: What is the need for decision support?

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There is a growing need for decision support: 1) decision-making is challenging and the challenge to make "good" decisions is growing; 2) the need to make faster decisions has increased; 3) too much information is common in decision situations and much of that information is only marginally relevant; and 4) there is more distortion of information in society. On a more positive note, there is a greater emphasis on fact-based decision-making in many organizations that creates a need for decision support. Overall, a complex decision-making environment creates a need for computerized decision support. Decision support refers to a broad concept that prescribes using computerized systems and other analytical tools to assist individuals and groups in decision-making.

Research and case studies provide evidence that a well-designed and appropriate computerized decision support system (DSS) can encourage fact-based decisions, improve decision quality and improve the efficiency and effectiveness of decision processes.

Most managers want more analyses and specific decision relevant reports quickly. Certainly, managers have many and increasing information needs. The goal of decision support is to create and help us use better information. There is a pressing need to use technology to help make important decisions better. Decision-makers perform better with the right information at the right time. In general, computerized decision support can help transfer and organize knowledge. Effective decision support provides managers more independence to retrieve and analyze data and documents to obtain facts and results, as they need them.

From a different perspective, cognitive decision-making biases exist and create a need for decision support. Information presentation and information availability influence decision-makers both positively and negatively. Reducing bias has been a secondary motivation for building DSS. Most managers accept that some people are biased decision-makers, but often question if a proposed DSS will reduce bias. For example, decision-makers "anchor" on the initial information they receive and that influences how they interpret subsequent information. In addition, decision-makers tend to place the greatest attention on more recent information and either ignore or forget historical information.

Changing decision-making environments, managerial requests, and decision-maker limitations create a need for more and better decision support. We should consider building a computerized decision support system when two conditions exist:

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1) Good information is likely to improve the quality of decisions; and

2) Potential DSS users recognize a need for and want to use computerized support.

If we invest in building decision support capabilities, we want the applications/systems to be used.

References

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Please cite as:

Power, D., "What is the need for decision support?" DSS News, Vol. 10, No. 11, May 31, 2009; updated April 29. 2017.

Author: Daniel Power Last update: 2017-04-29 05:17