IS/IT Investment And Organisational Performance In The Financial Services Sector: A Credit Union Case Study

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Abstract

This article presents preliminary results of research into the relationship between IS/IT investment and organisational performance in the Financial Services Sector (FSS). This results presented in this paper are from the first case in a series of six separate cases within the Australian FSS. Case study methodology was used to collect data (from interviews, documents and other sources) in a small sized Credit Union. Preliminary results obtained thus far indicate support for components of the IS/IT investment model. In addition, results suggest the presence of a set of intermediary variables, namely operations, product delivery and customer service, but more research is needed to further develop and refine the model. It is hoped that this model will lead to a better understanding of the business value of IS/IT and the effects of both management practice and Strategic Information Systems Planning on the relationship between IS/IT investment and organisational performance.

Keywords
Information Systems, Information Technology, Investment, Organisational Performance, Case Study, Financial Services Sector

Introduction

The question of the business value of Information Systems/Information Technology (IS/IT) is one that has and continues to preoccupy IS researchers and professionals (Banker, Kauffman & Mahmood 1993). When this question is raised in the context of a particular business environment, the issues become decidedly more complex and elusive.

There have been some studies conducted in the past (Weill 1992) to better understand the relationship between IS/IT investment and organisational performance. In many instances, particular emphasis was placed on trying to establishing a direct causal link between the two aspects with little success (Harris & Katz 1991). Not surprisingly, the results of many of
these studies have been equivocal and therefore the generalisability of much of this research has been quite low. This has been due in part to differences in research methods, measures employed and even the period of time during which these studies were conducted (Kauffman & Weill 1989).

Though these issues are not new (McKeen & Smith 1993), this current research looks at them from a rather unique perspective. Firstly, the research is being conducted in the Australian environment, whereas much of the previous research was conducted mainly in the United States of America. Secondly, and more importantly, by using a qualitative research methodology to conduct empirical research into this phenomenon, the research contributes to the development of theory by building a conceptual model of the relationship. This model could then form the foundation for improved testing thus leading to a better understanding of this complex yet very important relationship. Given the apparent lack of strong testable theory in this area of research (Markus & Soh 1993), it is believed that the resultant model will prove to be of interest not only in understanding the value of previous IS/IT investments, but also in future decision making processes regarding new IS/IT investments.

The rest of this paper is laid out as follows; the next section presents a review and discussion of previous literature and research. Immediately thereafter, the conceptual model is presented. Following that is a brief discussion of the Financial Services Sector in Australia, the environment in which this research was conducted. That is then followed by a discussion of the chosen research methodology, its associated research design, protocol, data collection and analysis strategies. Finally, the preliminary findings including a case description and brief discussion are presented followed by a summary of the research and its implications.

**Literature Review**

The financial services sector has always been a leader in the use of IS/IT (Harker & Zenios 2000). Financial institutions use IS/IT for a variety of purposes from basic infrastructure, normal day-to-day communication including e-mail and office automation through transaction processing on core banking systems, Automated Teller Machines (ATMs), Internet banking, voucher/item processing systems, image storage systems and Management Information Systems. This has not only enabled financial institutions to increase the variety of products/services offered, it has also enabled them to create new, sometimes unique delivery channels, and perhaps more importantly to be able to handle the extremely large number of transactions generated through these channels (Krishnan et al. 1999; Harker & Zenios 2000). In many instances IS/IT investments are driven by the need to substitute labour for capital or to increase operational efficiencies and in so doing contain or reduce operating costs (Dewan & Min 1997).

It is against a background of ever increasing IS/IT investments that the question of the relationship between IS/IT investment and organisational performance is raised. Falling hardware prices, coupled with increasing technological capabilities in both hardware and software, have contributed to the explosive growth in the number and variety of applications of IS/IT within organisations (Brynjolfsson & Hitt 1996). Ironically, this also spurred debate into the so-called information systems productivity paradox. Further, reviews of the literature have revealed an apparent lack of agreement as to the contribution of IS/IT investments to organisational performance. A number of studies have been conducted, not only within the
Financial Services Sector, but also in other industrial sectors, all attempting to determine the nature of this contribution, and with mixed results (Kauffman & Weill 1989).

In each of these studies, the aim was essentially to investigate the relationship between investment in IS/IT and organisational performance. However, it is clear that the lack of a consistent definition for IS/IT (Weill & Olson 1989) has plagued this area of research, although, in all fairness, this could be attributed in part to the rapidly changing nature of IS/IT. To further complicate matters various researchers, depending on the primary focus of their studies, have used differing measures for organisational performance. For instance, Lucas (1975) defined a model and a set of variables to determine the relationship between the use of an accounting system and the performance of an organisation. Cron & Sobol (1983) on the other hand measured the effect of computer usage and organisational performance using generic profitability measures such as sales growth over a five-year period, Pre-tax Profits, Return On Assets (ROA), and Return On Net Worth.

One of the shortcomings identified in many earlier studies was the focus on technology in the main, thereby limiting the scope in terms of understanding the broader impact of other factors on organisational performance. This may also be attributed to the aforementioned lack of consistent definitions. It can therefore be argued that previous studies could in fact have underestimated the actual impact of IS/IT on organisational performance (Weill & Olson 1989).

Another shortcoming of many earlier studies was the almost exclusive use of variable/factor type testing research methods, utilising data obtained from surveys or secondary data. In many of these studies statistical analytical techniques, such as descriptive statistics, regression analysis, ANOVA and other multi-variate methods were applied to the data (Kauffman & Weill 1989; Capon, Farley & Hoenig 1990). In addition, many researchers have borrowed from the economics literature and utilised the popular Cobb-Douglas production function or its variants in attempts to establish causal relationships between S/IT investment and performance (Dewan & Min 1997). Kauffman & Weill (1989) highlight the failure of these statistical methods to take into account contextual factors as a key aspect that may have contributed to the measurement problem. Suffice to say many of the results from these earlier studies have been equivocal. Recently there has been growing call for the use of more interpretive approaches to build a strong foundation upon which further research and testing can then be based (Hirschheim & Smithson 1999; Trauth 2001).

It is therefore evident that there is a need to extend research in this field, possibly by focussing on a particular sector within a single industry in order to gain a better understanding of the impact of IS/IT and then extending the research to other areas. Further, it is clear that there is a need to utilise key performance indicators that are relevant to a particular industry, in order to obtain results that can be better interpreted in the context of the industry concerned. This argument is also supported by Banker, Kauffman & Morey (1990) who stated that aggregate measures such as revenue, Return On Investment (ROI), Return On Assets (ROA) and profitability to name a few, may not adequately depict the true contribution of IS/IT as there are many factors that influence organisational performance.
Conceptual Model

Given the apparent lack of testable models in the existing literature, a conceptual model was proposed that attempts to explain the IS/IT investment and performance relationship. This model is illustrated in Figure 1.

The conceptual model was based on reviewed literature and suggests the existence of a relationship between the level of investment in IS/IT, as depicted by the IS/IT portfolio and organisational performance. It can be deduced from the model that a successful IS/IT implementation is likely to have a positive effect on an organisation’s performance (Sohal & Ng 1998). Further, the model also takes into account the influence of management practice on the effective and efficient use of IS/IT. The conceptual model consists of the following components:

- The Information Systems portfolio, which depicts the level of investment in IS/IT (Markus & Soh 1993).
- Organisational performance, as measured by a given set of performance indicators.
- A set of moderating variables termed Managerial Effectiveness (also referred to as Conversion Effectiveness (Weill & Olson 1989, Weill, 1992)).
- Key considerations for Strategic Information Systems Planning, SISP (Weill & Olson 1989, Earl 1993) which raise questions as to how organisations can effectively/efficiently plan for IS/IT investment.

**Financial services sector In Australia**

All financial institutions operating in the Financial Services Sector in Australia are now regulated by the Australian Prudential Regulatory Authority (APRA). APRA was established after the Wallis inquiry of 1996 whose three main objectives were (a) to perform a review of the Financial Services Sector; (b) examine the major drivers of change in the industry
particularly technology issues; and (c) make recommendations for improvement to the existing regulatory framework (http://www.aph.gov.au/library/pubs/bd/1997-98/98bd203.htm#Purpose). Prior to its establishment, supervision and regulation of the financial industry was fragmented with different sectors reporting to different bodies. As a result, of the Wallis inquiry, a new regulatory framework was proposed which brought regulatory control of the financial industry under one umbrella body, APRA.

The Financial Services Sector in Australia has approximately 275 Authorised Deposit Taking Institutions (ADIs), broken into seven main categories, namely: (1) Australian Owned Banks; (2) Foreign subsidiary banks; (3) Branches of foreign banks; (4) Building Societies; (5) Credit Unions; (6) Other ADIs; and (7) ADIs in liquidation (http://www.apra.gov.au). Figure 2 summarises the distribution ADIs in the Australian market.

![Distribution of ADIs as at 15 April 2002 (Source: APRA)](image)

**Figure 2: Distribution of Authorised Deposit-taking Institutions (ADIs) within Australia**

As at March 2002, the Australian Financial Services Sector continued to outperform other sectors of the economy (by over 2%) with year to date performance rising to 6% (Brown et al. 2002). Internationally, the Australian banking industry’s relative share performance price also showed strong performance of close to 13% for the 12 months to February 2002. In comparison, the United States index recorded 9.9%, the Canadian financials 10% and the United Kingdom bank index 10.3% for the same 12-month period.

**Credit Union Sector**

As shown in Figure 2, Credit Unions comprise the largest single sector of the Financial Services Sector. Together, Australian Credit Unions have a combined asset base of approximately AUD$24 billion with approximately three and half million people utilising their services. Credit Unions provide a wide range of products and services including Loan products, ATM access, Internet banking services, Credit Card services and Insurance to name a few.
A Credit Union is a mutual organisation that provides an alternative to the traditional retail bank. According to The Australian Credit Union Network, “Credit unions are democratic, member-owned financial institutions that keep total focus on the members they serve” (http://www.cu.net.au/presentation/homepage.asp). Thus, unlike banks, Credit Unions do not have shareholders, rather they have members who are also their customers. Consequently, the main driver for Credit Unions is seen as the service that they provide to their members and not profit, as would be the case in a commercial/retail bank.

Credit unions in Australia are members of the Credit Union Services Corporation Australia Limited (CUSCAL), which plays a dual role as both an industry body and a service provider to Credit Unions.

**Research Methodology**

Cavaye (1996) refers to Case Study research as a multi-faceted approach that can be used in both positivist and interpretivist research. Further, the fact that Case Study research designs accommodate both single and multi case scenarios using various units of analysis (Cavaye 1996) makes it a highly versatile and very suitable method for conducting research in many fields of study, irrespective of their level of maturity. The Case Study research method can therefore be used in all instances and types of research ranging from exploratory, through descriptive to explanatory.

Given the issues identified in the literature review, Case Study was seen as most suitable research method that could be used to investigate the nature the relationship between IS/IT investment and organisational performance. As alluded to earlier, the research problem is an issue about which there does not seem to be much agreement in the literature and hence there is a strong need to develop theory in this field of study. The research methodology incorporates a structured Case Study Protocol developed to address issues of both rigour and validity in the data collection process.

**Research Design**

The research program was developed by using and applying Eisenhardt's (1989) outline for case study designs, which breaks the research process down into phases as follows; (a) Getting started; (b) Selecting cases; (c) Crafting instruments and protocols; (d) Entering the field; (e) Analysing data; (f) Shaping hypotheses; (g) Enfolding literature; and (h) Reaching closure.

Selection of cases was performed using theoretical sampling as opposed to random sampling techniques that are more commonly used with survey type research and the unit of analysis was the organisation. In much of the earlier research, differing units of analysis have been used. These have ranged from the individual (Lucas. 1975), through the business unit (Alpar & Moshe 1990) and the organisation (Sethi, Hwang & Pegels 1993) right up to the level of the economy as a whole (Loveman 1988). This apparent lack of consistency has contributed greatly to some of the problems regarding generalisability discussed earlier (Willcocks & Lester 1999).
Case Study Protocol

Eisenhardt (1989) and Yin (1994) both highlight the need for a Case Study Protocol that can be used as a guide in conducting Case Study research. Such a protocol should outline the procedures and rules that govern the conduct of the researcher and the research project. The protocol developed for this study had four main sections, as follows;

1. Section 1- General: General information about the protocol itself and an overview of the research project in terms of (a) what the project sought to address; (b) why it was important to conduct the research; (c) how the research was to be conducted.
2. Section 2- Procedures: Procedures governing the conduct of the researcher during the course of data collection. Uniformity of method contributes greatly to rigour of method and validity of results especially when multiple cases and/or researchers are involved Yin (1994).
3. Section 3- Research Instrument: Data were collected via multiple structured, open-ended interviews, documents and other data sources. The research instrument itself consisted of five subsections, each containing questions directed towards a specific component of the IS investment model.
4. Section 4- Data Analysis Guidelines: Outlines of strategies and techniques for analysing data and developed using recommendations by Miles & Huberman (1994) who argue that in developing such strategies and techniques a priori, a researcher is forced to consider the data that will be collected and its relevance to the research. Of particular interest in this section was the data schema that specified much of the secondary data that would be need to collected.

Data Collection

The use of more than one data source is a technique, known as triangulation. It is strongly recommended by many researchers (Miles & Huberman 1994; Yin 1994; Neuman 2000) as a mechanism for increasing both reliability and validity in qualitative research. Data from multiple sources were analysed using inductive and deductive techniques to achieve convergence on a given set of facts.

The data collection procedures developed for and used in this research were straightforward. Contact was initially made with company executives to obtain consent for participation. Once an organisation had agreed to participate, a schedule of interviews was then drawn up involving the Chief Executive Officer, Chief Financial Officer and Chief Information Officer (or equivalent depending on size of organisation). Each interview was approximately 60 – 90 minutes, was recorded and later transcribed. In addition, a substantial amount of other data was collected that included financial reports, IS/IT investment data, industry statistics and non-financial data from a variety of sources.

Results

In the case under consideration, structured interviews were conducted with the two executive managerial staff; the General Manager (GM) and Manager Finance And Administration (MFA). Other data collected included IS investment ratios, Capital expenditure (including IS/IT data), annual reports, newsletters and statistics as provided by APRA.
Background
AB Credit Union\(^1\) (ABCU) is a relatively small Credit Union operating in the Australian Financial Services Sector. It was founded in the 1960s and since then has experienced slow but steady growth. According to the GM:

“*It is a traditional credit society and it operates on the traditional Credit Union values of providing a service to members.*”

This epitomises the basic tenets of the Credit Union concept and like all Credit Unions in Australia, ABCU is member-owned. Being a small organisation, the structure is relatively flat and ABCU does not have an IS function even though much of its operation is heavily dependent on technology. This aspect makes ABCU a very interesting case. However when one views this in the context of the Credit Union industry in Australia and the fact that core transaction processing is provided by CUSCAL (amongst other services), the lack of an IS function does not seem quite so odd. Within the Credit Union sector, ABCU is a niche market operator that tends to favour a strategy of slow but steady growth. This philosophy is encapsulated in the following comment by the GM:

“*It is not driven by maximising profitability, though it is recognised that the Credit Union needs to make a profit to accumulate capital.*”

To this the MFA adds:

“It’s [strategy] driven by a number of things such as the requirements of APRA and generally where our philosophy of personal service to members with as little fees as possible with as competitive interest as possible.”

This last statement raises the issue of regulation in the industry, which as we shall see later has a strong influence on financial institutions in general. In this respect, the Australian environment is no different from other financial service industries around the world (Lilja 1999).

As far as products and services are concerned, ABCU offers a wide range of products ranging from ordinary banking services, loans and lending, insurance and term deposits. Services offered include Internet/Online banking, telephone banking, bill paying services, ATM access (note that ABCU does not have its own ATMs), cheque services, giropost, international foreign exchange to name a few.

Level Of Investment (Information Systems/Technology Portfolio)
Figure 3 is a summary of key IS/IT investment data. It is evident that ABCU’s expenditure in IS/IT has been steadily increasing over the past five years. This expenditure has been directed at all three levels of IS/IT portfolio as described by the conceptual model, namely infrastructure, transactional and decision support systems.

In many ways, this is typical of organisations within the Financial Services Sector (Harker & Zenios 2000). It should be noted however during the same period ABCU has also recorded modest growth in profitability, which would have enabled it to sustain these increases in IS/IT expenditure.

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\(^1\) Pseudonym, the organisation’s real name is suppressed for confidentiality purposes.
Figure 3: Summary chart for ABCU, showing an increase IS related expenditure

One of the difficulties with determining appropriate levels of expenditure and hence the nature and structure of an organisation’s IS/IT portfolio has always been in the definition of what constitutes Information Technology (Weill 1992). This was identified as an issue in the case, where a very broad definition of what constitutes IS/IT was given. According to the GM:

“...that’s the PCs, the core banking system...the software, ...plus the communications network”

Clearly, this broad definition of what constitutes Information Technology could have ramifications for investment/expenditure decisions made in this regard.

The case of ABCU was particularly interesting, in that the organisation does not have its own IS/IT department and outsources the running of its core banking system and many of its IT support functions. Further and because of its size, ABCU has adopted a philosophy of being a quick follower as far as adopting new technologies is concerned. ABCU is therefore a very good example of an organisation that is using IS/IT to deliver service and products by maximising on economies of scale and scope created by virtue of its membership to CUSCAL. There is an acceptance that given its size ABCU cannot afford to operate and maintain its own core banking system and although the possibility of acquiring a system specifically for ABCU has been considered, the option is simply not viable at this stage. The same applies to services such ATMs and POS. Since ABCU does not operate its own ATMs or POS terminals, ABCU members access these services via other institutions’ ATMs and terminals. Naturally, the cost of these services to members is an issue that ABCU has to manage carefully.

According to the GM, much of this investment (in IS/IT) is seen as having a direct impact on customer service, which as mentioned earlier, is an important aspect of the Credit Union philosophy. In fact, customer service was a recurring theme as far as IS/IT investments were concerned and it has been identified as a critical issue in the performance financial institutions (Harker & Zenios 2000).
In terms of whether the portfolio as it stands meets the needs of the organisation, both the GM and MFA agreed that, although the portfolio does meet the needs of the organisation, there was room for improvement. Take for instance the core banking system. This system has been in use for the past 25 years or so. It therefore presents its own unique challenges. For a start, it is not a based on a relational database and as consequence extracting member-data can be somewhat difficult. In addition, the age of the core banking system has implications for the development and implementation of modern banking products. As for other equipment, the organisation does have in place plans for replacing/retiring equipment such as PCs, monitors etc on a regular basis in order to ensure that they have relatively new infrastructure in place. At the time when these interviews were being conducted, the society was in the process of upgrading its telecommunications network from an analogue to a digital routed network that was envisaged to be more efficient.

**Organisational Performance**

Investment in IS/IT is seen as directly benefiting the organisation and contributing positively and markedly to performance. According to GM;

"Definitely, I mean we could not perform without our investments in IT. If there were no IT, there would be no ABCU."

And

"If we didn't, if we weren't investing and spending money in that area we would not be able to operate as a Credit Union. Its as simple as that!" (MFA)

Clearly, the organisation’s senior management see successful IS/IT investments as having a strong and positive impact on overall performance. This investment enables ABCU’s product delivery and customer service to be comparable to those of much larger financial institutions. Again, this may be attributed to economies of scale and scope enjoyed by virtue of membership to CUSCAL.

**Managerial Effectiveness**

All five factors relating to Managerial Effectiveness were observed as being present in ABCU. The individual impacts as observed are summarised in table 1.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Impact (Low, Med or High)</th>
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<tr>
<td>Senior management commitment to IS/IT</td>
<td>High</td>
</tr>
<tr>
<td>[Firm] experience with IS/IT</td>
<td>Medium</td>
</tr>
<tr>
<td>User satisfaction with IS/IT</td>
<td>Medium</td>
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<tr>
<td>The organisation's internal political environment</td>
<td>Low</td>
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<tr>
<td>The organisational structure</td>
<td>High</td>
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*Table 1: Impact of managerial effectiveness factors on IS/IT*

Senior management in ABCU did exhibit a high level of commitment to the development and use of IS/IT in the organisation. According to GM and MFA this can affect both the utilisation and development of IS/IT in the organisation (Markus & Soh 1993). In ABCU’s
case, it is in fact the two senior managers who are responsible for managing and supporting day-to-day IS/IT issues as the organisation does not have an IS function. When this is read in the context of the organisation’s size and absence of an IS/IT function, the impact of this issue on the nature and structure of the IS/IT portfolio and ultimately performance becomes clear.

In terms of firm experience with IS/IT, it appears that though certain individuals may in fact have a moderate to high level of exposure to IS/IT, collectively the firm appears to display a low to medium level of experience with IS/IT. This may also be attributed to the fact there are no specialist IS/IT staff in the organisation and this could have certain ramifications for the organisation going into the future. This combined with the reactive nature of the organisation may in future pose some difficulty especially with respect to keeping up with rapid changes in IS/IT. Although both GM and MFA expressed their desire to have a specialist IS/IT person, technical rather than managerial, both conceded that the organisation currently does not have capacity to employ such a person.

As far as user satisfaction is concerned, all indications at this juncture are that there are no major problems in this regard, with Manager Finance and Administration rating the systems as being generally satisfactory. According to MFA:

“We believe what we are doing and what we are offering our members from the IT side apart from not having ATMs is pretty well up with what the larger organisations are doing and our members are getting, from that point of view, pretty good service as if they were with [a bank].

In fact, it would appear from the interviews conducted that the attitude towards IS/IT is generally positive. This may be due to the small size of the organisation and its relatively flat structure, that would preclude the potentially negative impact of issues, such as internal politics, as might be prevalent in much larger organisations (Stacey 1993).

Considerations For Strategic Information Systems Planning (SISP)

There do not appear any significant issues in this regard at this juncture. The organisation is small and has no IS/IT department. An overall corporate philosophy exists and IS/IT is seen as an enabler in this regard.

Context and Environment

ABCU, like other financial institutions, operates in a regulated environment (Lilja 1999). Management at ABCU see the current IS/IT architecture as allowing them to compete effectively with other (larger) organisations. The introduction of Internet banking being seen as having the single biggest impact on ABCU, both in terms of the organisation itself and its members. In this regard, ABCU has seen a steady shift towards the use of online banking that has enabled the organisation to service a much greater and wider proportion of its market given the very limited number of points of representation that it operates.

The foregoing indicates that many of the “dependent” and “intervening” variables in the proposed model do in fact exist in one form or another and so provide tentative support for
the model. In the next section, we discuss the implications arising for organisational performance and how it relates to the variables for this Credit Union exemplar.

**Summary**

**How IS/IT Affects Performance In An Organisation**

The analysis so far indicates that there is support for the argument that IS investment contributes positively to organisational performance. This is an important observation particularly in the context of the aforementioned debate on productivity paradox (Brynjolfsson & Hitt 1996). In this case, it is evident that without ABCU’s past, present and proposed future investment in IS/IT, its ability to service its members would be seriously and negatively affected given the potential for competition from other Credit Unions and Commercial/Retail Banks. However one needs to be careful of assigning a direct causal relationship between IS investment and organisational performance. This is because there are many other factors besides IS/IT that are involved in the delivery of products and services to the consumer. It is certain though that IS/IT plays a major role in this process and that ABCU is heavily reliant on IS/IT.

**Emergent Themes**

Our preliminary analysis indicates that there are intermediary variables (themes) upon which IS/IT has a direct influence and these may in turn affect organisational performance. This has implications for the structure and behaviour of the final IS investment model. In this case, these variables are:

- Operations [banking]: branches and other front office functions, back office functions and cash management.
- Product delivery: Channels through which customers access products and services.
- Customer service.

Clearly, these variables will not exist in isolation and it is likely that there could be some interaction between them. Further, the implications for ABCU are that a better understanding of and a more focussed IS/IT investment in these areas could potentially have a significant and positive effect on organisational performance. To date, much of ABCU’s investment in IS/IT has been directed at one or more of these areas with the specific intent of improving upon the status quo, and hence producing better performance, by boosting income whilst reducing or maintaining costs at the same level. This approach, which in ABCU’s case may not have been deliberate due to the lack of formalised Strategic Information Systems Planning, but coupled with a very high degree of managerial intervention has been effective for ABCU and has contributed to continued growth in sales and overall organisational performance.

One particularly striking issue that has also emerged and which may be considered a part of the environment of financial institutions is the concept of discretionary versus non-discretionary IS/IT investment/expenditure. Discretionary investments relate to investments that an organisation may make across its portfolio based on a critical analysis of goals and objectives as governed by the corporate strategy. Non-discretionary (or mandatory) investments however are not determined by the organisation but rather by the regulating
authority or environment. Non-discretionary investments may also be across the portfolio and are mandatory in order to comply with legislation or legislative changes. In any given period, these two types of investment are likely to have varying impacts on the organisation’s cost base and consequently its performance. A recent example of a non-discretionary investment are changes that would have had to be made to a variety of systems in order to comply with the introduction of the GST (Goods and Services Tax) in Australia.

Conclusions

The Credit Union case study has provided preliminary support for the IS investment model and the model itself is believed to make a conceptual contribution to the body of knowledge by encouraging further debate into the IS/IT investment/organisational relationship. The emergent themes have suggested extensions to the model as being areas that ABCU and other financial institutions’ IS/IT investment can be focussed with the intent of improving organisational performance. However, they will require further verification. The results suggest that IS investment does make a positive contribution to organisational performance, if this investment is directed at [improving] specific aspects of the organisation. Management commitment and support is seen as having a strong influence and could be a determining factor in as far as successful development and utilisation of an Information Systems portfolio is concerned. However, causality between IS investment and organisational performance is not suggested at this stage.

Limitations

Caution needs to be exercised in interpreting these results as they very preliminary and from a single and small case within a large industry. However, as indicated earlier, this is only the first case in a broader research project. Further research is currently in progress with other financial institutions that will provide for comparative analyses with other cases, both small and large within the Financial Services Sector. Despite these limitations, the results are very encouraging with the proposed model providing avenue for more debate into the IS investment and performance relationship.

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