

# Issues of Adopting Benefits Management Practices of IT Investments in Municipalities: A Delphi Study in Norway

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## Abstract

*The concept of benefits management highlights explicit practices to facilitate benefits realization from information technology (IT) investments, in addition to plain project management focusing on information systems (IS) deliverables as such. This article presents preliminary results from a Delphi study of identifying critical issues to facilitate adoption of benefits management practices in Norwegian municipalities. Three expert panels were established, representing three stakeholder groups within the domain of managing municipal IT investments: the viewpoint of central government, municipal top management, and municipal middle managers responsible for particular municipal services and domains. The experts of the Delphi panels suggested 59 issues and identified the most important ones for further scrutiny and discussion. The results both confirm and complement previous suggestions concerning adoption of benefits management in organizations. Moreover, the results provide a basis for further research on the “best” (or satisfactory) practices of IT benefits management in municipalities.*

## 1. Introduction

The public sector meets great challenges, as well as lucrative opportunities, in the process of modernizing government services and operations towards e-Government. New digital services require significant investments in information technology (IT) and simultaneous organizational change to realize benefits from the investments. However, the benefits gained are not always proportional to the scale of the investments

and governments are thus starting to focus on how to facilitate benefits realization.

In general, the issue of benefits realization [15], a.k.a. benefit capture [9], posits a challenge both in the industry and the public sector [14]. That is, despite IT solutions delivered to organizations, the organizational and societal impacts often remain only partially, if at all, realized [9]. Many organizations have difficulties to pre-define and anticipate the benefits, at least all the benefits, in the first place [7, 9]. Moreover, even when expected benefits can be defined up front, little attention may be paid to the post-implementation stage, after the initial justification of IT/IS projects, to maximize the effects of the project [15]. And, even if conducted, post-implementation reviews often focus on technical conformance, project management effectiveness, and other easily quantifiable issues, whereas the actual benefits delivery to the organization often remains less explicitly measured [2, 7].

To meet these challenges of benefits realization, a number of frameworks and methods for *benefits management* have been suggested [1, 6, 14]. Benefits management is defined as

*“(t)he process of organizing and managing such that the potential benefits arising from the use of IS[information systems]/IT are actually realized”* [14, p. 36].

Proponents of benefits management suggest that in addition to investment justification and evaluation *per se*, it is necessary to establish an explicit methodology to ensure that IS development initiatives actually deliver the initially proposed, as well as emerging, benefits [15]. For example, the “Cranfield Process

model” of benefits management comprises five stages: identify and structure benefits, plan benefits realization, execute benefits plan, review and evaluate results, and establish potential for further benefits [14, 15]. For each of the stages, more detailed procedures and techniques are suggested and illustrated in light of selected case studies [14]. In spite of a number of examples from benefits management resulting in systematic development of methods and tools for the field [14], research in general shows that methodologies covering the full process of benefits management are not widely available in practice [2, 7]. The stated desirability of benefits management in the first place is, at best, grounded on anecdotal mentions referring to an unspecified number of case studies [6, 14]. It is claimed that systematic benefits management helps:

- avoid the loss of clearly achievable benefits,
- identify and realize more extensive benefits,
- reduce IT costs for some investments,
- cancel or re-direct projects with no benefits in sight [6],
- identify essential IT functionality with regard to organizational goals, and
- reduce the amount of IT functionality focusing on change in core business practices [14].

In the Norwegian public sector, Kommunenes Sentralforbundet (KS), a central organ for municipalities, has set a goal that in 2008 every municipality should document that their IT projects have actually resulted in better services, more effective operations and resource savings [4]. For this purpose, KS has started actions to develop methods and tools for goal-oriented benefits realization to be adopted by the municipalities. In addition, the Norwegian government has launched actions to facilitate definition and adoption of benefits management practices for the municipalities to follow.

However, the above assumptions and suggestions for the rationale for benefits management in the public sector remain little validated empirically beyond a few case studies aimed at testing the researchers’ conceptual pre-understanding of benefits management [e.g. 14]. Moreover, the benefits management literature remains often implicit about who is the actual owner versus customer of the benefits management process. For example, Bennington and Baccarini [2] study project managers as the owners, whereas Ward and Daniel [14] indicate that benefits management at best

involves strategic alignment and development programs beyond the scope of particular IT projects. Finally, Kohli and Devaraj [6] suggest a broad involvement of various managerial stakeholders into the process in large organizations.

While we do not oppose the above stated “drivers” of benefits management which have motivated the development of existing frameworks and processes, such as the Cranfield process [14, 15], we address the need for additional research on adoption and implementation of benefits management processes in the public sector – in our case, Norwegian municipalities. Especially, we want to examine issues, which would ease the adoption of systematic benefits management, as it has remained challenging to implement in practice. Unlike most contexts reported in the general benefits management literature, the municipalities within one country form a targeted domain in which the research and development results can be openly shared and utilized. Hence, it forms an attractive research opportunity and the results may have direct implications and effects within the network of already interested organizations.

Taken the motivation, reasoning and prerequisites for our research stated above, we define our research question(s) as:

*What issues would facilitate adoption and implementation of benefits management of IT investments in Norwegian municipalities?*

## **2. Research process**

As we assume that the “best” (or “satisfactory”) practice for managing benefits of IT investments in the public sector has not yet been documented, let alone proven, we chose a research approach which orientates towards future and theory creation. Hence, we chose to launch a Delphi study [11] with three panels of experts from municipalities and central government to define the “base-line” for selecting appropriate benefits management practices for further examination. This paper describes the Delphi research method and presents the preliminary results of the first round of the study. We will follow the process steps recommended for Delphi studies by Schmidt [12] and Okoli and Pawlowski [11].

As suggested by Okoli and Pawlowski [11], our first activity was selecting the experts for the study. In municipalities, the general budget responsibility lies on the shoulders of the municipal Chief Administration Officer (Rådmand), whereas particular IT investments mostly focus on varying domains of professional

expertise (such as schools, health care, etc.) under the responsibility of municipal middle managers within these areas. The third group consisted of the central government representatives responsible for facilitating benefits realization from IT investments in municipalities in general. We recruited 28 expert panel members from seminars organized for these stakeholders during spring 2006, aiming at three separate panels for the above-mentioned stakeholder groups. The panel of the central governmental representatives included 6 members, the panel of general management included 10 members, and the panel of middle managers included 12 members. The latter two panel members came from municipalities of varying size and geographical location within the country. The middle managers represented varying fields of municipal services, such as health care, school, technical services, and IT management. In each panel, the average member has long professional experience from the municipal domain in general and his or her job in particular. However, the panellists carry no specialized expertise on benefits management practices before the study (as few professionals in the municipal sector readily do). Hence, our results represent a realistic picture of the municipalities, who would face the request to adopt and implement systematic practices for benefits management concerning their IT investments.

The first phase of the actual Delphi study with the selected panels was the brainstorming of issues related to the research question [11, 12]. In this phase, we treated the experts as individuals. Each expert was asked to list at least 6 issues (in no particular order, as suggested by Schmidt, [12]) related to the successful adoption and implementation of benefit management practice for IT investments in municipalities. Each issue has a shorter “name”, definition, and a brief reasoning why this is important according to the expert in question. The experts e-mailed their lists to the researchers, thus remaining anonymous to each other. After gathering the issues from the participants, the researchers unified the list of issues, removed exact duplicates and unified terminology. The consolidated list was sent back to experts who gave feedback to validate that the researchers have not dropped out any issue defined by any expert in this phase and that the researchers had not misinterpreted or changed meanings of any issue defined by an expert.

The second round narrowed down the brainstormed list to a manageable number of the most important issues within each panel. Now, we divided the experts into the three panels described above. In each panel, the experts defined around 20 issues that they

considered as “most important”. The presentation order of these factors was randomized to the varying panel members to avoid bias related e.g. towards choosing factors from the top of the list. For each distinct panel, the factors selected by more than 50% of the experts were retained for the next phase.

The third phase of the Delphi study aims at a consensual ranking of the relative importance of the identified issues. Each expert in each panel is asked to rank the issues of their panel, with a possibility for justifying, explaining, and commenting their rankings. The researchers then collect the rankings and assess consensus among the panellists in each panel and between the panels using nonparametric statistical techniques [12, 13]. Unless the consensus has not reached an acceptable level in the first round of ranking, the feedback is shared with every panellist and then they are asked to re-rank each list, now in light of the reasoning from each other. If needed, the step is reiterated, until the panellists reach an acceptable consensus or the consensus plateaus (i.e. the mean rankings of two successive rounds are not significantly different). The final result of this phase is a ranked list of issues related to the rationale and implementation of benefits management in the municipalities for each of the panels. Now, we can compare the separate panels’ rankings with each other to check whether they are significantly different thus representing genuinely different viewpoints to the benefits management process.

This study reports the preliminary results after the second round, in which the panellists defined the group of most important issues within each panel. Despite of the fact that the Delphi research was in process while writing this paper, the issues already provide us with food for discussion and theory creation about how to start benefits management in the public sector.

### 3. Results

The consolidated list (Appendix) consisted of 59 factors. In the appendix, one can also see a brief clarification for each factor. Each member of panel actually thus came up, on average, with 2 unique factors or issues. This finding alone shows the need for our exercise. No thoroughly identified set of issues to help adopt a “best practice” for benefits management were already in place among the members of our panels.

The second round resulted in three separate lists of issues for each panel (Table 1; Panel A = representatives of central government, Panel B = municipal central administration, and Panel C =

managers of particular professional areas of municipal operations). Within each of these panels, the factors in the table reached more than 50% of the panel members' votes to be included in the "most important issues" for that panel. Whereas each panellist could choose 20-25 factors to be included in the second round, the final number of the factors varied between the panels:

Panel A chose 16 issues, panel B 22 issues, and panel C 13 issues. In Table 1, the issues identified as "most important" in all three panels are presented in bold, whereas the issues brought up by two panels are presented in italics. The numbering of the issues in Table 1 refers to a description of the specific issue in the appendix.

Nr.	Panel A	Nr.	Panel B	Nr.	Panel C
<b>1</b>	<b>Easy to use</b>	<b>1</b>	<b>Easy to use</b>	<b>1</b>	<b>Easy to use</b>
		2	Easy to learn		
		3	Resource needs		
<b>4</b>	<b>Straightforward results</b>	<b>4</b>	<b>Straightforward results</b>	<b>4</b>	<b>Straightforward results</b>
8	Employee participation	7	<i>Salability</i>	7	<i>Salability</i>
19	Exemplary business cases	10	Applicability beyond IT		
		17	Scalability		
20	<i>Templates for benefit calculation</i>	20	<i>Templates for benefit calculation</i>		
21	Exchange of competence	23	<i>Broad participation</i>	23	<i>Broad participation</i>
		24	<i>Embedded part of change mgmt practice</i>	24	<i>Embedded part of change mgmt practice</i>
29	<i>Decision support for politicians</i>	29	<i>Decision support for politicians</i>		
30	<i>Requirement from management</i>	30	<i>Requirement from management</i>		
		31	Coverage over project life-cycle		
<b>34</b>	<b>Goal clarity</b>	<b>34</b>	<b>Goal clarity</b>	<b>34</b>	<b>Goal clarity</b>
		37	<i>Quantitative and qualitative benefits</i>	37	<i>Quantitative and qualitative benefits</i>
<b>38</b>	<b>Clear responsibilities</b>	<b>38</b>	<b>Clear responsibilities</b>	<b>38</b>	<b>Clear responsibilities</b>
40	<i>Support for documentation</i>	40	<i>Support for documentation</i>		
41	Organizational incentives for benefit creation	42	Operative incentives for benefit creation		
45	Benefits for the public	44	<i>Measurability</i>	44	<i>Measurability</i>
				46	Short and long-term benefits
		47	<i>Visibility of benefits</i>	47	<i>Visibility of benefits</i>
51	<i>Realistic expectations for efficiency</i>	57	Ex ante evaluation	51	<i>Realistic expectations for efficiency</i>
58	Process analysis				
<b>59</b>	<b>Inter-professional co-operation</b>	<b>59</b>	<b>Inter-professional co-operation</b>	<b>59</b>	<b>Inter-professional co-operation</b>

**Table 1 Most important issues selected by each panel**

All three panels highlighted five factors: ease of use, straightforward results, clarity of goals, clear responsibilities to conduct benefits management, and inter-professional co-operation for realizing benefits in municipalities. Hence, all three stakeholder groups agreed that the benefits management methods should be easy to use and as well as easy to take into use. In addition, the results from these methods should be straightforwardly understandable for everyone involved, and based on clearly stated goals for IT investments. Moreover, before taking into use any method, the organizational responsibilities for

conducting benefits management processes should be clearly stated and a co-operative culture across professional boundaries within the municipalities should be facilitated.

To summarize Table 1, we divide the issues regarded as important to adopt and implement a benefits management process in municipalities into three wider categories: (1) issues related to preparing the organizational context of municipalities, (2) issues related to organizing the benefits management process, and (3) requirements related to benefits management tools and techniques:

1. *Contextual and cultural issues of preparing an environment for benefits management including:*
  - inter-municipality competence exchange,
  - management requirement for benefits management,
  - explicit organizational responsibilities for coordination and participation,
  - support for political decision-making, focus on short- and long-term benefits,
  - inclusion of benefits for the public in the analysis and
  - overall culture with incentives towards creating benefits from IT directing benefits mainly to those who actually produce them.
2. *Issues of the benefits management process including:*
  - explicit allocation of resources for benefits management,
  - wide participation of employees and other stakeholders across the professional boundaries,
  - benefits management embedded as a part of everyday change management and
  - support for the whole life-cycle of IT investments projects.
3. *Requirements related to the methods and techniques including:*
  - easy-to-learn and use,
  - clear overall idea,
  - applicability to all development initiatives, scalability to varying size of organizations and projects,
  - easy-to-use templates to calculate benefits,
  - possibility to identify both qualitative and quantitative benefits,
  - good support for benefits documentation, good support for ex ante –justification,
  - tools for business process / workflow analysis,
  - focus on straightforward results that are easy to understand,
  - clearly stated goals for IT investments,
  - easily measurable parameters and
  - illustration of the impact to everyday work.

## 4. Discussion

As our Delphi study aims at creating theory about relevant issues [11] for adoption of benefits

management, the panels did not lean on any pre-defined suggestions for such issues. However, a few such suggestions can be readily found from the literature [2, 3, 5, 8, 10, 14] thus forming a benchmark for discussing about our results. These suggestions are based on either pre-defined issues used in surveys (without much previous empirical grounding of the importance of the issues and largely focused on private sector organizations) [2, 8], or on qualitative evidence from case studies [3, 5, 6, 10, 14]. Hence, we argue that our research, based on viewpoints provided by 28 practitioner stakeholders, provides additional insights to the research question, justifying a discussion of the existing literature. It could, on one hand, confirm suggestions from previous qualitative case studies and, on the other, bring in new issues in relation to those pre-suggested for quantitative surveys. In the following, we will discuss the issues in light of the major categories of issues identified above; (1) contextual and cultural issues, (2) issues related to the benefits management process, and (3) requirements for benefits management methods, tools and techniques.

### 4.1 Contextual and cultural issues

In general, managerial awareness that the tendency to focus on IS/IT deliverables [2] alone hardly ensures benefits realization sets the baseline for the idea of benefits management [14]. Explicitly defined responsibilities involving the entire organization to realize IT payoffs have been recommended [6]. Our panels identified this issue clearly by highlighting explicit responsibilities together with the issue of managerial requirement for systematic benefits management (panels A and B).

A narrow focus on IT deliverables may cause a lack of focus on those who should enjoy the benefits [2, 14]. In our study, panels A and B identified the need for creating an incentive-driven culture, in which people would be confident to create benefits knowing that they would also affect positively on their own working conditions. That is, the panels assume that in the public sector, few benefits would be created unless there is a direct motivation to improve the working conditions of employees. As an interesting detail, only Panel A, the central government experts, actually emphasized that benefits to the public should be included in the process.

The literature suggests that the identified benefits should be tightly aligned with the organizational strategy [6, 14], and lack of strategic vision may hinder benefits realization [6, 8]. However, this issue was not addressed by all panels. Panels A and B suggested that the results should contribute to the decision-making of

the politicians. As a reason for this, we suggest that the “strategy” of the Norwegian municipalities may often appear as emergent, due to the political decision-making processes and budget-oriented culture of the municipal administration. The public sector has even been suggested to suffer from political, even “irrational”, decision-making cultures, which in part would explain the difficulties to implement benefits management [5, 14]. However, Panel C highlighted focus on long-term benefits in addition to “quick wins” [as mentioned by 8, 14], which suggests that the municipal middle management could step forward as the major interest group of enhancing longer-term strategy work in connection to benefits realization. This brings up an interesting tension in the context of municipal benefits management – should it mainly serve contemporary political trends or longer-term development of selected municipal services from the viewpoint of municipal officers?

Anyhow, we suggest that such contradictory choices of how to serve these different stakeholders of benefits management should be explicitly declared as a part of the benefits management culture. Such culture may also vary in different municipalities – to be either “politics-driven”, “budget-driven”, or “profession-driven” – depending on the intentions and activity of politicians versus municipal central administration versus municipal middle managers, respectively. Further investigations are needed to answer the question of how to merge these, firstly seemingly contradictory, viewpoints to a fruitful synthesis or work out how to live with the differences.

Bennington and Baccarini [2] have suggested lack of (project) manager experience as a potential hinder for benefits realization. This issue was mainly addressed by Panel A, which suggested competence exchange among municipalities and examples of good projects as important means to facilitate benefits management. However, the municipal Panels B and C assumed more method-related issues, thus suggesting that “the method should do the trick”. Project managers can also experience benefits management process as a threat for the viability of their projects [2]. Ward and Daniel [14] emphasize that the culture of benefits management should not search for scapegoats for failed initiatives, but instead focus on establishing constructive and fair culture of sharing the benefits among the stakeholders. Similar issues were mentioned by the panels and are listed in the consolidated list (see Appendix), whereas they were left out from the narrowed-down list (see Table 1). However, this issue might still appear contextually important in individual

cases, particularly in less “constructive and fair” environments.

## **4.2 Issues related to the benefits management process**

The multi-stakeholder perspective on benefits management has been emphasized especially in the public sector [5, 14]. This issue was also highlighted by all of our panels: panels B and C emphasized involvement of all stakeholders, whereas panel A emphasized involvement of employees and the public as two separate issues.

The benefits management process requires resources, i.e. one has to accept that the project cost may rise to gain greater impacts and benefits in the end [14]. Organizations may, however, experience difficulties to allocate additional resources to benefits management, due to the budget oriented nature of public agencies, competition with other parallel projects and tight project budgeting in the justification phase in general [2, 6]. In our study, this issue was mainly addressed by Panel B, whereas the others did not highlight its importance. Panel B suggests that time and resources are necessary to carry out the benefits management process. This observation resembles the argument of Ward and Daniels [14]. However, whereas Ward and Daniels [14] argue that sufficient resources are necessary to realize actual benefits, our experts only point out that managers need to allocate sufficient funding to enable the benefits management process.

McKay et al. [10] suggest that benefits management should become embedded in day-to-day routines of the organization. In this study, this was well supported by the municipal panels B and C.

## **4.3 Requirements for benefits management methods, tools, and techniques**

Perhaps the most common recommendation concerning benefits management methods in the literature is the utilization of carefully constructed, illustrative, and realistic business cases to highlight expected and realized benefits [10, 14]. This issue is recognized by our Panels B and C. They suggest that the identified benefits should be made visible in relation to the municipal operations. Panel A, in turn, highlights exemplary business cases from other organizations to enhance benchmarking. Interestingly, only Panel A argued the need for including business process modelling and analysis to the set of the method requirements – in line with Ward and Daniel [14]. The municipal managers, however, seem to highlight more

the simplicity of techniques, instead of thoroughness or sophistication of the analysis techniques, such as process modelling.

Irani et al. [5] suggest that the traditional financial measures are irrelevant in the public sector, and that the benefits identification and assessment should focus more on interpretative (qualitative) impacts. Here, the municipal panels (B and C) represent a partially contradictory standpoint, suggesting that both quantitative and qualitative benefits should be identified and sought. Panel A and B refer in addition to “templates for benefit calculation”, indicating that it is important also in the public sector to focus also on the financial benefits, *in addition* to the qualitative, intangible benefits.

Ward and Daniel [14] highlight the importance of ex-post benefits reviews, which is also considered one of the most challenging issues in the surveys of benefits management practices [7, 8]. However, Panel B, representing the top municipal administration, also highlights the importance of a solid focus on ex-ante justification, which seems still to pose a challenging issue. The issue of identifying measurable and realistic benefits from the start was also regarded as an important success factor concerning the method support.

Ward and Daniel [14] especially address the challenges to identify intangible benefits, suggesting modelling of benefits dependency networks to identify cause-effect relationships among them. In the public sector, this issue can also be approached through imitating other municipalities and exemplary cases, as the municipalities do not have any needs for hoarding up their “best practices”. This competence sharing viewpoint, which may help especially to understand and imitate intangible benefits realization, was, however, only highlighted by Panel A, whereas the municipal focus seems a bit more oriented towards internal work on identifying and realizing benefits in context, in a more self-contained way.

Although a set of tools for benefits realization have been suggested [14], some sources mention that the issue of “too few tools available” may hinder benefits management [2, 7]. However, our panels do not address this issue. Instead, the focus on the method requirements resides especially in the need for simple and easy-to-use tools, rather than existence of methods as such. Although Ward and Daniel [14] state that they present easy-to-use tools, the actual easiness of adoption and use of them has not been empirically validated beyond the normative statements of the academics who have promoted the particular tools. As our panels highlight the easiness-of-use and simplicity

to a great extent, we suggest that in the beginning of each project in municipalities, any consultant (or other method champion) would actually assess the “easiness” of the suggested methods and practices.

#### 4.4 Implications for research and practice

Although our paper describes a research in progress, some suggestions for researchers and practitioners can already be made.

For researchers, two issues clearly need further investigation. First, the literature on benefits management is inconclusive concerning the availability of appropriate tools and techniques. Some report a lack of appropriate and available tools [2, 7], whereas others suggest that such tools are readily available [14]. We adopt a middle position, acknowledging the existence of some tools and techniques. However, we argue that available tools need further validation in terms of usefulness and ease of use. In addition, we argue that there is a need for investigating the appropriateness of existing tools in public sector settings, as the suggested tools were developed to fit the needs of private sector organizations. Further, as our panels agreed on some issues but differed on the importance of others, there is a need to develop a better understanding of when, where and how to apply specific tools and techniques.

Second, the stakeholder complexity of public sector organizations has been suggested to pose considerable challenges for benefits management [5, 14]. This study supports this and provides some insights into how stakeholder interests differ and sometimes contradict each other. The issues highlighted by the three panels in this study differed considerably across the three main categories. Although the insights provided by this Delphi study shed some light on the nature of the differences, it is likely that we have only seen the tip of the iceberg and that further investigations of the nature and impact of different and contradictory stakeholder interests are necessary. Especially, the issue of how to manage to gain long-term benefits under dialectical and political decision-making cultures poses a challenging issue.

Overall, we consider our study to be a basis for further design research and action research towards creating and trying out the “best” (or at least, satisfactory) practices for benefits management in Norwegian municipalities.

From the viewpoint of practice, the issues identified in this study provide useful insights for both managers and policy makers. Although it is too early to suggest stringent guidelines based on our findings, managers

should make notice of the issues listed in Table 1 when implementing benefits management processes. Further, as interests in particular benefits may vary, national policy makers, responsible for devising general benefits management approaches should note the tensions between different stakeholder groups and account for the different rationales for implementing benefits management practices.

## 5. Conclusion and Further Research

The three expert panels of our Delphi study identified a number of important issues concerning adoption and implementation of benefits management in Norwegian municipalities. The results contribute by confirming and ultimately challenging the suggestions of previous lessons learned from the qualitative studies in the field. Our findings suggest issues to be considered on three main areas:

1. cultivating an organizational context and culture towards benefits management in general,
2. issues related to organizing the benefits management process, and
3. issues of choosing and improving concrete methods and tools for benefits management

and illustrate differences between the three expert panels.

Our further research includes the fulfilment of the Delphi study by ranking the issues more specifically within each panel. Based on the ranked list of issues, we will then form a basis for action research, in which we will apply and learn about the suitability of concrete benefits management methods in municipal contexts of IT investments.

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## Appendix. The consolidated list of 59 factors (translated from Norwegian)

Nr.	Factor	Clarification
1	Easy to use	The method should be easy to use, without much need for external support. Information to use the method needs to be collected to one place, so that work can be done without much interruption of daily work.
2	Easy to learn	The method should be easy to learn, and easy to put into use by all stakeholders.
3	Resource needs	Method use should not require much resource to gain results, and should be a part of the daily activity with minimum needs for additional resources.
4	Straightforward results	The results from the benefits management process should be easy to understand and adhere.
5	Sufficient facts	The method/process should help to find facts from the existing reality in the context in question (about costs and other issues), when possible.
6	Completeness	The method should include all aspects that might be needed to analyse a project: e.g. the idea, cost/benefit, project plan, evaluation of workflow, ex post evaluation...
7	Saleability	The method/concept should be intuitive so that the purpose and implementation would be immediately obvious and sensible for the participants.
8	Employee participation	Everyone impacted by the new ways of working should have a chance to participate in the identification of benefits, checking municipal facts and numbers, and to suggestions as how to realize the benefits.
9	Easy language	The method should use language familiar in municipal organizations, with no difficult technical jargon.
10	Applicability beyond IT	The method should not be limited to IT investment analysis / mgmt, but be usable also on other areas of investments.
11	Means for continuous follow-up	The method needs to include risk factors analysis related to realization of particular benefits factors, so that these can be continuously followed up with corrective actions, as necessary.
12	Informing about the method	Sufficient promotion and information about the method and guidelines are important.
13	Conflict reduction	There is a need to create safety, e.g. through involving union representatives, that they workforce would not be downsized or laid off. To avoid professional conflicts.
14	Need for time	Benefits realization requires that the participants have time to do this work, which needs to be accepted.
15	Prioritization of activities	Benefits realization means use of effort, resources and possible conflicts. The method needs to give tools to prioritize among identified benefits.
16	Accessibility	The method should be easily accessible and everyone needs to know where the information about the method is located.
17	Scalability	The method should be usable in all municipalities, of varying size and geographical location.
18	Focus on potential	The process should evaluate and document the areas for greatest potential – on other areas it is easier to reap benefits than on others.
19	Exemplary business cases	The method should include examples from other municipalities, which show that method is usable to document benefits from IT investments, including descriptions how the others have done it.
20	Templates for benefit calculation	The method should have several exemplary templates which show how benefits can be calculated within varying public service areas (e.g. school, health, technical services...)
21	Exchange of competence	In addition to the method, the municipalities should have access to forums of experience exchange and competence transfer from successful projects that have reached good results.
22	Benefits for employees	Effective processes can also streamline daily work and provide more exciting ways to solve previously time-consuming repetitive work. Awareness of expected benefits can increase the motivation and self-image of the employees.
23	Broad participation	Management and employees should participate in all phases of the process. Broad participation is needed for the quality of new solutions, and motivation for implementing these new solutions.
24	Embedded part of change mgmt practice	The method should be formed so that benefits management becomes a natural part of general-level organization development and change processes.
25	Weary of change	Too much focus on effectiveness and efficiency can lead to resistance to the benefit realization process.
26	National focus	Awareness to the fact that that benefits management is a national initiative in eNorge (eNorway) 2009.
27	Requirement for govt financing	Benefits management should be mandatory in municipal projects that need support for central governmental institutions.
28	Ownership of the process	Someone needs to be interested in benefits identification and realization – either in municipality management or at the state level.
29	Decision support for politicians	The politicians should be involved in benefits realization. The method needs to provide understandable results about the value of IT for them.
30	Requirement from management	The management in municipality (political and administrative) should require that all IT investments should be implemented through the benefits realization process with clear goals and understanding of expected impacts.
31	Coverage over project life-cycle	The method should be usable both early in and all through the planning phase of the initiatives and also in follow-ups after implementations.
32	Focus on public interest	There is an increasing focus on just use of public funds. The method needs to focus on services given to the public, to improve existing and to introduce new services.
33	Argument for e-government	Need to show that it is feasible to invest in IT to improve e-government. This will give credibility, especially to the politicians search for savings.

34	Goal clarity	The method should help formulate clear goals, which are experienced positive for the employees, public and politicians.
35	Quantitative benefits	The method should support identification of quantitative benefits.
36	Qualitative benefits	The method should support identification of qualitative benefits.
37	Quantitative and qualitative benefits	The method should support identification of both quantitative (cost reduction, time savings, ...) as well as qualitative (improved service, better work environment,...) benefits, and a holistic picture in general.
38	Clear responsibilities	The leaders need to be aware that benefits are not automatically realized. Responsibilities for realizing particular benefits need to be defined on an individual level, they need to define plans, in which benefits potential is accepted as being realistic.
39	Balancing internal versus external benefit	The process should systematically analyse both organizational effectiveness and impact on the end users. Sometimes increased municipal effectiveness is less effective for users and citizens.
40	Support for documentation	The method should support easy documentation of different kinds of benefits.
41	Organizational incentives for benefit creation	Those municipalities and other organizational units who create benefits should to largest possible extent keep the benefits. This should lead to budget- and accounting clarifications among varying juridical units and administration levels.
42	Operative incentives for benefit creation	The organization units implementing the projects which give benefits should have incentives, e.g. possibilities for better work environment, better service quality – not one-sided reduction of budgets. The system needs to be fair for those units from which benefits are taken out.
43	Inter-municipal co-operation	Benefits realization often requires organization changes and merging functions. The greatest potential here resides in inter-municipal IT co-operation.
44	Measurability	The method should show that the measurements are useful and carry real relevance in the operations. The measurement should be doable without much extra effort.
45	Benefits for the public	Effects, especially benefits, on the public need to be measured as well.
46	Short and long-term benefits	The method should document and measure benefits both in the short term (1 year) and long term (many years), together with analysing the situation before the implementations.
47	Visibility of benefits	The method should clearly illustrate the everyday impact on both the employees and management.
48	Holistic view to processes.	The method needs to cover a holistic view to services so that it does not become a control system for a part of the process. E.g. an accounting system needs to be able to function to register issues at shopfloor easily, as it should function as well as a coordination system for the management.
49	Plan for benefits realization	Benefits are not realized automatically. A benefits realization plan, based on the promises laid out in the cost/benefit analysis, is needed.
50	Belief in benefits realization	One needs to believe that benefits management is beneficial in the first place.
51	Clarity of expectations	In the process it should be clear how much of a realized benefit in itself means changes, such as reduced time and labor used for routines in the operational units etc..
52	Need to learn new systems and processes	Need to map the educational needs, give sufficient training and time to learn new systems and processes, especially to control that the new routines are used as planned.
53	Competence on benefits mgmt	All municipal stakeholders (politicians, administrative mgmt, employees) need to have insight and competence on tools for benefits realization processes (cost-benefit analysis, process modelling, measures...)
54	IT competence of management	The management needs to have competence on IT opportunities for organization development.
55	Competence on project mgmt	Competence on project management is a necessary prerequisite for good benefits realization.
56	Prestige	Employees could be motivated with prestige on taking new practices into use.
57	Ex ante evaluation	The method should help make a thorough mapping for needs and requirements for an IT investment, to ensure that the system will be utilized.
58	Process analysis	The method should include analysis tools for today's solutions, future potential, consequences and choices, and bottlenecks of the current business processes. The results should show how IT and organization change are related, to find new innovative work practices.
59	Inter-profession co-operation	The method should simulate co-operation among different professions in the public sector, to ensure the broad perspective on IT investments, on different levels of the municipality.