers before, since she had never had any previous training in it. Now that she knows how to use them, she is confident in sharing her knowledge with others in the village. She helps the students to type up their assignments and also other documents for church groups.	She is very positive about the <i>feso'otai</i> centre, without it she would not have had the chance to acquire computer skills.

5.4.1 Empowering individuals

The new skills acquired by the centre managers have given them more recognition and authority than they previously possessed. In the context of the village, although the manager holds the skills, how they use this knowledge is still controlled by the chiefly system (Figure 3.2)

Village A

According to some of the participants, the manager has a very important role not only in managing the centre but also in their role of using the computers or machines on behalf of the users. Ioana is an example of one such person. She states: *"I am only confident to use the computers if the centre manager is there to show me what to do. But most of the time I give the manager the things I needed done like typing up a document"*. Iosefa relays a similar experience: *"The manager opens the game for me. I do not understand much about how to work the computer"*. This has given the Centre manager recognition and respect due to their knowledge of computers.

Village B

Olive the Centre manager was referenced often times by some of the participants as the ‘teacher’ for the school. She is viewed by the villagers as someone with special skills and specialised knowledge and they hold her in great respect. Olive is in a position of influence as her knowledge of using the computers is encouraging the villagers to use the Centre even if they do not know how to use the computers. As Lina said: *“I do not use the computer or photocopying machine; I give what I need done to the centre manager and she will do it for me”*. Maria who was the previous Centre manager shared the same experience with Olive: *“I typed the documents for the people that came to use the centre”*.

As the Centre manager Olive has had the chance to build her computer skills. She is sought after by the villagers to have their documents prepared. She says *“I have created wedding invitations, greeting cards and funeral programmes for some of the villagers”*. Another skill she has managed to perfect is photo editing *“I can do graphics on Adobe Photoshop... this is very popular with our village, people bring in their old photos and they want me to change the background so it looks nice”*.

5.4.2 Document elaboration

Village A

The local high school also uses the Centre to *“type up exam papers”* according to Iosefa. Ioana is glad that students are not only able to conduct research but also able to *“type out their internal assessments”*. Ana realises that the centre is making it easier and more convenient for users to create documents: *“Families used to go to Apia to look for an office to type up documents for court cases but now they come to the centre”*.

Village B

Olive has found that some of the women who come and ask for documents to be typed up and photocopied do this for the purpose of fundraising. She has noticed that most women want to *“print bonus and raffle tickets”*. Olive explains that the women *“used to write up their tickets but people did not want to buy them because they did not trust the handwritten tickets; they used to tell them that they would not buy them because*

their business is not registered". At the moment more people are buying raffle and bonus tickets, given the tickets are now printed from the computer.

Village C

Pua has noticed that the *feso'otai* centre is frequently used by church ministers, teachers and students to prepare their documents. She said:

"Students come to use it to type up their internal assessments. Teachers come to type up exam papers. Used a lot by church Ministers for sermons and other documents for church".

Other users have used the computers to type up songs and print reports for church groups. Teachers from the local high school and learning centre are thankful for the centre because they no longer need to travel long distances to use computers in larger centres. Tina recounts how *"teachers from the high school come and use the place it's convenient for them"*.

Pua who left high school before computers were introduced there is thrilled that she had the opportunity to learn how to use computers *"Now I can type"*. She is putting her skills to good use since she is responsible for typing up documents. She adds that a few of those who come to the centre *"know how to use the computer"*. Pua has seen people from other villagers in search of the services provided by the centre to *"prepare church reports, type up court cases"*.

5.4.3 Challenges to the use of feso'otai centre

Village A

Despite the advantages and the convenience of having the *feso'otai* centre located in the village, there are also disadvantages which are recognised by the villagers. Ana knows that *"with using computers you must understand English"* since the *"programmes are not written in Samoan; if you cannot read or understand English it will be very difficult to use the computer – you might as well turn it off"*.

Village B

Mataio, who is a non-user, vouches that he *“will definitely use the computers if it was in Samoan.”* He knows that this is one of the reasons why he is a non-user because he, just like the other local young men, *“cannot really understand English”*. Maria, the previous centre manager, recognises that:

“You cannot use the computers if you do not understand English because there is nothing on the computer that says in Samoan ‘press this’”.

The majority of the computer users were found to be school aged children and even some university students. The participants identified some of the barriers that prevent villagers from using the Centre. Lina, who is a mother of five and a carer for her elderly father said:

“I want to come and learn how to use the computers and get my fingers use to the computers but I just do not have the time”. She also adds that *“some of the other mothers would love to come and get computer training but they have a lot of responsibilities at home like me”*.

Lina still uses the services of the Centre but it is through the centre manager, she finds that this is convenient for her as *“it is easier for me to give Olive what I need done”*.

Maria remembers the time when the Centre at Village B was officially opened and officials from MCIT came to teach the local villagers how to use the computer, saying: *“Almost no one came to learn”*. Six years later the *feso’otai* centre is hardly ever used (in particular by those who live in the village) except by students and office workers. Maria reflects on the time when she used to look after the centre, *“I wasted a lot of time looking after the place; some days I would come and open the centre but no one would come for about two hours, sometimes the whole day”*. Maria’s role was a voluntary position she did not see the point of sitting at the centre the whole day if there were no users. Therefore she continues with her errands until someone needs to use the Centre then she will open the centre. Olive also keeps the centre closed until someone needs to access and use the Centre or when they have computer training workshops.

“I used to come and open the centre at eight in the morning – usually no one would show up so I would just go home... if they want to use the place they can

call me, it is a waste of time sitting in here if there are no users, I rather make use of my time by doing chores at home”.

The parents send their children for computer training but they do not see the need for it for themselves. One of these parents is Ula who says: *“I send my children to come and use the centre”*. When Mataio was asked why he had never visited the centre previously, he responded

“I do not have any interest in computers, because I do not know how to use them. I did not grow up seeing these machines around and besides I would rather be hanging out with my friends than coming here”.

Mataio, like Ula, perhaps does not see the value for himself in visiting or using the Centre’s facilities. Lina suspects that only the children will make use of the centre

“I know hardly any of the adults come and use the centre. I think the main users we want for the centre are our children because they have a future ahead of them”.

However others like Maria, who never grew up using computers, were keen to make the place work. Maria put it as follows: *“I started using computers when the centre opened. I offered to help look after it because no one was willing to try it. I did not want the place to go to waste”*. The Centre in village B has progressed with its users because of individuals like Maria, who were willing to learn and make the centre useful from the beginning.

Village C

In the view of mothers like Tina and Eseta the centre is not a place for them but appropriate for their children. Tina said: *“we use to come to use the machines but we know it's not for us because we are older”*. When the centre initially opened, people from MCIT came to train the women but in Eseta’s words: *“they tried and teach me but my fingers are too stiff they are no use for pressing buttons*. Apart from her frustration in using the keyboard she found that she would rather be *“at home doing my family chores than wasting my time in front of the computer”*. Tina fully concurs, saying: *“You know we have a lot of Samoan chores”* and in her opinion she would much rather *“put*

in the younger women, so they can learn how to use and find a job". In Tina's brief encounter with the centre she found playing games on the computer could be fun but *"I have family responsibilities so I would rather have the young people come and use the Centre"*.

Even though all the participants state their support for the centre, it unfortunately receives few or no users during the day. The village mayor Iakopo has shared his interest in learning about computers but he admits that he has no time to get the necessary training, he said:

"Yes I want to come and train on how to use the machines, because I know it is used a lot in offices. So if I come and get some training I can get another chance at finding work. Although I want to I don't have any spare time to come and get the training. I have responsibilities in our home and my responsibility as the mayor".

Iakopo thinks that if he had a computer in his home *"it would make it easier to get the training done. I can have someone come over and show me how to use it when I'm free"*.

Pua and Nina, who are responsible for the day to day maintenance of the centre, do not spend their whole day at the centre, saying: *"People hardly come only when they need to because they are busy with things to do at home and their families"*. Eseta mentioned that she has *"never used the internet. You see me looking around the room? This is the first time I have been back in here since eight months ago"*. Usually the centre is not open during the time displayed on the board, and this also goes for the other centres. The managers are only contacted to open the centre when someone needs to use the facilities.

The most commonly used service at the centre is the digital camera. This is used for taking passport photos, family photos, and village photos from which the villagers can order prints. Next to the digital camera the photocopier machine receives much attention as this is commonly used by the teachers from the local high school, church ministers and clerks. Based on the financial report for the centre for the year 2010, computer training sessions and the fax machine were hardly utilised at all. Although the internet is

on dial-up it was only used sporadically that year. During this research study, the centre was waiting on the technician from MCIT, to set up the broadband connection for the internet. Plans are underway to make sure the *feso'otai* centre at Village C will be operating on broadband by the end of 2012.

5.5 Panopticon-surveillance

The way the *feso'otai* centre is operated and monitored reflects this category based on two concepts: *feso'otai* centre supervision and monitoring of computer use. The centre is treated by the villagers as an important place. Villagers who come and use the place are never alone because the manager is always present. Special care is taken when people browse the internet, more so with school aged children. Looking after the *feso'otai* centre is just as important to the local people as looking after a church building. They place a lot of effort in keeping it secure and maintained.

5.5.1 Feso'otai centre supervision

Village A

The Women's Committee take supervision of the centre seriously, regardless of what it is used for. As Ana recalled: "*When people come to use the centre I do not leave them alone in the room. I watch what they use on the computer*". This was especially true when a user came to use the internet – she made sure they were never left alone in the room as the manager kept a close eye on the user while conversing with others in the room. In the managers' view this is to prevent vandalism of the facilities by the users. She explained:

"I stay here so I can see that the user pay for the right service used. Some may have used the internet but say they were only using the computer training games [so] then we lose money because these two things have different costs."

Sione knows for a fact that he can trust the use of the centre because "*it is looked after and guarded by the Women's Committee, they do not let anyone use it as they please*". The village council oversee the protection of the centre as Iosefa explains because the protection of the place is also a primary concern for the village council. He says:

“If there are problems at the centre that the Women’s Committee cannot handle they can bring the matter to the village council”.

Village B

Olive knows she has a lot of responsibility on her hands with the *feso’otai* centre, saying: *“I cannot let the people use the centre as they please”*. She is worried about damages that will happen if the place is left alone with users, adding:

“I stay here and watch the centre when there are people in here. I cannot leave them here by themselves in case something happens and I get the blame”.

In a situation where she cannot look after the centre, but there are people who need to use it, she will ask one of the committee members to come and watch the centre, explaining: *“We have to be careful because these machines are expensive to fix”*. Olive further notes that this centre means a lot to the village so she feels obliged to ensure it is maintained to the best of her ability. She pointed to the children who were playing outside and said: *“They are not allowed to come in here – I do not want them to come and dirty the place (centre)”*.

In maintaining the *feso’otai* centre, the villagers recognise that it is the responsibility of the whole village, not just the Women’s Committee or the manager. Everyone is accountable to each other, like the break-in attempt at the *feso’otai* centre. Mataio told the manager to report this to the village council since they have the authority to punish whoever committed the act. He explained that if they did not let the village council know, the people that did it, will keep trying to ruin the place, *“but if they know they will get a penalty from the council they will stop doing these things to the centre”*.

Village C

The village takes pride in the Centre and with that comes responsibility. The Women’s Committee work together in maintaining and watching over the centre. They value the equipment since it was gifted to the community. As Tina describes it in vivid terms:

“We do not leave the place unsupervised... the village wants to make sure this place is safe because we don't want to have the machines returned. The place

has helped our village". Nina said: *"We really have to be careful with the machines when school children come, we do not just let them use the computer"*.

If the children do not know how to use the computers, the manager uses the computer on behalf of the child especially if they want to type up a school project. Even if a student knows how to use the computers the managers *"keep a close eye on them when they use it"*. In Pua's opinion this is good practice *"because we do not want them to do something that will wreck the machines"*.

5.5.2 Monitoring of computer use

Village A

Sina shared that in comparison with the internet cafes in Apia, the centre managers closely monitor the users. *"The centre is not like the other computer centres in Apia or using a personal computer where I can use [it] as I please. Here at the centre everything is monitored and the equipment must be used properly"*. Iosefa believes that monitoring of the computers is crucial especially where children are involved, adding:

"At the centre the children can use the internet as long as it is monitored by the centre manager. They (the children) should not be left alone to use the computers."

Sione, who is computer illiterate, shares his view that the internet is good if it is used for the right reasons but he also has some reservations about the internet. *"I do not support the internet because I have heard stories about what can be seen and done on the websites"*. However he believes the centre is sheltered from the negative influence of the internet because *"the centre here has tight security with what can be seen on the internet, there is always someone here monitoring the users"*.

Village B

There are certain restrictions placed on the users of the *feso'otai* centres as opposed to the general public who use public facilities such as internet cafes. The majority of the users who are school aged children are kept under close supervision by the manager. As Olive said *"I do not just let the users especially the young people browse the internet as*

they please or play games". The manager keeps a close eye on sites the users browse while they are on the internet "... *most of the people use it for emails and Facebook, sometimes for school research*". There is a restriction on the material that can be downloaded from the internet in that "*users are not allowed to download videos or games from the internet, only songs*". Olive thinks that because of the close supervision of the centre, people are cautious about their use of the computers, she said:

"I do not think they know how to browse for bad images maybe they do but they do not want to do it because I am in the room".

Village C

In Tina's opinion the young users of the *feso'otai* centre on Savaii Island are little influenced by the browsing habits of their counterparts in Upolu Island. Tina shares her view which is:

"The only reason why I do not like the internet is because of what happened with the school girl who made a bad video, [and] now it is all over the world... but we do not use the internet in that way at the centre because there is always someone here who monitors what people use on the computers".

Iakopo understands that tools such as the computer and the internet are good but it is the way that people use them that may become problematic, adding: "*The machines are not the cause of the problem it is the people using the machines; the reason why people make the wrong choice or do bad things: it is because they have weak minds*".

Nina one of the *feso'otai* centre managers shares her thoughts on how computer use is monitored:

"We really have to be careful with the machines when school children come. We don't just let them use the computer: we have to ask if they know how to. If not then we do it. If they do we keep a close eye of when they use it... we do not want them to do something that will wreck the machines".

Pua further adds "*we do not leave the place unsupervised*".

5.6 Virtual connection

The following sub-section explains the construction of the virtual connection category, from discovering the following concepts: connecting with others, media and information dissemination, extensive use of mobile phone for communication and ICT connectivity. The *feso'otai* centre has allowed access to connecting with families and friends who live overseas. Villagers have utilised the service of the internet to communicate and connect with others. Table 5.6 highlights some of the participants' views and attitude towards the *feso'otai* centre and the use of computers in relation to the concept of virtual connection.

Table 5.6: Interviewees' attitudes towards computer and feso'otai centre

Participant (age)	Attitudes towards computers	Attitudes towards the feso'otai centre
Village A Sina (26)	Enthusiastic user. She enjoys using the internet to communicate with families and friends from abroad	She values the communication by email, networking websites and online chatting
Village B Mataio (35)	Computer illiterate. Supports the use of computer but he does not encourage the use of the internet.	The centre is useful for the children to learn new skills. It was his first time at the centre when the interview was conducted
Village C Iakopo (28)	Computer illiterate. He supports the people in school to use it.	Iakopo has no interest in using the <i>feso'otai</i> centre. In his opinion, the centre is only useful for people who utilise this sort of technology on a daily basis like school children and office workers.

5.6.1 Connecting with others

Village A

Ioana observes that *“life is moving forward especially with technology, the internet has made communication faster”*. Sina spends an hour on the internet every visit emailing her husband and *“chatting with friends on Yahoo messenger and Facebook”*. She added that:

“If I have not kept in touch with my families for a while, I can check their Facebook page and see how they are doing by looking at their photos, reading what they put on their wall and so I do not need to call them”.

Other than communicating she values the use of the internet especially when she has a problem with the ferry: *“She emails her husband who finds out the information on the internet for her”*.

Village B

The centre has had a dial up connection for internet up until the beginning of 2011 and during that time *“hardly anyone used the internet”* according to Maria. However Olive noticed that once broadband had been installed *“more people started coming to use the internet”*. She saw that *the* majority of users used it for contacting families and friends overseas *“mainly for Facebook and email. We have a user who comes almost every week to check her Facebook page and sometimes to do research”*.

Olive shared some information about one lady who wanted to use email to contact her brother who lives overseas. At that time she knew how to use the computer, but not the internet. Olive said:

“I showed her how to create an email and send it... now she regularly comes and uses email... last time she came she wanted to know how to use Facebook, I told her I can help her create a page but she has yet to come and learn”.

The centre manager’s enthusiasm to show the villagers the use of the computers can only mean a positive outlook for the centre’s operations. Mataio, who is a non-user, has seen and heard the purpose of the internet and that, in his words, *“it is very useful for communication, we get to find out what is happening around the world”*.

Village C

The internet receives little attention at the centre, Nina has seen that it is mainly the University students who return home for holiday who come and use the internet, said: *“They come and use email”*. Pua said most of the visitors to the centre use it to *“communicate with families and friends overseas”*. Nina highlights the fact that they have dial-up connection causing little use, she said: *“We hardly have internet users because we have dial up – it is very slow”*. Other users who have come to use the internet are drive-by tourists, since the next internet stop is either at Salelologa or a two hour drive to the west of Savaii.

5.6.2 Media and information dissemination

Village A

The radio, television and newspaper are the main source of information that the locals have access to. As Iosefa mentioned he relies on these sources to *“find information about the current news and anything”*. To the villages using the internet for information is not an option.

The daily activities of the people in the village are based on knowledge being passed on by parents and elders of the family. Knowledge about cooking, farming, fishing and customs has been handed down verbally. There are no written records on how a crop of taro is best planted or how to find the best spot when out fishing. As Sina experienced during their family fishing trips, she had to look and listen in order to learn, Sina said:

“My father showed us the lights to look for direction when making our way back home, from fishing. We use stars for guidance too but it is only good on a clear night”.

It was Sina’s husband, who is from South America, who introduced Sina and her family to global positioning systems and wireless communication. With these new tools they are able to make more accurate estimations of the best areas to fish. Prior to the new tools their fishing trips were based on their father’s experience.

Village B

The presence of radio, television, video tapes and DVDs in almost every family has become the norm in a household. Felila made an interesting observation as to why she thinks there is a decline of youth attending church activities, stating:

“A lot of the time the young people are spending their time in front of the TV. They have DVDs, movies to entertain them at home, so staying at home is no longer boring”.

Both television and radio stations have a mix of English and Samoan programmes. Villagers like Mataio enjoys talkback shows on the radio and a Samoan programme on TV called Lali where he learns more about the culture, he said:

“I get information from programmes on TV like Lali and on the radio. The talk back programme on the radio is good because people share their problems and it makes me aware that I am not the only person with that issue”.

Maria first experienced finding information over the internet when her niece who lives overseas came for a visit. They wanted to find out their family’s genealogy, and with the aid of Maria’s niece and her knowledge of using the internet this yielded some results. Maria added:

“I do not know how to use the internet, but I read the materials she found – if I think it is relevant I tell her to open that page... we found records on our family as far back as the 18th century. We went to the registry office in Apia but they said they only have records from the 1950s”.

Mataio makes an interesting point when he says that *“if people understood that you can get information and help from the internet on how to prevent plant diseases, they would use the feso’otai centre more often... not only will they receive help from people in Samoa but also help from other countries”.*

Village C

Some expressed the opinion that the negative behaviour of this generation is a result of what they are exposed to on the television, movies and more recently the internet. They want to look, act and talk like their favourite singer or actor. In more ways than one some foreign behaviour goes against the grain of how a Samoan young person should behave. Tasi expressed the opinion that young people *“are watching the wrong things on TV and copying what they see. They wear the clothes they see on TV. You see some girls walking on the street wearing clothes that are not appropriate, it can give the wrong impression to the men”.*

5.6.3 Extensive use of mobile phone for communication and ICT connectivity

Village A

Gone are the days when the only telephone in the village was at the Women’s Committee’s building (Macpherson & Macpherson, 2009) . Now there are at least three

or four people from the same household all owning their own cell phone. As Sione observed: *“Children as young as eight know how to send a message (text)”*. Access to cell phones has brought new concerns to the villagers as conveyed to me by some of the interviewees. Iosefa shares these concerns, especially with what he witnesses at the local high school, stating: *“There are a lot of problems happening with school children because of cell phones”*. Ioana concurs, saying:

“Kids are inseparable from their phones, you hear some parents talking about their children at church [and saying] that their child spent the whole night talking on the phone”.

Sione who has a phone that does not support the text message function claims that mobile phones are having a negative effect on the younger generation *“now it is easier for the children to have boyfriends or girlfriends... because their parents do not see what they are texting or hear what they say over on the phone”*. He extends his view to include the influence of the internet concluding:

“It is very easy to hide what they get up to with texting; I think the same can happen with the internet because the parents do not know how to use the internet”.

In Ioana’s opinion the *feso ’otai* centre may provide internet access, but not every family in the village has a computer. She argues that *“there is only one centre but people hardly use the internet. But I guess if everyone had access to the internet at home it will have the same effect as the cell phones”*. However Ioana knows for a fact that it is impossible to prevent cell phone usage, adding: *“Because this is the way to communicate nowadays... texting and calling”*. She does highlight an important point that *“if there are any problems that arise as a result of using cell phones or the internet then the reason is the person that is using it”*.

Village B

The convenience of the cell phones has brought a faster way for villagers to communicate not only locally but internationally. Ula remembered in the mid-1990s that it was common to contact families overseas by using the public phones at Apia. Nowadays there is the convenience of the cell phone. He said:

“I think cell phones are a very important, fast way to communicate, not like before. If you do not have a landline you had to go to Apia to call families overseas”.

More and more people are using cell phones because of the discounted phone rates and prices. Ula recognises that this has a negative impact on the locals because it has given them an excuse to use it anytime they want. In his words: *“When they talk all night long because of the Free Nights deal I think they are using it for the wrong reason”.*

The use of the mobile phone has made communication faster for the local villagers. Ula said: *“When I had my cell phone I did not need to walk to the house of each chief to tell them we have a meeting or a problem I can just call them”.* Something Lina has also noticed in the village is that news travels around faster due to texting, she said:

“Now I could be sitting here discussing a sensitive issue at the same time I'm texting my other friend telling her about our conversation. When you walk out of the room others already know what we talked about... gossip goes around fast, not like the old days: not until you see the people then you talk to them.”

Besides the cheap calling and texting rates, the internet rates on cell phones are just as affordable. This has made accessing the internet more convenient for individuals, computers are not necessary and you can access the internet privately, which is something Felila is worried about. The fact that many people are accessing the Internet through mobile phones somewhat compromises the viability of the *feso'otai* centres, Felila said:

“My children they always use the internet on my phone. My son uses it after he has done his homework... he chats with his friends and families overseas, mainly his uncle that lives in France... sometime I do not like since they are free to browse whatever on their phones, when they go to their rooms... who knows what they watch and see”.

Although the participants claim that more people are using the internet on their cell phone, according to Felila, the majority of those who do so are *“high school and university students and office workers”.*

Village C

According to the users interviewed, their actions and how they represent themselves in a virtual environment do not differ from how they are in reality. Participants feel that if some behave differently online to how they would normally conduct themselves that behaviour depends on the person and their motives determines their actions. Iakopo gives a good example of this when he shares his experiences with the cell phone, he said:

“Random people used to call me in the early hours of the morning and want to talk so we talk but I have no idea who they are and how they got my number. The phone made it easy for me to talk to this person because I don’t see them and I could pretend to be anyone and so did the other person. I think this is the same with communicating through the internet, because you cannot see the person in real life”.

5.7 Community networks

The villages all show strong evidence of communal organisation and face-to-face contacts, everyone knows about everybody and what is happening in the village. The community networks category is formulated based on the following concepts: village council, operations in the villages, exposure to urban lifestyle, power of traditions and changes in the upbringing environment. The village operates as an extended family, as highlighted in Figure 3.2. Central to this is the adoption of religion into the culture. The Church is central to the worship life of the villagers and there are at least two Christian denominations in each village. Table 5.7 highlights some of the participants’ thoughts on the *feso’otai* centre and their attitude towards the centre in relation to community networks.

Table 5.7: Interviewees' attitudes towards computer and feso'otai centre

Participant (age)	Attitudes towards computers	Attitudes towards the feso'otai centre
Village A Ioana (65)	Thinks the centre is important for the village. She is computer illiterate but has a very positive view of computers.	Very positive about the centre, she advocated for the centre to be opened in their village.
Village B Olive (24)	Enthusiastic about the use of computers. Useful for student training and producing documents for church, school and families.	She wants more computers to help train the locals. The centre has been convenient for the villagers
Village C Tasi (45)	In his view, computers are the key to a better future, in terms of career development. Very enthusiastic about computers but has little knowledge of how they are used.	Tasi believes the feso'otai centre is a great place for the village especially the children growing up. He takes pride in the centre because it is adding value to their village's image.
Village C Eseta (67)	Strongly encourages young people to use computers to gain the skills necessary for work.	She supports the centre but thinks that centre managers should go look for paid jobs with the computer skills they have. She thinks the Centre has no future

5.7.1 Village council

Village A

The village council plays a crucial role in preserving and keeping the *faaSamoa* alive in the villages. Iosefa describes how their village has two committees, *“Village governance is very strong. We have two committees. One for the chiefs and orators, the other one includes the untitled men”*. This sub-committee is called the Safety and Protection committee. Their role is to ensure the safety of the villagers. This is an uncommon practice in the village structure, nevertheless Ana knows it is necessary since *“the village council is keeping the attitude of the young people at bay, because they (young people) fear the village fines or penalties”*. The Women's Committee president Ioana recalls the proposal from the Ministry *“everyone agreed to the feso'otai centre, no one rejected the project. So we renovated the old hospital building for the Centre”*. The Committees' decision had the support of the village council as Iosefa remembered *“the village leaders and all the villagers were here at the opening for the Centre we had Ministers from parliament. It was a proud moment for our village”*.

There are four Christian churches, one primary school and at least two tuck shops in the village. Majority of the villagers attend Sunday services but there was a time when church had a low attendance Iosefa said:

“This issue was discussed at the village council meeting, and then a rule was in place that everyone should attend church or they will get penalised. Come the following Sunday the pews were full again”.

Education is just as important as worship as Sione explained *“the village council passed a rule that all the children 14 years and under must attend school. The family will be penalised if their child is caught staying home”*. In Iosefa’s view education is important these days and so the children can learn how to read and write *“we rather see the children attending school than staying home and working the plantation, they can always come back to that but it is hard to go back to school when you are older”*.

Village B

The function of the village council is held in great regard by the locals, who revere and respect the decisions of the council. The members of the village council are the foremost protectors and sources of guidance to the village. In the words of Olive: *“They look out for the wellbeing of the village; they have rules in place to help keep people safe”*. The rules set by the council come with penalties if they are not adhered to. Ula mentioned that *“every village has their own rules and regulations, but the bottom line is to help protect the village”*. The penalties vary depending on the wrong done by the person, with fines usually being of s either a monetary nature, or in the form of boxes of canned fish or cooked pork or beef or the most extreme: banishment from the village. Some of the villagers do not have paid employment or have an exhaustive animal farm to serve the penalties and so Felila adds that *“the villagers are aware of the punishments and they live according to them”*. Felila recounts one example of how the village council may exercise its powers:

“There was a man who had been found selling marijuana. His name was brought in front of the council and he was banished from the village and the council reported him to the police”.

To encourage the villagers’ participation in meetings, functions and activities the village council has penalties in place as Mataio explained:

“If you do not show up, you pay a five dollar fine and if you do it three times your name will be given to the village council and you will get penalised a heftier fine....so the aumaga rather come to the activity than wagging it”.

Village C

The untitled men that chose to stay and serve their family and village express their love for the culture. Like Iakopo who upon completing his college education in Apia decided to come back and help look after the family because there was only his mother left. He owes a lot of what he has learnt about the culture to being involved with the *aumaga*. *“My generation enjoys coming to the meeting house so we can learn more about our culture”*. To him the meeting house is another educational place, especially in terms of the Samoan customs and one where he can refine his listening skills. This view is echoed by the village mayor Tasi who states: *“Looking and listening are very important while being a taulealea”*.

5.7.2 Operations in the villages

As mentioned previously, villagers have little or no time to utilise the services provided at the *feso’otai* centre. Many of the participants stressed that the *feso’otai* centre is important but mainly for the young people, given that a lot of those who live in the villages are occupied with other tasks to do with family, church and the village.

Village A

Sione said:

“I do not have the time to learn how to use these machines (computers) because I have work and family chores that take up most of my time”.

The untitled men in the village and their time are occupied with other village commitments and Iosefa gave an example of this saying:

“At the moment our aumaga are helping with maintaining our faisua (fluted giant clam) farming and assisting the government workers in clearing out the new lands outlined for families to move to, so they can be away from the seaside”.

The Women's Committee also have various activities to keep the women active in the village as illustrated in Figure 5.7.2 which shows the making of the traditional fine mats known as *'ie-toga*. This fine mat is part of the *fale lagaga* – the women's weaving circles, where the women come together every Wednesday to perform this task, as required of them. The mats in the picture were made in preparation for the Women's Committee inspections which are later used for special occasions.

Figure 5.7.2: The making of *'ie-toga* (the traditional fine mat)



Village B

At Village B, the operations in the village are focused around the family and the village interests. The village is involved with one of the government reservation projects and taking part in farming the water fish called *tilapia*. Looking after this project is the responsibility of the untitled men; in Mataio's words: "*The aumaga looks after the tilapia fish... we clean out the water pond and feed them*". Village life for local men who are not in paid employment sees them tending to the family plantations and fishing for a living. Mataio is one of the former and explains: "*I go to the plantation most days of the week depending on the weather*". Making use of ICT and the *feso'otai* centre is something they do not perceive to be relevant to their daily lives, as will be clear from the words of Lina who stated:

"I would like to learn computers and come here and sit under the cool air available (air-conditioning) but I have family responsibilities to tend to during the day so I have no time to sit here and type... nothing will be done".

The Women's Committee runs various activities throughout the year to keep the mothers and young ladies engaged with their responsibilities with the family and village. Every three months the committee carries out its inspections. The inspections

require the members to bring items that the committee had agreed upon. These items may include fine mats, kitchen utensils and cutlery, mosquito nets; in other words, they concern predominantly items that families need in their home. Felila knows that this sometimes puts a strain on some of the members: *“We encourage the women to get involved with village activities, [and] occasions... some of them complain that there is so much to do”*. Nevertheless she also recognises that this has become part of the Samoan customs and should be kept in practice, when she says: *“You know we cannot stop what we have been doing for so many years; people cannot shy away from it... if they do not want to do it they should go live in Apia where they do not have Women’s Committee or village responsibilities to do”*.

Village C

A similar view is shared by the participants at Village C. The *feso’otai* centre is a place for the school children who have enough time on their hands to learn and those villagers who have use it for work. Iakopo who now lives with his mother and tends to the family plantation says:

“I think the only people that usually talk about it (computers) are the people that have office jobs. But people of my generation who stay in the village, we do not really care about it... we (him and his friends) do not care about coming here because it does not improve how we look after our plantations”.

The village mayor Tasi also shares a similar view stating:

“Although I want to come and learn how to use computers, I do not have any spare time to come and get the training. I have many responsibilities in our home, and a lot of responsibility as the mayor. If I had a machine in my house it would make it easier to get the training done. I can have someone come over and show me how to use it when I am free”.

5.7.3 Exposure to urban lifestyle

Village A

People from the rural villages make a distinction between their lifestyle and that of those who live in the capital of Apia. The capital has become the focal point for the

modernisation of Samoa. To that extent people like Ana recognises the fact that when villagers make the move to live in Apia for school or work, sometimes when they return *“some bring back a different attitude like they do not have to listen to anyone”*. Nevertheless, she has noticed that their attitude soon changes because *“they are aware of the village council and their regulations”*. Besides the influence from Apia, Ana also recognises that some of the changes she has seen over the years are from villagers who returned after living abroad in countries like New Zealand: *“When they come back to Samoa they bring with them the way of life of other countries”*.

Sione thinks that *“the young people want to copy the Europeans by wearing shorts instead of a lavalava (sarong)”*. He strongly believes this act by the younger generation discredits the Samoan culture *“especially when they wear shorts in front of chiefs or elders”*. Nina adds that *“families from overseas bring the latest model phones for their families here, now all the teenagers want phones with cameras”*.

Village B

A common view shared by the participants concerns the fact that changes to the local traditions and customs is influenced by the changes in the wider world. Samoa is merely adapting the changes to keep up with the trend. Ula, who is one of the village leaders, makes an observation about the standard of living among the villagers: *“The country has moved with the changes in this world. Those days hardly any families had cars, but now almost all the families in the village have a car. More people are working in offices”*. Mataio, the farmer, shares the same view stating:

“We cannot stop the changes because it is just the life we are living right now, it’s constantly moving forward. More computers are used at work so we have to accept these changes”.

Nevertheless the rural villagers believe the capital of Apia is allowing for rapid changes to the Samoan customs. In their view the foreign lifestyle has become acceptable to the people who live in Apia, who do not have the guidance of the village council and the Women’s Committee. In Mataio’s opinion:

“The young people there do not guard their actions, [and] always want to make trouble, but here the village governance is what people respect...people live according to the rules”.

Ula felt that the difference in lifestyle was because *“in Apia there is little exercise of cultural practices because a lot of people who live there are from everywhere in Samoa, so there is not one village like here... most of the people who live in Apia are there for school or work”*. In village B girls are not allowed to wear shorts according to Felila, who says that *“a lavalava must be worn below the knees at all times.”* This rule was put in place by the village council because there was a growing fashion trend in Apia that the local village girls started to imitate. Girls were seen at the capital wearing shorts that were showing more legs than what is deemed appropriate attire for a Samoan girl.

Village C

According to the participants the *faaSamoa* is very strong in the rural villages. The villagers hold the role of the village council in high regard, declaring that village council’s governance is protecting and preserving the culture from the influence from abroad. As Tasi expressed his opinion on the matter:

“I do not think our culture will die because the village leaders now are carrying on what their fathers did, and we will continue to follow their examples. Even though there are changes but our values and principles remain.”

5.7.4 Power of traditions

Village A

When the participants were asked to explain the Samoan culture, Sione captured the essence of its meaning in his view:

“If we look deeply into culture it is nor here nor there but everywhere. It doesn’t have one description but plenty. Culture is the way you speak, how you stand and by the actions that you do. All of these show that you are Samoan. Culture is the way you are as a person”.

The village can be described as a family, despite the changes over the years Samoans have remained true to what they value. When a family has a funeral, wedding or birthday celebration, the villagers will get involved. The *aumaga* and *aualuma* come together and assist with the chores or hosting the visitors. Sione believes this part of the culture is reflected in Christian values, he said:

“I believe the essence of the culture is through the teachings of the Bible: we should help others in need. Plenty of hands make lighter work... people still have this sense of community in the village. They help each other out during funerals, weddings, reunions”.

Sina who now lives in American Samoa with her family knows that there is no better place to instil her cultural roots into her children other than travelling back home. She makes regular journeys to Samoa with her young children. Based on her experience with other cultures she strongly believes there is no better way to raise her children than to bring them back to Samoa: *“I always bring my children back to Samoa, so they know their identity. So they can learn the language and our way of life”.* Although she has travelled to other countries she knows deep inside this has not change her *“Samoa beliefs, values and customs”.* She owes a lot of this to her parents who brought her up in the Samoan way of life *“always working hard and obeying elders (the parents)”.*

Village B

In Ana’s view, she reflected on the history of Samoa:

“This day and age, everything is going fast, life is not standing still. Who knows how the Samoan culture will be in the future. There are a lot of changes from overseas. We cannot say for sure whether the culture will be affected by these changes especially with technology. Our children will grow up in a different environment from the one we are right now, because life does not stop at one point”.

The way of life for some of the young unemployed people is troublesome to some of the villagers. As Maria highlighted in their village there are *“a lot of young people [who] are no longer going to school... I know of a few who work on the family plantation but the majority of them just like to roam around and ride the bus to Apia”.* This has

become like clockwork for some of these young people *“they go early in the morning at 9am and come back together with people that went to work”*.

Village C

The separation of tasks between men and women of the village is another focal point of the chiefly system (outline in Figure 3.2). The tasks and duties of the sub-groups dictate the separation between the genders. The location of the *feso’otai* centre at the Women’s Committee meeting house has to an extent affected the usage by the men of the village. The young men perceive the *feso’otai* centre as a place for the women. As Iakopo puts it:

“We (young men) are just not interested; I had rather spend my time with my friends... besides the place (feso’otai centre) is better suited for the women”.

Pua, one of the Centre managers shared *“you hardly see men using the centre unless they are a church minister or a teacher”*.

5.7.5 Changes in the upbringing environment

Village A

Sina is the youngest of the participants from Village A; however, her upbringing does not seem to differ much from that of the others:

“Growing up was very hard, we lived off the sea, we went fishing and we sold whatever we got at the fish market in Apia because we were poor. It was mainly my brother and I that went to do this, all my other brothers (8) and sisters (8) would go to school but we were the ones that went to sell the fish”.

Sina’s view of the Samoan life is very similar to that of Ana, Ioana, Sione and Iosefa. Iosefa recalls a time when walking to and from school was the norm, usually with no food waiting for you at home. As he recalls it *“you wake up to family chores and returning home from school faced with more chores”*. Ana remembers a time when the cost of bread was five cent and so was the cost of a bus fare. There was no lunch money just leftover food from dinner the night before or a piece of coconut or pawpaw. Life according to these participants was simple but poor. As Ioana shared she too grew up in

a “*poor family*” so she was determined to make a better living for herself and the family “*seeing my father go through being put down by his family because he was poor made me want to make something out of myself*”.

Iosefa realises that “*these days’ children are doing whatever they want*”. In Ana’s opinion the reason why some of the young people are like this is because of their parents “*some will teach their children how to behave... another will leave their child without discipline. I think a parent who was taught well will do the same for their children*”. Something Ioana has seen throughout the years of teaching there is a change, she thinks the parents are not pushing their children hard enough like before “*some parents just want to sit and do nothing... they like going to Bingo [or] spend money on cigarettes or alcohol... they put their needs before the future of their family*”.

Village B

A common view shared by some of the participants, is that the young people are becoming more challenging when it comes to respecting their elders. Lina says “*it is so easy for the children to get smart with their parents. They show no respect for their elders, I know by the words some of the children are using in public*”. Felila reflected that the behaviour of the young people “*depends on the parents: some will teach their children on how they should behave. The child will follow their parents’ footsteps.*” Tina shared that disciplining young people is a concern of the village “*if you can’t handle disciplining your child you can seek the help from a matai*”.

Perhaps the people are acting this way because they know that financial help is just a phone call away. There is a growing trend in Samoa that families rely financially on families abroad. As Lina observed:

“People have become lazy they do not try and improve their standard of living. Just lazy, they rely too much on families from overseas to send money. But if the parents are lazy so will their children”.

People call their families who are living overseas to ask for financial assistance with school fees, funerals, village or church fundraising, power bills and food. Apart from the financial assistance there is also the material wants met by families overseas. Open

houses can be seen with the latest flat screen TV, villagers talking and texting using the latest model Nokia, and some listening to mp3 players.

Village C

The participants share that the Samoan traditions and standards have remained strong through the changes they observe in the country. The participants felt that their distance away from the urban area has help maintain the strong Samoan traditions. As Eseta sees it:

“Whatever the kind of attitude they (the young people) have picked up while living away from the village for school or work in Apia, once they step off that bus they know where they stand”.

Tina adds: *“The village regulations and the Samoan traditions are very strong, so the young people are very careful in how they behave”.* In Nina’s opinion *“it is really hard for us (young people) to go against what our parents taught us because there will be consequences for our actions if we do something wrong”.*

Eseta recognises that as much as she enjoys the young people being involved with village commitments, she believes they can do more with their lives than just attending to their daily chores, stating that *“these people need to look for their future, I mean everything you do in the village now requires money, if they are not working then how are they able to support their parents?”.* Tasi, who is a hard worker, recognises the need to seek financial assistance whether it will be selling the crops from the plantation or working at the office. She holds that:

“You need to do something to help your family, to serve your family and just doing daily chores like cleaning and attending to village activities will not help the future of the family... I think the young people need to actively do work that will earn their family money... they cannot keep on relying on families from overseas because once their parents pass away who is to say their families will continue to support them?”.

5.8 Chapter summary

This chapter has provided a detailed account of the findings of this study by discussing the five emergent categories: expanding skills and capabilities, efficient tool for document production, virtual connection, panopticon surveillance and communal life. It was found that *feso'otai* centre is used by the villagers as an educational place. The villagers use the computers to produce documents more efficiently. The *feso'otai* centre has provided a faster way for the villagers to communicate with families and friends. However, some of the villagers raised concern with access to the internet and how this may affect their children. The Women's Committee and especially the *feso'otai* centre manager keep close supervision of the *feso'otai* centre and how individuals use the equipment. Based on the findings, regardless of the ICT intervention the villagers have little or no interest on the use of the *feso'otai* centre apart from those who use it at school or work. The social norms and values are still observed at the villages, regardless of the change of time. However, the analytical endeavour does not end here. A higher level of theorising must be employed in order to answer the research question at hand. An elaboration of this analysis is discussed in the following Chapter.

6 Chapter 6: Analysis and Conclusion

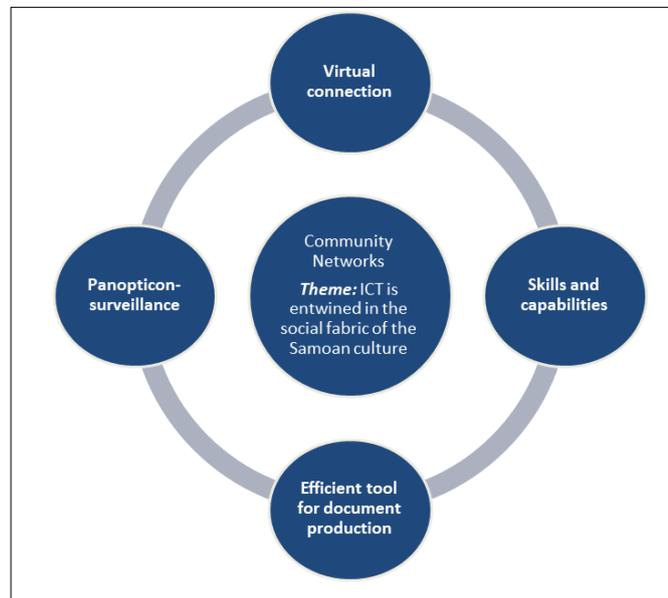
6.1 Introduction

This chapter focuses on an analytical discussion of the categories, in order to find out the underlying meaning of the findings. From the five emergent categories a higher level of abstraction was sought and as a result the theme: *ICT is entwined in the social fabric of the Samoan culture* emerged. This theme aims to address the research question: *What is the interplay between computer-mediated information produced elsewhere and local traditions?*

6.2 Theme: ICT is entwined in the social fabric of the Samoan culture.

The categories discovered provided an insightful understanding of how the villagers are utilising (or not utilising) the *feso'otai* centre and any ICT interventions. Figure 6.2 offers a view of the relationship between the categories.

Figure 6.2: Relationship between the categories



The relationship between the categories reflects the interaction between the people of the village and the ICT intervention. A look at Figure 3.8 shows the category communal life located in the centre of the diagram, which illustrates how the ICT tools were utilised in accordance with the needs and wants of the villagers. The adoption of ICT in rural villages has received the same attention as the adoption of other modern tools. Fig

6.3 shows a modern view of the village meeting house at Village B. This image reflects the Samoan saying *'e sui faiga ae tumau pea faavae'* which simply translates as 'ways of doing things may have changed, but the foundation has remained'. The way in which the meeting house is built may have changed but the purpose of its use has remained unaffected. Modern tools were used to create this structure but the purpose of why the meeting house was built has remained the same.

Figure 6.3: Fale Fono – Meeting House.



As it is, the operation at the *feso'otai* centre seems to reflect the demands of westernised society but has apparently little to do with the Samoan tradition, the *faaSamoa*. The equipment at the *feso'otai* centre appears to be utilised predominantly for areas that were introduced into the Samoan society. These include schools, church, office work and court systems, as these areas require computer skills in order to function more efficiently. On an individual level, computers have allowed for easy and convenient production of multiple documents compared to writing. However, ICT tools receive little or no attention in the daily operations of the village. Even though some of the villagers are very enthusiastic about using printed invitations for family, village or church occasions, social norms dictate the involvement of the entire village community (Tamasese, 2008). As Tasi observed:

“When there is a wedding or birthday celebration in the village, every young person knows that they have to attend to help with meal preparation and serving the guests; this is regardless of receiving an invitation... we all share the work load because the village is our family”.

The ICT ability gained by the Centre manager and some of the villagers were an ends to a means. ICT was mainly used for document production, and for the most these documents were for school or church. The villagers recognised the importance of computer technologies in educating the young people, in order to gain a new skill to assist in career development. The *feso'otai* centre offers convenience in terms of document production as the villagers have found. Producing documents such as family court cases, church songs, reports and school work is now a lot easier. Virtual connections with families and friends via the internet occurred in informal settings, and this mode of communication was predominantly used for personal interest.

Terry & Gomez (2010) study on computers found that personal satisfaction can be attained from learning how to use computers. The computer skills acquired by some of the villagers have empowered them, to believe they can do more with their lives. Village A reported of students who had excelled in school as a result of receiving computer training at the local *feso'otai* centre. In Village B one of the young people gained employment at an internet café, after attending computer training at the centre. At Village C, the *feso'otai* centre managers draw attention to the students who have excelled in their Typing or Computer subjects at school as a result of having attended the computer training sessions at the centre. The free computer training received by the *feso'otai* centre managers has enabled them to have the skills necessary to operate the equipment. This has gained them more recognition in the village than previously. At each of the *feso'otai* centres I visited, it was the manager(s) in particular who carried out the tasks like typing a letter, photocopying documents, and did research on the internet, on behalf of the villagers.

Having the *feso'otai* centre manager use the equipment instead of the villagers, contradicts the reason why the centre was implemented. The *feso'otai* centres were originally established for the distinct purpose of community use, in reality however, only a selective group of local people are confident users. As a consequence, there is a divide within the village between those who can and cannot use the computers. This divide goes beyond computer skills, as the participants highlighted the fact that for anyone wanting to use the computers they must understand English. This was

summarised by Maria's comment when she said: *"If you do not know how to read in English then you might as well turn off the computer"*.

I found that all three *feso'otai* centres were in fact rarely used. There was an obvious lack of usage of the *feso'otai* centre by local males. The location of the centre at the Women's Committee meeting house may have had an impact on this. The Samoan traditions dictates the separation of tasks between men and women (Meleisea & Meleisea, 1987). It appears that men rarely go to the *feso'otai* centre because in their view it is a place for women. Other than the low usage by village men, lack of computer skills and limited financial earnings by the villagers may contribute to the low turnout at *feso'otai* centres. Ula one of the village chiefs interviewed described the situation saying that *"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"*, thus written invitations are not necessary. People lend a helping hand because it is what is required according to the social norm adhered to in the village.

Computer-mediated information is yet to receive attention at the rural villages. Madon (2000) recognises that the issue is that developing countries need to focus on the acquisition and dissemination of information from developed countries. In the case of Village A Sina shared her view that information available on the internet has provided useful solutions for the problems she encountered while fishing. However, the information Sina received was from her husband, who did the research on her behalf. In this case, it was Sina's husband who was information literate. This situation emphasises the point made by Warschauer (2003) that people need to be information literate. It is not enough that individuals know how to operate the computers: they also need to comprehend, understand and make use of what they find. At the three *feso'otai* centres, it was found that any form of research on the internet and accessing information is done by students but only for school assessments. The common sources people normally use to find information about various issues in the country and from overseas is through local television, newspapers 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. However browsing for information online to some extent limits the access of the local people. Firstly the language used over the internet is predominantly English and secondly there is the cost of using the internet. Iakopo, who is a non-user stated: *“That is why 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”*.

Dysart-Gale, Pitula, and Radhakrishnan (2011) make the assertion that culture influences communication patterns, and the adoption of technology, however technology has also modified these communication patterns. Samoan people enjoy socialising with each other. The internet provides a new and convenient platform to keep these family and friendships bonds stronger. Samoans can now be found anywhere in the world (Ioane, 1987; Philp, 2009) and now distance is no longer a barrier in communication. According to the Centre managers the majority of the internet users spend their time on email and networking websites. One participant interviewed is a keen internet user, and spends most of her computer time on Facebook and email. She has found the networking sites she found convenient in keeping in touch with families and friends overseas, saying: *“I do not need to call my friend and see how she is doing I can just look at her photos online”*.

6.3 Computer-mediated information and local traditions

It is important to recognise that foreign influence is not new in Samoa. The country has a long history of colonisation going back to the early 19th century, when the German, British and American powers controlled the nation. When Samoa gained its independence in 1962, it had already adopted westernised education, business trading and certain western beliefs (Meleisea & Meleisea, 1987; Ward & Ashcroft, 1998). It seems that the need to adopt ICT tools is just a natural continuation of this westernised influence. Culture has been defined as the way of life, “a way of thinking, feeling and believing” (Geertz, 1973, p. 4). As Ioane (1987) argues, culture is a “by-product of human existence” (p. 246) and it will change depending on the environment and practises by the people. As Westrup et al. (2003) concludes that culture changes overtime and ICT tools will reflect these changes. Sharing, teaching and educating the young people about the Samoan culture, is at the frontier of the village council and

Women's Committee. ICT receives little attention as a tool to assist the preservation of the traditions.

The ICT intervention was perceived by the local people as adding value to the village's image. Across the villages the participants take pride in the *feso'otai* centre. 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. At first villagers were eager to use the *feso'otai* centre since it was something new but, they soon lost interest in acquiring computer skills. However, the demands of family, village and church responsibilities prevented some villagers from using the centre. Eseta and Lina who are from Village A and B respectively, both expressed their eagerness to use the computer but found it hard to have the time to do so.

6.3.1 The panopticon-surveillance concept

The panopticon concept is something evident in the Samoan community and their way of life. Refiti (2009) explores the panopticon idea when describing the traditional Samoan *fale* – house and its circular formation. The village meeting house where the village council of chiefs meets is built the same way. Each chief has an assigned post, the sitting positions demands that each individual faces all the others. The social theorist Jeremy Bentham (Fox, 1989) designed the first panopticon prison in the late eighteenth century. The underlying meaning of this design is to allow the prison guards to watch the prisoners without the latter knowing whether they are being watched. The panopticon concept has been widely used in studies concerning information systems surveillance in a work place environment (Kakabadse, Kakabadse, & Kouzmin, 2007; Klang, 2004; Spears & Lea, 1994). Nevertheless, the use of the concept is not limited to those settings. Monitoring the use of the *feso'otai* centre was a crucial factor in looking after it. How the machines were used was closely observed, and any services used by the villagers recorded. The *feso'otai* centre manager had a limitation on what he or she can do at the centre, any suggestions made by the manager had to be approved by the Women's Committee.

The *feso'otai* centre is given the same importance as school facilities and church buildings and this is why the centre is so tightly monitored. The whole village works together in keeping the *feso'otai* centre safe even though the Women's Committee is given the responsibility to maintain and look after it. As a village chief shared "*We (village council) penalise anyone that will try and damage the centre or steal the equipment*". Monitoring of computer use is common among the centres. One of the manager's said: "*We do not leave the people especially children to use the computers freely.*" The Women's Committee has strict rules while there are users at the place, someone from the Committee must be present, if the centre manager(s) is not available.

The village structure presented in Figure 3.2 depicts the level of reporting in the village. This structure is adhered to not only during village council meetings but also during day-to-day interactions. The villagers use the centre with an awareness of this social structure, with the understanding that if any problem occurs they would have to answer to the village council. 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. As one village manager expressed it: "*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*" This was the case at one of the centres when 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 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 *feso'otai* centre. Following the village council's request the Women's Committee held a special meeting to discuss the matter and 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.

In comparison to the internet cafés in Apia, the internet use at the centre is much more controlled. The concern for users accessing sexual materials over the internet has led to a watchful eye by the manager(s) and so "*if we see they are opening websites that we do not think are appropriate they are asked to stop using the machines*". Users are cautious

in how they use the internet. The majority of internet use is for communicating with relatives and friends overseas. The same concern is shared by the country's Prime Minister who stated: "The internet is OK so long as we impose the necessary controls to cut out pornography which would be damaging for our people" (Prosser, 2004, p. 2). Albirini (2006) echoes this experience in the Arab world, when the internet was introduced. There was a growing fear of the influence on religious and cultural values as a result of being exposed to another culture through the internet. In his finding Albirini (2006) concluded that individuals who were grounded in their beliefs, stood firm against the influence by ICT interventions.

Samoa 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 men at the plantation and women managing the household. Previously the centres ran 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 repair. The third centre no longer runs movie nights, since the venue is used by village groups for Bingo fundraising almost every night of the week. In hindsight movie nights never really took off because they were competing with television programmes and family's DVD players. The normal situation in Samoa being that if families are showing a particular DVD others might also want to watch, they invite their neighbours to watch it with them. Therefore, individuals would rather watch a movie at a neighbour's house than paying to watch that same feature at the *feso'otai* centre. It can be said that the cultural traditions in the rural villages have continued to maintain their strong hold in spite of the establishment of the *feso'otai* centre. The way the *feso'otai* centre is functioning is for traditional means and it is fair to say that offline customs are overriding online global trends.

This research attempts to bring to light and analyse 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. This study has shown that the adoption of ICT is influenced by the norms of the society (DiMaggio et al., 2001). How it is used is a response to the needs

and wants of the Samoan people. Cultural values and customs are embedded in the people. ICT is merely a tool enabling the Samoans to move with the change in time. The findings of this study are exemplified by the traditional Samoan saying *tele suiga ae tumau faavae* which translates as: the way of doing things may change but the foundation remains.

6.3.2 The future of the feso'otai centres

Beyond the social implications of the *feso'otai* centres, there are some issues about the future for the centres in the rural villages. The centre is left closed for the most part of the day. Barriers such as potential users being computer illiterate, having low English literacy and the monetary cost of using the centre have to some extent limited the number of users. It was found during the fieldwork, that none of the services offered by the centre are fully utilised, the internet in particular. The MCIT officials shared a proposed strategy in order to engage the villagers in using the internet, by setting up a website for the village. This website will give the village a profile, a place where the local people can share information about crops, handicrafts and Samoan medicine. According to the MCIT official, the aim of the website is to engage the community in a virtual network. Officials may be optimistic about the future of ICT, however the issue is not about having access to ICT but whether the people can make sense of this tool. As Avgerou (2003) put it the focus of low-income economies are “the basic market factors of land, labour, and capital to work properly” (p. 47). Based on this assertion and the previous discussion the focal point in rural Samoan villages is on acquiring the basic needs of the families.

6.4 Summary of findings

The implementation of *feso'otai* centres in the rural villages gave rise to the concern whether the cultural values would 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 develop their skills to gain better opportunities in career development. At times, the place is used to produce documents for families, church and schools. The villagers have the opportunity to network and

keep in touch with families and friends via the internet. The maintenance and use of the *feso'otai* centres is being closely monitored by the Centre managers.

As discussed in Chapter Three, western colonisation brought about changes to the way of life of the Samoan people (Ioane, 1987; Meleisea & Meleisea, 1987). Despite these changes the Samoan culture, as observed, is strongly adhered to in the rural villages. The concept of culture must be looked at seriously in the context of ICT. Cultural beliefs and values influence the way the computers are operated. Some of the village leaders had concern over the content villagers can be exposed to, so that the use of the internet is closely monitored by the managers and individuals do not have privacy to browse. The *feso'otai* centre as an ICT4D intervention presented an opportunity for the community to access a new learning environment with endless access to information. However, obtaining and distributing this knowledge proves difficult. The findings identified individuals in village communities who are both computer and information illiterate.

6.5 Concluding remarks and future research

This study has attempted to uncover the impact of ICT intervention in rural areas of Samoa, in particular its influence on cultural identity. This research has contributed to the literature by providing findings in the unique cultural context of rural Samoa. The uniqueness of this study has addressed some of the concerns raised earlier in relation to the changes ICT can effect on traditional norms and customs. The Samoan values and customs have remained in accordance with traditional social norms, despite the numerous modern changes and the manifold western influence the country has been subject to.

The findings of this study, presented some areas for future research on ICT4D that focuses on the context of Samoa. During the fieldwork it was observed that most of the users of the *feso'otai* centres were school-aged children, hence future research may be able to focus on examining how this group assimilates computer-mediated information in the particular context they live in. Mobile phone usage in Samoan has increased significantly over the past decade; it has become a common feature in the daily interactions between people. During the study, participants mentioned that there is a

growing trend in Samoa, whereby ICT is used via mobile phones. This presents another area for possible future research, focusing on the cultural implications of ICT used through mobile phones. As observed during the fieldwork, ICT used in the capital of Samoa exceeds its use in the *feso'otai* centres in the villages. It is recognised that exploring the contrast between ICT uses in urban compared to rural areas presents another focus for further research.

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Appendices

Appendix 1 – Consent Forms

Consent Form



Project title: **Feso’otai centres in Samoa**

Project Supervisors: **Dr. Antonio Díaz Andrade**

Professor Peggy Fairbairn- Dunlop

Researcher: **Margaret Sao**

- I have read and understood the information provided about this research project in the Information Sheet dated 4th August 2011.
- I have had an opportunity to ask questions and to have them answered.
- I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- If I withdraw, I understand that all relevant information including tapes and transcripts, or parts thereof, will be destroyed.
- I agree to take part in this research.
- I wish to receive a copy of the report from the research (please tick one):
Yes No

Participant’s signature:

.....
.....

Participant’s name:

.....
.....

Participant’s Contact Details (if appropriate):

.....
.....
.....
.....

Date:

**Approved by the Auckland University of Technology Ethics Committee on
19th September 2011 AUTEK Reference number 11/212**

Note: The Participant should retain a copy of this form.



Assent Form

Project title: **Feso’otai centres in Samoa**

Project Supervisors: **Dr. Antonio Díaz Andrade**

Professor Peggy Fairbairn- Dunlop

Researcher: **Margaret Sao**

- I have read and understood the sheet (dated 4th August 2011) telling me what will happen in this study and why it is important.
- I have been able to ask questions and to have them answered.
- I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- I understand that while the information is being collected, I can stop being part of this study whenever I want and that it is perfectly ok for me to do this.
- If I stop being part of the study, I understand that all information about me, including the recordings or any part of them that include me, will be destroyed.
- I agree to take part in this research.

Participant’s signature:

.....
.....

Participant’s name:

.....
.....

Participant Contact Details (if appropriate):

.....
.....
.....
.....

Date:

Approved by the Auckland University of Technology Ethics Committee on 19th September 2011 AUTEK Reference number 11/212

Note: The Participant should retain a copy of this form.

Appendix 2 – Indicative interview questions

Indicative Interview Questions



The interviewer will begin by indication to the participant that they will be collecting some basic background/demographic information such as:

Date of the interview: _____ Name: _____

Location of the interview: _____

Have you used Feso’otai centre: Yes No

Occupation: _____

Educational (background):

(Note: the blank lines will be filled out by the researcher)

The interviewer will then continue with general questions:

Village leaders:

Village Life

What are your roles in the village?

- a. What are the normal activities in your village?
- b. What do you do in your role?

What are the normal activities in your village? (During the week/weekend – probe)

Technology

What do you think about communication technology generally (TV, Radio, Telephone, Computers)?

- a. What are good things about it?
- b. What are the negative things about them?

Do you know about the Feso’otai centre?

- a. What do they do?
- b. Do you think it’s useful for the village? (probe)
- c. How and why is it not useful?
- d. Any negative things about the centre?
- e. How has the centre benefit the village?

What source do you use if you want to know about something?

- a. Latest news.
- b. Information on your health.
- c. Or how to better manage your plantation or animal farm.

Culture

Generally has the *faasamoa* (Samoan culture) change over the year? (probe)

- a. Do you think they still value the Samoan traditions and customs?
- b. Do you think it is different from when you were younger? (probe)
- c. Do you feel that the villagers (youth/women/children) are losing their culture and customs? (probe – why)

- d. Are there any changes you see in how the villagers interact with one another?

Any further comments would you like to add?

Feso'otai centre manager:

A. *Management*

How long have you been in the role?

- a. What do you do?
- b. Why did you get the job?

How do you find managing the centre? (probe)

Who are your main users? (students/youth/office workers/farmer)

- a. Do you charge users?
- b. Do you offer training workshops for villagers?

What have been some of the rewarding things you found being a centre manager? (probe-why)

What have been some of the challenges? (probe-why)

- a. How can they be improved?

Would you recommend Feso'otai centre to other villages?

B. *Village life and Culture*

Do you have other roles in the village?

- a. What do you do?
- b. How important are they these to you compare to your role as centre manager?

Is the Samoan culture important to you? (why?)

- a. Generally do you think the Samoan culture has change over the years? (probe – in what ways?)

What part of the Samoan custom do you adapt to the centre? (probe)

- a. Regulations for using the centre?

Has Feso'otai centre improved the village life? (probe)

- a. Of women, chiefs, youth, children?

C. *Technology*

What's your view on computers and the internet? (probe)

- a. What do you see as the three key benefits or costs?
- b. What are the influences on your village?
- c. What do you mainly use it for?

Tell me about Feso'otai centre

- a. Would you recommend Feso'otai centre to other rural villages?
- b. Has your centre served its' purpose for the villagers?

Where did you learn how to use computers?

- a. What functions can you use

Any further comments would you like to add?

Non – users of the centre:

A. *Village life & Culture*

Do you have an assigned role in your village?

- a. What do you do?
- b. How important is this to you?

How important is your Samoan culture to you? (probe – why)

B. *Technology*

What are your views about communication technology in general? (TV, Radio, Mob, Internet)

Do you know about the Feso'otai centre in your village?

1. If yes

- a. Can you tell me what the centre offers?
- b. How come you never use the services they provide? (probe – why)

- c. Have you ever visited the centre to have a look?
 - d. Do you see any positive changes the centre has brought into the village? (probe – what are they?)
 - e. Are there any negative changes you see as a result of the establishment of the centre?
2. If no
- a. How come you do not know about it?
 - b. Has anyone told you what the purpose of Feso’otai centre is?
 - c. Do you see any value in the centre? (probe)
3. What are your views on communication technology in general? (mobile, tv, radio) Probe
- a. What do you know about the internet?
- Any final comments about the Feso’otai centre in your village?

Any further comments would you like to add?

Users of the centre:

A. Technology

What do you do when you come to the Feso’otai centre? (Probe)

- a. What services do you use? (probe – why)
- b. Do you enjoy coming to the Feso’otai centre? (why)
- c. How often do you visit?
- d. How long do you stay? (probe – why)

Do you use the internet?

- e. In general what kind of website do you visit?
- f. Are you open with what you share with others online? (probe – why)

Where did you learn how to use the computer?

- g. What functions of the computer can you use? (Words/Excel/Powerpoint)

B. Village life & Culture

How are you involve in your village

- a. How do interact with others in your village?

Is your Samoan culture important to you? (Probe - why is this important?)

- b. Do you consider this when you are using the internet? For example when you are chatting with a friend or sending an email do you use the Samoan formalities? (probe – why)
- Do you see any changes in the way people are in your village when the Feso’otai centre was put in place?
- Can you provide any positive or negative outcomes since the Feso’otai centre has been in the village? (probe)

Any final comments about the use of Feso’otai centre in your village?

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Appendix 3 – Observation Protocol and Checklist

Observation Protocol and Checklist



Step 1: Secondary data will be collected from the National Pulenu'u centre. The data will be useful in providing factual information about the village's profile. The data of this nature will include (but not limited to) the following:

- Village population
- Schools
- Religion
- Crops and Plantation

Observer: The observation will be carried out by the researcher, who will spend approximately a week at each village.

Recording method: Note taking and checklist.

Duration: Researcher will observe the centre on Day 1 and Day 2 visit for an hour each day.

Step 2: Observation Checklist at the Feso'otai centre, this will add to the village profile.

<i>What did they use</i>							
Services	Internet	Computer program	Projector	Printing (P/Copy)	Passport Photo	DVD player	Place to hangout
Visitor 1							
Visitor 2							
Visitation	Single	Two or more	Length of stay				
Visitor 1							
Visitor 2							
Facial Expressions	Happy	Excited	Frustrated	Annoyed	Angry	Busy	
Visitor 1							
Visitor 2							
Communication	<i>With Manager</i>						
	Village life (activities)	Family	Church	How to use the computers	Accessing information online	How to use other facilities at the centre	
Visitor 1							
Visitor 2							
	<i>With Others</i>						
	Village life (activities)	Family	Church	How to use the computers	Accessing information online		
Visitor 1							
Visitor 2							

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Appendix 4 - Samoa 2006 Census of the economic status of the population

Table 4.1: Persons 15+ by main activities and sex, 2006

	Total	Male	Percent %	Female	Percent (%)
ECONOMICALLY ACTIVE					
Paid Job	28179	17714	63	10465	37
Subsistence for sale	1219	749	61	470	39
Subsistence for family use	15652	10324	66	5328	34
Subsistence for sale & family use	8878	7691	87	1187	13
Look for work - employed between 2005-2006	46	31	67	15	33
Look for work - employed before 2005	199	138	69	61	31
Look for work - never employed before	462	249	54	213	46
Total	54635	36896	68	17739	32
NOT ECONOMICALLY ACTIVE					
Attending School	13358	6617	50	6741	50
Unable to work - old/disability	5315	2367	45	2948	55
Domestic work/Housework	34042	9444	28	24598	72
Total	52715	18428	35	34287	65
Not Stated	2454	1329	54	1125	46
All	109804	56653	52	53151	48

Source: (Samoa Bureau of Statistics, 2008, p. 25)

Appendix 5 - Pictures for the services provided at the *feso'otai* centres



Source: Feso'otai Centre manager – Village B