The Significance of Minimal Evaluation of Major Investments Håkon Finne, Senior Research Scientist SINTEF Technology and Society Norway

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The significance of minimal evaluations of major investments

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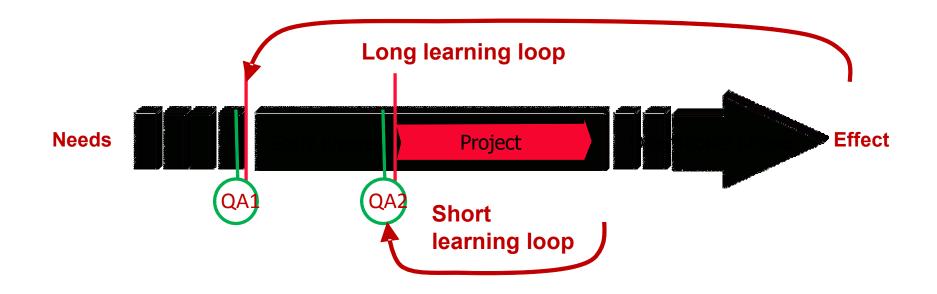


- Based on Concept study with ongoing extension
- Main question: What can be achieved through performing small ex post evaluations of major investment projects?



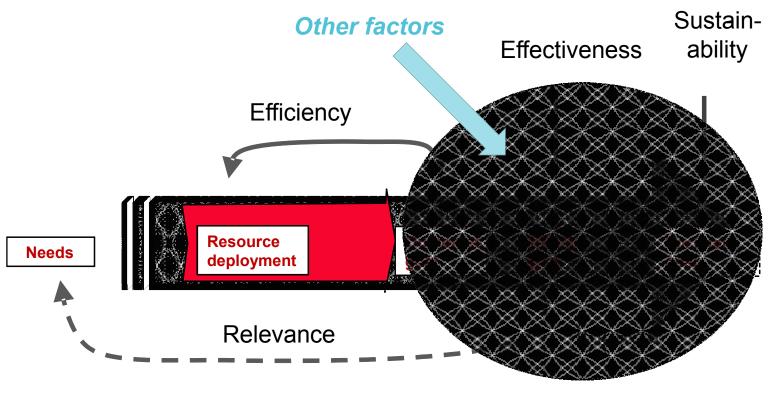


Learning loops in QA & evaluation





Evaluation model: Logframe + OECD DAC criteria







Eight first ex post evaluations

Project	Project type	Cost MNOK	Completed
Svinesund border control	Building	257	2005
E18 segment	Road	583	2007
Asker-Sandvika double track	Railroad	3 714	2005
MTB Skjold	Defence	5 000	n.c.
Eiksund tunnel	Road	1 095	2008
Lofast	Road	1 318	2007
NAV Basis	ICT	867	2010
Østfold university college	Building	560	2006

Ex post evaluation exercises 2012 & 2014, typically 3-5 experts, 2-4 person-months

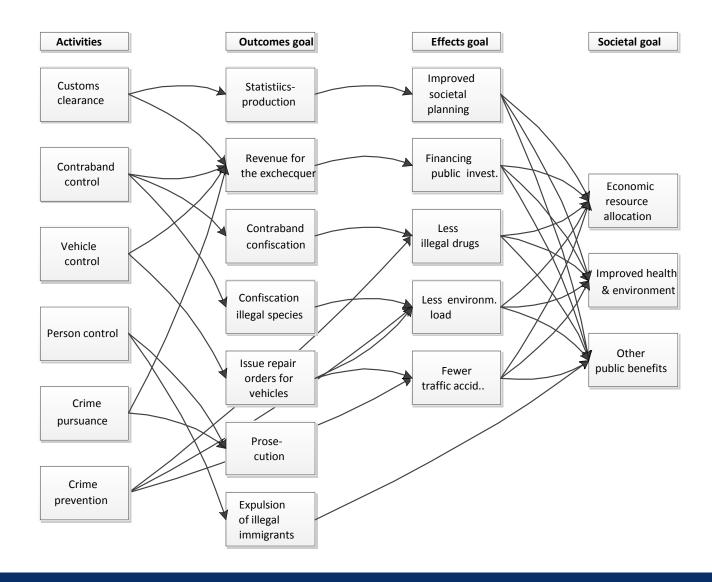


Goal structure and goal formulations

- Outcomes goals for cost, time, scope well formulated (quality?)
- Intended effects well formulated in transport projects, not so in most other projects, sometimes contradictory, had to be reconstructed from various sources
- Societal goals typically very vague
- Some major goals not expressed in governing documents
- Only outcomes goals used for project management
- Logical framework (change theory) typically missing or tacit
- Expected to improve with concept choice studies and QA1



Incomplete derived goal hierarchy for border control (Svinesund)





Efficiency (outcomes goal attainment)

- Cost and time usually not far from targets
- It helps with a sacred completion date
- Most important uncertainties usually addressed in plan and handled in execution
- Scope at gross level usually no issue
- Quality: user surveys
- Scope and quality at detailed levels much more difficult to assess
 - Elements dropped (trade-offs)
 - Technical debt
 - Fitness for purpose
- Caveat: ICT systems development not in portfolio



Effectiveness (effects goal attainment)

- Delimitation from other projects a challenge treat as options?
- Easiest to assess in road projects, not even there always as projected
- Otherwise frequently lack of suitable data, opaque original projections
- But also: Little recognition that effects are co-produced between investments and users
 - Roads: Not many ways to use them
 - Railways: Competition from road system
 - Buildings: Owners for maintenance, users for utilization
 - ICT systems: Severely underestimated integration complexity
- Cannot blame project management then who is responsible?
 - Design projects differently?
 - Skills and methodologies for user involvement in building design
 - Organizational maturity for designing ICT systems to support work processes



Impacts (positive and negative unintended effects)

- Prospective environmental impact analysis well-known practice, but projects that do not pass this test will not likely be implemented
- Could require large effort if required to do properly, outside scope of small evaluation exercises
- Assumptions and trajectories could be checked if a prospective impact analysis were in place



Sustainability (projected societal goal attainment)

- Difficult to assess without speculation, could build scenarios
- Boils down to continued relevance and willingness to pay for services and maintenance in the future
- Sometimes surprisingly much shorter usage time of investments than planned for,
 and reduced alternative use value



Relevance (match to needs to be served)

- Test of relevance difficult to assess without pre-existing alternative concept comparisons
- Frequently more or less formal concept choice studies before project formulation
- Frequently very long lead times and extremely long path dependencies, puts relevance to the test, particularly in ICT projects



Cost benefit analysis

- Can potentially reduce all costs and benefits to a single denominator
- Very hard to quantify benefits if no formal model exists
- May possibly be helpful to check a previous CBA
- Gives little added value beyond the other criteria



Ex post evaluation process

- Should focus on effects and relevance, then sustainability and impacts, lastly on efficiency
- Must be independent and have evaluation expertise
- Helpful to have sector expertise
- Relevance of data more important than precision; triangulate
- Must perform on-site visit and interviews with relevant personnel
- Totally dependent on pre-existing studies, documented controversies, relevant data
- Can put together a good overview, little new
- DAC criteria surprisingly relevant, but often moot because of good planning
- Learning feedback to new projects and new QA practices should be addressed explicitly
- Small exercises not suitable for projects with very complex processes and results



Thank you for your attention

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