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# Some Thoughts on Success in Applying Models to Water Resource Systems

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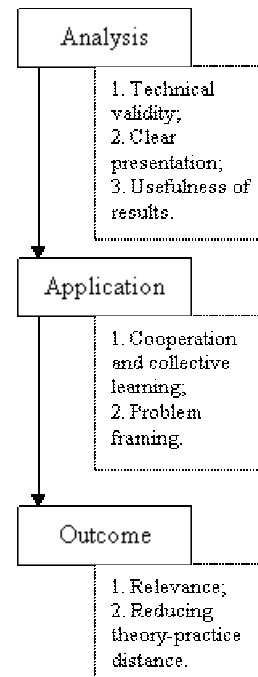
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In the attempts to apply models to complex water systems we must consider the interests and opinion of numerous stakeholders. The use of these models does not eliminate the risk of making mistakes but can better inform all these different stakeholders (Loucks and van Beek, 2005). The success (or failure) of these attempts is often hard to judge. Many possible frameworks have been presented to judge success.

Following Goeller (1988), in this paper we suggest that the effectiveness of models in practice can be judged by three measures, each one applies to a different time period (Figure 1). The *analysis success* reflects how the analysis was performed and presented to the stakeholders. The analysts must take care of client satisfaction but a success only based on this measure will be transitional. In our experience the client may be not satisfied because he is learning something he does not want to accept. The *application success* is concerned with how the model was used in the decision making process and by whom. Also, the extent to which the information from the model application influences the decision making process is a good indicator of success in model application. As the identification of problems is a key aspect of their solution, the application success can support the framing of problems to better identify problems worthy to be solved (Hermans, 2005). The *outcome success* gives information on how the use of analytic results from the model affects the system planning and management and if information resulting from the model improve the problem.

All of us must judge the success in a “smart way”. Problems and measures can change over time. Monitoring the performance of any decision influenced by the models and working closely with the client is a central aspect in any modelers’ activities.



**Figure 1.** Success Evaluation Steps

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