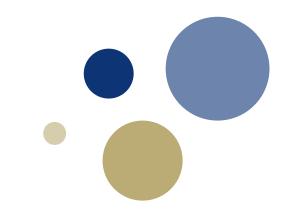


Norwegian University of Science and Technology



Benefit Management in Public Construction Projects

Experiences and Recommendations Based on Seven Case Studies

Christian Bakke – 20th September 2024

Concept report nr. 76

Anne Strand Alfredsen Larsen. Gro Holst Volden, Biørn Andersen, Jan Alexander Langlo og Christian Bakke Nyttestyring i statlige byggeprosjekter - Erfaringer og anbefalinger basert på syv caseprosjekter Concept-rapport nr. 76

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Concept report nr 76

Overview of the Study

- Focus: Benefit management in public construction projects in Norway
- Examines the practice across different sectors
 - Statsbygg, the Norwegian government's building commissioner, property manager and developer.
 - Forsvarsbygg, The Norwegian Defence Estates Agency
 - Sykehusbygg, The Norwegian Hospital Construction Agency
- Highlights the importance of systematic benefit planning and realization throughout the project lifecycle

Main Research Focus:

 How are benefits identified, planned, and managed in state projects?

• What recommendations can improve benefit management in public construction?

Definition

- The Norwegian Agency for Public and Financial Management (DFØ) guide for Benefits Management
- Benefits are broad effects perceived positively by at least one stakeholder
- Covers both qualitative and quantitative benefits
- Focuses on long-term societal and user impacts

Method:

- Case studies of seven public construction projects
 - Centre for Psychiatric Health
 - New Østfold Hospital
 - Psychiatric Building in Kristiansand
 - NTNU Campus Development
 - New National Museum
 - Firestation Haakonsvern
 - Police National Emergency Response Center
- Interviews with stakeholders: 20 interviews with 31 informants
- Document analysis and seminars for validation

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The Four Steps in Benefit Management Step 1: Identify Step 2: Plan Step 3: Implement Step 4: Document

The Norwegian Agency for Public and Financial Management (DFØ)

1. Identification of Benefits

- Step 1: Identify Step 2: Plan Step 3: Implement Step 4: Document
- Formal requirements for benefit identification are followed but often framed as project justification

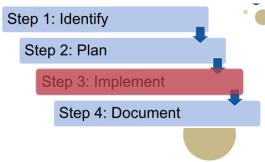
• Effect goals are often overly ambitious, unclear, or not directly tied to project outcomes

2. Planning of Benefits

- Step 1: Identify Step 2: Plan Step 3: Implement Step 4: Document
- Benefit plans vary greatly in quality and specificity
- Lack of baseline measurements

 Difficulty aligning objectives across different project stakeholders

3. Execution of Benefits Management



- Insufficient focus on user involvement and long-term
 operational costs
- Unclear roles in implementing benefit plans

 Benefit tracking is inconsistent and lacks continuous engagement

4. Documentation of Realized Benefits

- Step 1: Identify Step 2: Plan Step 3: Implement Step 4: Document
- Limited documentation of realized benefits

 Follow-up on quality and functionality, but societal benefits are rarely measured

 Lack of clarity on responsibility for measuring benefits post-completion

Paradox 1 – The most important decisions are made when we know the least

• **Key points:** Early decisions have the most impact, but knowledge is minimal.

• Learning Point: Emphasize the need for thorough early evaluations.

Paradox 2 – Important benefits are not formulated as goals but are still expected to be managed

• **Key points:** Key project outcomes are not clearly defined, causing confusion

• Learning Point: Focus on to state and prioritize objectives clearly.

Paradox 3 – Benefits Not Measured Get Ignored

• **Key points:** Unquantifiable benefits may be overlooked, leading to suboptimal decision-making.

• Learning Point: Introduce methods for considering qualitative benefits.

Paradox 4 – Those responsible for extracting benefits are often one- time actors

• **Key points:** Short-term participants may not have the incentive to maximize long-term benefits.

• Learning Point: Highlight the role of consistent stakeholder engagement.

Paradox 5 – More benefit owners lead to more confusion

• **Key points:** Multiple stakeholders with different expectations create complexity.

• Learning Point: Coordination mechanisms are needed to align interests.

Paradox 6 – The benefit owner does not always have the tools to manage benefits

• **Key points:** The person or group responsible for the project's benefits may need more control or authority.

• Learning Point: Collaboration across departments and teams is crucial.

Paradox 7 – A naive belief that benefits can be realized without proper incentives



• **Key points:** Benefits are often assumed without ensuring there are strong incentives.

• Learning Point: Design incentive structures that align with desired outcomes.

Paradox 8 – The need for speed in the project can override the need for maturity

• **Key points:** Pushing projects forward too quickly can compromise necessary planning and development.

• Learning Point: Balancing speed with thorough preparation is essential.

Paradox 9 – Focus on construction, even when organizational development is crucial for benefits

• **Key points:** Physical infrastructure is often prioritized over softer, organizational elements.

• Learning Point: Benefits depend equally on nonphysical components and physical components.

Paradox 10 – Finding the right balance between predictability and flexibility is challenging

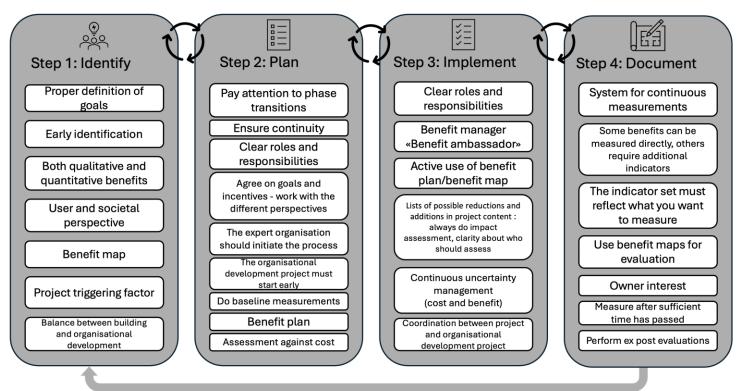
- **Key points:** Rigidity can stifle innovation, but too much flexibility can lead to chaos.
- Learning Point: It is important to operationalize goals and new plans. However, the plans must be flexible enough to allow for updates as changes occur during the project (adaptive planning).

Conclusion

 Public construction projects face challenges in benefit management

• Improvements can be made through more systematic identification, planning, and monitoring of benefits

The Four Steps in Benefit Management



General recommendations

- · Benefit management must be put on the agenda and concepts and terminology must be clarified
- Benefit management must be a natural part of the project: the owner must be involved, clear organisation/role clarification, "common rhythm" between stakeholders