

The factors that are forcing companies management essay

[Business](#), [Management](#)



DissertationAn Analysis of the Factors that are Forcing Companies to Adopt Green IT and how is this affecting CSR strategy within the Service Industry.

Contents

Chapter 1: Introduction

The IT Industry generates the same amount of Carbon emissions as the aviation industry, which is roughly 2% of Global Carbon Emissions (O’Neil, 2010). Although O’Neil admits this figure can be open to interpretation, he duly notes that the IT industry is uniquely positioned to influence the remaining 98% of emissions. However to what extent is the power that IT has to control emissions and provide smarter energy use, being harnessed by businesses? It can be widely agreed that IT is crucial to many businesses in today’s global and interconnected economy. The Office of National Statistics (ONS) stated that 93% of UK businesses had a broadband connection (ONS, 2012). This highlights just how integrated ICT is within the UK business environment alone. However it was found that in 2009 only 9% of Firms rated Green IT as an organizational ‘ upper half’ priority. This grew to 37% in 2011 (GHIT, 2011 n. b reference). As companies lean more towards Green IT to what extend is the Green factor influencing how businesses position themselves in the current business environment. In today’s more consumer conscious driven market Corporate Social Responsibility (CSR) has become an important strategy for many businesses, and many seek competitive advantage as a result. Although research shows that adoption of Green IT is growing. It raises the questions has the increase in Green IT uptake influenced CSR strategy for businesses through the accreditation of greater green credentials? And have business’s current CSR

strategy been a motivation for the inclusion of Green IT into its business operations or neither? Being able to understand this gives rise to the first objective of this study which hopes to determine whether Green IT is being used as part of a CSR strategy. Establish whether the adoption of Green IT is playing a part in businesses CSR strategy. However, there are many reasons as to why businesses adopt a CSR strategy. Yet the motivation for adopting a Green IT strategy may be very different from the reasons why originally a business's CSR strategy was enacted. To add another hypothesis, CSR may not be playing a role in the adoption of Green IT and there could be other factors at play that is encouraging the growth of Green IT. This justifies the second objective which is stated as Determine whether the motivation for the adoption of Green IT is in unison with the businesses CSR strategies, or distinguish whether there are other motivations beyond CSR for its adoption. As a result this investigation will identify and critically review relevant literature towards understanding the realm of CSR. Specific attention will be paid to academic literature behind the drivers of why companies adopt a CSR strategy, paying particular attention to the service industry. Furthermore an understanding of what Green IT consists off needs to be identified and analysed. The research hopes to understand the current social and environmental challenges business face and why or if Green IT is being seen as a solution to these challenges.

Chapter 2 Literature Review

This chapter aims to understand what Green IT is and how it is aligned with Corporate Social Responsibility. ...

2. 1 Green IT

Green IT doesn't have a precise definition despite the term being widely used in industry and the media (Mingay, 2007). However Green IT within enterprise is defined by Gartner, one of the world's leading information technology research and advisory companies as "optimal use of information and communication technology (ICT) for managing the environmental sustainability of enterprise operations and the supply chain, as well as that of its products, services and resources, throughout their life cycles." As emphasised by the Gartner report this definition consists of many dimensions and breaks down the definition as the following.

Optimal Environmental decisions usually demand balancing trade-offs. Those trade-offs are frequently cost-benefit-related, and frequently involve balancing different environmental impacts (for example, throwing out inefficient servers and replacing them with new, more-efficient ones, or extending the life of the old servers). Optimal means weighing the options and choosing the best path given the enterprise's goals and priorities. As such, it demands and is a set of management activities, processes and capabilities. Environmental Sustainability At the heart of green IT is the concept of environmentally sustainable development, defined as, "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." This definition reaches beyond energy efficiency and addresses a broad range of environmental issues facing IT. Enterprise Operations This encompasses using ICT to improve the environmental sustainability of the activities and processes of the enterprise and includes its energy and material efficiency.

Supply ChainEnterprise operations are often the "tip of the iceberg" in terms of actual enterprise impact. Therefore, analysing and optimizing the supply chain through an environmental lens is important. IT plays a key role. For example, carbon accounting down the supply chain will be a key application, as well as ensuring compliance with enterprise environmental policies.

Products and ServicesThis involves designing and providing stewardship of enterprise products and services, as well as considering how ICT can be used to improve environmental sustainability. **Resources**These are employed by the enterprise, including its capital assets (such as IT equipment and software), and have an environmental cost associated with them. Green IT encompasses managing and optimizing those resources in an

environmentally sensitive way. **Life Cycle**Life cycle is particularly important in the definition, demanding consideration or stewardship from cradle to grave of those things over which the enterprise could reasonably be considered to have influence or choice. That may include managing the full life cycle of the enterprise products, and would certainly include considering the life cycle of the IT equipment being procured. Gartner, 20?? This

definition identified all the aspects of Green IT consists off. This is a useful definition for businesses as it highlights several areas where companies can be more environmentally and socially friendly. Info-Tech Research Group identified 11 Green IT initiatives in businesses and split them into four major groups: Virtualization & Consolidation, Energy Efficiency, Travel Reduction, and Asset Disposal (2009). Furthermore Info- Tech Research Group highlight the fact that business look to Green IT for Business Benefits and Cost

Reduction. The paper states that 40% of Green IT Initiatives were undertaken

for Environmental Reasons whereas 60% were taken for business reasons (p4,. 2009) The paper goes onto address the business reasons however it leaves the motivations for environmental reasons unexplained.

2. 2 Why is IT a social issue?

The world can expect its two billionth computer to be born in 2014 (Gartner, 2008), and therefore we can continue to anticipate greater environmental concern from computing. There are very direct environmental implications associated with PC's due to the impacts of production, use and disposal of the equipment (Kuehr & Williams, 2003). Forge, 2007 states that our economy has been developed to the point of complete dependence on ICT. This penalty for dependence Forge continues, is being paid for through the externalities of energy usage and hazardous substances. He highlights nine sustainable considerations. Energy and material consumption during use. Energy and materials used in manufacturing. Packaging and distribution of products. Planned obsolescence and shortened product life. Health effects on users. Health effects on manufacturing workers and surrounding environment and its inhabitants. Disposal at the end of useful life. Landfill and incineration with toxic waste. Recovery processes. Health hazards to workers in recycling and metals. Forge, 2007 The main two areas of environmental concern for ICT is the added creation of Greenhouse gases through energy use and hazardous substance use. Climate change as a result of greenhouse gas emissions is causing 400, 000 deaths a year and is costing the global economy 1. 6% which equates to \$1. 2trillion of lost GDP (Harvey 2012). There is evidently a human cost and financial cost which can

be attributed to the increases in Greenhouse gases. Harmon and Auseklis (2009) highlight that the rapid growth of Data centres as a result of Internet-based business more metaphorically known as 'cloud' computing has increased IT costs and the resulting Environmental impact of IT to a new level. Harmon and Auseklis state that data centres can easily account up to 50% of a company's energy bill. Harmon and Auseklis add that for Service Industry firms data centres are the primary source of greenhouse emission (2009). Data Servers alone in the US used 1% of all global electricity produced Harmon & Auseklis (2009). Factors Driving the Adoption of Green Computing

The rapid growth of the Internet
Increasing equipment power density
Increasing cooling requirements
Increasing energy costs
Restrictions on energy supply and access
Low server utilization rates
Growing awareness of IT's impact on the environment

Harmon & Auseklis (2009)
Kuehr & Williams (2003) go on further to say that as computers are built smaller, computers become harder and more difficult to recycle, only intensifying the environmental problems (p37). The manufacturing use and disposing of one desktop computer with a Pentium III processor and a 17-inch cathode ray tube (CRT) monitor uses at least 260 kilograms of fossil fuels and 6400 megajoules of energy, 81% is of the energy is consumed just in the manufacturing process (Betts, 2004).

2. 3 CSR as a Business Strategy

We can trace the aspect of business acting socially responsibility right back into ancient times Werther and Chandler (2006). However the business case for CSR is remains widely disputed. Henderson (2001) regards the widely

held doctrine of CSR as 'deeply flawed'. The economic argument put forward by Milton Friedman (1970) suggests that management has one responsibility 'to maximize the profits of its owners and shareholders and that social issues are not the concern of business people.' This indicates that the social problems should be left to the free market. Karnani, (2012) conforms to this notion by suggesting that the balance should be struck between free-market trends and the role of government regulation to ensure that social welfare is respected. Furthermore Karnani almost goes as far to say that businesses are in fact being irresponsible by buying into the belief that CSR can provide a solution to social problems, because profits are being diverted away from shareholders and that executives cannot act solely in the best public interests. Therefore he feels that society could be too reliant looking to corporations to address social problems and that the real solutions could be ignored. Despite this many companies have taken it upon themselves to act in a socially responsible manner and the number is growing. 80% of Fortune's 250 companies produced formal CSR reports up from 50% in 2005 (BSR, 2010). Firstly it is important to determine what actually CSR is. It should be made clear that CSR covers a wide range of areas. Dahlsrud (2008) analysed 37 definitions of corporate responsibility. The research found that the various definitions could be split into 5 dimensions; Environmental, Social, Economic, Stakeholder and Voluntariness. The dimensions were categorised by identifying phrases within the various definitions. From this the research could deduce the various dimensions that the umbrella term "CSR" encompasses. The results of Dahlsrud (2008) research can be found in table 1. Surprisingly the Environmental Dimension

came last on the ' Dimension Scores' table whereas the Stakeholder Dimension came top. This is surprising in the sense that a personal conjecture would be that most people would associate the environmental aspect of CSR rather than Economic or Stakeholder dimension as backed by Wenhao and Kaufman (2011). Wenhao and Kaufman state that 90% of the top Fortune 50 companies saw the ' environment' as a top CSR area. Referring back to Dahlsrud's study only 7 out of the 37 definitions included every dimension see Table 2. This could hint as to why there is not a general consensus on a single definition of CSR and hence the reasons why there is no standardised framework from which companies can define a CSR strategy. The definition that satisfies all the dimensions is the Commission of the European Communities definition which states CSR as " A concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis." The important part of this definition is to recognise that CSR is adopted on a voluntary basis and that companies have to see a benefit for the adoption of such strategies. It is important to highlight what these motivations are because there is a strong argument socially and economically as to what is the actual benefit to society of companies adopting a CSR strategy. Garriga and Mele created a CSR motivational framework revolving around the Instrumental, Political, Integrated and Ethical theories for CSR. This is a useful framework as it identifies key motives for the adoption of a CSR strategy. This theory can help frame the issues for the growth of Green IT and reasons for the adoption of Green IT by individual businesses in the service industry. Listed below is a short

summary of each of the motivations as why companies adopt CSR. The various theories will provide a useful framework to help identify reasons why Green IT may be incorporated into many organisations.

2. 3. 1 Instrumental Theories

Instrumental theories of CSR according to Garriga and Mele, (2006) revolve around the notion that CSR is a 'strategic tool towards' an economic goal. This supports Friedman 1970 notion that the sole responsibility is to maximise wealth. Instrumental theory has been widely accepted by business. There are 3 theories that fall within this dimension; Shareholder Maximisation, Competitive Advantage and Cause Related Marketing. Maximising Shareholder value is the idea that investing in any social demands that would produce an increase of shareholder value should be made. However if the social demands only impose a cost to the company it should be rejected. However Garriga and Mele's paper highlights the long term value maximisation approach known as 'enlighten value maximisation' as defined by Jensen (2000). Enlightened Value Maximisation is recognised due to the fact that the pursuit of Shareholder value Maximisation is not always compatible while trying to satisfy other stakeholders. Therefore the focus is on long term value maximisation where there is criterion for trade-offs amongst other stakeholders. Competitive Advantage consists of three approaches; social investments in a competitive context, b) natural resource based view of the firm and its dynamic capabilities, c) strategies for the bottom of the economic pyramid. Competitive Advantage Strategies are strategies where the allocation of resources is used to achieve long-term

objectives and create a competitive advantage. Social Investments in a competitive context: Garriga and Mele, (2006) highlight the Porter Model for competitive advantage where a company's philanthropic social investments is the best way to increase competitive advantage and where it can create more social value than individuals. Porter (1980) theorizes that the combined knowledge, understanding and resources of the firm can more effectively tackle a social issue than individuals and governments. This is of a contrasting theory to Friedman's theory that the firm is should use its knowledge and resources to tackle problems relating to its mission. Burke and Lodgson (1996) go on to say that philanthropic activities are close to the company's mission, the company creates greater wealth than other donations. Natural Resource-Based View of the Firm and Dynamic CapabilitiesThe Resource Based View of the firm relies on its web of human, organisational and physical resources to gain competitive advantage through capabilities and routines (Barney, 1991; Wernerfelt, 1984). Petrick and Quinn, (2001) identified that some companies have ethical and social capabilities. These can be a source of competitive advantage, for example ethical and social capabilities may influence the moral decision making of a company. However Hart (1995) suggests that drivers for new capabilities and resources are the constraints of the natural and biophysical environment. Although a company being dynamic in its capabilities may give competitive advantage, the interesting idea here is that it could actually be the physical environment that forces a company to act socially responsibly, rather than any philanthropic or altruist notion that has been mentioned previously.

Strategies for the Bottom of the economic pyramidThe bottom of the

Pyramid refers to the world's poorest or those poorest in society.

Traditionally most company see the world's poor as individually poor, with very low purchasing power. However Prahalad (2002) suggests that business should see the bottom of the pyramid as a large market where certain innovative strategies can serve the poor and make profits due to the sheer scale of those at the bottom of the pyramid. By serving goods and services to the poor the lives of millions can be improved socially and economically. This inevitably creates a competitive advantage by serving more customers and increasing revenue. However the interesting thought is that to what extent and influence the social aspect of serving the bottom of the pyramid has over a business rather than the monetary influence. It could be suggested that the social benefits of serving the bottom of the pyramid is just a side benefit of the possibility of large monetary reward.

Cause- Related Marketing

Another example of an Instrumental theory is 'Cause Related Marketing'. Cause Related Marketing is where "the brand manager uses consumer concern for business responsibility as a means for securing competitive advantage. At the same time a charitable cause receives substantial financial benefits" (Smith and Higgins, 2000, p. 309) The motivation for this is that adopting a CSR strategy or acting socially responsibility gives brand differentiation and can enhance customer relationships and sales. Rangan (2012) found that the enhancement of Brand from engaging in CSR activities was the biggest motivation/benefit from adopting CSR strategy with 60% of participants recognizing improved brand reputation.

2.3.2 Political Theories

Garriga and Mele (2006) Political theories relate to the role of power that business has in society and the social impact of this power. The two major theories highlighted by Garriga and Mele are Corporate Constitutionalism and Corporate Citizenship. Corporate Constitutionalism Davis (1960) argues businesses are a social institution and therefore has to use its social power responsibly. The social responsibilities of businessmen equates to how much social power they have. As a result those who do not use their social power in what society consider a responsible manner will lose it as the vacuum of social irresponsibleness will be filled by those who act responsibly. This is most prevalent with businesses where society demands responsibility (Davis, 1960) Integrative Social Contract Theory Donaldson (1982) believes that there is an implicit contract between business and society. This assumes that there are some indirect obligations between business and society. Donaldson and Dunfee, (2000) propose a Theoretical Macrosocial Contract and a real Microsocial contract. By offering these contracts among industries, departments and economic systems can be legitimate. Where the Macrosocial contract provides rules for social contracting and where the Microsocial contracts are binding with identified communities such as an industry company or economic system. Corporate Citizenship The idea that the firm is a citizen is not a novel one (Davis , 1973). Various factors including the crisis of the Welfare State, the Globalisation process together with the deregulation process and greater access to technology has meant some companies have greater social and economic power than Government. Matten et al, 2003 extend the view of Corporate Citizenship where

corporations enter the arena of citizenship at the point of government failure in the protection of citizenship. In conclusion of the various modules of Corporate Citizenship the term is mainly concerned with rights, responsibilities and possible partnerships of business in society. Furthermore the term has strong focus on business responsibility to the community with specific ways to improve the local community and consideration for the environment.

2. 3. 3 Integrative Theories

Integrative theories are associated with theories that look at how social demands are integrated into business operations. The main rationale for these theories is that business depends on society for its existence, continuity and growth. Social Demands are often considered to be the method for how business can create legitimacy and prestige through its interaction with society. Preston and Post (1975) feel that the content of business responsibility is limited to the space and time of each situation depending on the values of society at that moment and comes through the company's functional roles. Issues Management Issues management regards the firm's Social Responsiveness in the face of social issues and processes to manage them within the organisation (Sethi, 1975). It was defined by Waddock and Rude (1986, p. 124) as "the process by which the corporation can identify, evaluate and respond to those social and political issues which may impact significantly upon it." Furthermore Issues management attempts to minimize "surprises". It is seen as an early warning system to highlight the environmental threats and opportunities that arise from social and

political change. The Principal of Public Responsibility This is where Public Policy guides the firms responsibility rather than personal-morality views. Public Policy not only includes the literal text of law and regulation but also the broad pattern of social direction reflected in public opinion, emerging issues, formal legal requirements and enforcement or implementation of practices. (Preston and Post, 1981) Stakeholder Management Stakeholder management is oriented towards stakeholders, rather than focusing on specific issues or public responsibility. There are two basic principals as presented by Emshoff and Freeman (1978) that underpin Stakeholder Management. One is the central goal to achieve maximum overall cooperation between the entire system of stakeholder groups and the objectives of the corporation. The second is that the most effective strategies for managing stakeholder relations revolves efforts which simultaneously deal with issues effecting multiple stakeholders. Corporate Social Performance Corporate Social Performance is a complied of a set of theories. It is the search for social legitimacy through the processes of giving appropriate responses. Carroll (1979) suggested that corporate performance was built upon three elements. A definition of social responsibility, a listing of issues in which social responsibility play a part and a philosophy on how corporations should respond to social issues.

2. 3. 4 Ethical Theories

Ethical theories are a group of theories that focus on the ethical requirements that cement the relationship between business and society. They are based on principals that express the right thing to do to achieve a

good society. Normative Stakeholder TheoryDonald and Preston (1995, p. 67) The normative core of Stakeholder theory is based on two ideas. 1) Stakeholders are persons or groups with legitimate interests in the procedural and/or substantive aspects of corporate activity. For example Shareholders are identified as stakeholders by their interests in the corporation, despite whether or not the corporation has a corresponding functional interest in them. 2) The interests of all stakeholders are of intrinsic value. This means that the each of the stakeholders merits consideration for its own sake and not because of it's ability to further the interests of some other group or stakeholder for example Shareholders. Sustainable DevelopmentSustainable development is a value-based concept. It is defined by the World Businesses Council for Sustainable Development (2000, p. 2) as requires the integration of social, environmental and economic considerations to make balanced judgements for the long term". Firms which adopt a Triple Bottom Line show a pragmatic approach to how company's can identify their Sustainability as it includes economic, social and environmental aspects of the corporation. The common good approachBusiness contributes to the common good in different ways, such as creating wealth, providing goods and services in an efficient and fairway, at the same time respecting the dignity and the inalienable and fundamental rights of the individual. Furthermore, it contributes to social well-being and a harmonic way of living together in just, peaceful and friendly conditions, both in the present and in the future (Mele, 2002).

2. 4 Final Remarks

Chapter 3 Methodology

In order to truly understand companies' attitudes towards Green IT and how this relates to their CSR approach, semi-structured interviews were chosen as a means of gathering the appropriate data. A method of primary data collection was chosen because despite the noticeable academic attention paid to CSR there was not enough appropriate data to answer the objectives set out in the introduction in full. The research sample shall consist of a broad range of companies varying on size and business type. In doing so validity is expected to increase by being able to distinguish, omit and highlight any predisposed patterns that there could be between size and type of organisations. In addition this helps the research to be more representative of the various business categories within the service industry. In addition, suppliers of IT will be included in the sample so that they can give valuable insight into purchasing habits of IT and what, if any, concern or motivation there is for Greener IT. The sample hopes to examine in total ten businesses consisting of Large MNC's, SMEs, Micro Businesses and IT suppliers. The split between these four categories hopes to be even, however they will all fall in to the Service Industry criteria. Consequently those chosen to be interviewed need to be able to speak on behalf of the business, but more importantly still be able to speak about Green IT and or the business's approach to CSR. As a result Business Owners, IT Directors, Managing Directors, Executive Directors and CSR directors will be the clientele invited to help conduct the research. The noticeable limitation of this style of qualitative research is that a relatively small amount of

companies cannot be truly representative of the entire service industry as suggested by Saunders et al (2012). However through triangulation we can mitigate this limitation slightly. However to further substantiate any links between Green IT and CSR it may be possible to unearth secondary data relating to the research's aims. As the nature of this research is focused on qualitative data, Saunders et al., (2012), advocates semi-structured as the preferred method for collecting qualitative data, whereas "structured interviews are used to collect quantifiable data". Furthermore as the sample varied with regards to IT customer and IT supplier inevitably the questions will vary slightly in order to accommodate the position of the interviewee. This decision was substantiated by Saunders et al. (2012), as the authors' note that questions and themes may vary from interviews given a specific organisational context that is encountered in relation to the research topic. In the research's case it is the sample's business size and type, IT supplier and IT customer. An unstructured interview in comparison lets the interviewee guide the conversation and conducts the interview with no predetermined questions (Saunders et al, 2012). In order to be able to compare results between participants, set questions were indicative to the research in order to accurately judge the responses between each business. Conversely Saunders et al., (2012) found that managers are more likely to agree to interviews than complete questionnaires, especially when the interview is seen to be interesting and relevant to their work. This should hopefully be the case when 93% of businesses have an internet broadband connection (ONS, 2011) and where... . In addition semi-structured interviews create the opportunity to generate greater assurance and feedback to the

participants about their practices and the research. These benefits should hopefully help convince participants to overcome the negatives of interviews which can be factors such as the time commitment, which many owners and directors may find hard to find. In order to promote the use of computer technology as a more environmentally friendly substitute to vehicle travel, phone interviews will be conducted. However there were other benefits by conducting the interviews over the phone. Saunders et al, (2012) highlighted the added cost and convenience benefits. Yet the authors note that there is no ability to interpret hand gestures and body posture to help interpret the information being given. To help overcome this, avoid bias and produce reliable data the interviews will be recorded so that full concentration can be given to the conversation (Saunders et al, 2012). Recordings will only be undertaken with prior consent from the interviewee. Another solution in order to overcome the lack of ability to interpret hand gestures and body language is asking whether the interviewees would prefer to conduct the interview via an internet connection, where visual imagery and audio can be transmitted to the interview's subjects in real time (synchronous). This will reduce cost and allow the conversation to be recorded more easily. However in order for synchronous internet-mediated interviews to work the interviewee must have the compatible software at his disposal in order to cooperate (Saunders, Et al,. 2012). Where this is not appropriate telephone interviews will be arranged. As the nature of this research is exploratory, alternative research methodologies such as questionnaires did not fit the purpose of the research. Saunders et al, (2012) affirm that the nature of questionnaires is best intended for descriptive and explanatory research. In

addition Observation involves " the systematic observation, recording, description, analysis and interpretation of people's behaviour (Saunders et al, 2012). As the research wasn't focused on an individual's behaviour Observation as a research method was not considered. The main area which is being investigated is CSR. As the service sector is split into many sub categories of industries such as Marketing and Financial Services for example, each tend to have their own criterion in which they judge their CSR. This raises the issue as how to judge whether a company adopts valid initiatives which can be considered socially responsible. The sample includes firms that range from Large MNCs to Micro organisations and many will abide by different CSR codes. Those registered on the London Stock Exchange (LSE) for example have to abide by the Combined Code (Financial Services Authority, 2003). On the other hand a small business owner may abide by his own set of values and codes. Substantiating this concern Jean-Pascal et al identified five relationship types between how firms regulate their CSR activities with respect to Government Regulation and Self- Regulation (2011). This highlights a minimum of five different potential CSR codes firms could adopt. Therefore in order to determine whether a company adopts valid CSR practices, the stated CSR practices from the participants will be judged in relation to the dimensions of CSR which is discussed in chapter 2 as Environmental, Social, Economic, Stakeholder and Voluntariness. This gives the researcher a broad framework in which to critique whether a perceived CSR activity can be a genuinely CSR act. Green IT will be identified through the definition that was stated in chapter 2. Furthermore the Info Tech Research Group (2009) as stated in Chapter 2 identified eleven Green IT

initiatives which can be split into four major groups: Virtualization & Consolidation, Energy Efficiency, Travel Reduction, and Asset Disposal. This can help confirm any Green IT initiatives that companies may be adopting. Finally the selection criteria for the sample will follow the self-sampling method. Using Saunders' et al, ' Selecting a non-probability sampling technique' (2012) it can be concluded that self-selection is the most appropriate technique for selecting the research's sample. This is because the research is exploratory and there are no sampling frames or quota variables to consider. Companies shall be contacted which meet the selection criteria of the research which is as follows. Must be a service Sector BusinessUse Information Technology as part of their business operationsParticipate in socially responsible activitiesAfter identifying whether a company is suitable, the company will contact will be either contacted via telephone or email or asked whether they would like to participate in the research. Findings and AnalysisThis chapter presents an overview of the results of the research from the interviews with various businesses and IT suppliers. The results of the findings are analysed and presented after the results. Various organisations were invited to be a part of the research. Most were inclined to support the research however some were not. 10 companies were originally targets with an 80% success rate. A range of companies were selected and conscious efforts were made when deciding which companies were to be interviewed. Business were selected mainly either if they supplied IT and could give valuable insight in to the market for Green IT, or whether they were heavily dependent on IT and or positioned their company as an ethical company. Interviewee A is a SME business owner

of an Ethical Cleaning Company. The company focuses on the fair treatment of cleaners and the use of eco-friendly products. The company has a London based office with 15 office based staff. In addition the owner also is a Managing Director of another company focused on Test Purchasing. However the interview was particularly focused on the ethical cleaning company however both companies were discussed in the interview. The revenue of this firm was £3m. Interviewee B is the CSR director one of the UK largest Financial Services Company with an investment portfolio of £388bn worldwide and worldwide sales of £1. 9Bn with over 8000 employees. The company is registered on the London Stock Exchange, FTSE4Good and Dow Jones Sustainability index. It has a clear CSR strategy and reports annually on its progress. Interviewee C is the IT Director for a purely Online Marketing based firm based in Portsmouth UK. Their turnover is £11. 5M and they have been included in the Times Top 100 Companies to work for, for the past 4 years. No explicit CSR strategy is in place. Interviewee D is a Managing Director of a Micro Online Retailer of Office Supplies to SMEs, Large Corporations, Educational Establishment and Government based in Dorking UK. Revenue is £800, 000. No explicit CSR strategy in place however the business is environmentally conscious. Interviewee E is the managing director of a Green IT supplier based in Sheffield UK. They chose computer parts and vendors based on their energy efficiency, greenness and how ethically sourced/produced materials are. They supply various organisations charities, educational establishments and retail shops with Green IT. Revenue £2m. Heavily focused on Ethics and Environmental sustainability. Interviewee F is the Vice President of an IT supplier located in Washington,

DC. The business specialises in IT consultancy, design, project management, implementation and support services. They supply services to SME's, Charities and Government. Revenue is between \$20m and \$22m. Internal CSR focus is more on social issues rather than environmental. The varied sample above hopes to give a broad reflection of the types of business involved in Service Industry from Micro to very large organisations. Furthermore a sample of IT suppliers was introduced. One supplier focuses specifically on Green IT and the other supplies IT solutions in a broader sense to the needs of its diverse customer base. IT suppliers were chosen to help give a great understanding of market trends of Green IT from a supplier's and buyer's perspective. Although Video conferencing interviews was the most preferred method due to cost and to highlight how IT can reduced environmental impact compared to commuting, some interviews were done over the phone. All candidates agreed to semi structured interviews at a pre-arranged time. This was an agreement made by both parties to discuss the research rather than have emailed and written responses which doesn't allow for the most insightful repos compared to semi structured interviews. Each interview although slightly tweaked depending whether the candidate was a supplier or consumer of IT aimed to determine the two objectives stated in chapter 1. The research and findings will be discussed with regards to Garriga and Mele's (2004) framework of CSR theories. The framework will be used to help determine whether the adoption of Green IT can be associated with an Instrumental, Integrative, Political or Ethical motive. The findings from the research found motives were focused on Economic, Social, Political and Ethical reasons. This helps substantiates Garriga and Mele's

(2004) hypothesis as appropriate framework for this investigation and analysis. The table below highlights any CSR Activity or socially responsibly activity within each business. A separate table will be compiled for the suppliers. In the remaining column three asterisks will be placed indicating the primary driver for that range of activates and if any other motivations were mentioned an asterisks will be place in the respective column. Two asterisks for a secondary motive and one asterisks for other minor motives.

CSR Activities and Motivations	Interviewee	Inter-viewee	CSR Motivations,
Activities and Key Quotes.	Int.	Inst.	Pol. Eth. A
Wondering whether the whole Green ' Thing' is over.	Customers should expect businesses to be Green.	Eco	
Friendly Cleaning Products – Cost More	don't expect a ROI,	just except a	
bigger cost.	Recycling service we provide – We do expect a ROI	Ethical	
Treatment of the Staff	We took the company out to a School and did some		
community service	handyman school.	No cost apart from labour cost.	Expect
to find ways to be socially responsible without costing materially more.			
Motivations	Morals	Position ourselves	You have to be doing the right thing
because customers kick up a stink if you don't	Yeah we are Green but you		
should expect that.	CSR not a Differentiation.	More of a differentiation if you	
don't have Eco Friendly credentials than if you do these days.			

-

- **

- ***

- *

B1st Reason Minimize Risk of the Business. Environmental & Social risk2nd Reputation. 'Place where I want to work'. Organisations influence corporate behaviour. Social Media can very quickly campaign against corporations. 3rd Research and Development - A point of Innovation4th New Psychological Contract - Relationship between employees and employers are changing. Major influence in the mortgage market and how much do we understand what our own employees face in the mortgage. How does L&G back me as an employer. CSR strategy: how can we enrich the business by understanding more the issues that are going on in the outside world and how can we integrate products around that." Only 3% of consumers are concerned with the environment" Part of Climate Wise and how is Climate change affecting doing business and the insurance sector. BICT research businesses that factor CSR into their activities outperform those who don't by 3%We are taxed at £12 tonne of CO2 produced. Last year CO2 emissions cost us £500, 000, just to operate our business. Legislation has quantified pollution with a value. In our view companies cannot be carbon Natural. And customers don't view our environmental performance on emission's but on how much paper gets dropped through their door. Emissions down to our data centres. 40% of our energy bill at one office purely down to our data centre. We want to virtualize our data centre. Performance and Security of

data primary consideration/motivation for ITCost benefit second
motivatorGreen benefit is a Bi-product. They report back to us on how much energy we use. Our IT supplier should be able to measure energy better than us. This has removed our 40% bill away from our company and removed these emission costs. WEEE standard used to dispose of the IT and back into circulation. Birth to Death agreement with our suppliers.

**

*

CNo Explicit CSR strategyPurely focused on ROI from any social business activity to maximise profitability for the company. Career development for employees. Employees are treated well.

DDon't consciously CSR strategy in place. We do things in an environmentally responsible manner. Pay to offset the carbon emissions of our data centres and servers. Environmentally friendly initiatives seen as a way to cut costs. Recycle and dispose of electronic properly. Cost reasonsMoral ConsciousIn the past it was a differentiator, however it is not so much now. End users don't consider the power consumption. However my products are become more efficient. But that is probably being driven through regulation.

**

ESupplier. CSR was central to their business model. Components was sourced from Iceland which uses GEO thermal energy to manufacture aluminium. Components for computers were cherry picked for there energy consumption. Vendors also chosen on what processes were used to solder parts together which can have an impact on the natural environment. Motivation for being Green was a differentiator. Motivation for companies purchasing their Equipment is cost savings. Only a few have brought the equipment because it has been Green. Educational establishment's pre Credit Crunch were focused on Greenness, now focused on Cost and we have had to adapt our business model to suit that. We don't have power over our supplies to affect their production and greenness credentials.

FSupplierCSR strategy was focused on Employees. We only do something socially responsible if it affects our employees. Gave example of fundraising for a cancer charity after an employee had fallen ill. How do we maximise IT resources which have an impact on power, cooling and space, which has an impact on the environment. Everything we have to do has to tie back to profitability and to shareholders. Non-Profits – want to understand what you are doing for the environment. However they don't require it. Commercial organisations, don't care they don't ask. In 20 years of being in the business, not one has asked about our environmental or even social awareness. They are truly focused on what affects their bottom line. However the cost savings

are in line with Green Computing. Green Computing was a buzz word and a phase and people jumped many years ago. We do CSR to look after people. Brings humanity into the business. Gives a bigger purpose than being totally profitably driven. Day of Giving. We provide our services purely on our clients needs. None have asked specifically for Green IT. However all have asked for energy reduction services because of its cost. Energy efficient computing is expected. However Government incentives to encourage people to work from home rather than commute is a driver for some of our services. IT can be used in other ways to reduce environmental impact.

Motivations for Green IT
Interviewee Motivation for adopting specifically
Green IT Practices
Int. Inst. Pol. Eth. A Cost Benefit

B Cost Benefit, Issues Management

**

C Cost benefit

D Cause Related Marketing/ Differentiator / Efficiencies

E (Supplier) Differentiator

F (Supplier)Cost Reduction

Ethical TheoryEthical Theories are concerned with the Utilitarian approach to corporate behaviour which is where an action is morally right if it results in the greatest amount of good for the greatest amount of people affected by that action (Crane & Matten, 2010). Ethical Theories played a noticeable role in a firms CSR strategy. However in only one case was an ethical theory the primary motivator for acting socially responsible. Interviewee F talked about only acting in a socially responsible manner to their staff. An example of their ethical motivation was when an employee became sick and the firm helped by having office days dedicated to raising money and awareness to certain causes that had affected employees in the past and present. There was no economic motive or use of business power to better society but a fiduciary motive to care for employees (stakeholders). We can pin this motive against Freeman's (1984) Normative stakeholder theory because of the firms " managers bear fiduciary duties towards stakeholders".

Interviewee A talked about wanting to do the right thing, however this was very much a secondary motive before other reasons for incorporating CSR activates. Interviewee D had similar motives for incorporating CSR however wanting to do the right thing came before other reasons as to why he implemented socially responsible behaviours in his firm. Although ' wanting to do the right thing' was a prominent motivator for CSR activity. Ethical Theories didn't once play a motive in the reasons for adopting Green IT, not

even as a lesser motive. Even though Green CSR activities such as recycling did have an ethical motive for some Interviewees, reducing the environmental impact through IT didn't have an ethical motive. Interviewee A one of the firms which had an ethical motive for adopting CSR practices stated, " That he tries to find ways of being socially responsible without it cost the firm money". Even though this is slightly contradictory, as he explicitly stated he doesn't expect to gain a ROI from the environmentally friendly cleaning product he procures. Green IT seems to be an area of CSR which isn't done for Ethical reasons, despite other Green initiatives being done for similar ethical motives. Integrative Theory Integrative Theories which focused on integrating social demands into businesses operations played a small but noticeable role in motivations for CSR. Integrative theories were most prevalent in Interviewee B. Interviewee listed four reasons for the company adopting a CSR strategy. Two of these motives identified as the Issues Management and Public Responsibility fell in to the integrative theories approach. Issues management refers to Corporate processes of response to their social and political issues which may impact significantly upon it. Interviewee B firm plays a big role in the Insurance Industry. It insures against flooding and other environmental impacts caused from extreme weather. Extreme weather can be correlated to carbon emissions. Therefore a direct cost can be attributed to the impact of global warming on their business and hence by limiting environmental impact through their business operations they can hope to reduce the cost to the business in the long run. Here there is a clear motive for adopting for adopting a CSR strategy which is cognisant towards the environment.

Instrumental Theories Instrumental Theories which align economic objectives through social activities (Garriga & Mele, 2004) played the dominant and central theme to Political Theory Discussion Motivation for CSR

Activities Motivation for adopting Green IT Practices Instrumental Theories

14*Instrumental Theories 18*Ethical Theories 6*Integrative Theories

2*Integrative Theories 5*Ethical Theories 0*Political Theories 1*Political

Theories 0*Davis, K.: 1973, 'The Case For and Against Business Assumption of Social Responsibilities', *Academy of Management Journal* 16, 312-322.

Jensen, M. C.: 2000, 'Value Maximization, Stakeholder Theory, and the Corporate Objective Function', in M. Beer and N. Nohria (eds.), *Breaking the Code of Change* (Harvard Business School Press, Boston), pp. 37-58. Matten, D., A. Crane and W. Chapple: 2003, 'Behind de Mask: Revealing the True Face of Corporate Citizenship', *Journal of Business Ethics* 45(1-2), 109-120. Porter, M. E. (1981). The contributions of industrial organization to strategic management. *Academy of management review*, 609-620. Rangan, K., Chase, L., & Karim, S. (2012). Why every company needs a CSR strategy and how to build it. Cambridge, MA: Harvard Business School. Donaldson, T.: 1982, *Corporations and Morality* (Prentice-Hall, Englewood Cliff, NJ). Donaldson, T. and T. W. Dunfee: 2000, 'Precis for Ties that Bind', *Business and Society* 105(Winter), 436-444. Preston, L. E. and J. E. Post: 1975, *Private Management and Public Policy. The Principle of Public Responsibility* (Prentice Hall, Englewood Cliffs, NJ). Gond, J. P., Kang, N., & Moon, J. (2011). The government of self-regulation: On the comparative dynamics of corporate social responsibility. *Economy and Society*, 40(4), 640-671. Betts, K. (2004). Calculating computing's environmental cost. *Environmental Science &*

Technology, 38(22), 432A-433A. Harmon, R. R., & Auseklis, N. (2009, August). Sustainable IT services: Assessing the impact of green computing practices. In Management of Engineering & Technology, 2009. PICMET 2009. Portland International Conference on (pp. 1707-1717). IEEE. BSR (2010). Corporate Responsibility Reporting: A View for the Next Cycle: Nine Key Trends, www.bsr.org