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Accounting Information System in Economic Groups

Adaptation to the Needs of Subsidiaries

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Dedication

I dedicate this dissertation to my parents and my daughters for motivating, inspiring and encouraging me during this journey.

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Abstract

This study used institutional theory as a lens to understand how far institutional factors affect Accounting Information Systems adoption (integrated in an Enterprise Resource Planning system) and use in a subsidiary. For this purpose and after an extensive review of the literature on the topic an empirical study is done. The research approach is qualitative and a case study research method has been used. The relevant information is collected via semi-structured interviews.

The result indicates that the large majority of daily basis tasks of the company studied depends on AIS (integrated in an Enterprise Resource Planning system) to function. And the fact that it is the Headquarters that chooses AIS/ERP to be used does not have a negative impact on the subsidiary company because the key factors are taken in considerations when selecting and implementing the system.

Keywords: Accounting Information System, Enterprise Resource Planning, Institutional Theory, Isomorphism, Parent, Subsidiary

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Abbreviations

AIS - Accounting Information System
CSF - Critical Success Factor
EPOS - Electronic Point of Sale
ERP - Enterprise Resource Planning
IS - Information system
IT - Information Technology
IP - Internet Protocol
MIS - Management Information System
MSAS - Motorway Service Areas
NIE - New Institutional Economic
NIS - New Institutional Sociology
OIE - Old Institutional Economic
PC - Personal Computer
RDC - Remote Data Collection
RQ - Research Question
SFM - Site Finance Manager
SIM - Site Inventory Manager
WB - Welcome Break
WBSM - Welcome Break South Mimms

1. Introduction

1.1. The Scope of the Research

Information and communication technologies have been assuming increasing importance in the business world, being considered as one of the key factors for the success of an organization or business group. Likewise, accounting information systems (AIS) have had widespread adoption in both public sector organizations and the private sector (Rom & Rohde, 2007). These systems (AIS) are generally defined as a subsystem within the main information system in an organization, which deals with the collection, processing and reporting of financial information associated with the operations of the organization.

However this research will be using a broader perspective of AIS which not only includes the binding of AIS to the information systems of organization but also analyses the AIS and the information system as separate domains (Steinbart, 2009). Thus in this research AIS will cover the structured and unstructured information, financial and non-financial, used for the purpose of decision making, performance evaluation and management control. But this paper focus on AIS, because, although accounting information is only a small part of the information used by most managers, much research has assumed that such information is the most relevant or the only information manager's use (McKinnon and Burns, 1992).

The existing research in this area points to unsatisfactory and inconclusive results (Sutton, 2006; Granlund, 2011; Grabski, Leech and Schmidt, 2011) and it shows that production of information for management control and decision making has been ignored (Granlund 2011).

The adoption of information systems has been the subject of research for decades, and current models of technology adoption and diffusion have connected a complex network of system, organizational, individual, and social factors to adoption decisions (Ugrin, 2009). Recent research has shown that organizations are affected, in part, by institutional factors with regard to adoption of information systems (Teo, Wei and Benbasat, 2003). Consequently it is important to understand the effects of institutional factors, because adopting decisions primarily based on institutional factors would seemingly result in limited understanding of how a system contributes to a specific organization (Ugrin, 2009).

When it comes to companies that consist of multiple business units there are an array of challenges they need to face. They need to create a compatible information system among units that have their individual particularities like the products and services they offer, the

processes they use to create value, and their culture, experience, and location (Gordon and Gordon, 1997).

In this paper, the case study, of a multi site organization, invokes institutional theory to evaluate the influence of institutional pressure on AIS choice and implementation.

1.2. Research Objective

One line of research in the field of AIS is related to changes in the business environment, the increasing use of information systems and the development of information technology (IT).

The increasing complexity of business networks, globalization, shortening life cycle of products and the need for interconnection functions are some of the reasons for the use of integrated management information systems (MIS). "Currently, integration is needed increasingly in the business environment. This need emerges from the efficiency and synergy, necessary requirements in a complex and turbulent environment. In other words, integration is needed to facilitate coordination, which is again, related to the building of competitive advantage" (Granlund and Malmi, 2002: 305).

Suppliers and consultants of IT systems available in the market have been responding to the growing demand for AIS and thus the world have witnessed, in recent years, a massive process of diffusion of AIS which has provided financial controllers with a range of new tools that can improve their performance in various ways e.g. decision making, performance evaluation and management control. These tools are now identified as management accounting innovations (Elbashir, Collier and Sutton, 2011).

In addition, advances and development in IT alongside with the emergence of integrated Enterprise Resource Planning (ERP) systems, in the 1990's have enabled a change in collection, measurement, analysis and communication (transmission of information) within the organization and between organizations (Burns & Vaivio, 2001) and, allowed companies to have better control through the integration of the entire business cycle. From the second half of the 1990s almost every organizations (from multinationals to medium and small sized) replaced their earlier systems and implemented wide-ranging and multifunctional integrated information systems such as ERP (Davenport, 1998; Cooper and Kaplan, 1998).

There is no universally definition of ERP systems, but from an accounting perspective Granlund and Malmi (2002) define it "as module-based integrated software packages that control all the personnel, material, monetary and information flows of a company" (pp. 303).

Thus, in ERP systems accounting modules (AIS) are only one part of the information system (IS).

The suppliers of these systems argued that the ERP would allow the strategic management process to be sustained and connect it to everyday's operational tasks. This promise was not achieved and ERPs have become instruments of efficiency not effectiveness (Davenport, 1998). On the other hand, many organizations have encountered serious problems in the implementation of ERP. A famous case of failure was played by Allied Industries (Ragowsky & Somers, 2002). In fact, over 70% of projects related to new technologies do not achieve their goals (Lewis, 2001). Nevertheless, each year are invested large sums of money on investments in information technology (Carr, 2003).

It is true that ERPS systems have enabled improving operational tasks in management accounting, particularly in terms of information collection (Booth, Matolcsy and Wieder, 2000), Booth *et al.*, 2000). However, there is some lack of tools and more sophisticated software, essentials in the management and control of an organization (Rom and Rhode, 2006).

According to Davenport (1998), for a big company ERP “raise another important organizational question: How much uniformity should exist in the way it does business in different regions or countries? Some big companies have used their enterprise systems to introduce more consistent operating practices across their geographically dispersed units.” (pp. 127).

In this context, this research aims to analyse the extent to which the fact of being part of a corporate group, affects a company regarding the implementation of an AIS more suitable to its particular needs of information for decision making. After a thorough review of the literature, the AIS existing in the company will be studied as well as its use for decision making.

This study used institutional theory as a lens to understand how far institutional factors affect AIS/ERP adoption and use in a subsidiary. According to Grabski *et al.* (2011), majority of ERP research focuses on ERP selection, success factors, and the implementation phase, but seldom on post-implementation impacts. There is very little research focused on post-implementation efforts (Alves and Matos, 2013). This highlights a critical research gap. Our study fits in this research area.

1.3. Organization of the Dissertation

This dissertation is organized according to the usual structure of a scientific paper. The work begins with a brief introduction in which are defined the objectives of the research, followed by a brief explanation of the theme and the research issues.

Chapter 2 will cover the Theoretical Framework and showing an overview of Institutional Theory, which was adopted as a lens to understand the relevant factors in this research. It also makes reference to the different aspects and approaches. The theoretical framework presented in this chapter supports the empirical study (chapter 5).

Chapter 3 covers a review of existing literature. To justify the aims and objectives that were set out at the beginning of this dissertation, this chapter starts with a brief introduction of AIS and the interplay between institutional forces and AIS. And it concludes with a review of literature about ERP and its implementation in multi-sites companies.

Chapter 4 presents the research methodology used to guide this study. Specific research questions and methodological procedures are used in order to achieve the research aims and objectives. The delineation of the methodology the choice of case study and data collection is also explained in this chapter.

Chapter 5 covers the case study, using the information gathered in the literature review and interview with the purpose of addressing the research questions.

Chapter 6 discusses the results obtained from the case study. The core of this chapter focuses on the key answers gathered from the semi-structured interviews carried out with the organizational participants.

The seventh and last chapter presents the conclusions of this study. It restates the research aims and objectives and then demonstrates how all the materials discussed within this dissertation were used to address these aims and objectives. Some of the limitations found during the research study are outlined as well as suggestions for possible further research are also proposed.

2. Theoretical Framework

2.1. Theoretical Grounding

After the Second World War, many scholars and researchers have resorted to various theoretical approaches to design solutions and understand the process of implementation of management accounting practices. Highlights include the Neoclassical Theory, the Theory of Contingency and Institutional Theory (Necyk and Frezatti, 2010). However because the intention is to study the pressures that an organization is subject to when implementing an AIS, institutional theory will be used as theoretical support.

Recent research in this field (Scapens and Jazayeri, 2003; Dechow and Mouritsen, 2005; Quattrone and Hopper, 2005; Hyvönen *et al.* 2008) have shown that the methods associated with "surveys" are very poor in the perception of change and flexibility of control practices and management accounting. Moreover case studies based on Institutional Theory or "actor-network Theory" approaches can reach further than the functionalist approaches of management control (Granlund, 2011). Therefore, this study opts for conducting a case study (Yin, 1989) and Institutional Theory will be used as theoretical framework.

2.2. Institutional Theory

Institutional theory is one of the theoretical models in focus, the past 30 years, in organizational studies (Pereira, 2012) and is increasingly used in accounting research to understand the influences on organizational structures. Several authors have been devoted to the study of the theory and its application in organizations as a central element in the creation and perpetuation of enduring social groups in the workplace, as well as their impact on accounting (DiMaggio and Powell, 1983; Carpenter & Feroz, 2001, Major and Ribeiro, 2008; Moura, Dias Filho and Machado, 2010).

Institutional theory seeks to explain aspects such as the origin of the formal structure of organizations, how business can be affected by the need of society or by attitude of other companies. And, in particular, which factors lead firms to adopt certain practices created in the external environment (Leal, 2011). "Institutional Theory assumes that organizations adopt structures and management practices that are considered legitimate for other organizations in their fields, regardless of their actual usefulness" (Carpenter & Feroz, 2001: 569), ie, in response to pressures from the institutional environment in which they operate. Companies

adopt structures and processes that are socially accepted as the most appropriate (Carpenter & Feroz, 2001).

In the corporate context management accounting consists of a range of accounting information systems that support decision makers in achieving organizational objectives (Major and Ribeiro, 2009). Recently, theories that seek to understand management accounting taking into account the institutional context in which the company operates have emerged (Major and Ribeiro, 2009). The use of these new theoretical approaches emerged to address the gaps existing since the mid 80's. For example, empirical studies such as Scapens (1984) show that the practical reality of management accounting within enterprises differed from that prescribed as the ideal theory (Necyk and Frezatti, 2010). Based on the difference between theory and practice new context of research were explored using the institutional approach.

The interest of institutional theory in the social sciences has increased and, according to Major and Ribeiro (2008), several theories have been proposed and developed in the literature. The three most fundamental theoretical lines used in management accounting research are:

- New Institutional Economics (NIE) - NIE focuses on the institutional environment as a range of social rules, laws and policies that establish the basis for production, exchange and distribution. The institutional environment is seen as a central element for understanding the evolution of an industry and strategy of organizations inserted therein. Institutional environment has a great influence on the behaviour of organizations (Major and Ribeiro, 2009).

- Old Institutional Economics (OIE) - OIE Considers the institution (organization) as being the main object of analysis and not the rational behavior of individuals decision makers (Boff, Beuren and Guerreiro, 2009). Economic agents operate in a social context in which the norms and shared values shape individual behavior. In management accounting the basic idea is that rules and organizational routines play an intermediary role between the actions and interactions of everyday life and the institutions that underlying organization. These rules and routines carrying certain organizational characteristics over time, including contributing to the socialization of new members (Major and Ribeiro, 2009).

- New Institutional Sociology (NIS) - This theoretical lines suggest that the relationship between organizations is influenced by, norms and traditions of the environment. Early NIS theorists sought to explain how different organisations act in accordance

with similar standards of behaviour and how they employed similar structures. "The management accounting practices are in this strand of institutionalism, the result of economic pressures, but also of an institutional nature. Understanding institutions is assumed, therefore, as an essential factor in the study of accounting" (Major and Ribeiro, 2009: 45). The practices used in the organization are operated by these pressures of institutional environment in which they operate and not by economic issues such as internal efficiency requirements (Major and Ribeiro, 2009).

Therefore, institutional theory focuses on the study of the interrelationship between the individual, the organization and the environment, (Boff *et al.*, 2009). According to its purposes, as described in section 1, and because it will analyse the relationship between companies and institutional environment in which they insert, this paper fits under the New Institutional Sociology (NIS).

2.3. Institutionalization

Authors of the institutional theory of sociological tradition usually base the definition of the institution on a cultural basis, despite the different meanings attributed to the concept (Guarido & Costa, 2012). Scapens (2006) argues that institutions are the routines that have become separated from the historical roots, that is from time to time become automatically accepted.

According Guerreiro *et al.*, (2008), these routines or institutionalized activities, are actions that tend to be enduring, socially accepted, resistant to change and do not directly depend on rewards or monitoring of their permanence. In this line of thought, Scapens (1994) argues that accounting can, over time, be a structure that reflects the way people think and act in an organization - which is accepted as unquestionable, being unrelated to its specific historical circumstances . I.e., assumptions and beliefs deeply installed in the culture of the social group and accepted automatically, so that people do not ask about them.

Table 1 shows that from the time at which the process occurs habitualization is widespread, leading to objectification and subsequent sedimentation. It should be noted that after the sedimentation process, new members or even new companies are unaware of the origin of the variations (Pereira, 2012).

Table 1: Stages of the institutionalization and comparative dimensions

Dimension	Pre-institutional Stage	Semi- institutional Stage	Total Institutionalization
Process	Habitualization	Objetification	Sedimentation
Characteristics of adopters	Homogeneous	Heterogeneous	Heterogeneous
Impetus for diffusion	Imitation	Imitative/normative	Normative
Theorization Activity	None	High	Low
Variance in the implementation	High	Moderate	Low
Structural failure rate	High	Moderate	Low

Source: Tolbert and Zucker, (1996: 185)

2.4. Isomorphism

Isomorphism is a key term used extensively within neo-institutional theory. DiMaggio and Powell (1983) defend that when institutions are affected by similar set of environmental conditions they tend to resemble each other.

DiMaggio and Powell (1983) call the process by which organisations tend to adopt the same structures and practices as isomorphism, which they describe as a homogenisation of organisations. This means that organizations which choose to adopt different structures or behave differently than others might find that these differences are criticized. Because of isomorphic processes, organisations will become increasingly homogeneous within certain areas and conform to expectations of the wider institutional environment (Carpenter and Feroz, 2001).

There are three different institutional isomorphic processes, namely: coercive isomorphism, mimetic isomorphism and normative isomorphism, as suggested by DiMaggio and Powell (1983). Each of this institutional isomorphism will be discussed in detail in the following sections.

Normative isomorphism stems primarily from pressures from professional groups (Tsamenyi, Cullen & Gonzalez, 2006). These pressures arise from the professionalisation of a particular field, which aggregates people within the organisation to embrace certain types of structure and processes to establish a cognitive base and legitimisation for their occupational autonomy (DeMaggio and Powell, 1983). Professionalisation occurs through formal education,

professional associations, trade associations, and through professional media. It can also, be generated by external sources such as professional networks and knowledge introduced into an organisation by a manager.

Therefore, an organisation making a new decision or adopting a new practice can be derived from some aspects of its manager's personal attributions. The formal and informal interpersonal networks of an organisation's senior managers may also influence its decision-making and organisational actions.

Coercive isomorphism stems from political influence and legitimacy need where organisational changes are induced by those stakeholders upon which the organisation is dependent. Within the coercive pillar, organisations become similar through coercive isomorphism, as they influence individual organisations in a compelling manner, described by DiMaggio and Powell (1983) as consequences of formal and informal pressures exerted on organisations by other organisations upon which they are dependent and by the cultural expectations of the society within each organisations function.

Such forces could possibly be requirements issued by governmental bodies or standards defined by regulatory associations with the related power to impose expectations. This relates to the perspective of the managerial branch of the stakeholder theory, whereby an organisation is influenced by the demands of its powerful stakeholder groups (Zhao, 2012).

Coercive pressures are placed on a dependent firm by other organisations and by the cultural expectations of the broader society within which it operates (DiMaggio and Powell, 1983). These pressures have been associated with the obtaining of compliance on the part of organisations within the field in which they operate. Zhao (2012) refers that the use of rules and regulatory mechanisms in facilitating this compliance. If those rules and regulations are breached, punishment is enforced.

Institutional theory overlaps with a number of other theories, such as the legitimacy and the stakeholder theories, which derive from the broader political economy theory. And researchers, such as Carpenter and Feroz (2001), suggest that coercive isomorphic pressure, as defined in institutional theory, has some points in common with resource dependency theory.

Mimetic Isomorphism occurs when organisations face situations without having a clear indication of the best practices; they restrict their selection of organisational structures or practices to those that are being used by a large number of other organisations or by those organisations which are recognised as being successful within the institutional environment (Carpenter and Feroz, 2001). In other words, under conditions of uncertainty, the imitation of

successful peers is deemed to be a safe strategy. This is consistent with DiMaggio and Powell (1983: 152) they state that “organisations tend to model themselves after similar organisations in their field that they perceive to be more legitimate or successful”.

Mimetic isomorphism can be regarded as a response to organisational uncertainty in pursuing the best course of action. Imitating other organizations can be the solution for this uncertainty with little expense for a company. This mimicking may happen indirectly through for instance employee transfer, or explicitly via consulting agencies or different industry trade associations.

Institutional theory assumes that organisations will select among alternative structures or practices on the basis of efficiency considerations, primarily at the time that their organisation field are being founded or reorganised. Subsequently, they adopt forms that are considered legitimate by other organisations in their field, regardless of these structures or actual efficiency (Carpenter and Feroz, 2001).

To some extent, normative isomorphism is distinct from mimetic isomorphism in having an underlying evaluation tone. In one hand, mimetic isomorphism gives a shared frame of reference, of how things are done; on the other hand, normative isomorphism takes place on a moral base, what is right to do around here (Zhao, 2012).

3. Literature Review

The literature review will cover main areas like Accounting Information System (AIS), AIS and Institutional Forces, Enterprise resource planning (ERP) and Implementation of ERP in Multi-sites Companies.

3.1. Accounting Information

The concept and role of accounting information has been studied by several researchers (McKinnon and Bruns, 1992; Alves, 2004; Hall, 2010). According to McKinnon and Bruns (1992, 4) “the boundary between accounting information and other information used by managers is not easy to delineate” but it’s useful to try to define the meaning of accounting information. McKinnon and Bruns (1992) define the accounting information as accounting measure that consists in assigning numerical value to economic events already past, present, or future, based on observation and according to specific rules. Therefore “accounting information is quantitative, related to an entity, is based on observation, and is prepared according to rules. Data and information that do not meet these tests are not accounting information” (McKinnon and Bruns, 1992: 4). Consequently, management accounting information is a range of operational and financial data about activities, processes, business units, products, services and customers of an organization (Alves, 2004).

“Managers in all levels of an organizational hierarchy need precise and suitable data and information to make decisions that increase organizational performance” (Asemi *et al.*, 2011: 167). Thus, Accounting Information should have two basic qualities to be considered useful: “relevance” and “reliability”, in other words, faithful representation. For accounting information to be relevant, it is capable of making a difference in the decision making process. And reliable accounting information must also be faithfully represented to be useful (Anomah, 2012).

But how and why managers use accounting information?

“Although insightful, collectively, prior studies of what managers actually do with accounting information lack integration and conceptual clarity such that common themes and issues have not been developed” (Hall, 2010: 302). And prior studies have devoted inadequate attention to the practices through which accounting information is used by managers in their work (Ahrens and Chapman, 2007).

3.2. Accounting Information System

A major function of an accounting department is to collect, process and disseminate information to managers and these accounting systems “are frequently what come to mind when the question of where managers get information is raised” (McKinnon and Bruns, 1992: 6) The accounting information system (AIS) is systematic, reliable, and unbiased (Alves, 2004) but not sufficient in meeting manager’s needs for information (McKinnon and Bruns, 1992).

Prior research in the area of AIS is very broad ranging from studies where the major concern is Information technology issues rather than accounting applications (Granlund, 2011). Consequently and often “Accounting Information Systems (AIS) tool is an adaptation of the field of Information and Computer Technology systems to help in the management and control of processes that are related to firms’ economic-financial area. The AIS concept is not related to a specific application area, it is anywhere financial, accounting, and managerial issues have to be controlled.” (Ahmad, 2013: 344). AIS research exists at the intersection of the accounting and information systems domains (Poston and Grabski, 2000; Sutton, 2004; Ferguson and Seow, 2011). AIS researchers study accounting and information technology in explicit terms, operating in the middle ground between the fields of accounting and information systems (information technology) perspective (Granlund and Mouritsen, 2003).

AIS can be used in large, medium or small organizational scales helping to improve productivity and minimize cost, simplifying, effectively, communication between different departments, thus simplifying their job and minimizing the time consuming (Ahmad, 2013). With the advance in technology, companies can generate and use accounting information from a more strategic perspective. Nowadays companies face high level of uncertainty in competitive markets. Thus managers are challenged to improve their AIS and data processing to match the modern specifications of different market, financial and technology issues with respect to the advanced performance criteria, (Ahmad, 2013).

3.3. Accounting Information System and Institutional Forces

Institutional theory is widely used in accounting studies, being considered a robust sociological perspective within organizational theory (Albu *et al.*, 2013). As stated by Ugrin (2009) “More recently institutional theory has also been applied in accounting and information systems. Accounting researchers have examined a wide variety of issues through the institutional lens” (pp. 369). From the mid-1980’s to 2000’s accounting researchers have examined the use of accounting information as a means to support decisions made from an institutional perspective and the impact of institutional factors on choices and usage of

accounting policies. And more recently, in the context of institutional theory, issues such as firms' choices of performance measurement and accounting change have gained prominence, (Ugrin, 2009).

The literature on management accounting practices suggests that contextual factors like wider environmental and organisational factors exert influence on accounting practices (Heidhues and Patel, 2008). However, management accounting literature also suggest that management accounting practices have been converging and standardizing due to the increasing adoption of similar management philosophies and system designs (DiMaggio and Powell 1983).

Institutional theorists have argued that when organizations are inserted in their institutional context they tend to adopt similar organisational identities and structures, which lead to congruence between the external institutional environment and organisations (DiMaggio and Powell 1983; Heidhues & Patel, 2008).

New Institutional Sociology (NIS) focuses on the wider environment of an organization. NIS raises the awareness that organizations need to conform to rules and beliefs of the institutional environment in which they belong to (Scott, 1987; Scott and Meyer, 1994).

According to DiMaggio and Powell, (1983), NIS also explains the changes in organizational practices such as accounting practices, referred to as institutional isomorphism (coercive, mimetic and normative). And, due to its focus on both exogenous and endogenous factors, NIS has been used to provide an understanding of accounting choices and behaviour (Tsamenyi, Cullen, & José Gonzalez, 2006; Scapens, 1994). Many studies suggest that there is a link between the institutional environment and organization's choice of accounting controls (Tsamenyi *et al.*, 2006). Initially, researchers of NIS used to give no importance to the interplay between institutional and market forces in accounting choice, (DiMaggio and Powell, 1983). The role of the market and the power of competitive forces were recognised in later researches, (Tsamenyi *et al.*, 2006).

Institutional factors have a huge impact within an economic group. Subsidiaries companies are compelled to adopt technologies and practices imposed by parent companies which they depend on. This imposition occurs through coercive isomorphism (DiMaggio and Powell, 1983). And researches about relationship between parents companies and subsidiaries found out that "trusting the parent company shapes a subsidiary's perception that a practice exported from the parent company to the subsidiary is efficient" (Schweizer, 2010: 107). Also it has been suggested that there is a direct relationship between dependency and coercive pressures. The more dependent a subsidiary is on the parent company, more pressures for "group" internal

consistency it is put under. In another hand, the more financial contributions a subsidiary provides to the overall group, the less are parental pressures (Schweizer, 2010).

3.4. Enterprise resource planning (ERP)

3.4.1. From AIS to ERP

With the business world moving towards a completely collaborative model and competitors upgrading their capabilities, companies are challenged to:

- improve their business practices and methods in order to remain competitive;
- share the critical in-house information with their suppliers, distributors, and customers;
- upgrade their capability to generate and communicate timely and accurate information within the company.

“To accomplish these objectives, companies are increasingly turning to Enterprise Resource Planning (ERP) systems.” (Umble *et al.*, 2003: 241).

In their review of ERP research Grabski *et al.*, (2011, p. 38) stated that “Enterprise Resource Planning (ERP) systems were widely implemented in multinational corporations to integrate diverse and complex corporate operations”

“An ERP is an information system that manages, through integration, all aspects of a business including production planning, purchasing, manufacturing, sales, distribution, accounting, and customer service” (Sheu *et al.*, 2004: 361). Nowadays many companies have seen ERP as a “must have” system to improve competitiveness, (Sheu *et al.*, 2004). The table 2 shows some of the many functions supported by an ERP package in different fields in an organization.

Table 2: Functions supported by an ERP in different areas within an organization:

Finance and Account	Human Resource	Operations and Logistic	Sales and Marketing
Accounts receivable and payable	Human Resource time accounting	Inventory management	Order management
Asset accounting	Payroll	Material management	Pricing
Cash management and forecasting	Personnel planning	Plant maintenance	Sales management
Executive information system	Travel expenses	Production planning	Sales planning
Financial consolidation		Project management	
General ledger		Purchasing	
Product-cost account		Quality management	
Profitability analysis		Routing management	
Profit centre accounting		Shipping	
Standard and period-related costing		Vendor evaluation	

Source: Adapted from Umble *et al.*, 2003: 243.

According to Deshmukh (2006) early accounting systems formed the nucleus for contemporary ERP systems. “Accounting was the first functional area to get automated and feel the effects of Information Technology. Accounting software has become more sophisticated over the last several decades, and now it forms the core of business information systems”, (Deshmukh (2006: 34). And usually, management’s need for timely access to consistent information provoke ERP system adoption (Grabski *et al.*, 2011)

From an accounting perspective Granlund and Malmi (2002) define ERP “as module-based integrated software packages that control all the personnel, material, monetary and information flows of a company” (pp. 303). And, nowadays in many companies, the AIS is incorporated in ERP system. “Accounting software no longer exists at mid-size and higher-ends. Instead, we have accounting/business software, integrated business information systems, or ERP systems with accounting and finance modules” (Deshmukh, 2006: 34). Some of the most popular packages are shown in Table 3.

Table 3- Some of the most popular accounting information system (software package)

AIS	Features
Microsoft Dynamics ERP	Includes Microsoft Dynamics AX, an accounting and finance, HR and CRM tool; Microsoft Dynamics GP, a mid-market accounting suite; Microsoft Dynamics NAV and Microsoft Dynamics SL, both SME ERP platform.
Oracle e-Business	A modular ERP platform. Includes Oracle CRM, Oracle Financials, Oracle Logistics, Oracle Order Management and Oracle Warehouse Management Systems. The software makes use of the Oracle database.
Sage Line 500 and Sage 1000	Cornerstone ERP solutions for thousands of UK businesses, Includes CRM, HR, Payroll and Business Intelligence.
SAP Business One	Aimed at SMEs, Includes Financials, Sales Opportunities, Purchasing Banking, Human Resources, E-commerce and WebCRM.
Infor Global Solutions	Built on an open, flexible, service-oriented architecture (SOA) with web-based user interfaces. Includes Infor ERP LN, Infor ERP SyteLine, Infor ERP VISUAL, Infor ERP Adage and Infor ERP LX.
NetERP from NetSuite	NetSuite supplies on-demand, integrated business management software Includes hosted accounting, CRM, ERP, e-commerce and web site development software.
Sun Systems	Fully integrated software application, Designed for international organizations, complex operations and fast-growing companies, Includes financial and business management modules.

Source: Mohamed, (2009), and Sun Accounts (2009)

According to Pathak (2005) ERP package software is not the one that can be plugged into a server and ready for use, Corporations very often had to invest large amount of funds to customise the package to suit their needs.

3.4.2. ERP - Implementation and critical success factors

As referred earlier, nowadays business world is moving towards a completely collaborative model. Thus to be successful in a very competitive market, companies must upgrade their capabilities to increase competition, expand markets and rise customers expectations, (Umble *et al*, 2003). This scenario “increases the pressure on companies to lower total costs in the entire supply chain, shorten throughput times, drastically reduce inventories, expand product choice provide more reliable delivery dates and better customer service, improve quality and efficiently coordinate global demand, supply and production.”, (Umble *et al*, 2003: 241). In this context and compared to non-integrated departmental systems, ERP provides two major benefits: (Umble *et al*, 2003):

- an incorporated enterprise view of the business that covers all functions and departments;
- a database where all business transactions are entered, recorded, processed, monitored and reported.

ERP system also lead to better cash management, reduction of personnel requirement, and a reduction on overall costs of information technology, by eliminating redundant information and computer systems (Umble *et al.*, 2003).

However implementing an ERP system is an expensive or high-risk venture. About 65% of executives believe that the potential implementation problems of ERP systems can be harmful to their business, (Umble *et al.*, 2003). In their review of ERP research Grabski *et al.* (2011) stated that a “significant amount of ERP research has focused on identifying the factors critical for success in implementing ERP systems. ERP systems are very expensive, complex, impact the entire organization, and if they fail, they have the potential of contributing to the failure of the organization itself” (pp. 41).

There are two reasons which lead ERP to failure to meet expectations: poor implementation and an ERP system can be a poor “fit” for a particular firm and perhaps should not have been adopted, (Ugrin, 2009).

Critical success factors (CSF) have been defined as those few things that must go well to ensure success for an organization, and they were developed to help identify critical areas of concern and provide measures that would aid in the management of those areas (Grabski *et al.* 2011). Umble *et al.* (2003) have identified some factors that can be considered critical to the success of an ERP implementation:

- Clear understanding of strategic goals - key people on the organization must carefully define why the ERP system is being implemented and what critical business needs the system will address;
- Commitment by top management - strong leadership, commitment, and participation by top management;
- Excellent project management - a clear definition of objectives, development of both a work plan and a resource plan, and careful tracking of project progress;
- Organizational change management - “implementing an ERP system may force the re-engineering of key business processes and/or developing new business processes to

support the organization's goals" (pp. 245). ERP implementations may trigger profound changes in corporate culture;

- A great implementation team - ERP's implementation team member should be chosen based the skills, past accomplishments, reputation and flexibility. The team are in charge of the entire project ensuring that all necessary resources will be available as needed;
- Data accuracy - is essential for an ERP system to function properly because of its integrated nature. Actually, data accuracy should be considered a top priority when implementing an ERP. For example, if a wrong data is entered it can generate a negative domino effect throughout the entire enterprise;
- Extensive education and training - is the most widely recognized critical success factor. If the employees do not understand how a system works, they will invent their own processes using those parts of the system they are able to manipulate. To make end user training successful, the training should start early, preferably well before the implementation begins;
- Focused performance measures - project evaluation measures must be carefully constructed and also, must be included from the beginning. To be successful, system's implementation should be tied to compensation, and the "new" system must be forever monitored and measured.

Literature review quotes as reasons for the implementation of ERP systems: the need to remain competitive; to increase the demand for real-time information; to obtain information for decision making; the integration of applications; to implement a new business plan; to reduce costs and increase sales; to integrate all the information scattered throughout various systems within the organization in a single integrated system; or simply to seek to resemble the most modern international organizations (Alves and Matos, 2013).

In their paper Alves and Matos (2013) found that "integration of applications", "increased demand for real-time information", "integration of information" and "Information generation for decision-making" as the most popular reasons for ERP adoption. The same authors found that most of the modules implemented were: the Financial Accounting module, the Materials Management module and the Controlling module. These results corroborate those from other studies they have mentioned (Spathis, Constantinides 2004; Botta-Genoulaz, Millet 2006; Spathis 2006), according to which, in those organizations that have implemented ERP the financial and management accounting module are dominating. Thus they conclude that

Portuguese organizations that implemented ERP systems began by implementing the modules of accounting, which shows an initial concern to integrate their accounting processes.

3.4.3. ERP - Implementation in Multi-site Companies

According to Umble *et al.* (2003), there are particular concerns when implementing ERP in corporations or multi-site companies. The final success of the ERP implementation depends directly on the way in which these concerns are addressed.

“One of the objectives of an ERP implementation may be to increase the degree of central control through the implementation of standardized processes. Alternatively the implementation may be undertaken in order to provide the remote sites with capabilities that allow them to fine tune their processes to their unique situations.”, (Umble *et al.*, 2003: 247).

Implementing ERP system in a multi-site company is more complex, difficult and challenging due to the geographic dispersion of the sites, (Markus *et al.*, 2000). The different culture of organizations between sites needs to be taken in consideration (Umble *et al.*, 2003; Sheu *et al.*, 2004). Markus *et al.*, (2000), suggest that the scope is one of the first issues emerging when implementing ERP in multisite organisations. They have referred three main reasons why the scope is so important:

- It defines the level of benefit ERP systems can bring to the company;
- It also defines the level of the impact of ERP systems in organizations in terms of managerial autonomy, task coordination and process integration in the business units;
- Large scope projects are more expensive take longer to implement and fail more often. Thus, higher level of organisational authority and wider organisational participation are required.

In the other hand, corporate standardization versus local optimization is taken as a fundamental issue since corporate standardization brings a simplified interfaces between different parts of the organization, also more flexibility in terms of moving people and products between different locations with minimal disruption and relatively simple to consolidate information across the organization. Local optimization provide a more efficient and effective operation and can reduce costs (Umble *et al.*, 2003).

Corporations need to establish a very effective cut-over strategy regarding to implementation of ERP's. They must decide if the implementation will take place in all sites simultaneously or

if it will be phased by module, by product line, or by plant with a pilot implementation at one site (Umble *et al.*, 2003). A phased approach is generally considered to be more appropriate for multi-sites companies since it can provide an idea of the success of the entire project during the very first attempt of implementation (Umble *et al.*, 2003).

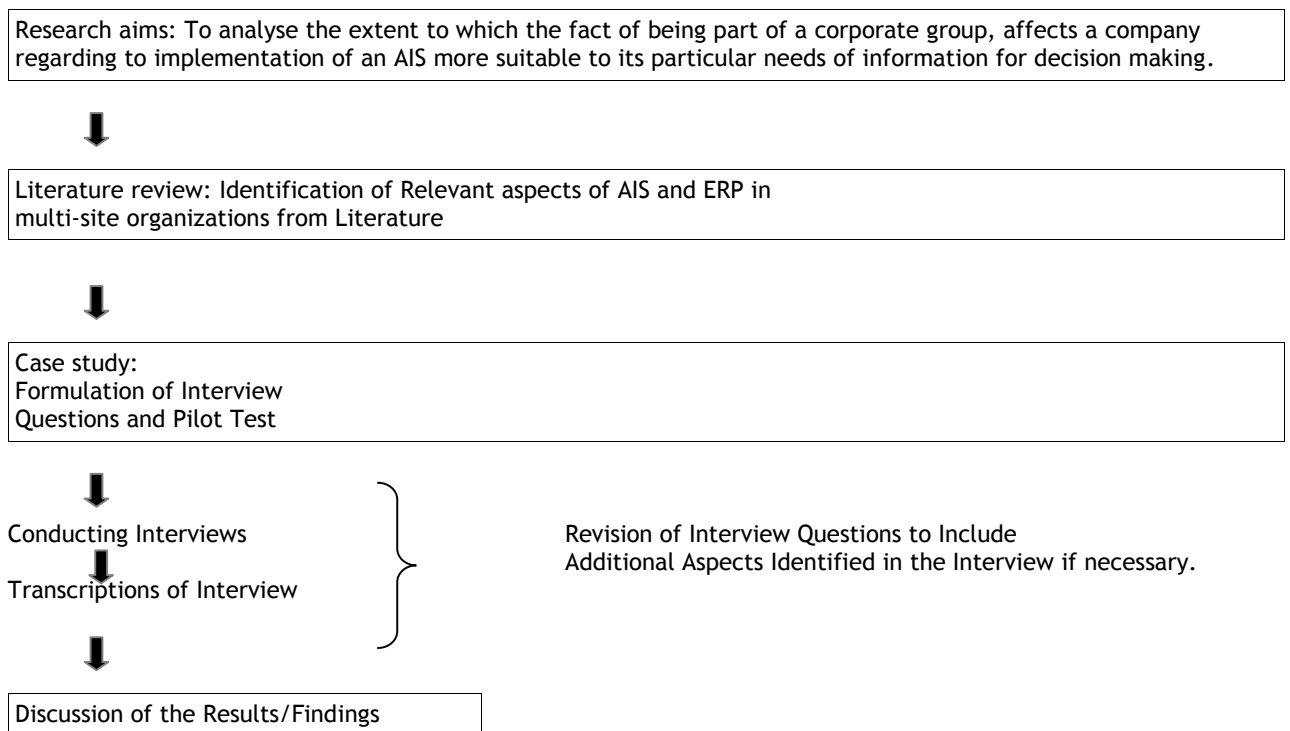
According to Grabski *et al.*, (2011), recent reviews indicate that a majority of ERP research focuses on ERP selection, success factors, and the implementation phase, but seldom on post-implementation impacts. There is very little research focused on post-implementation efforts (Alves and Matos, 2013). This highlights a critical research gap. This study fits in this research area. It will try to bring some contribution to bridge that gap of research.

4. Empirical Study

4.1. Research Design

According to Yin (1994), any kind of empirical research should have a research design, which translates into a logical sequence the path that connects the questions proposed to the data collected and, finally, the conclusions to be drawn, as shown on Table 4.

Table 4: Research Design



Source: Adapted from Yin (1994)

4.2. Research Questions

As mentioned earlier, this research aims to study the extent to which the fact of being part of an economic group, affects a company regarding to implementation of an AIS more suitable to its particular needs of information for decision making.

The AIS used by companies nowadays, are determined by the new possibilities offered by information technology. The remarkable progress that information technology has

experienced in recent years has provided a number of new tools to professionals in accounting that enable them to improve their performance in several ways (Zarzycka, 2012).

The need for accounting information in business is universally recognized today (Alves, 2004; Ferreira *et al.*, 2010; Florentine, 2012). However, selecting the most appropriate software can represent a serious issue. To Florentine (2012), the specific activity of the company should be the most important criterion to take into account. Another criterion, for the selection of an AIS in a corporate group context, relates to the flexibility of the software. If it is possible to apply the software in several organizations simultaneously (Florentine, 2012).

According to Gordon (1993), there is a standardization of information technologies systems from multinational or multi-site companies. The availability of information and communication technologies are frequently set out, standardized and implemented in the entire group. Thus, it is important to evaluate the impact of standardization for the provision of adequate, accurate and timely information to support management decision making.

Ferreira *et al.*, (2010) report that multinational companies which follow a global strategy are based on a configuration in which the subsidiaries have very little autonomy and just adopt the standardized technologies laid down by corporate headquarters. However, according to Masalu *et al.*, (2012), there has been a significant increase in the participation of the subsidiary companies in the process of technological innovation within the business groups. Subsidiary companies can perform three types of activities in the process of technological innovation:

- creation, in which subsidiaries develop innovations locally for local use;
- adaptation, in which subsidiaries adapt innovations developed by parent company to its individual needs;
- diffusion, in which a subsidiary transfers its innovations developed locally to parent company or other subsidiaries.

The limited evidence related to the link between institutional factors and AIS adoption and use gives rise to the first research question (RQ):

RQ1 - Are the AIS determined by the fact that the company is part of a corporate group? Do institutional factors affect AIS adoption? (In this study, corporate group is defined as collection of parent and subsidiary corporations that function as a single economic entity through a common source of control).

RQ1a - Are the AIS adopted by the company defined according to company's information need?

RQ1b - Are the AIS imposed by parent company?

RQ1c - Which other factors are considered when selecting AIS?

Literature shows that there is more than one definition for accounting information user. According to Drury (2008) "Accounting is a language that communicates economic information to people who have an interest in an organization - managers, shareholders and potential investors, employees, creditors and the government" (pp.6). Gabás *et al.*, (1996), define the user of financial information as being everyone in business, which need to know the aspects related to financial and economic activity, enabling decision process, and with a right to access the financial information. This right exists when the user interests may be affected, positively or negatively, by the activity of the informant.

Horngren *et al.*, (2012) defined the managers of the company as primary or internal users of accounting information and the investors, banks, regulators and suppliers and external users. Several studies present the financial analyst as the primary user of accounting information in the context of prediction (Alves, 2004). There are many users of accounting information who requires information for decision making purposes, but this study will focus on managers.

To Marriott & Marriott (2000), companies prepare and manage accounting information using technological resources such as computer, but in general, do not use their full potential. So it is important that studies on adoption of computerized accounting systems will also extend to the intensity of use of the technological resources available.

Several studies (Lehmann and Gallupe, 2004; Tsamenyi *et al.*, 2006), report that people tend to show some resistance to changes in organizations. Consequently, many systems are not accepted or used by potential users, regardless of considerable investment in time and money in the development and implementation thereof (Luarn & Lin, 2005). According to the research done by Tsamenyi *et al.*, (2006) the resistance to changes occurs when feelings of uncertainty from employees of subsidiaries, intensified by the little information given to them about the changes in the company. The top management only focuses on communicating the need to implement the new system and its technological aspects. The employees, on the other hand, were more concerned about the impact of the changes in their work. The research also mentioned that "employee's participation in the project was thus limited to their training in the new system and its use and its utilization" (pp. 425). It is along this line of thought that come the second and third research questions.

RQ2 - Do institutional factors affect AIS use? How do the users of AIS of subsidiary company react to the imposition from parent company? Do they criticize, or accept because they think the AIS is adjusted as necessary and seek to improve the existing system?

RQ3 - What is the degree of usage of AIS in performing daily tasks?

Information is seen as an essential resource for entrepreneurs, business people and managers in the process of decision making. Since the quality of decisions is often dependent on an opportune and relevant information (Serrasqueiro and Nunes, 2004). And some studies have shown that accounting information is used on most managerial decisions (Alves, 2008).

The concepts of information and accounting information have been the subject of research, being presented diverse perspectives on the definition of accounting information. Management Accounting Information is defined as the operational and financial data regarding activities, processes, operating units, products, services and customers of an organization. And, it is possible to relate the data to the accounting events in order to present them, using techniques and procedures well defined in the financial statements, which, when interpreted by decision makers, may be helpful information for decision making process (Alves, 2004).

In a corporate group it is possible to conclude that some managers of subsidiary companies are more comfortable using the same system to produce information for decision making and to prepare the official reports, to be sent to parent company (Souza *et al.*, 2003). In this context arises the fourth research question.

RQ4 - Accounting information produced by the subsidiary is the final product for analysis and decision making, or it still needs to be worked on?

4.3. Procedures and Methodology

4.3.1. Delineation of the Research Methodology

This chapter will cover the research methodology and procedures used to achieve the ultimate goal proposed in this study. The research was carried out in two parts. The first part will provide a comprehensive review of the literature about the theme, in order to obtain the theoretical support and enrichment for the empirical study. Also included is an extensive theoretical research on institutional theory, as theory used to support the empirical study.

The second part of this paper presents a case study about one of the 29 sites of Welcome Break Group Ltd, through conducted semi-structured interviews with key informants (various users of the AIS). The interview guide was prepared based on the literature review and contains open questions.

For a research project to reach a credible scientific standard it should be guided by a set of rules and procedures to enable it to achieve the goals initially set by the researcher (Yin, 1989). Therefore, a qualitative research (Case Study) will be used and two data collection methods: interviews and documentary analysis. In this process it is relevant to mention the role of the researcher as an employee of the organization under study.

Qualitative research has in its essence some characteristics: the direct source of data is the natural environment and the researcher is the main agent in the data collection; the data that the researcher collects are essentially descriptive; researchers here are more interested in the process rather than results (Bogdan & Biklen, 1994). This study falls within a practice-oriented model that Dull and Hak (2008) have defined as "descriptive practice-oriented research."

Each method as a set of rational and systematic activities, that allows to safely reach scientific knowledge, can lead to a different speech but coherent statement of reflection developed. One of the methods used in qualitative research is interview (Vieira *et al.*, 2008). The data collection method used in this case study is face to face semi-structured interview with relevant employees within the organization studied.

The case study draws primarily on interview data, but also utilizes internal company documentation. The analysis of texts and documents is a method often used in qualitative research (Vieira *et al.*, 2008). To perform work that is intended, the documents used as source documents were very important to understanding the functioning of the group as a whole.

4.3.2. Case Study Choice

Yin (1994), has defined case study as an empirical analysis which investigates a contemporary phenomenon inserted in a real context, where the boundaries between phenomenon and context are not evident and in which multiple sources of evidence are used.

Case studies provide an extensive view of the phenomenon under study and allow the researcher to capture the global characteristics of reality. The great advantage of this method lies in its ability to encompass the entirety evidenced through documents, interviews and observations (Yin, 1994). It is an interpretive case study, where the interpretations of

actors take place within a particular historic, political, and economic context (Collier, 2001). That is why, despite its frequent use in research, case studies are sometimes stereotyped as a research methodology lower among the various research methods. And the researchers who use this method are often accused of lesser accuracy, objectivity and rigor (Yin, 1994).

The choice of case studies should follow a similar logic to sample selection for conducting experimental research in which it seeks to deny or prove a specific aspect of the theory being tested, (Yin, 1994). This case study will study the existence of isomorphic pressures in the adoption process of AIS by subsidiaries.

As the objective of this research is to investigate to what extent a company inserted in an economic group is restricted on implementation of AIS best suited to its individual needs, the company chosen as case study is the largest of the 29 branches of Welcome Break Group Ltd. This choice is justified, mainly because the company falls within the subject matter, and also is implementing changes in accounting procedures determined by headquarters.

It is worth mentioning that this study has the particularity of the investigator being an employee and one of the users of existing accounting systems in the company. This fact lead to a particular need for the researcher to control subjectivity and personal opinion in relation to the facts. On the other hand this fact might facilitate data collection.

4.3.3. Data Collection

Interviews are one of the most common methods used in qualitative research because they allow a comprehensive understanding of the experience and opinion of the respondents. In this research, interviews are a primary source used to collect information. An interviews guide was elaborated to support semi-structured interviews. "It could be argued that the semi-structured interview is the most important way of conducting a research interview because of its flexibility balanced by structure, and the quality of the data so obtained" (Gillham, 2005: 70). Thus the researcher tried to help the interviewer to ensure that all the relevant topics were covered. Furthermore, the semi-structured nature of the interviews gave flexibility to the exploratory search.

The interview guide was developed based on the objectives of the study and the information gathered in theoretical study, as can be seen in Table 5. Indeed, the interviewees are those who have a direct involvement with the subject studied. In order to get more accurate and truthful information and since the finance manager is the only one able to answer certain questions, this research will use two interview guides. One for the Site Finance Manager, due to the nature of his roles, knowledge and experience and another for all finance team.

According to the purpose and subject of this research everyone who uses AIS on a daily basis was interviewed. This included the SFM, Inventory Manager and five finance clerks. More details of the interviewees is shown on chapter 5 of this dissertation.

Before beginning the interviews the purpose of the study and the importance of the interviewee for its realization were explained. Also the interviewer was quite explicit about the confidentiality of interviews and case study in order to leave the interviewee more comfortable. It should be noted that during the interview everyone was given complete freedom to speak of subjects questioned, since the questions were openly.

The fact that the researcher was a worker in the company where the study was held and was also a user of AIS was an advantage during the interview because it enabled the interviews to assume a more informal character, contributing to the willingness of respondents (colleagues) to respond. On the other hand it constituted a huge challenge since the researcher had to keep certain distance and an impartial attitude in order to not influence the answers.

The end of the interview occurred after all relevant matters have been mentioned. However, the interviewer always left open the possibility of a new contact with the interviewees to put further questions that arose during the investigation.

In addition to interviews and documents via the Internet, www.touchstonefms.co.uk, www.welcomebrek.co.uk, some documentation provided by the company itself were consulted; Finance Blue Book, Control Objectives and Finance Policies; Finance Green Book, Control Activities. All documents were reviewed carefully.

Table 5: Interview guide

Research Questions	Authors	Interview Guide Question
RQ1 -Are the AIS determined by the fact that the company is part of a corporate group? Do institutional factors affect AIS adoption?	Florentina, (2012) Gordon, (1993) Masalu <i>et al.</i> (2012) Alves, (2004) Ferreira <i>et al.</i> , (2010)	Who is in charge of deciding the AIS used in Welcome Break South Mimms (WBSM)? Did WBSM participate in this decision? If yes, what was the company's role in this choice? Are AIS standardized for the whole group? Are there any particular characteristic in WBSM that could potentially affect the implementation of AIS? If yes, were they taken into account when choosing the AIS? For how long has WBSM been using the same AIS? It is hard to quantify how implementing an AIS system will result in achieving operational goals? Is it hard to quantify how implementing an AIS system will help an organization meet strategic goals? Is it easy to quantify how implementing an AIS system will help an organization meet its goals? Is it hard to obtain the information to calculate a return on investment of an AIS implementation?
Research Questions	Authors	Interview Guide Question
RQ2 - Do institutional factors affect AIS use? How do the users of AIS of subsidiary company react to the imposition from parent company? Do they criticize, accept because they think the AIS is adjusted as necessary and seek to improve the existing system?	Marriott & Marriott, (2000) Alves, (2004) Lehmann and Gallupe, (2004) Luarn & Lin, (2005) Tsamenyi <i>et al.</i> , (2006)	How would you rate the institutional pressures in WBSM? How would you rate the benefits of using the AIS in WBSM? Are There benefits in the integration of corporate systems? What difficulties were found when using the AIS and how were they overcome?

<p>RQ3 - What is the degree of usage of accounting information systems in performing daily tasks?</p>	<p>Marriott & Marriott, (2000) Alves, (2004) Luarn & Lin, (2005) Tsamenyi <i>et al.</i>,(2006)</p>	<p>What level of use of the following accounting information systems: EPOS, SUN, CITRIX, and RDC?</p>
<p style="text-align: center;">Research Questions Q</p>	<p style="text-align: center;">Authors</p>	<p style="text-align: center;">Interview Guide Question</p>
<p>RQ4 - Accounting information produced by the subsidiary is the final product for analysis and decision making, or it still needs to be worked on?</p>	<p>Serrasqueiro e Nunes, (2004) Souza <i>et al.</i>, (2003) Alves, 2004</p>	<p>What is your opinion about the appropriateness of the AIS regarding to South Mimms needs?</p> <p>AIS systems contribute to information exchange between organizations?</p> <p>Implementation of AIS systems results in greater information exchange?</p> <p>Implementation of AIS systems causes problems to coordinate operations?</p> <p>Is it hard to quantify how implementing an AIS system will result in achieving operational goals?</p> <p>When asked an opinion about the importance of having an “on site” IT department instead of one IT department for the 29 sites, SFM said:</p>

5. Case Study - Welcome Break Group Ltd

As mentioned earlier, this research aims to study the extent to which the fact of being part of an economic group, affects a company regarding to implementation of an AIS more suitable to its particular needs. Through this case study we will try to analyse the perception of the AIS users regarding to the impact of an accounting system chosen by the headquarter (Head Office) in a subsidiary company - Welcome Break South Mimms.

5.1. Company presentation - Brief History

Welcome Break is the UK's second largest operator of motorway service areas (MSAs) after Moto, providing a diversity of services and products to travellers on motorways throughout the United Kingdom.

Opened in 1960, the service area at Newport Pagnell Services Ltd was the company's first motorway service area to be constructed. The company's portfolio was expanded to five motorway service areas during periods under the ownership of the Imperial Group. The group has been growing along the years. Currently operates 29 sites, including 24 motorway service areas and employs around 4500 people.

The facilities available at Welcome Break service areas varies at each site, with most sites open 24 hours a day throughout the year. Typically, each service area comprises a café or restaurant, a retail outlet, a hotel and a petrol station.

The Welcome Break South Mimms (WBSM) services were opened by Margaret Thatcher on 6th June 1987 but they had to be rebuilt in 1998 after a large fire on the 13th August. WBSM is situated at the busy roundabout between the M25 and A1.

WBSM employees around 300 people and provides its costumers a large variety of unit business as listed below:

WHSmith - retail shop,

Waitrose - supermarket

Burger King - catering

KFC - catering

Eat-in restaurant - catering

Starbucks - coffee shop

Days Inn - hotel

Petrol station - fuel

WBSM is the only site which offers special facilities for truck drivers in a separated building - Truckstop.

5.2. Data Collection - The Interviewees

This case study has, as its main source of information, seven interviews with seven company employees, who work with AIS on a daily basis, including the Account and Finance Manager. These interviews were not tape-recorded. This can be considered a weak point in the research methodology. However, all the interview notes were filed.

In management accounting literature there is a discussion about whether a small number of interviews can be considered sufficient. Seven interviews are consistent with other case studies in management accounting research which usually varied between 5 and 12 interviews (Heidhues & Patel, 2008). Moreover, the sufficiency of interviews is dependent on the amount of new information that can be retrieved with each one (Heidhues & Patel, 2008). In this case study, the seven interviewees are able to provide comprehensive insights into the research question, as they represent all the AIS users in Welcome Break South Mimms.

The following table shows the main characteristics of participants.

Table 6: Characteristics of participants

	Participants						
	Site Finance Manager	Inventory Manager	Finance Clerk				
Name	Steve Powell	Dahesh Patel	Sara	Kim	Harshani	Jacky	Andrea
How long in WBSM (years)	21	19	12	5	3	16	17
Current function	Site Finance Manager	Site Inventory Manager	Purchase and sales ledger	Purchase and sales ledger	Purchase and sales ledger	Purchase and sales ledger	Payroll
How long in the current function (years)	3	12	11	3	2	10	17

5.3. Accounting Information System (AIS) in WBSM

The AIS in use at WBSM manage important business process in different departments. All of AIS are integrated with ERP and this integration increases the relevance of accounting information and reduces the level of uncertainty to the decision maker.

5.3.1. Electronic Point Of Sales - EPOS

“Welcome Break’s EPOS strategy for sales and stock control was implemented throughout the group in conjunction with replacement of remote site IT infrastructure.”¹ In an interview to an IT and services company, Touchstone Group, the Planning and Analysis Manager of Welcome Break, Kelvin Astill explained that Welcome Break and Touchstone Group team worked together to provide the tools, techniques and experience required for an integrated client solution. This involved integrating new and existing technology, such as the accountancy software, payroll and hotel reservation system with supporting technology and people (Touchstone, 2012).

EPoS Systems, supply a fast and efficient way of deal with customers. They involve managing sales, integration directly with credit card payment, stock control and keeping track of customer information. Because they record a vast amount of information about different areas of the business, managers are able to make decisions with the benefit of the latest sales and stock information.

“In support of our aggressive site renovation and expansion program, we required a robust, innovative point-of-sale with the flexibility to fit easily into both the restaurant and retail environments while providing the needed technology standardization and consistency throughout our various locations. We also required a POS system supporting open-system architecture allowing us to select application software to best meet our present and future business requirements,” commented Welcome Break IT former Director Philip Lane (The Free Library, 1999).

5.3.2. Sun Accounts System

Sun Systems consist in fully integrated software that includes financial and business management modules. Due to the design and the appropriateness for international organizations, complex operations and fast-growing companies, Sun Systems is used by multinational corporations whose subsidiaries worldwide require an international product with a global support infrastructure.

¹ <https://touchstonefms.co.uk/wp-content/uploads/2012/11/Touchstone-FMS-Welcome-Break.pdf>

Sun Systems follows an open platform strategy. The “solutions operate independently of database and server platforms, running on Microsoft Windows NT, with SQL Server or Oracle, and UNIX with Oracle.” (SunAccounts, 2009).

5.3.3. XMPPro System

In 2013 WB Group decided to modernize the processes and improve the efficiency across the business by implementing the XMPPro solution. This project was carried on by an exiting partner Touchstone. XMPPro replaced a software system that dates back to 20 years, RDC (Remote Data Collection). The main objective of RDC was integrating different branches to the head office. The new software aims to update and improve the system and reduce manual work. With XMPPro 250 remote users will be able to manage their purchase ledger and generate postings that will update the Sun Finance Ledger (Touchstone, 2013).

5.4. Institutional forces and changes in the accounting information system

In March 1997 Welcome Break Group was acquired from Granada by Investcorp. At that time “all the accounting functions were run centrally by Granada. In less than six months, Welcome Break would have to have its separate financial operation up and running. This ambitious project needed extensive project management, together with business and technology solutions adaptable enough to accommodate rapid change and meet the requirements of the hospitality industry” (Touchstone, 2012).

Due to a limited financial and IT skills available in the company, Welcome Break contract IT Service Group as business partner, who helped the company articulate their financial strategy and to project manage and source various technologies and people.

Touchstone is an IT Services Group that offers integrated business solutions to help its clients address a range of business issues, from financial control, sales force productivity, management information to marketing effectiveness.

Touchstone developed the accountancy software project in two phases. The first phase involved implementing a UNIX based accounting solution that was powerful and robust enough to be able to handle a large growth in the number of users. However the system needed to be simple enough to operate, so everyone could be able to use it with a basic level of training. The second phase of the project was to roll the fully tested product out to the various different service sites (Touchstone, 2012).

Once completed the design of accountancy software, the processes for data import and export alongside with its translation were approved and effected. All the remote sites were linked to head office for banking, electronic messaging, Electronic Point of Sale (EPOS), Purchase Order Processing and Electronic Data Interchange systems.

In 2012, Welcome Break Group has signed a three-year IT services contract with Phoenix to support its network of 29 motorway retail complexes. “David Willock, director of IT at Welcome Break, said all the company’s site units use Welcome Break systems and processes, including electronic point of sale (EPOS), stock control and payroll and come under my remit, supported by Phoenix which helps maximise Welcome Break’s capacity to trade, across all sites at all times.”²

The new system improved and increased power and control from head office over the 29 sites (subsidiaries). Head office’s power and control, as identified above, has been recognized by institutional researchers as a form of coercive isomorphism (DiMaggio and Powell, 1983; Tsamenyi, Cullen & Gonzalez, 2006). In our case study, the head office directly coerced changes by “forcing” all of the subsidiaries to adopt the same accounting information system.

DiMaggio and Powell (1983) argue that isomorphism can cause organizations in an industry to look alike. Coercive pressure stemming from both the regulatory environment and head office control were influential in driving the change in our case organization -Welcome Break. In the context of WBSM, the Head Office is the one which establishes certain methods and procedures to be followed by the whole group. The organisation is thus considered to be coerced into adopting those practices by the influence of its powerful headquarter.

² www.retailtechnology.co.uk/news/2877/welcome-break-assures-it-service/

6. Discussion of the Findings

Following the structure of this research this section will discuss the results obtained with the interviews by answering the research questions.

The literature about Institutional Theory establishes that companies adopt structures and processes that are socially accepted as the most appropriate in response to pressures from the institutional environment in which they operate (Carpenter & Feroz, 2001). In fact WBSM does not choose the AIS used in site. The interview with site finance manager aimed to prove this. When asked who was in charge of deciding the AIS used in South Mimms, Steve Powel, SFM answered *“The Head Office makes the decision. Company is standardising accounting programs and rules. Identical reports and identical spreadsheets for all of the 29 sites.”* However and according to Masalu *et al.* (2012), subsidiaries companies are having a significant participation in the process of technological innovation within the group, *“we participate in the decision since the SFM's point of view counts. So the overall process is the same, but the differences between sites are taken into account”*. He added. Aspects like the dimension of the site, and the nature of unit businesses operating in each site are some of the factors taken into account when selecting an AIS. WBSM is one of the largest sites and has a Truckstop area with a petrol station in a separated building. Truckstop operates as semi-independent business unit. Part of the account information is processed locally and sent to the main site or can be assessed by connecting to the server located in Truckstop via IP adress. (RQ 1)

According to DiMaggio and Powell (1983), within the coercive pillar, organisations become similar through coercive isomorphism as consequence of formal and informal pressures exerted on organisations by other organisations upon which they are dependent. When it comes to suppliers WB is quite independent from its suppliers. It is considerable easy to change them. But again, the head office needs to make the decision for the group, assuring that the suppliers are capable of supplying an efficient AIS. So an individual site has no authority to use an AIS more appropriate to its needs. It is clear that there is a coercive isomorphism exerted by the Head Office on subsidiary WBSM (Kholeif *et al.*, 2007). (RQ 1)

WB Group have been using the same AIS for many years, as imposed by the parent company. As Steve Powel said, *“Our AIS are too old compared to those used by our competitors which have adopted newer systems”*. Also Dahesh Patel, SIM confirmed that there are AIS in use for more than 15 years. DiMaggio and Powell (1983) state under mimetic pressures sometimes organisations model themselves after similar organisations in their field that they perceive to

be more legitimate or successful. Imitating other organizations can then resolve this uncertainty with little expense for a company. (RQ 2)

In this case study there is no evidence that the company is affected by mimetic isomorphism because a single site cannot change its AIS. And the selection is not based on imitating competitors. According to Steve Powel "There's no indication of better performance by our competitor regarding the AIS. WB still doing really well using older systems". (RQ 2)

DeMaggio and Powell, (1983), states that normative pressures develop when professionalism of a particular field, which aggregates people within the organisation to embrace certain types of structure and processes to establish a cognitive base and legitimisation for their occupational autonomy. Again WBSM does not show any sign of being under normative pressure since depending on the parent company. (RQ 2)

Overall WB South Mimms is satisfied with the AIS imposed by the Head Office, according to both, SFM and SIM. For example, Steve Powel said that "*The AISs are good and appropriated to South Mimms needs*". Also, the company can easily quantify financial benefits provided by AIS. "*The number will show a reduction or an increase of costs of finance and account department.*" - Steve Powel. Regarding to return on investment on AIS, Dahesh Patel suggests that it will be easy to quantify, since an efficient accounting systems results in a reduction of personnel cost. (RQ 2 and RQ 1)

Regarding to company's goals SFM believes that a better accounting system would improve the performance of the operators and will help WB to achieve strategic goals. According to the SFM the key factor for a very successful and beneficial system relies on the implementation process. "*If the implementation of all the phases go as well as planned, we might look at a very successful and beneficial system*". (RQ 1)

According to Alves and Matos (2013), companies adopt ERP to integrate application and information, to increase the real time information sharing and to generate information for decision making. The interview with finance team was crucial to verify that company depends on ERP/AIS to operate its daily basis tasks. All of the AIS are utilized by everyone, as they are fundamental for completing the daily tasks, except Sun Account which is used only by SFM and SIM. Also the team mentioned reduction of processing time and sharing information as being the main of several benefits of using AIS. (RQ 3)

When questioned about how to overcome difficulties encountered when using AIS, apart from the SFM, the respondents almost unanimously, said that depending on the nature of the problem. As K. Baywaters said, "*the solution can be as easy as log off and log back in again*

or call the IT support team”. The IT support team gives the instruction to fix the problem over the phone, or they can access to the PC via the IP address. In fact most of the interviewed agreed that there is no need for South Mimms to have its own IT department. However for SFM *“It would be good to have, at least an IT skilled person on site to contact when we need them, instead of having to contact them by phone and explain the problem over the phone. When they are busy dealing with other issues, the waiting time can be long, sometimes”*. (RQ 2)

For SFM, to integrate different areas of business implicates, sometimes, changing in people’s routine and habits. Some people show resistance to changes as they prefer to work in their comfort zone. This resistance can be explained by the fear of losing their job as the employees are more interested in the impact these changes may have on their work (Tsamenyi *et al.*, 2006). To overcome this problem SFM suggests more training and information are necessary to enable people to achieve more confidence using AIS. (RQ 2)

As mentioned earlier in this dissertation, every Welcome Break branch use the same AIS. The main advantage of this, according to the interviewees, is the speed in sharing information between sites and the Head Office. It also improves integration between different sites, which will simplify the analysis and evaluation of corporate financial data by Head Office, as all the sites will produce a similar report, spreadsheet and other accounting information. (RQ 4)

The account information produced by WBSM are sent to head office via e_mail or can be accessed by *login* on the ERP, or by simply *login* to Citrix to see network drives for all sites users to connect to relevant drives where the information is saved. Some of the accounting information are fundamental for decision making in the site and contribute to decision making for the group without requiring any additional work. For example information regarding payroll, daily sales and inventory. (RQ 4)

For showing the true financial position to the shareholders and investors, Head Office prepares a consolidated balance sheet, consolidated profit and loss account and other relevant reports, by combining the information received from all of subsidiaries and making adjustments if necessary. (RQ 4)

7. Conclusions

This research aims to analyse the adaptation of AIS to the needs of companies incorporated in economic groups. A case study was conducted on a motorway service area, which is one of the 29 branches of Welcome Break Group Ltd. The triangulation of data was performed by analysis of literature, interview with the finance team which use AIS on daily basis and information collected from company's web site.

Like mentioned earlier, this study used institutional theory as a lens to understand how far institutional factors affect AIS/ERP adoption and use in a subsidiary. By analysing the relationship between companies and the institutional environments in to which they are inserted, the theoretical line of institutional theory in which this research fits is the New Institutional Sociology (NIS).

The results show that in this case study, head office controls all of the subsidiaries as a form of coercive isomorphism. As consequence, none of the branches have authority to select or choose the AIS which best suit their needs. They are directly coerced to adopt the same account and financial information system. However, when Head Office makes the decision some of the particular characteristics of individual site are taken into account in combination with institutional factors as well as the SFM opinion or point of view about the process, along all of phases.

As expected, employees have some resistance to change especially when these are imposed by the head office, and not internally. This resistance is mainly the consequence of the fear of losing their jobs or facing new challenges. To overcome these problems SFM suggests more training and information needs to be provided to the employees in order to achieve more confidence using AIS.

According to the finance team, WB highly depends on AIS/ERP to perform the daily tasks. Apart from Sun Accounts used by the finance and inventory managers, all of the AIS are utilized as they are essential in every areas of the business: sales, inventory, payroll, purchases. So AIS plays a crucial role in the whole company and in addition to that, brings several benefits for example: reduction of processing time, eases information sharing and increases flexibility in processing data as well as increases the quality of reports.

The literature suggests that accounting information is used in most of managerial decisions and this was verified in the case study. In fact, and as one of the largest site of the WB

Group, South Mimms produces relevant accounting and financial information for decision making at the site as well as for the whole group.

Due to the integration and standardization of AIS most of the accounting information sent to Head Office is ready for analysis and decision making without requiring any further adjustments. However when it comes to showing the information to the shareholders, investors, Her Majesty's Revenue and Customs³ and also for important decisions for the group, the finance team from Head Office aggregates the relevant information from all sites, makes adjustments if necessary, in order to produce consolidated account and financial information, which reflects the true and real financial position.

This dissertation provides an illustration of the way in which Welcome Break designed structures to respond to pressures from institutional forces. Institutional forces drive the company to integrate the account and finance information system to facilitate data analysis and decision-making. In this context, the contribution of this study is showing that regardless of not having the authority to make decision about the AIS that best suited to its needs, WBSM is successful with head office choice. In order to meet the subsidiaries needs, WB Group ensure that the whole process is rigorously prepared by Head Office, the finance managers from subsidiaries are consulted regarding particular characteristics of the subsidiary which might lead to modifications or adjustments on the AIS. The employees are well informed and trained to overcome any resistance to change and to promote their involvement and motivation with the new system or process.

One of the limitations of this dissertation is the sample studied. It is noted that a single case study does not allow the result to be generalized to other organizations. Another limitation is regarding the interview. They were non-recorded because the interviewees preferred to answer the questions in a more confidential way. To overcome this issue all of the answers were written carefully during the interview.

Due to breadth of the subject and because AIS are constantly evolving it is suggested for future research, a comparative study between two or more subsidiaries within the same economic group or groups whose companies have different activities. Likewise the subject can be analyzed through alternative lenses such as resource dependency theory, the impact on Headquarters, which could bring another understanding of the theme.

³ Her Majesty's Revenue and Customs (HMRC) is a non-ministerial department of the UK Government responsible for the collection of taxes and the administration of other regulatory regimes.

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9. Appendix

9.1. Appendix 1 - Interview Guide

Personal Information

Name (Optional) _____;

Age: _____;

How long have you been working for WB? _____;

What is your current position in WB and for how long? _____;

Decision to adopt an accounting information system (Research Question 1)

Who is in charge of deciding the AIS used in WBSM?

Did WBSM participate in this decision?

If yes, what was the company's (Site) role in this choice?

Are AIS standardized for whole group?

Yes No

Partially?

Are there any particular characteristics in WBSM that could potentially affect the implementation of the AIS?

Yes No

If yes, were these characteristics taken into account when deciding?

How long has the company been using the same accounting information system?

Influence of Institutional factors (Research Question 2)

Institutional Pressures			
	Coercive	Mimetic	Normative
	<p>Perceived Dominance of Suppliers that have Adopted AIS</p> <p><input type="checkbox"/> Strongly disagree <input type="checkbox"/> Strongly agree</p> <p>1. WB's well-being depends on their resources. 2. WB cannot easily switch away from them. 3. WB MUST maintain good relationships with them. 4. They are the core suppliers in a concentrated industry.</p>	<p>Perceived Extent of Adoption by Competitors</p> <p><input type="checkbox"/> None has adopted <input type="checkbox"/> All have adopted</p>	<p>Perceived Extent of Adoption by Competitors Currently</p> <p><input type="checkbox"/> None has adopted <input type="checkbox"/> All have adopted</p>
	<p>Perceived Dominance of other sites that have Adopted AIS</p> <p><input type="checkbox"/> Strongly disagree <input type="checkbox"/> Strongly agree</p> <p>Other sites have shown a better performance.</p>	<p>Main competitors that have adopted AIS</p> <p>1. Have benefited greatly. 2. Are perceived favorably by others in the same industry. 3. Are perceived favorably by suppliers. 4. Are perceived favorably by customers. Why is it important competitors have same ais</p>	<p>Perceived Extent of Adoption by Other Sites</p> <p><input type="checkbox"/> None has adopted <input type="checkbox"/> All have adopted</p>

Difficulty to Quantify (Research Question 1)

It is hard to quantify how implementing an AIS system will result in achieving operational goals.

strongly disagree strongly agree

It is hard to quantify how implementing an AIS system will help an organization meet strategic goals.

strongly disagree strongly agree

It is hard to quantify how implementing an AIS system will help an organization meet its goals.

strongly disagree strongly agree

It is easy to quantify how implementing an AIS system will help an organization meet its goals.

strongly disagree strongly agree

Information to calculate a return on investment of an AIS implementation is hard to obtain.

strongly disagree strongly agree

System-Integrativeness (Research Question 4)

Implementation of AIS systems leads to coordination in strategic planning activities between companies.

strongly disagree Strongly agree

AIS systems contribute to information exchange between organizations.

strongly disagree Strongly agree

Implementation of AIS systems results in greater information exchange.

strongly disagree Strongly agree

Implementation of AIS systems causes businesses to coordinate operations.

strongly disagree Strongly agree

Benefit in general integration between firms

is not a benefit of AIS adoption is a benefit of AIS adoption

Explain why.

Stage in general AIS systems are:

not widely adopted widely adopted

Explain why

Utilization of AIS in Accounting Functions (Research Question 3)

What is the level of use of the following accounting information systems? Give your answer based on the following table: 1-Never Utilized; 2-Rarely Utilized; 3-Only by the Managers; 4-Often Utilized; 5-Very Often. Explain the reason for your answer.

AIS	1	2	3	4	5
EPOS					
SUN					
CITRIX					
RDC					

Benefits/dificulties of AIS utilization (Research Question 2)

How would you rate the following benefits of using the AIS in WBSM?

1= Not Beneficial; 5= Very Beneficial

Benefits	1	2	3	4	5
Reduction of time in the preparation of weekly reports					
Reduction of processing time					
Improvement in the quality of reports					
Increase of speed in processing payroll					
Speed in disseminating accounting information					
Increased flexibility in processing data					
Ease of information sharing within the group					
Producing reliable and consistent information					

Which difficulties are found when using the AIS and how are they overcome?

As an important person in using and generating accounting information, what is your opinion about the appropriateness of the AIS regarding to South Mimms needs?

9.2. Appendix 2 - Interview with SFM

Questions	SFM 2/10/13
Who is in charge of deciding the AIS used in WBSM?	<i>Head Office.</i>
Did WBSM participate in this decision? If yes, what was the company's (Site) role in this choice?	<i>Yes. Do not make the decision, but Site Finance Manager's point of view counts.</i>
There is already standardization for all the sites.	<i>Yes. Company is standardising accounting program and rules identical reports and identical spreadsheets.</i>
Are there any particular characteristics in WBSM that could potentially affect the implementation of the AIS? If yes, were these characteristics taken into account when deciding?	<i>Yes. We are the only site with a Truckstop facility. So the overall process is the same, but the differences between sites are taken into account</i>
How long has the company been using the same AIS?	<i>Long time, RDC (remote Data connection) has been used since 1990's.... SUN Accounts and Epos from 1999 and have been upgraded. Citrix is more recent, 2005.</i>

<p>Institutional Pressures</p> <p>(Coercive pressure)</p> <p>Perceived Dominance of Suppliers that have Adopted AIS</p>	<p><i>WB is more independent from its suppliers. It is considerable easy to switch away from them.</i></p> <p><i>We need to make sure that our supplier are capable of supply an efficient AIS.</i></p>
<p>Perceived Dominance of other sites that have Adopted AIS</p>	<p><i>The new system has been just implemented and it is too early to tell 100% sure about the performance.</i></p>
<p>(Mimetic pressures)</p> <p>Perceived Extent of Adoption by Competitors</p>	<p><i>The systems used in WB are too old comparing to those used by competitors.</i></p> <p><i>WB normally compares three differents options and decides which one to adopt.</i></p>
<p>Main competitors that have adopted AIS</p>	<p><i>There's no evidence of better performance by our competitor regarding the AIS. WB still doing really well using older systems.</i></p>
<p>(Normative Pressures)</p> <p>Perceived Extent of Adoption by Competitors Currently</p>	<p><i>Main competitors have adopted newer systems</i></p>
<p>Perceived Extent of Adoption by Other Sites</p>	<p><i>All have adopted. All sites use the same system.</i></p>

<p>It is hard to quantify how implementing an AIS system will result in achieving operational goals.</p>	<p><i>Financial benefits are easy to quantify. Numbers will show a reduction or increase of costs of “Back of House” (account and admin). Less hours in IT contract.</i></p>
<p>It is hard to quantify how implementing an AIS system will help an organization meet strategic goals.</p>	<p><i>It is easy to quantify the performance of operators. Better accounting systems improve performance.</i></p>
<p>It is easy to quantify how implementing an AIS system will help an organization meet its goals.</p>	<p><i>Yes. By comparing where company is and where it wants to be according to the expectations.</i></p>
<p>Information to calculate a return of investment on an AIS implementation is hard to obtain.</p>	<p><i>It is, financially, easy to obtain and quantify the return of investment on an AIS implementation by measuring the profit from the units businesses, for example.</i></p>
<p>System-Integrativeness</p> <p>Implementation of AIS systems leads to coordination in strategic planning activities between companies.</p>	<p><i>Yes. Company decides the schedule and IT support team work out the best chronogram for the implementation.</i></p>
<p>AIS systems contribute to information exchange between organizations.</p>	<p><i>Yes, definitely. Within the group it is much simpler and quicker to exchange account information. The Head Office and other sites can access the information half hour after being input.</i></p>
<p>Implementation of</p>	<p><i>Yes. Because of the uniformisation of AIS information exchange</i></p>

<p>AIS systems results in greater information exchange.</p>	<p><i>became a much simpler process. Mainly because there's no need of convert information, same program, same format everywhere</i></p>
<p>Implementation of AIS systems causes businesses to coordinate operations.</p>	<p><i>Yes. Currently we are implementing new AIS alongside with people learning how to use the new system.</i></p>
<p>Benefit in general integration between firms (sites).</p>	<p><i>Being integrated means sites are more able to support each other in terms of training, holiday cover, without any further training or preparation. Since all the sites have the same systems and processes.</i></p>
<p>Stage in general AIS systems are:</p>	<p><i>AIS is widely adopted in WB. Every site has one.</i></p>
<p>What is the level of use of the following accounting information systems?</p> <p>EPOS SUN CITRIX RDC</p>	<p style="text-align: center;">5 5 5 4</p>
<p>How would you rate the following benefits of using the AIS in WBSM?</p> <p>Reduction of time in the preparation of weekly reports</p> <p>Reduction of processing time</p>	<p style="text-align: center;">4 4</p>

Improvement in the quality of reports	4
Increase of speed in processing payroll	3
Speed in disseminating accounting information	5
Increased flexibility in processing data	5
Ease of information sharing within the group	5
Producing reliable and consistent information	3
Which difficulties are found when using the AIS and how are they overcome?	<i>Integrate different areas of business implicates sometimes, changing in people's routine and habits. This process requires further training. Technical issue too we contact the IT support team and sometimes contacting the suppliers.</i>
As an important person in using and generating accounting information, what is your opinion about the appropriateness of the AIS regarding to South Mimms needs?	<i>The AIS are good and appropriated to South Mimms needs. If the implementation of all the phases go as well as planned, we might look at a very successful and beneficial system. Like I said earlier, the overall process is the same, but when the company selects AIS the differences between sites are taken into account.</i>
When asked an opinion about the importance of	<i>It would be good to have, at least an IT skilled person on site to contact when we need, instead of contact them by phone and explain the problem over the phone.</i>

having an “on site” IT department instead of one IT department for the 29 sites, SFM said:	
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9.3. Appendix 3 - Interview with SIM and the Finance Clerk

	Questions					
	SIM	FC Kim	FC Harshani	FC Jacky	FC Sara	Payroll - Andrea
Who is in charge of deciding the AIS used in WBSM?						
Did WBSM participate in this decision? Yes If yes, what was the company's (Site) role in this choice?						
There is already standardization for all the sites.						
Are there any particular characteristics in WBSM that could potentially affect the implementation of the AIS? If yes, were these characteristics taken into account when deciding?						
How long has the company been using the same AIS?	SUN 2001 EPOS 2000 CITRIX 2005					

	<i>RDC</i> <i>1990</i>					
Stage in general AIS systems are:						
What is the level of use of the following accounting information systems?						
EPOS	5	5	4	4	5	5
SUN	5	x	x	x	x	x
CITRIX	5	5	5	5	5	5
RDC	3	2	3	5	3	x
How would you rate the following benefits of using the AIS in WBSM?						
Reduction of time in the preparation of weekly reports	3	4	5	4	5	5
Reduction of processing time	5	4	4	4	5	5
Improvement in the quality of reports	5	3	4	4	5	5

Increase of speed in processing payroll	3	x	x	x	5	5
Speed in disseminating accounting information	3	x	x	x	x	x
Increased flexibility in processing data	3	2	3	4	3	5
Ease of information sharing within the group	3	5	5	4	5	5
Producing reliable and consistent information	5	3	4	3	5	5

<p>Which difficulties are found when using the AIS and how are they overcome?</p>	<p><i>Learning how to use the new system properly. More intensive training process</i></p>	<p><i>When the server goes down we cannot log on another department to collect reports for example. Sometimes when citrix goes down we need to call IT support team. If they cannot sort the problem out we have to do some of our work manually, like safe check, or leave the less important to nest day.</i></p>	<p><i>When the server stops working because of the weather or some other reason. Call IT support team for instruction or fix it locally if possible.</i></p> <p><i>Formula error that we cannot change. Inform the manager in order to correct the spread sheet.</i></p>	<p><i>Unscanned products cannot be put on the system. Sometimes system is too slow. Call IT support team.</i></p>	<p><i>Sometimes system freezes or log user out automatically. Log in again or call IT support team.</i></p>	<p><i>Data on the system not match to the paperwork. People are not setup properly. Not able to pullet report from Truckstop because of IP address. System does stops work. Enter data manually. Call IT support team.</i></p>
<p>As an important person in using and generating accounting information, what is your opinion about the appropriateness of the AIS regarding to South Mimms needs?</p>	<p><i>Yes. User friendly, better time management, more efficiency.</i></p>	<p></p>	<p></p>	<p></p>	<p></p>	<p></p>

<p>When asked an opinion about the importance of having an “on site” IT department instead of one IT department for the 29 sites, SFM said:</p>	<p><i>Not important</i></p>	<p><i>It is not really important. They are quite good sorting the problems out over the phone. They can login to any of our computer and find out the problem and fix it.</i></p>	<p><i>Not really important. IT support team is quite good and quick in solving problems. They can dial on our computer through the pc address and fix it.</i></p>	<p><i>Not really</i></p>	<p><i>Yes. It would be useful. Easier to sort problems out face to face rather than phone calls.</i></p>	<p><i>Not really important</i></p>
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