

Improving impact and effectiveness: What can individuals or groups do to make it more likely that their projects will have positive impact?

Notes from working session

Participants: Jean André, Pieter-Jan Fioole, Daniele Vigo, Ruth Kaufman,

1. "Impact" takes different forms depending on the circumstances. The group first identified the dimensions along which we may measure impact (column 1 in the table below) and then discussed a few of the things that we may do to increase the impact along each dimension.
2. This is not intended as a complete list, but a starting point for consideration.

IMPACT DIMENSIONS	INCREASE THE IMPACT
Influencing senior management in making strategic decisions	Listen and understand their agenda and speak their language Promise results, but only manageable results Inspire them with successes and challenges of OR projects outside the organisation (and showing the limits) Have a champion at the VP level Brand "OR-inside" the tools and outputs
Improving communications and exchange of information between OR "tech providers" and end-users Revealing the needs of the stakeholders and expressing the needs from business and technical people	Use Participative modeling Explore alternative expressions of the problem. Qualify the problem. Is it a real problem? Have a "How can we help?" attitude Have the full set of stakeholders on board from the project start
Offering automation to provide new services	Listen and understand their agenda and speak their language Perform the feasibility study of a new service
Reducing a comprehensive set of costs : not only short term operating costs (e.g rolling stocks, timetabling) but also long term costs (maintenance costs)	Have a proper backtesting methodology: retrieve past historical data, over an enough long history to replay the good or bad decisions to take into account uncertainties. (If cost savings achieved through operators using OR tools) understand how they use the tools and how much How much the OR applications generate the savings? Tracking savings? Optimization had an influence on the process so it is almost impossible to disconnect in some contexts. Ensuring the full transfer
Improving business flexibility with regards to uncertainties, political changes...: 'what if' scenarios capability increased	Think of the different scenarios that can happen. Build the library of potential scenarios and risks. Remember that past does not represent always the future. Stress test.

Supporting managers' intuitions for pre-decisions with analytics	
Improving the knowledge building and consolidation with an OR methodology	
Changing the way the end user is performing his current job	Be aware of, and honest about the possible impact on end users, and plan change management early. Be trustworthy: honest, competent & reliable
Setting the baseline to have a consistent answer less depending on situations and human factors and increasing robustness	
Improving sustainable impacts :	Be trustworthy (honest, competent & reliable)
<ul style="list-style-type: none"> • employee happiness, 	Value these KPI and make them explicit
<ul style="list-style-type: none"> • CO2 savings, 	
<ul style="list-style-type: none"> • Fairness & Transparency 	
<ul style="list-style-type: none"> • Health Benefits 	
Changing the training of end-users	Be explicit with the end users about the changing requirements for being good at their jobs, when new tools are brought in that require them to make fewer or different sorts of judgement and analysis
Becoming a training tool as reference for giving insights	
Transforming the way we (or managers) see the problem, possibly through the power of the modeling process	Recognise that it is OK if the effect of the model or tool is to change thinking and insight, rather than directly to inform decisions; even if this comes from the process of modelling, not the model itself. Be clear on the final output