

# [How information and communication technologies affect decision making](https://assignbuster.com/how-information-and-communication-technologies-affect-decision-making/)

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ICT has revamped the whole decision making process. No decision making in our modern day society can be effective without involving the use of ICT tools in every part of the process. In an age where information is the key to organizational success, nothing fills this critical role better than information communications technology. In all fields of management, whether the mainstream corporate world or in non-conventional management environments, ICT has a major role to play in the decision making-process. The goal of this report is to illustrate the role of ICT in decision-making process, and demonstrate why more organizations should articulate the vision of developing the use of technology in the running of these organizations.

Introduction Decision-making is the process of choosing the best alternative among the options available to the decision maker (Awwal, 2002). Therefore, in a decision-making scenario, the decision maker needs to identify all the feasible options and make a choice of the alternative that best utilizes the available resources, delivers the highest quality, and is consistent with the organization’s long-term strategy. As such, decision-making is not an easy process a lot of information is necessary before an optimum decision is arrived at by the organization’s management. Decision-making is a risk process, involving taking chances (Balanskat et. al.

, 2006). The certainty of the choices the decision-maker is considering, the better the quality of decision they will make, and the lower the burden to the decision-maker. Information communications technology reduces the risk the decision makers have to take, as a higher risk could lead to the detriment of the organization in the ever competitive and globalized economy. Decision-making is a digressive process, with many back and forth movements depending on the amount of information available to the management. Decision-making is not a perfect or a linear process; it is a recursive process which mainly relies on trial and error to finally arrive at the final decision (Awwal, 2002).

The more the information available the more the decision-making process becomes definitive. In the information age, information necessary for decision-making is increasingly sort by the use of information communication technology. Decisions depend on the conditions prevalent at the time (Salian, 2002). The conditions comprise of the decision environment and they waver even within the same organization. The subsisting conditions are therefore important for the decision-maker; a slight change in the decision environment could invalidate the entire purpose for which the decision was a requirement. From the going, it may appear that information is of paramount importance in the decision-making process, but research shows not really (Hengst, 2001).

The time factor is an indispensable factor in the entire process. Some decisions have very exacting time deadlines which if contravened would compromise the effectiveness and at worst the necessity of the decision. Aims/objectives of the report The purpse of this report is to establish a connection between decision-making and information communication technology, and illustrate the indispensable that management has come to accept as part of the regular decision-making process. What does a decision entail? To understand the role of information communications technology on the decision-making process, and distinctively what a decision entails. A decision involves four major parts: information, alternatives, criteria, and goals. To expound on the four facets of decision-making on this, the information part, which is the most relevant to information communications technology, is the knowledge base upon which the decision maker weighs the decision alternatives (Awwal, 2002).

The second part of the decision is the available alternatives, which are the prospects that are existent for the decision-making process. The third critical part of the decision is the criteria, or the conditions the decision finally settled on has to meet. The last part of the decision process asking oneself whether the decision helps the organization realize its goals (Salian 2002). Relationship between Information Communication Technology and Organization Hierarchy Researchers have analyzed in detail the link that exists between ICT and the organizational management roles. A common observation by many of these researchers is that the price of computing keeps coming down over the years (Bloom et.

al., 2010). The decrease in prices of information sources has led to wider availability of information to all sectors of management from the top to the very low technical management levels. Therefore, the entire organizational structure is fully has full and thoroughly infiltration by information communication technology. Interestingly, the trends in the use of information technology vary among the various management levels.

Decentralization greatly accelerates decision-making in many modern organizations especially through the advances in the use of computer-based technologies such as database softwares (Bloom et. al., 2010). However, communication technologies, such as email and mobile phones result in the centralization of decision-making to the higher levels of management. Clearly, the decision making process is transforming as a result of information communications technologies, from the highest levels to the lowest levels with access to information technologies. Information communication technology dominates manufacturing process The dominion of information communications technologies in the entire organizational process, form decision-making to manufacturing has been thorough and complete.

Data management tools are technological in nature. Management of organizational resources, inventory management, budgeting, financial analysis, forecasting, costing, business process re-engineering, quality control, project planning, project documentation, all bank on technology to run effectively (Salian, 2002). Use of customized softwares, and computer aided manufacture and design empowers the workers to make decisions more accurately, and with less supervision from the superior manageement members. While the burden of decision-making falls more heavily on the junior management staff, the communications technology that the senior management uses makes them more accessible than ever before (Salian, 2002). It is upon the management therefore, to decide just how much of the decision-making is allocable to the junior management staff. Information communication technology and e-governance Examples abound of the leaps in development a government stands to make with the unreserved embracing of the use of information communications technology.

The government launched a bold plan to increase its use of information communications technology in the provision of services in its departments. The results were impressive, with better efficiency and elimination of red tape observed in the use of traditional governance processes. Decentralization of control comes with the use of information communications technology, and efficiency increases many times over (Hengst 2001). ConclusionInformation and technology has made transformation in the corporate decision making process to the point where decision-making is possible on all rungs of the corporate ladder. The fall in the price of technology and communications technology bears the greatest credit in this regard (Bergh, 2010).

Technology facilitates lower level decision making, while communications technologies enhance the communication and the accessibility of the senior management by all levels of the management. The only dilemma the management team faces is in deciding to whom to give certain decision-making roles. Information communications technologies help in the identification and analysis of problems in the society, and in generation of information for better decision-making and policy development (Government of Australia, 2006). In pursuit of this noble goal, all stakeholders have to participate fully at all levels, international, regional, and national, to help unleash the full potential of information communication technology. Information infrastructure grows with the use of information communication technology. Knowledge only previously available to certain levels of management is now available for use by all the stakeholders who need the information.

Transparency results from this and the whole society benefits. Organizations should aim to implement the policies of international conventions on the organizational use of information communications technologies. WSIS, ICSU, and CODATA recommend the increase in use of information and technology in governance and decision making as the key application of the information technology (CODATA, 2003). Other areas of interest include universal access to scientific knowledge, and the improvement of education and training. Sluggish uptake of the ICT-based means to governance is a major hindrance in creation of a unified pool of scientific knowledge to help the project attain its full purpose (CODATA, 2003).

In addition, the publicly accessible data sources require proper inspection to ensure maintenance of consistent and viable quality.