

# [Ict impact: small and medium sized enterprises](https://assignbuster.com/ict-impact-small-and-medium-sized-enterprises/)

This essay provides a critical evaluation of small and medium-sized enterprises use of, information and communication technology (ICT) and how ICT can allow the hospitality SMEs to gain competitive advantage and achieve a higher market share. Then the importance of the SMEs towards global economies is discussed. In further discussion, positive and negative factors which influences adoption and utilisation of ICT has been analysed. Further this essay provides an understanding of the benefits that can be achieved by adopting information and communication technology in small and medium-sized enterprises.

The modern economies are built on information and communication technology (ICT), in such a knowledge-based economy, competitive advantage will be with those organisations that have the capacity to deliver innovative forms of work that raise product and service productivity. In this modern environment, small and medium-sized enterprises (SMEs) have tremendous opportunities. ICT can provide opportunities for SMEs to access world markets, low-cost entry into new markets and the ability to gain efficiencies in business processes. However, these factors may be different for most SMEs. The virtual marketplace is rapidly growing of new business models that require restructuring of their strategic plans for current businesses. To be successful in this competitive market, a large investment in personnel and infrastructure is required. Costly Technological and marketing factors are also making it more difficult for SMEs to succeed in the modern knowledge-based economies. (Love and Irani., 2004) describes, limited attention has been given to ICT implementation in small and medium-sized enterprises.

According to the (EU., 2005) definition, firms with less than 10 employees are considered “ micro” and less than 50 employees are considered “ small” while “ medium-sized” firms span the range 50-249 employees.

First and foremost, it is important to discuss the importance of the SMEs towards the global economies. For instance according to (EU., 2005) SME enterprises are socially and economically important, since they represent 99 % of all business in the European Union. According to (Dholakia and Kshetri., 2004) in the U. S. economy, SMEs comprise 99. 7% of the business in the US, accounting for 48% of the gross national product (GDP) and 53. 7% of the total employment.

Source: (Department for Business Innovation and Skills., 2010)

As according to the above diagram, In UK 2009, Small and medium-sized enterprises together accounted for 99. 9 per cent of all enterprises, 59. 8 per cent of private sector employment and 49. 0 per cent of private sector turnover which is estimated at £1, 589 billion, £88 billion (5. 8 per cent) higher than 2008.

(Young et al., 2002) describes due to their contribution towards the economy SMEs and there entrepreneurs are highly significant to the national economy of many countries. (Dibrell et al., 2008) describes, hospitality SMEs should consider the importance of innovation within modern technology in order to gain a higher market share within the competitors. (Wolff and Pett., 2006) describes that highly innovative organisations manages to built up key source of competitive advantage in the absence of scale economies (Lewis et al., 2002). For example, substantial evidence suggests that appropriate strategic employment of ICT may be essential in implementing strategies to enhance firm performance. A direct linkage between ICT and firm performance was established by (Powell and Micallef., 1997). They found enterprises that highly invest in ICT, outperform competitors who do not invest in ICT to the same extent. These results suggest ICT offers enterprise a competitive advantage, which aids to differentiate the enterprise within the marketplace. However, SMEs seems to be slowing in adoption on technological innovations (Yap and Thong., 1996). This process could eventually result an increased market share of the larger multinational organisations. If this occurs then it will reduce the important role and contribution of SME’s within the economy.

(Garry., 1988) More over there are other major contributions of SMEs which includes employing more staff per unit of capital, they help to increase the total saving of the economy, they have more impact on income distribution as well as they encourage the usage of local materials, they provide opportunities for development of skilled managers, they play a complimentary role in the industry supplying goods, raw materials and services to larger Organisations.

(Young et al., 2002) identified that entrepreneurs are for the most critical source identified as information technologies adaption as well as overall management styles of any business. Their role is more cultural and determines the innovative attitude of Small and Medium Enterprises. Entrepreneurs are the once who realise the benefits of information technology that give an opportunity for organisations to improve their efficiency, effectiveness as well as the level of competitiveness. Effective entrepreneurs of SME’s are the ones who realise the positive contribution of ICT that has been used by larger organisations. With the declining costs of ever more advance and user friendly micro computers, as well as standard software packagers, the benefits which could be from ICT are accessible even for SMEs. Good entrepreneurs of SMEs should realise that larger organisations have been using and benefiting computers and other products and implement ICT in the SMEs.

Although prior studies have established evidence of beneficial performance and Productivity impacts of ICT investments (Huang and Liu., 2005), there is also considerable scepticism to the benefits of ICT and, consistent with what has become known as the “ productivity paradox” (Trott and Hoecht., 2004), IT investments do not meet performance objectives or that there is little or no relationship between ICT investment and firm performance. Various arguments have been put forward as to why there is a lack of consensus in the value of ICT investment. For example, (Powell and Micallef., 1997) suggest that ICT is now so readily available and, as such, does not offer competitive performance. Others point to miss-measurement problems related to inputs and outputs (Wilcock and Lester., 1997), confusion related to generalization of studies due to issues related to the level of analysis and the role of time lag effects between investment in technology and its payoff.

## Factors influencing adoption and utilization of Information and Communication Technology by SMEs

Adopting information technology in SMEs involves a strategic understanding of the market opportunities afforded by the implementation of IT, and the ability to successfully implement them in order to gain competitive advantage. Young et al (2002) suggests, IT adoption in SMEs are affected by number of factors, among them entrepreneurs and there characteristics are the most critical factor. This is simply because SMEs need highly organised and systematic entrepreneurs. Since SMEs entrepreneurs have relatively limited resources to withstand any key mistake in their operations, it is also realised that SMEs do not have economies of scale and resources to afford a lager management team to assist them in businesses.

As discussed by Windrum and Berranger (2002), in many literatures adaption of IT in hospitality organisations is related to the organisation size. For instance, smaller hospitality organisations are less likely to adopt new technology than larger organisations. Hospitality SME’s typically have less complex organisational structure, hence, has lower internal requirements for extensive communicational technologies. With smaller volumes of information to be communicated and stored, there is less compelling need for IT to manage information. Tetteh and Burns (2001) suggests that few hospitality SMEs realise that they need a strategic plan of web and that they will have to develop the capabilities for managing the information infrastructure for an e-business. Further Chapman et al (2000) suggests that UK SMEs tend to lack the in-house technical skills necessary to successfully implement e-business strategies. In addition, the European Union has been funding a range of projects aimed to boost information technology use in SMEs. Despite these efforts, information technology use in SMEs remain much slower than large Enterprises.

According to DTI (2000) estimates that some 63% of UK businesses provide formal ICT training for their employees. This compares very favourably with respect to their findings in the other G7 countries. For instance 73% in France, 71% in Germany, 61% in Canada, 50% in USA and 47% in Italy. When considering the firm size, there is a different view in ICT training for their employees. For instance, medium sized firms with a 58%, and just 50% of small firms providing formal training compared with 74% of large organisations. According Lange et al (2000) study of Scottish SMEs, Training of ICT is perceived as a costly investment. Further, the study shows that managers view of invest in upgrading in-house skills as risky. Mainly this was regarded in risk of losing trained staff to larger organisations. Research conducted by Mullins et al (2001) on European SMEs suggested only half of managers made a link between staff skills and effective use of e-business ICTs. In fact it points out the lack of awareness of the available opportunities, rather than a lack of in house skills.

Another prevailing problem for hospitality SME is the lack of investment capital, lack of resources and that they do not benefit from economies of scale that are profited by the large scale businesses. Further stronger financial constrains faced by the SMEs is a key factor. In fact SMEs tend to be more sensitive to costs. As a result, rather than acquiring latest information technology options hospitality SMEs tend to choose a lower cost, second best option that do not satisfy the customer needs. Further the flatter structure of the hospitality SMEs means that the management will perform multiple tasks within the organisation. For instance, in a small guest house the owner will be the receptionist, room attendant and the waiter. As a result managers in SMEs have a little time to spare in order to increase their own knowledge (Lange et al, 2000). When combined with the pressures arising from multi tasking, managers of hospitality SMEs are constrained to the day to day running of the business with little or no time to devote to forward planning. Yap et al (1992) suggests, successful implementation of new ICT is closely associated with the duration of the SMEs information technology experience. The reason been that ICT implementation require time to be resolved and measured success will be dependent on a time scale. But as described above the SME managers have little or no time to concentrate on the implementation of new information technologies.

According to the Department for Business Innovation and Skills (2010), at the start of 2009, there were 3. 6 million enterprises with no employees, an increase of 68, 000 (1. 9 per cent) since the start of 2008. Enterprises with no employees accounted for 74. 8 per cent of all private sector enterprises at the start of 2009. However this proportion varies by industry, which counts to 26. 2 per cent for Hotels and Restaurants. Privately owned and privately operated hospitality enterprises, lack standardisation and often professionalism. As a result those enterprises would not acquire ICT as a strategic advantage.

Source: Burgess, 2002

According to the above research it is clear that SMEs are lacking of usage of internet for business factors such as, to receive payment for services, to take orders for services, monitor markets and completion, and to advertise their services.

Despite the advantages (Burgess, 2002), actual adoption of the Internet for e-commerce applications is limited. Moving into e-commerce requires a major change in the models that businesses use as well as the adoption of specific communication and information technologies. Not surprisingly, many small businesses are waiting to see if these new innovative ways are viable and whether the return on the investment will exceed the costs of adopting the new technologies. The other key issue is that the managers of SMEs could get caught up with technology development, designing, maintaining and promoting and lose their focus in day today operational jobs.

Infrastructure and business related factors\*\*\*\* (NTIA, 1999) such as the business environment in which a specific firm operates influence the level of involvement of the firm in the Internet. Businesses fortunate enough to be located in new and high-bandwidth telecommunication regions can expect to obtain better technological services to support e-commerce applications. Such access is generally better in urban than in rural areas A business environment where other firms invest in technologies, share their experiences offer greater support for a specific firm to actively or passively pursue a specific strategy. Further Competitive environments have a strongly influence on the adoption of a technology. Ghosh (1998) provides several examples of companies in the U. S. that adopted the Internet mainly because of competitive pressures. Increasing numbers of SMEs from developing countries are adopting electronic technology as a means of communication and distribution under competitive pressure from suppliers and customers from developed countries. More than five years ago a study found that some of the organizations from developed countries accepted new suppliers only if they can demonstrate an EDI capability The study points out that “ there are cases of companies, particularly traditional, small, older firms, who have gone out of business because of inability, or unwillingness to comply or disbelief in the need to comply. This has been particularly true of some middlemen companies”

## Advantages of implementing Information and Communication Technology In SMEs

The Internet can be a critical factor in enhancing a firm’s market reach and operational efficiency (Porter, 2001). Internet based technologies provide small firms the opportunity to overcome the limitations of size and compete more effectively and/or in larger markets with bigger sized establishments. There is some evidence to suggest that the Internet has increased international opportunities for hospitality SMEs. According to Williams (1999), Internet technologies can Increase ability of small firms to compete with other companies both locally and nationally as a promotional tool and creates the possibility and opportunity for more diverse people to start a business. Further ICT can offer convenient and easy way of doing business transactions (not restricted to certain hours of operation, virtually open 24 hours a day, seven days a week). Most importantly ICT offer an inexpensive way for SMEs to compete with larger companies and to attract new market segments via internet.

Research conducted by Dibrel et al (2008) noted several managerial implications for SMEs. The key findings were that product and process innovations exhibited strong linkages with ICT. Information and Communication Technology mediated the innovation to firm performance direct relationship and ICT was positively related to performance. Based on these findings, managers should be more willing to invest in ICT; however, managers must also be cognizant of the necessity to create systems and processes that most effectively optimize ICT usage. This study, in conjunction with past research, clearly demonstrates the need for a firm to invest in IT and to hire employees that are capable of utilizing ICT to implement competitive business level strategies successfully.

## Conclusion

According to previous research and theories it is clear that Information and Communication Technology can enhance the position of SMEs, such as, by improving competitiveness and reach out to customers at greater distance. New markets and distribution channels, increased communication and low-cost advertising can be achieved through ICT. Although Information and Communication Technology have been proved to be popular with large business organisations, hospitality SMEs can also create value by marketing and selling services electronically. In ICT each organisation is constrained by same amount of graphics and design capability that the internet can deliver, so everyone starts from the same position with their websites. This allows SMEs to compete directly with the larger organisations and acquire a valuable market share. As a result on the internet it is easy for SMEs to build and maintain a professional looking site with innovative services and compete in a market that generally belongs to the larger organisations. In addition SMEs, due to their size, have the advantage of being able to implement changes faster and adapt to the demands on internet better than a larger organisation. Further the SMEs can gain direct benefits such as cost saving in areas such as communication and marketing, shortened communication cycles, an improved relationship with suppliers, customers and enhance their image. In addition ICT can provide savings from lower procurement and overhead costs, reduce inventory costs arising from electronic ordering and just in time delivery. However for SMEs to achieve success through ICT they must be widely available to range of customers and SMEs must be aware of the consumer market and prepared to alter their business process to sudden changes in the market segment.