



Engaging Senior Decision-Makers in the OR Process

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“Infandum, regina, iubes renovare dolorem”

Aeneas to Dido, Vergil, Aeneid II



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“O Queen, thou bidst me bring to mind experiences of
unspeakable grief” *Aeneas to Dido, Vergil, Aeneid II*

Organisations and decision-making

- The high-level decision-making process within organisations is “a complicated drama ... which involves power, influence, negotiation, game playing, organisation politics, complex social relationships with real people not merely office holders”.
 - Eden, C, and Sims, D. On the nature of problems in consulting practice. *Omega* 7, 119-127 (1979)

Making an impact with OR

- Probably many modes of successful analytical impact
 - Glacier mode (slow, steady but remorseless influencing of organisational outlook)
 - As an integral part of important, well-established processes
 - Generation of good solutions to complicated ‘technical’ problems
 - etc, etc
- This talk is about ‘Engaging directly with senior decision-makers when it really matters’
 - Concern arose from Chief Scientific Adviser’s Review of OA in MoD (2004)

- Study of “Best Practice in OA Support to Senior Decision-Makers”
- Considered how our colleagues do it (or don’t do it) in
 - UK organisations with in-house OR groups (in both public and private sectors)
 - Management consultancies
 - Defence analysis groups in allied nations
- Also conducted a review of the academic literature

External consultancies

OR groups as part of a research establishment or agency

OR groups as an integral part of their organisation's HQ structure

External consultancies

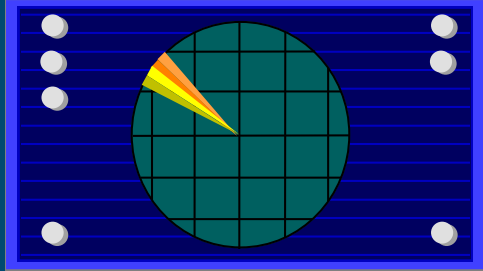
OR groups as part of a research establishment or agency

OR groups as an integral part of their organisation's HQ structure

Integral, in-house OR : advantages

- Heads of OR branches or divisions are seen as members of the same peer group as policy-making or executive colleagues
- Key decision-makers may only be one layer above heads of OR
- Requirements for analysis, and changing priorities, are identified naturally, and quickly, as part of day-to-day business
- Decision-makers have regular exposure to even quite junior analysts, allowing trust to build up

Lessons from in-house groups (1)



- Agility in identifying opportunities for analytical intervention and capturing requirements accordingly
 - Be there: right place, right time
 - Understand the real issues
 - Commit resources

Lessons from in-house groups (2)



- Ruthless matching of the focus, approach and tempo of analysis to decision-making timescales
 - “We did 6 months of analysis in 24 hours, but it made an impact with the Minister”
 - Analysis of one or two key issues can illuminate a whole problem
 - By no means all ‘quick and dirty’ ...
 - ... but longer-running analysis is a pot on which to draw rather than the extended run-up to a ‘study report’

Lessons from in-house groups (3)



- Communication of results in a form appropriate to senior management working styles
 - Two-pager ... 10-minute rule ... a few PowerPoint slides
 - “I haven’t written a report since I have been in the company”
 - “We put more effort into the presentation than into the analysis”
 - At-the-desk interaction with simple model can be effective
 - **Must match presentational formats to individual preferences**

Lessons from in-house groups (4)



- Generation and maintenance of trust
 - Senior managers can only operate if they trust their advisers ... applies to analysts as well as managerial subordinates

Lessons from in-house groups (5)

- Most fruitful relationships generated by working closely with individual senior managers, rather than committees
- Also embed analysts into multi-disciplinary 'tiger teams'



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How do management consultancies overcome the disadvantages of their external position?

Lessons from consultancies

- Intensive networking and account management at senior level (to establish senior contacts, generate trust, win business)
- Insistence on dealing with client at appropriate (ie senior) level at key points within projects ...
- ... with senior person (eg 'partner-in-charge') on the consultancy side
- Emphasis on understanding senior client's perspective on project - provides the basis for effective communication
- Surprise-free reporting, with information and communication appropriate to senior levels

“If we can't deal with the client at the right level, we walk away ...”

The academic literature



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Academic literature



Organisations and decision-making

- The high-level decision-making process within organisations is “a complicated drama ... which involves power, influence, negotiation, game playing, organisation politics, complex social relationships with real people not merely office holders”. (Eden and Sims)

Organisations and decision-making

**Organisations:
non-positivist
and pluralist**

**Synoptical vs
incremental
cultures**

**Bounded
rationality**

**Power! Five
types, two-
pronged impact**

**Programmed
choice**

Satisficing

**Cognitive
biases**

The analytical intervention

- Empirical study by Stewart Robinson of Warwick University:
 - Survey of 10 modelling-based projects in industry
 - ‘Quality of outcome’ was seen, by both clients and analysts, as three times more dependent on the ‘quality of the process’ than on the ‘quality of the content’
 - ‘Quality of content’ was probably taken for granted

Robinson, S. General concepts of quality for discrete-event simulation. *European Journal of Operational Research* **138** (1), 103-117 (2002).

The analytical intervention

Four purposes
of 'rational
analysis'

Three styles of
intervention

Knowledge
Management
perspectives

'Issue selling'

All good stuff, but mainly descriptive
rather than prescriptive!



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Issue Selling

- Organisations can be seen as pluralistic market-places of ideas in which issues and answers are ‘sold’ and ‘bought’ ...
- ... or, organisations are systems of ‘distributed attention’ to issues and answers
- Issue sellers are ‘players’ who use a repertoire of ‘moves’ to sell issues and attract top management’s attention.

Dutton *et al.* Moves that matter: issue selling and organizational change.
Academy of Management Journal **44**, 716-736 (2001)

Issue Selling : moves

- Packaging moves
 - How issues are ‘framed’
 - How they are presented
 - How an issue’s boundaries are defined and presented (‘bundling’)
- Involvement moves
 - Targets (whom to involve)
 - Nature of involvement (eg formal / informal channels)

Issue Selling : contextual knowledge

- Relational knowledge
 - Knowledge that actors have about each other's intentions, stakes, goals, territories
 - Helps anticipate and address resistance, find and enlist expertise, learn and work the power structure
- Normative knowledge
 - Knowledge about accepted or appropriate norms and behavioural patterns in a particular organisational setting
 - Helps seller to choose moves and execute them well in that specific setting
- Strategic knowledge
 - Knowledge about the organisation's goals, plans and priorities.
 - Particularly assists in determining 'bundling' moves

Knowledge type	Questions
Relational	<p>Who will be affected by the issue?</p> <p>Who has experience with the issue?</p> <p>Who cares about the issue?</p> <p>What groups can help with advocating the issue?</p> <p>Does this issue threaten anyone or anything?</p> <p>Who has decision authority relevant to the issue?</p> <p>Who has power to promote or block the issue?</p> <p>When will people be ready to act on the issue?</p>
Normative	<p>What kinds of data do we need to make people use?</p> <p>How are data normally used by people?</p> <p>How are arguments made against the issue?</p> <p>What kinds of arguments are followed?</p> <p>Where are meetings or social gatherings legitimate decision fora?</p> <p>How long does it usually take to sell an issue?</p> <p>Have similar issues been sold (or failed) before?</p>
Strategic	<p>How do we define the organisation's goals and values?</p> <p>How does the organisation plan to achieve these goals?</p> <p>What are the critical strategic issues for top management?</p> <p>What is the broader competitive / political context?</p>

Use as check-list

External consultancies








OR groups as part of a research establishment or agency

OR groups as an integral part of their organisation's HQ structure

National defence analysis organisations

- Even when formally part of parent MoD, usually embedded within (geographically and organisationally) separate research establishment or agency
- Dstl's status as a Trading Fund Agency and its distinctly flat management structure are also factors to be reckoned with
- Need to maximise exploitation of “internal” positioning while learning lessons from management consultancies

Building on internal positioning - including lessons from allied nations

- Locate OR function within MoD HQ, regardless of organisational positioning 
- Dual-hat research establishment CE as MoD chief scientist (or equivalent dual-hatting for head of OR group)  
- Second analysts into MoD HQ teams for specific tasks 
- Arrange direct involvement in analysis in earlier career paths of senior decision-makers (*not so easy if not already a tradition!*)  
- Reinforce relationship with scientific / analytical posts in MoD (at both senior and staff levels) to co-own and champion analysis 

But also learn from consultancies ...

- Senior-level account management and networking within customer / stakeholder community
- Involvement of senior staff in key projects from beginning ...
- ... interacting at critical stages with senior stakeholders
- Surprise-free reporting in formats compatible with top management working styles

Conclusions

- We learnt a lot from this study ...
- ... not least because it made us think about our own (rather uncommon) positioning as, formally, an internal group but with external-consultancy-like features
- Similar organisations overseas with a successful track record in this area have features / approaches that mitigate the problems identified
- In principle, we now know better how to get the best of both worlds rather than the worst!
- The academic literature review gave useful insights into the pathologies of organisational decision-making and codified what we should be thinking about when engaging with it

Summary: Engaging senior decision-makers - how to fail!

- Fail to understand the real issues
- Fail to understand whom you need to influence and “where they are coming from”
- Conduct key interactions at an inappropriately junior level
- Deliver late
- Surprise the customer in public or when it’s too late to address his/her concerns
- Report in indigestible formats not matched to individual preferences
- Fail to engender trust



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