

## A Model for Interpreting Information

We have suggested a number of factors that influence the interpretation of information. How are all these factors combined? What is their net impact on the interpretation of information? This model summarizes all the variables described above. The figure portrays one representation of how a user of information systems develops a model to interpret information and how he or she would constantly execute and revise the model.

In the model, to interpret data a decision maker draws on current data and a history of past decisions and their results. The interpretation turns data into information, and the decision maker takes some action. He or she observes the results and stores them for future reference. We expect the model to be formed inductively by the decision maker and to be heavily influenced by beliefs. For example, a decision maker may observe data on sales and production over time and find that these data seem to predict customers' reactions to a product. The decision maker is building an interpretational model based on his or her beliefs and analysis of historical data and observations.

After testing the interpretational model and developing confidence in it, the decision maker uses the model deductively. He or she observes data and uses the model to interpret them. Now, the decision maker perceives data on sales and production as constituting information on product acceptance; he or she may even ignore other information conveyed by these data.

After an interpretational model has been formed, further experiences are fed back to modify the model. Past decisions, problems, and experiences all influence the future interpretation of information. These experiences are based on actions taken on the basis of information and the results of those actions. If changes in a new product based on sales and production data increase sales, the interpretational model described above will be reinforced.