Information systems requirements

Technology, Information Technology



The Information Systems requirements and subsequent evaluation of the impact these systems will have on the business 'Ready to Eat, Executive summary This report is to be delivered by 25th May 2010 and is designed advise Rebecca Smith about various information system possibilities that would best suit the requirements of Rebecca's business 'Ready To Eat' (RTE). The report firstly describes what an information system is, its purpose and how they work.

This report will then discuss the increasing globalisation of markets and how IS can be utilised in small businesses to capitalise on these new markets and improve their competiveness. Further discussion are delivered on what information systems are available and describes how IS haves different functions but can and do overlap when providing support for the specific business function. The report identifies information system by their function and how they can assist RTE in managing the business. Managers and business owners are expected to make decisions which have a positive effect on the future of the business; this report describes how Information systems have directly influenced decision making and how if information systems to be effective need to integrate forecasting the future and offer alternative scenarios of the outcomes of decision. The report also offers the hypothesis of Porter's Competitive Forces model and advocates that this model is the foundation to understanding the strategic forces affecting businesses. The report characterises the role of information system and how the manipulated these forces give small business a strategic advantage. This report will identify the information requirements of RTE by advocating that the basic process of systems development involves defining the project, creating a

model, deriving a model, measuring the costs and benefits of all alternatives, selecting the best option, designing the new system, completing the specific programming functions, installing and testing the new system, and completing a post-implementation audit (Chad, Yu-An; Shu-Woan 2007).

Collaboration and communication among key stakeholders is then discussed outlining the role of the internet, intranet and extranet and how these tool can be used in business to archive a more efficient and effective operation. Further details to IS implementation are explored with a focus on identifying problems that are generally associated with the implementation of IS, this report then offers solutions by utilising planning to combat these problems. The report then discuses the ethical and security issue that are associated with information systems in business. In finalising the report if offer a summary of conclusions and recommendations that include the use of that information to facilitate the business function is of vital importance and by using Information system effectively RTE will be in a better position to sustain growth and productivity. The report recommends the utilisation of office information system transaction processing system to improve the productivity day-to-day operational and financial elements. Further, the use of Management Information systems (MIS) were recommended so as to provide the information necessary to manage and organisation effectively. It is a recommendation of this report that information system be utilised as a as tool to gain a strategic advantage by aligning the businessgoalswith the influence of the five forces described in the report as Porter's Competitive Forces model to obtain competitive advantage by influencing direction or strength of one or more of the forces in Porter's model.

Table of contents Executive summary 2 Table of contents 3 Introduction 5 Information systems 5 The benefits that information systems can provide for your business6 Types of information's system available for to RTE7 Operating Support System8Transaction Processing Systems8 Management support systems8 Decision support system8 Knowledge Management Systems 9 How information systems could help RTE in managing their business. 9 Information systems affect on management decision-making? 10 How these information systems could be used to gain competitive advantages. 10 New Threat to Entry11 Bargaining power of Customer11 Bargaining Power of Suppliers11 Substitute Products12 The intensity of competition among current rivals within the industry12 What are the information requirements of RTE? 12 What business processes should RTE consider making computerised? Why? 13 Collaboration and communication among key stakeholders13 Management challenges during implementation of the computerised information system15 Planning15 Objectives of ecommerce adoption15 Involve of users and key personal16 Implementation Stage16 Top management commitment16 IT investment evaluation process16 Security and ethical issues16 Ethics17 Organisational Issues17 Conclusion17 Recommendations18 References20 Introduction For a business to be successful in today's competitive environment computerised information systems are now being used to harness information to facilitate the business function. O'Brien & Marakas (2009) described a information system (IS) as, any organised combination of people, hardware, software, communication networks, data resources and policies and procedures that stores retrieves, transforms and disseminates information in an organisation' The increasing

globalisation of markets and business has brought increased competition and new opportunity for small business and the effective use of Information system will better enable small business to sustain growth and productivity. Whilst there are many challenges inherent in development of such systems, these systems can offer businesses a number of advantages such as a competitive tool to develop new products and services, integrate with suppliers, compete against rivals, and make effective and efficient changes to business operations. There is a diversity of sophisticated hardware, software and communications technologies, used in information systems in today's business which makes it sometimes difficult to classify these systems in any one category. Whilst the function of information system can overlap they all seek to benefits business by supporting business processes and operations, supporting decision making by employees and manager and supporting strategies for competitive advantages (Chad, Yu-An & Shu-Woan 2007).

Mangers depend on information system for decision making to help organise the data around them when they cannot process that data accurately and within the short period of time available to them. Managers will use this information to make decisions which have a positive effect on the future of the business. To properly assess the effect in the future of the decisions to be made diverse tools come into play. An effective information system should integrate forecasting the future, and because their choices have been made, such a system must also support the comparative assessment of the effects of alternate decisions (Gray, 2006) Information systems are also used to gain sustainable competitive advantage by aligning the business goals

with IS that influence the five strategic forces outlined in Porter's

Competitive Forces model so as to obtain competitive advantage. The

model's central principle is that a business profit potential is determined to a

large extent by the threat of new entrants, the bargaining power of

customers, the bargaining power of suppliers, the threat of substitute

products or services and the intensity of competition among current rivals

within the industry (Evans & Neu 2008). The development of effective

information systems holds a number of challenges for small businesses. The

problems however can be addressed actively addressing the anticipated

problem by ensuring if the appropriate technical skills and experience

available and sufficient telecommunications infrastructure.

Further must be customer and ecommerce usage and evaluation stages the involvement from staff and user of the IS as well as a commitment from top managers. (Chad, Yu-An & Shu-Woan 2007). Businesses like RTE need routinely deal with issues such as privacy, identity theft, spyware and spam and implement controls to minimise risk. Information is a valuable organizational resource that must be effectively managed and carefully safeguarded as information cannot secure itself or protect itself from phishers, spyware, or identity thieves (Matthew & Schlachter 2007). The manner in which information is used is dependent on the ethics and beliefs of the people that make up the organization, especially the organization'sleadership(Woodbury, 2003). Information systems For a business to be successful in today's competitive environment the collection of information and the then appropriate use of that information to facilitate the business function is of vital importance. Computerised information

systems are now being used to harness this information and with the rapid growth oftechnologythe challenge to business is how it can effectively utilise these information systems (Stair & Reynolds 2010).

To fully understand how an information system works it is beneficial to first understand the separate terms, information and systems. Firstly, information is any knowledge that is acquired by any means (Stair & Reynolds 2010). It is the organisation of that information which is important, and for that a system is required. A system is a plan or method of doing something, and is a combination or arrangement of interrelated components to form an integrated whole that has clearly define boundaries so as to achieve a common set of objectives (O'Brien; Marakas 2009). A information system (IS) can be any organised combination of people, hardware, software, communication networks, data resources and policies and procedures that stores retrieves, transforms and disseminates information in an organisation' (O'Brien & Marakas 2009). Information system in the business world often utilises technology to support operations, management, and decision-making (Stair & Reynolds 2010). The benefits that information systems can provide for your business The increasing globalisation of markets and business has brought increased competition and new opportunity for small business.

To capitalise on these new markets and improve their competiveness, small business need to be more effective and efficient in their business process (Chad, Yu-An & Shu-Woan 2007). The effective use of Information system will better enable small business to sustain growth and productivity (Chad, Yu-An & Shu-Woan 2007). The managerial knowledge, skills and experience of

decision makers will benefit from the amalgamation of specific business aspects in their organisations which information systems can provide (Stair & Reynolds 2010). Generally the benefits of an IS can be categorised into four groups: Organisational, resulting in more organised business processes thus improving the business efficiency Managerial, allowing a better return on investment and increasing the business performance; Strategic, improving the collaboration within the company and with external partners and increasing the customer satisfaction; Technical, integrating data, objects and processes, increasing the flow of data and information and the access to the information stored, thus building a flexible infrastructure and operational, by reducing the costs (Evans & Neu 2008). When examining the benefits of information systems is also useful to categorise them according to the functional area being integrated (Worley, et al. 2005). The functional benefits of IS integration cover data management, collaboration, reporting, strategic management, decision making processes and integration of communication networks.

Functional IS integration includes implementing shared-access, integrated databases, which improve the processes of collecting, accessing and analysing data and allow business such as 'Ready To Eat' (RTE) to monitor events and take proactive actions before critical problems arise (Evans & Neu 2008). Whilst there are many challenges inherent in development of such system, these systems can offer businesses a number of advantages. Information technology are used by many organisations as a competitive tool to develop new products and services, integrate with suppliers, compete against rivals, and make effective and efficient changes to business

operations (Worley, et al. 2005). RTE could become a market innovator by using IS to provide a unique product and service to its current customers (Chad, Yu-An & Shu-Woan 2007). This uniqueness will make it harder for potential competitors to enter the market place. In addition, another strategic use of IS would to create electronic linkages to customers and suppliers, doing this will lock in business by increasing the cost of switching to another product (Buhalis & O'Conner 2005).

The benefits that may be achieved with the implementation of information systems would include potential cost reductions business performance improvement productivity improvements customization of products and service enhanced reporting capabilities Improves personal efficiency Facilitates interpersonal communication expanded marketplaces Promotes learning or training Increases organizational controlProvide information for support of decision making Creates a competitive advantage over competition 24 hour trading and information exchange and management (Chad, Yu-An & Shu-Woan 2007) Many businesses are failing to recognise and implements the levels of information systems required to fully benefiting from IT investments in e-commerce (Stair & Reynolds, 2010). Whilst there is obvious benefits realised from the implementation of information system in small business, business are still reluctant to implement information systems as it is sometimes difficult to identify and measure the returns that can be achieved (Worley, et al. 2005). Business that can successfully evaluate the performance and outcomes from their information systems development and adoption are better able to exploit the potential and more likely create competitive advantages (Worley, et al. 2005). It is important that an

appropriate system of measurement is developed and put in place to properly track measure and evaluate whether the planned goals have met expectations. Information system projects sometimes fail due to the considerable focus on implementing the technology but have no formal mechanism to evaluate progress for what information system was designed to do (Chad, Yu-An & Shu-Woan 2007).

Often the benefits that are gained buy the implementation of a IS are not immediately apparent as they are inherently qualitative, such as guest satisfaction and systems efficiency and are not immediately recognised in monetary terms (Worley, et al. 2005). The problem of qualifying return is further complicated with system such as supply chain management which operate outside the boundaries of the business but ultimately provide advantages to you business in the long run (Buhalis & O'Conner 2005). Types of information's system available for to RTEThere is a diversity of sophisticated hardware, software and communications technologies, used in information systems in today's business and it often is difficult to classify a system as belonging uniquely to one category (O'Brien; Marakas 2009). Contemporary application software supports transaction processing generates management information whilst other applications provide transaction processing, management information, and decision support. Organizations increasingly are consolidating their information needs into a single, integrated information system (Buhalis; O'Conner 2005). Whilst information system can overlap in their function they all seek to benefits business by supporting business processes and operations, supporting

decision making by employees and manager and supporting strategies for competitive advantages (Chad, Yu-An; Shu-Woan 2007).

Operating Support System An office information system or OIS are systems that try to improve the productivity of employees who need to process data and information. Uses of an office information system include a range of business office activities such as e-mails, spread sheet, scheduling and wordprocessing. These systems are used at all levels from management to front line employees. Additional uses if this category of information systems may include Web browsers, personal information management, and groupware (O'Brien & Marakas 2009). Transaction Processing Systems A transaction processing system (TPS) is an information system that captures and processes data generated during an organisation's day-to-day transactions. A transaction is a business activity such as a deposit, payment, order or reservation. Clerical staff typically performs the activities associated with transaction processing, which include the following: Billing systems to send invoices to customers Systems to calculate the weekly and monthly payroll and tax payments Production and purchasing systems to calculate raw material requirements Stock control systems to process all movements into, within and out of the business (Stair & Reynolds, 2010).

Management support systems A management information system (MIS) is mainly concerned with internal sources of information (Stair & Reynolds, 2010). MIS usually take data from the transaction processing systems and summarise it into a series of management reports. A management information system (MIS) is a system or processes that provides the

information necessary to manage an organisation effectively (Melville, Kraemer & Gurbaxani, 2004). MIS and the information it generates are generally considered essential components of prudent and reasonable business decisions. MIS is viewed and used at many levels by management. It should be designed to achieve the following goals: • Enhance communication among employees. Deliver complex material throughout the institution.

Provide an objective system for recording and aggregating information.
 Reduce expenses related to labour-intensive manual activities.
 Support the organization's strategic goals and direction (Stair; Reynolds, 2010). Decision support system A Decision support system (DSS) is an information system designed to help users reach a decision when a decision-making situation arises. A decision support system uses data from internal and/or external sources (Stair; Reynolds, 2010). Internal sources of data might include sales, inventory, or financial data. Data from external sources could include interest rates, the cost of raw material such as flours, and fuel cost.

Some decision support systems also include capabilities that allow you to create a model of the factors affecting a decision (O'Brien & Marakas 2009). With the model, you can ask what-if questions by changing one or more of the factors and viewing the projected results. Many people use application software packages to perform DSS functions. Using spreadsheet software, for example, you can complete simple modelling tasks or what-if scenarios. Knowledge Management Systems Knowledge management (KM) expands the concept to include information systems that provide decision-making tools

and data to people at all levels of a company (Stair & Reynolds, 2010). The idea behind KM is to facilitate the sharing of information within a company in order to eliminate redundant work and improve decision-making. KM becomes particularly important as a small business grows.

When there are only a few employees, they can remain in constant contact with one another and share knowledge directly. But as the number of employees increases it becomes more difficult to keep the lines of communication open and encourage the sharing of ideas. Knowledge management is a way of using technology to facilitate the process of collaboration across an organization (O'Brien; Marakas 2009). How information systems could help RTE in managing their business. Operating Support System that utilise as e-mails, spread sheet, scheduling and word-processing will help employees and management be more productive in there day to day tasks. Employees can perform tasks electronically using computers and other electronic devices (Melville, Kraemer,; Gurbaxani 2004). RTE could use such system for example, to update delivery schedules electronically to delivery personal.

Office information systems use communications technology such as voice mail, videoconferencing, and electronic data interchange (EDI) for the electronic exchange of text, graphics, audio, and video which could be utilised to communicate to employees when working from home. Transaction processing system (TPS) is an information system that will help RTE with all the transaction of the day to day operation. These may include the recording a business activity, a customer's order, an employee's timecard or a client's

payment (Melville, Kraemer, ; Gurbaxani, 2004). Transaction processing systems also assist with confirming an action or triggering a response, such as printing orders from customers, sending a tax invoice or generating an employee's pay checks. Further to this TPS assist updating data, adding new data, changing existing data, and or removing unwanted data (Chad, Yu-An; Shu-Woan 2007). Knowledge management information's facilitate the sharing of information within a company in order to eliminate redundant work and improve decision-making (Stair; Reynolds 2010). KM becomes particularly important as a small business grows.

As the number of employee's increases at RTE it will becomes more difficult to keep the lines of communication open and encourage the sharing of ideas. Knowledge management is a way of using technology to facilitate the process of collaboration across an organisation (Buhalis; O'Conner 2005). A small business like RTE might begin buy sharing customers feedback with employees to establish better more effective product and service. A management information system would benefit RTE in its support operations, management, and decision-making. Using this information, RTE can produce reports that recap daily sales activities; list customers with past due account balances; graph slow or fast selling products; and highlight inventory items that need reordering. Management information systems can be integrated with transaction processing systems (Worley, et al. 2005).

RTE could then derive all the necessary information from a sales transaction for example which would update transaction processing system records the sale, updates the customer's account balance, and makes a deduction from

inventory. Information systems affect on management decision-making? Manager and business owners are expected to make decisions which have a positive effect on the future of the business. Managers and owners have handful of data around them but manually they cannot process the data accurately and with in the short period of time available to them. Therefore mangers depend on information system for decision making and thus Information systems have directly influenced decision making (Gray, 2006). Today, databases and web based resources, accessed through effective communications, make information about the past rapidly available. Although databases make essential past and near-current data available, they do not support the essence of decision-making, namely assessing the effect of alternate future courses that can be initiated by the decision maker (Gray, 2006). To assess the effect in the future of the decisions to be made diverse tools come into play.

An effective information system should integrate forecasting the future, and because their choices have been made, such a system must also support the comparative assessment of the effects of alternate decisions (Gray, 2006). There are many examples of IT systems that successfully support decision making in business situations. Due to the importance of information in decision making a separate field has emerged to serve the appropriate information's to managers for effective and good decision making purpose. Serving the suitable information use to pass through a process called management information system as the information is using to make management decisions (Stair & Reynolds 2010). How these information systems could be used to gain competitive advantages. Porter's Competitive

Forces model is the foundation to understanding the strategic forces affecting businesses. Understanding what role information system can play to manipulated these forces is paramount to utilising IT as a as tool to gain a strategic advantage (Evans; Neu 2008).

The model's central principle is that a business profit potential is determined to a large extent by the following five competitive forces within that industry. These forces are: The threat of new entrants, The bargaining power of customers, The bargaining power of suppliers, The threat of substitute products or services, The intensity of competition among current rivals within the industry (Evans & Neu 2008). Central to the five strategic forces it is important that they are used to gain sustainable competitive advantage by aligning the business goals with the influence of the five forces to obtain competitive advantage and influence direction or strength of one or more of the forces in Porter's model(Evans; Neu 2008). As we are seeking a strategic change For IT strategy is focused on external forces and the sustained competitive advantage this focus provides (McIvor; Humphreys 2004). Whilst IT infrastructure and processes tend to support efficiency: lower costs, faster transactions, higher quality, and production efficiency. These efficiencies do not result is sustained competitive advantage (Evans ; Neu 2008). The reason is that the technologies are employed are easily duplicated by your competitor resulting in short term advantages making these technologies tactical rather than strategic and focused on operational efficiency rather than sustained competitiveness (McIvor; Humphreys 2004).

However if RTE can continually improve and implement tactical advantages before their competitors they will achieve the ongoing competitive edge. New Threat to Entry The business of providing healthy meals to customers, such as RTE, is haracterised by a low barrier to entry. Large Capital costs to enter the market are not required and distribution channel are not controlled by any entity or complex in nature (Evans; Neu 2008). In some cases consumerloyaltyto brands can be a barrier to entry in the market place, however branding with RTE product is not strong and customer would easily shift to another product based on price or quality. Information system technology or the lack of such technology can make it easier for new firms to enter the industry in competition to RTE and change the competitive nature of that industry. For example internet technology could be employed by RTE where orders for lunches could be ordered online making the product tailor made to the customer and also more efficient and effective than taking orders over the phone. If RTE does not take up this opportunity there competitor could do so and thus penetration into RTE's existing market (McIvor; Humphreys 2004).

By RTE making their ordering system more usable for the consumer they are creating a barrier to new competition to entry into the market. Bargaining power of Customer The bargaining power of buyers is influenced by a number of similar factors. When the number of buyers of a product or service increases the bargaining power of any individual buyer decreases (Evans; Neu 2008). Internet technology has increased the pool of potential buyers of many products and services, thereby decreasing their power as individual buyers while increasing the power of the sellers. Conversely, supply chain

technology may limit the number of suppliers who have access to secure networks, thus making them captive to the buyer (McIvor; Humphreys 2004). This situation increases the bargaining power of the buyer while limiting that of the suppliers. In the case of the healthy prepacked meals buyers do not have a strong influence over price as there is a relatively broad base of buyers with only two suppliers of the product, healthy packed meals.

Buyers do have influence in that they can switch to another product purely base on price as at this stage the suppliers have not uniquely differentiated their product from each other (Evans ; Neu 2008). Bargaining Power of Suppliers The power of suppliers is increased when only a small number of suppliers exist in the market and there are limited substitutes are available (Evans; Neu 2008). In the case of RTE there is only two suppliers of thehealthpre packed meals product available but this lead to little advantage to the business as a supplier. The market exists where either of the two businesses could provide the whole market if either as the product is not unique and buyers could easily swap to the alternative product (Evans; Neu 2008). The bargaining power of suppliers is decreased by any technology capable of increasing the number of suppliers. Technologies that increase switching costs increase the power of suppliers, while those that decrease switching costs decrease the power of suppliers (Evans; Neu 2008). RTE needs to be there first, for example ordering online form the ease of the office.

RTE should consider a tailor made health choices for their clients as flexible manufacturing technologies that allow for high levels of product customization tend to make it less attractive for customers to switch to a rival's product or service (McIvor & Humphreys 2004) Substitute Products Substitute products and services are threat to RTE Product, a substitute product is a product that appears to be different, but can satisfy the same need as another product. A substitute product or the healthy prepackedfoodcould be the supplier of muesli bars or an easier accessible healthy pie van outside the business. Substitute products are increasing their importance as a strategic force as an increasing networked economy has made substitute products and services more readily available (Evans & Neu 2008). The intensity of competition among current rivals within the industry As in the case of the supply of prepacked healthy foods another supplier has recently entered the market. Unless RTE can increase the barrier to entry into the market place additional suppliers may enter the market and increase he competition. Among rivals, sustained competitive advantage derived from technology usually occurs when the technology is maximised by innovative organisation structures, marketing channels, or supplier relationships within an industry, it is almost inevitable that rivals will use the same core technology for the production of their products and services (Evans & Neu 2008). In most instances, these core technologies will be supplied by vendors with such technologies being transfer very rapidly among the rivals within an industry.

As a result, most core technology within an industry is tactical, rather than strategic (Evans & Neu 2008) What are the information requirements of RTE?

There are a number of different types of information systems that can serve the needs of RTE at different levels in the organization. Information systems might be developed to support employees and management in decision making planning and controlling, for example to help with the quantity of supplies of pre? packed healthy meals and decision about opening the business on public holidays (Gray, 2006). Other types of information systems include transaction processing systems, which simply record the routine transactions needed to conduct business, like payroll, shipping, or sales orders; and office automation systems, which are intended to increase the productivity of office workers and include such systems as word processing, electronic mail, and digital filing (Gray, 2006). Ideally, the various types of information systems in an organization are interconnected to allow for information sharing. A variety of tools exist for analysing a company's information needs and designing systems to support them. The basic process of systems development involves defining the project, creating a model of the current system, deriving a model for the new system, measuring the costs and benefits of all alternatives, selecting the best option, designing the new system, completing the specific programming functions, installing and testing the new system, and completing a post-implementation audit (Chad, Yu-An; Shu-Woan 2007). It is theresponsibility of small business owners and managers to plan what systems to implement and to ensure that the underlying data are accurate and useful.

The organization must develop a technique for ensuring that the most important systems are attended to first, that unnecessary systems are not built, and that end users have a full and meaningful role in determining

which new systems will be built and how(Chad, Yu-An; Shu-Woan 2007). What business processes should RTE consider making computerised. RTE should advance the current use of their computerised operating support system to being used outside the office, either from home or in between home office and client deliveries address. The current software used to increase productivity, e-mails, spread sheet, scheduling and word-processing etc can easily be extended to home. The idea of closing on public holidays or being at home at weekends need not be detrimental to the business if the basic operational function of the business can be run from home. This can also be extended to communication with mobile information systems with the ability to accept and place orders whilst in transit. This facility can also used to submit information into a customer relationship management system.

For example whilst delivering to clients it is leant that it was the client's birthday. This information could be stored and used in the following year to create customer loyalty. Computerising day to day operation with TPS will help RTE with the financial side of the business. A simple accounting package for small to medium business is MYOB; this can track cost and inventory of supplies of raw materials. In addition both cash receipts and account receivable information can also be process keeping up to date financial data. This data can also be used for budgeting and forecasting and thus planning and controlling (Chad, Yu-An; Shu-Woan 2007). Management information system and decision support systems are usually associated with larger business but any system that can collate internal and or external information and report this information in a fashion usual to decision making.

Using this information, RTE can recap daily sales activities; list customer's information; view sales of high and low margin products product to assist in decision making (Worley, et al. 2005). Collaboration and communication among key stakeholders The Internet is a global system of interconnected computer networks that uses the standard Internet Protocol Suite (TCP/IP) to connect of user across the world (Tsunenori et al. 2008). Most traditional communications media, such as telephone and television services, are reshaped or redefined using the technologies of the Internet. The Internet is allowing greater flexibility in working hours and location by offering different opportunities of collaboration and communication (Tsunenori et al. 008).

Businesses, which utilise Internet, intranet and extranet facilities, are gaining significant competitive advantages through the ability to better collaborate and communicate amongst stake holders by utilising the information system and process that these platforms provides(Tsunenori et al. 2008). The Internet is used extensively by businesses taking advantage of the efficient way in which its spread information to a vast number of people simultaneously. The Internet has opened a whole new market for business. Working collaboratively has been made dramatically easier due to its low cost and nearly instantaneous sharing of ideas, knowledge, and skills (Melville, Kraemer, ; Gurbaxani, 2004). Internet " chat" for example would allow colleagues to stay in touch in a very convenient way when working at their computers during the day. Stake holders and collaborating teams can work on shared sets of documents without either accidentally overwriting each other's work or having members wait until they get " sent" documents to be able to make their contributions (Buhalis & O'Conner 2005).

Business and project teams can share calendars as well as documents and other information. Such collaboration occurs in a wide variety of areas including scientific research, software development, conference planning, political activism and creative writing The Internet can be defined as an interconnected series of computer networks, which provides global access to communication and information. Intranets are internal networks, which utilise Internet technologies to support communication, collaboration, information sharing and the support of business processes within the organisation (Melville, Kraemer, & Gurbaxani, 2004). Extranets utilise Internet and intranet resources to link customers, suppliers and trusted partners with the enterprise in a connected way to facilitate communication and collaboration and improve business relationships (Buhalis & O'Conner 2005). Information systems such email, calendaring and chat systems are simple example examples of information systems that can be used in the workplace to create a collaborative working environment (Melville, Kraemer, & Gurbaxani, 2004). A collaborative working environment supports people in both their individual and cooperative work, who can work together whether inside or outside of the office. Business matching and collaboration support systems are can be used for small-and-medium sized companies such has RTE.

A category of IS designed to support collaboration and communication is termed Enterprise Collaboration Systems (ECS). ECS is a combination of Internet, Intra and extranets used to facilitate communication and collaboration. An example for RTE is the sharing of the order information placed by customers. The desired result from the implementation of an ECS

is would be to provide each member of the team of RTE with the tools to share documents and information through communications and collaboration to make it easier individuals to manage their own tasks more effectively and efficiently (Gray, 2006). An intranet is a network within the organisation private computer network where members of the origination can securely share any part of an organization's information or operational systems within that organization (Buhalis; O'Conner 2005). The intra can host an extensive part of the business information technology and also may be the host of several website for internal communication and collaboration. Benefits of the intranet are that intranets can also help users to locate and view information faster leading to time saving.

The Intranets could be used to distribute information to employees on an asneeded basis (Gray, 2006). Intranets can be used for communication within an organization and is for staff the opportunity to keep up-to-date with the strategic focus of the organization (Melville, Kraemer, ; Gurbaxani, 2004). Some examples of communication would be chat, email, and or blogs. Intranet Web publishing allows cumbersome corporate knowledge to be maintained and easily accessed throughout the company using hypermedia. Information that may be distributed by this means might be employee manuals, company policies, business standards and even training. Because this information can be updated online the most recent version is always available to employees using the intranet. This can promote a common corporatecultureas every user is viewing the same information within the Intranet (Buhalis; O'Conner 2005).

Intranets are also being used as a platform for developing and deploying applications to support business operations and decisions across the internetworked enterprise. Users can view information and data via webbrowser rather than maintaining physical documents such as procedure manuals, internal phone list and requisition forms. This can potentially save the businessmoneyon printing, duplicating documents, and the environment as well as document maintenance overhead (Buhalis; O'Conner 2005). When part of an intranet is made accessible to customers and others outside the business, then that part forms part of an extranet. Businesses can send private messages through the public network, using special encryption/decryption and other security safeguards to connect one part of their intranet to another (Buhalis; O'Conner 2005). An extranet is a private network that uses Internet protocols, network connectivity to exchange information. An extranet is an extension of a company's internet that is made available via the internet to people outside the business.

It can be used to exchange information and ecommerce between businesses, doing business with other business (business-to-business, B2B) in isolation from all other users of the internet This is in contrast; business-to-consumer (B2C) models involve known servers of one or more companies, communicating with previously unknown consumer users(McIvor, ; Humphreys, 2004). An extranet is an extension of the intranet to other business but is not accessible to the general public an extranet however requires network security such as firewalls. The extra net can be utilised to select order and track supplies required to make the prepacked healthy meals. Uses of the extranet could also be utilised to exchange large volumes

of data using Electronic Data Interchange (EDI) or Share product catalogues exclusively with trade partners (Tsunenori et al. 2008). Management challenges during implementation of the computerised information system The development of effective information systems holds a number of challenges for small businesses. The problems associated with the implementation and the eventual success of information systems can be minimised by actively addressing anticipated problem.

Firstly, it is important to understand the organisational goals and assess if the appropriate technical skills and experience available are available to accomplish these goals. Further it is important that there is involvement from staff and user of the IS as well as a commitment from top managers. In addition there must be sufficient telecommunications infrastructure, customer and ecommerce usage and evaluation stages in the adoption of ecommerce (Chad, Yu-An; Shu-Woan 2007). There are three stages in the adoption of ecommerce. The problems associated with the development of effective information systems can be minimised by addressing the challenges that may arise in process off planning, implementation and post implementation reviews (Chad, Yu-An; Shu-Woan 2007). Planning Objectives of e-commerce adoption The key issues for the organizational adoption practices in the planning stage include e-commerce adoption objectives, user involvements, top management commitment and user resistance management (Chad, Yu-An; Shu-Woan 2007). The Objectives for adopting an e-commerce system by organizations varied greatly, so to properly plan for the implementation of information systems a business must first know what objective and expected outcomes they wish to achieve.

The closer the alignment with stated organizational goals and how the e-commerce investment is organized and conducted gives rise to a better opportunity of success (Worley, et al. 2005). Many businesses simply fail to establish a linkage between the reasons for adopting an e-commerce system and their organizational goals. Systems are often installed without linking the benefits to their organizational goals. Good user resistance management is a critical part of successful adoption of any IT investments in e-commerce. Involving users in the planning stage during the implementation of these systems will alleviate significant user resistance (Chad, Yu-An; Shu-Woan 2007). Involve of users and key personal With the implementation of computerised information system there often comes a great deal of change.

Change management techniques need to be carried addressing the resistance to this change. It is one thing to have the commitment of senior personal but this alone will not succeed if there is considerable resistance from other members of the organisation (Worley, et al. 2005). On the other hand, organizational evaluation involves pre-project justification and change management in the planning stage, and the use of investment evaluation and benefits realization methodologies in the implementation stage (Chad, Yu-An; Shu-Woan 2007). There is a direct relationship between users' involvement and system success (Worley, et al. 2005). Organisations which keep the users and customers in the dark would tend to have low usage for their systems.

Furthermore, many benefits expected from the adoption of these systems were mainly tailored for the customers and the senior personal (Chad, Yu-

An; Shu-Woan 2007) Considering the complexity of the decisions and the large expenditure required for business to engage in e-commerce projects a better understanding of the adoption and evaluation practices of IT investment in e-commerce in Australian Business will assist them in their involvement in e-commerce (Worley, et al. 2005). Small to medium enterprises such as RTE needs to know what they want to achieve from the implementation of the computerised information system and to link these objectives to the e-commerce adoption (Chad, Yu-An; Shu-Woan 2007). Implementation Stage Top management commitment Obtaining top management commitment throughout the implementation is critical to the success of the IT investments in e-commerce (Chad, Yu-An; Shu-Woan 2007). There also should be a focus on the possible dissatisfaction and resistance among employees or users regarding the implementation of some of the IS and a user resistance management plan implemented. IT investment evaluation process Evaluation for any electronic commerce initiatives is difficult and requires much more rigorous evaluation process One of the critical points of the post-implementation is the appropriation of the system by its users which is often difficult and extensiveeducationand training should be considered (Melville, Kraemer, ; Gurbaxani, 2004). Security and ethical issues Businesses today routinely deal with issues such as privacy, digital security, identity theft, spyware, phishing and spam (Spinello, 2003).

Businesses like RTE need to deal with these issues and institute controls to minimise risk. The manner in which information is used is dependent on the ethics and beliefs of the people that make up the organization, especially the

organization's leadership (Woodbury, 2003). Business ethics has development various principles that embrace the basic principles of ethics held by society as a whole which in turn leads of good and ethical business practices (Spinello, 2003). With the development of Information Technology it has been reason that good ethics in the development and uses of information technology correspond to the basic business principle that good ethics is good business (Woodbury, 2003). Information is a valuable organizational resource that must be effectively managed and carefully safeguarded as information cannot secure itself or protect itself from phishers, spyware, or identity thieves (Matthew; Schlachter 2007). As concerns about security and privacy increase as a result of personal concerns and fears over the theft of personal information, it is import for a business such as RTE to developed and / or revised codes of ethical conduct (Woodbury, 2003). At the same time government continue to develop laws and legislation that are specifically related to ensuring the privacy and security of information and individuals (Woodbury, 2003).

by an organisation. These include privacy, accuracy, property, and accessibility (Lacey; Suresh, 2004). It important for owners and or managers to develop a sense of awareness of the potential types of ethical issues those are common to information (Matthew; Schlachter 2007). Managers should be involved in monitoring outward activities of the business because customers and their privacy are affected when there are outward breaches. Of equally important are inside issues such as internal surveillance and monitoring activities, because these affect employees (Woodbury, 2003).

Due to the prevalent use of Internet, instant messaging and email a number of software surveillance products have been developed for the by today's business.

Organisational Issues In and organisation it often that you would encounters a Computer virus and increasing attacks by hacker are perpetrated with the intention to destroy data and software so as to disrupt computer services. Phishing attacks frequently target a specific group of people and are intended to secure personal information, usually financially related, from innocent and unsuspecting responders (Woodbury, 2003). Criminals are especially interested in acquiring, bank account information, credit card numbers and other financially-related data that can help them to steal identities or money from unsuspecting customers. Identity theft is the appropriation of someone else's identity to commit fraud or theft (Lacey; Suresh, 2004). It is not only not people external to the business but also people from within the company such as disgruntled insiders that a great amount of damage and threats to cyber security originates. Programs commonly referred to as "spyware" or "adware" have become very widespread and are used to monitor online behaviour (Henry, 2005). The programs threaten compliance efforts and intellectual property, and create problems for computer users, some of the problems that prevail as a result of spyware include slow computer processing speeds and pop-ups taking over (Matthew; Schlachter 2007).

Remedies for spyware include installation of anti-spyware software and switching to more secure software. The general sense at this time is that this

may be a cure that is more costly than the problem to be solved however, the consequences of identity theft are significant, and the financial impacts exceed billions of dollars each year (Lacey, 2004). The victim is subject to loss of funds or other property, a tarnished credit history, a possible criminal record, difficulty in securing employment, and an inability to obtain goods and services (Lacey, 2004). Identity theft is a problem that affects both individuals and organizations, and remedies must be developed. The organization's first line of defence, the firewall, is easy to install and maintain and didn't doesn't disrupt regular business applications. Conclusion In concluding they report as identified and describe the nature of information system and how they can be used in business as a competitive tool so as to be successful in today's competitive environment. The report has offers a number examples of how information systems can offer businesses a number of advantages such to develop new products and services, integration with suppliers, and the competitive edge by effective and efficient changes to business operations.

This report attempt to categories information systems as to their function but state that this is not always possible as many system overlap and are increasing integrates in the in providing support to various business function. The report offs and example of a information system the is utilised for decision support but also provides transactional support for the businesses day to day financial operations. The report describes how managers will use this information to make decisions which have a positive effect on the future of the business. The report also detail how IS are also used to gain sustainable competitive advantage by aligning the business goals with IS

that influence the five strategic forces outlined in Porter's Competitive Forces model. The report offers solution to problem that arise in the implementation of IS by proactively planning to combat these problems. Lastly this report discussed such as privacy, identity theft, spyware and spam and how business need to implement controls to minimise risk as Information is a valuable resorce to organizational and must be effectively managed and carefully safeguarded. The report desrines tha manner in which information is used is dependent on the ethics and beliefs of the people that make up the organization, especially the organization's leadership.

Recommendations It is recommended by this report that for RTE to be successful in today's competitive environment the collection of information and the then appropriate use of that information to facilitate the business function is of vital importance. Computerised information should be used to harness this information. By using Information system effectively RTE will be in a better position to sustain growth and productivity in the following areas. Organisational, resulting in more organised business processes thus improving the business efficiency; Managerial, allowing a better return on investment and increasing the business performance; Strategic, improving the collaboration within the company and with external partners and increasing the customer satisfaction; Technical, integrating data, objects and processes, increasing the flow of data and information and the access to the information stored, thus building a flexible infrastructure and operational, by reducing the costs (Evans & Neu 2008). It is recommended that RTE implement information systems for daily operation support in the form of an office information system t to improve the productivity of employees who

need to process data and information. Uses of an office information system to include a range of business office activities such as e-mails, spread sheet, scheduling and word-processing. These systems should be used at all levels from management to front line employees.

In addition a transaction processing system should be used organisation's day-to-day transactions. These systems can provide productivity gains in the functions of billing systems to send invoices to customers, calculating the weekly and monthly payroll and tax payments, the production and purchasing systems to calculate raw material requirements and ttock control systems to process all movements into, within and out of the business (Stair & Reynolds, 2010). It is also recommended that Management Information systems should be utilised so as to provide the information necessary to manage and organisation effectively. These systems are designed to enhance communication among employees, Provide an objective system for recording and aggregating information, reduce expenses related to labourintensive manual activities and support the organization's strategic goals and direction (Stair; Reynolds, 2010). It is a recommendation of this report that information system be utilised as a as tool to gain a strategic advantage by aligning the business goals with the influence of the five forces described in the report as Porter's Competitive Forces model to obtain competitive advantage by influencing direction or strength of one or more of the forces in Porter's model. This report recommends that by actively addressing anticipated problem associated with the implementation of information systems a successful outcome is more likely. For his to occur it is important to understand the organisational goals and assess if the appropriate

technical skills and experience available are available to accomplish these goals.

Further it is important that there is involvement from staff and user of the IS as well as a commitment from top managers. There are four areas of concern with regards to information collected by an organisation. These include privacy, accuracy, property, and accessibility (Lacey; Suresh, 2004). Remedies for spyware include installation of anti-spyware software and switching to more secure software. It is recommended that owners and or managers develop a sense of awareness of the potential types of ethical issues those are common to information (Matthew; Schlachter 2007). Managers should be involved in monitoring outward activities of the business because customers and their privacy are affected when there are outward breaches. The organization's first line of defence, the firewall, is easy to install and maintain and didn't doesn't disrupt regular business applications A policy should be implemented that cover both ethical and security procedures. Ethical behaviours in the development and uses of information technology should be similar to the basic business principle that good ethics is good business.;