

: *What are benefits of Interorganizational DSS?*

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In general, an organization can benefit by providing DSS to its customers, suppliers and other significant target users outside traditional boundaries. Interorganizational DSS may facilitate shared decisions between 2 organizations, serve to increase collaboration in a supply chain or support decisions of a specific group of individuals. An Interorganizational DSS may provide stakeholders with access to a provider company's intranet and privileges to use specific capabilities. For example, companies may make a Data-Driven DSS available to suppliers or a Model-Driven DSS available to customers to design a product or choose a product. An Interorganizational DSS may be revenue generating, part of an internal decision process, or it may be a service to create goodwill, user dependency or reduce costs of more direct decision making interactions. Benefits seem to cluster in eight broad categories and depend upon the type of DSS created and deployed.

Interorganizational systems can support transaction processing, decision making by external parties and cooperative or shared decision-making. Today it is possible to create integrated Web-based systems that support both decision making about a task and the required transaction processing. Despite the possibilities, a number of real-world issues like the need to re-engineer or redesign business processes and how to encourage trading partners to participate in e-Business relationships remain major challenges. Managers in interdependent organizations need to cooperate to build shared DSS and suppliers need to consider what types of DSS can assist their customers. Also, managers must confront a variety of business, technical and legal issues and impediments if they want to build effective Interorganizational DSS.

The first major business issue that must be confronted is "who will use the system?" -- perhaps end user customers, managers in supplier or customer organizations, or managers in other stakeholder organizations. Then DSS designers and provider organization managers need to ask a number of more specific questions: "What is the cost of the proposed Web-based, Interorganizational DSS and who will pay the cost?" Then all managers involved need to ask: "Do we need to reengineer or redesign our decision or business processes? Does the Internet increase the speed of decisions and transactions and create efficiencies for our business or for stakeholder organizations? Will the use of networks, Web-based DSS and the Internet create new value for the targeted users?" Too many "No" answers to the above questions and proposed Interorganizational DSS projects will certainly fail. Users must perceive that they benefit or the system will not be used!

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In terms of technical issues, provider/initiating organization managers need to ask if their organization has the staff and technology in place to build the proposed Interorganizational DSS. Someone needs to determine what hardware and software target users will need to effectively use the DSS. If potential technical problems and needs are identified early in the development process, any potential technical barriers can be overcome.

Finally, from a legal perspective managers in the provider organization need to determine what data, documents, knowledge and quantitative tools can legally and ethically be made available to targeted external users, especially end user customers and suppliers, to support their decision making. Also, provider organization managers must ask: "Do we have privacy, ethics or liability issues if we move ahead? Are there copyright issues associated with the proposed Interorganizational DSS project?"

After noting these 3 important areas of concern, it is important for managers interested in providing external-facing decision support systems to examine some examples and discuss potential benefits. The Web facilitates cooperative processes and can include buyers, suppliers, and stakeholder partners in redesigned business processes. With Web-based, Interorganizational DSS supporting value chains, the supply-chain management system and the customer support system can be integrated. Integration can provide sharing of manufacturing, inventory and sales data. With such a system suppliers build to order and do not stock inventory based upon projections. A collaborative external-facing DSS capability can support relationships with key stakeholders. With an Interorganizational DSS, peers in customer and supplier organizations are connected for real-time collaboration. A well-designed Interorganizational, Web-based DSS should reduce interdependent decision making cycle time and promote greater creativity in solving shared interorganizational business problems.

Frequently cited examples of Interorganizational DSS include forecasting and replenishment (FAR) systems created by large retailers like Wal-Mart and Target. Also, health insurance providers frequently make data available to health plan managers to help them understand how well their plan is performing. Some companies are in business to collect and then share decision relevant data, for example Experian created ContractorCheck(SM), a service to help consumers check on a potential contractor and avoid home improvement problems. Also, many companies provide current and potential customers decision support. The Principal Financial Group introduced Web-based tools to help people make more informed healthcare choices. WellPoint has a Medicare Part D decision tool. Some online retailers have product recommender systems for customers.

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With an external-facing DSS, most direct benefits of improved decision making should accrue to a person or an organization external to the provider organization. But significant indirect benefits can accrue to the provider organization. At a minimum, the following eight benefit categories should be explored when evaluating a proposed Interorganizational DSS. The benefits will change for specific communications-driven, data-driven, document-driven, knowledge-driven or model-driven Interorganizational DSS. More integrated customer-facing transaction processing and decision support systems may yield even greater benefits.

1. Cost reduction. Reduce costs of inputs from suppliers, decrease the lead times and holding costs.
2. Decision cycle time reduction. Speed up decision making by a stakeholder and potentially reduce internal decision cycle times.
3. Collaboration. Increase collaboration and information sharing.
4. Competitive situation. Alter competition in the industry by better meeting needs of a customer.
5. Revenue. Create new sources of revenue.
6. Participative design. Allow customers and other stakeholders to participate in product/service design decisions.
7. Repeat purchase and use. Create relational or product dependency and encourage repeated use of the DSS for decision making.
8. Process improvements. Reduce decision process and decision making inefficiencies.

Please help identify other categories and/or suggest examples. As always your comments and questions are welcomed.

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References

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