Managing Benefits in the Public Sector. Surveying Expectations and Outcomes in Norwegian Government Agencies

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Abstract. Government agencies currently experience increasing pressure to document benefits from spending on eGovernment efforts. Hence, structured methods for benefits management (BM) are being developed. However, hardly any studies have investigated how such approaches are used and experienced. This study addresses this practice-research gap by reporting a study of a project involving 30 Norwegian government agencies using a common BM approach. A questionnaire was answered by project managers. Results show that that some 80 % of the managers considered their early quantifications of expected benefits to be realistic. Further, the managers found the approach useful. They felt projects became more focused, and expect to continue working with a BM approach. While the benefits that were identified and quantified in the reported projects represent estimates and not measurements, this study shows that BM can be useful – and even welcomed – in eGovernment projects and that demonstrating benefits from such projects can be accomplished.

Keywords: Benefits management, benefits realization, survey.

1 Introduction

Challenges related to calculating and demonstrating value from eGovernment efforts are emerging as one of the key barriers to the development of eGovernment [1]. The difficulties in calculating tangible long term benefits to offset clear, often apparently high, short term costs can severely hamper the speed and scope of eGovernment progress [1]. It is a challenge to find adequate ways of calculating benefits as such calculations should be based on public sector value models (see e.g. [2, 3]). In contrast to the business sector, the public sector has to increase not only economic values but also social (e.g. equality and rule of law) and democratic ones, such as equality, openness and transparency. Not only does this add to the list of goals to be strived for, also the different categories of goals may be in conflict with each other [4]. Public sector activities also involve a wide variety of target stakeholders [5, 6] and hence requires difficult trade-offs.

Despite the challenges related to crafting proper assessment frameworks, there has long been strong political pressure to document effects from eGovernment efforts. International action plans like the i2010 plan from the European Union explicitly underlines the importance of realizing and documenting value from eGovernment efforts [7]. Also, national action plan like the Norwegian government's eNorway 2009 plan [8] and the Norwegian Association for Municipalities' eKommune 2009 plan [9] encourage focus on – and to some extent demand - documentation and realization of benefits.

To cater for the increasing demands to demonstrate clear benefits from eGovernment efforts, efforts have been initiated to develop adequate assessment frameworks. Both the EU and OECD have sponsored such developments resulting in e.g. the eGEP assessment framework [2].

While promising assessment frameworks are appearing, the existence of usable frameworks is no guarantee for successful documentation and realization of benefits. Rather, it has been argued that the biggest untapped potential for service improvement relates to resources and improved management [10]. Hence structured approaches to managing and realizing benefits are being suggested to assist agencies in the process of managing their eGovernment efforts. Such frameworks are generally referred to as Benefits Management (BM) or Benefits Realization (BR) and can be described as approaches to assist proper identification, management and realization of benefits using appropriate tools and techniques [11]. Examples of elaborate frameworks for BM and BR include the Benefits Management Model [11] and Active Benefits Realization [12]. However, some concerns can rightfully be advocated. For instance that BM and BR frameworks have been developed to support for-profit organizations and that they have only received limited empirical validation [13]. It is thus poorly documented that such approaches actually work equally well in public sector contexts as in the for-profit sector.

To start addressing this knowledge gap, this study investigates public managers' experiences with a comprehensive effort to implement a structured approach to benefits management in eGovernment projects. The case at hand is Research Council Norway's Høykom program where 48 projects used a structured approach to benefits management. Because this is an innovative approach in the Norwegian public sector we investigated not only the outcomes of this set of projects but also the effect on working methods and prospective changes in these. We considered it important to try to estimate the potential of implementing benefits management in the public sector, and these projects are only precursors. Full implementation would require consistent use of clear methods as well as development of useful and practical goals for public sector activities. While using the same BM method, the project studied here used locally defined goals which makes comparison of actual results hard; however effects on working methods can be realistically assessed.

The study was based on three research questions. The first one asked, **How reliable are up-front benefit estimates?** We had noted that similar projects had specified prospected benefits very differently [14] and hence hypothesized that;

H1-1; The quantification of expected benefits in the Høykom-program has been inaccurate.

Acknowledging the major problems with measuring effects of eGov projects [2, 3], research question 2 looked for changes in the way projects were planned and pursued

as compared to before the BM project. If actual measurement of outcomes is hard, at least changes in work methods are visible and the nature of these changes at least give indications of changes in outcomes – the very act of formulating goals and trying to assess them increases focus on these goals. As comprehensive evaluations had not yet been done in the municipalities, we saw impact on procedures as a proxy variable, hence RQ2; What has been the actual and/or perceived impact of Høykom's BM approach in Norwegian municipalities? Here we hypothesized that the approach would lead to positive reactions and a higher degree of goal-orientation in everyday work, and that this would be experienced positively:

- H2-1; The explicit focus on project benefits in the Høykom program has led to a more pertinent identification of potential benefits in the projects.
- H2-2; Benefits realization in the Høykom program was perceived as useful.
- H2-3; Agencies that have experienced benefits realization/management are likely to continue with some form of benefits management.
- H2-4; Benefits management/realization leads to an improved and more unified understanding of the purpose of the organization among the employees.

These four hypotheses were all closely related to the goals of the Høykom BM approach. Research question 3 focused more generally on understanding of how a BM approach should best be implemented in the public sector; What are the main challenges in terms of identifying and realizing benefits from eGovernment projects in Norwegian municipalities? Our hypotheses on this point stemmed from the Norwegian public sector's history of being budget-oriented and, we hypothesized, not quite ready for a BM approach:

- H3-1; Norwegian public agencies lack an organizational culture that is necessary to support benefits realization/benefits management.
- H3-2; Norwegian public agencies are not aware of available techniques to support benefits realization/management.
- H3-3; Norwegian public agencies lack the competence that is necessary to successfully realize benefits from ICT-projects.

The paper is structured as follows. First we describe our choice of research approach. Second, the case is described. We then present and discuss the results. Finally some conclusions are presented.

2 Method

This study was initiated and funded by Research Council Norway (RCN). In fall 2005, KSeF, the Norwegian competence centre for e-Government where one of the authors is employed, was asked to assess and evaluate the benefits management approach that had been developed and implemented for use in a particular RCN program Høykom (see Section 3).

All Høykom projects that used the benefits management approach were invited as respondents for our survey. In all, 48 projects had used the approach. However, the survey was only sent out to 42 respondents as some managed more than one project.

The project managers in the Høykom projects were the persons with most hands-on experience with BM and were consequently chosen as respondents to the survey. The project managers were approached in mid November 2007, by e-mail, with a letter from the director of the Høykom program encouraging them to participate in the survey and a hyperlink to the survey itself. One reminder was sent out and the survey was closed in mid January 2008. Of the 42 respondents, 30 took the time to fill out the questionnaire resulting in a response rate of 63 %.

In addition to responses regarding the project the following background variables were used: Municipality size, Project type (e.g. internal vs external focus), and Sector (e.g. municipal vs national government). Because these variables typically have importance for the outcome of eGovernment projects we expected that as BM requires both professional skill, available municipal data and resources to measure both baseline and outcomes larger municipalities, engineering-type projects and scale advantages (more common in national government sector than in municipalities) would make a difference.

We asked a total of 36 questions, most of which were formulated as an assertion which respondents rated by a 6-grade scale where 1 meant "strongly disagree" and 6 "strongly agree". For some of the ratings, open-ended questions asking for explanations were added.

The projects studied here started in 2005 and are now completed. They have been investigated underway in terms of surveys of planned goals and pre-project estimates of benefits. The present study investigates the situation after project completion. Goals were different in different projects. Hence the only comparable data we could get were estimates by the project managers. Clearly they have a stake in the projects which might flaw their opinions. However, they also have a stake in achieving goals and consistence between planning and outcome. Therefore their estimates of the preand post situations may be relatively credible. As regards their opinions of the qualities and capabilities of their own organizations, however, they are clearly biased. To improve reliability of the investigation we also checked for consistency in their answers, for example between perceived results, assessments of the method used, and plans for the future in their organization. It would appear unlikely, for example, for project leaders to claim that results were positive and they plan to use a BM approach again unless they also truly feel your organization can indeed handle it.

3 Case Description

In 1999, the Norwegian government established a national development program, Høykom, to stimulate broadband development in scarcely populated areas that had so far been neglected by commercial vendors. Research Council Norway (RCN) was made responsible for administering the program. Since 1999, Høykom has supported more than 500 projects with nearly \$100 million (US). The main focus of Høykom has been to ensure high-speed Internet connection throughout Norway. However, a portion of the funding has been allocated to developing content to be distributed through broadband connection, mainly electronic services to citizens.

Spurred by political pressure from the Ministry of Modernization and a desire to facilitate and document effects of the program, the Høykom administration developed

an approach to BM in 2005. The approach was initially piloted in 17 projects, then revised and applied to a wider set of projects. In brief, the approach consists of assessments and reporting routines at four distinct project phases:

- 1. Before project start-up: initial cost/benefit analysis to accompany the project proposal when applying for financial support from Høykom;
- 2. During the project phase: a specific, detailed plan of expected benefits from the project. The plan is seen as an instrument for the project manager;
- 3. By project sign-off: When the project manager hands over the results of the project, the project owner should develop a benefits realization plan that clearly states which benefits the organization will pursue (based on the plan of expected benefits from the project manager) and how the organization intends to act to ensure that specific benefits are actually realized;
- 4. During the operative phase: Roughly a year into the operative phase, the project owner should assess the effects of the project and account for which and how eventual benefits were actually realized. [14]

During the period of 2005 to 2007, 54 projects were selected to use the BM approach. Projects were selected by the Høykom administration based on the nature of the projects. Pure infrastructure projects were excluded as their effects were considered too indirect, i.e. providing only a basis for establishing value creation, no directly doing it. Of the 54 projects that were selected by the program board, 48 have used the approach to benefits management actively. The Høykom program is scheduled for termination during 2008 and is now evaluating and summarizing the overall usefulness of the program.

4 Findings and Discussion

In this section we present the results from the questionnaires by research question and comment these results. (For all tables below, 1 means "strongly disagree" and 6 means "strongly agree").

4.1 Precision in Up-Front Benefit Estimates

Our first research question asked what caused the diverse and imprecise quantification of potential benefits in the Høykom projects that we had noted.

H1: The quantification of expected benefits in the Høykom-program has been inaccurate.

This hypothesis was confirmed, however not strongly. 80 % of the managers considered after the project that their early estimates had been realistic, while 20 % said they had overestimated them. This largely positive view is tempered by support for the assertions that defining and measuring benefits beforehand is problematic with more than 1/3 of the managers claiming this to be hard or very hard (Table 1). While clearly the post-project estimates are also subjective, pre-project estimates were rather over-optimistic. The explanations given include reasons such as, "hard to identify user benefits"; "hard to actually realize benefits as responsibility for that is not defined, for

	quantification	on of expect	ed benefits	in the Høyk	om progran	n has been
inaccurate.						
			2.1	a		
"It is hard	l to identify a	comprehensi	ve set of bene	fits in advance	2"	
Score	1	2	3	4	5	6
%	0	30	33	20	10	7
Mean: 3.3						
"It is hard	to measure b	enefits by nur	nbers"			
Score	1	2	3	4	5	6
%	0	17	27	27	17	13
Mean: 3.8						

Table 1. Results for Hypothesis 1

example because central government prohibits certain things and picks up the prospected benefits for other things. This means that even if estimates were in principle realistic, realizing them could still prove hard. There is, hence, a potential contradiction between the answers to the different questions. One explanation to the differences might be that precisely because it was hard to define benefits beforehand managers took a conservative approach and defined only "safe" ones, ones they could more easily inspect afterwards, hence the positive review of their early estimates.

4.2 Impact of Benefits Management

Our second research question asked about the actual and perceived impact of Høykom's Benefits Management approach. Four hypotheses were related to this.

H2-1: The explicit focus on project benefits in the Høykom program has led to a more pertinent identification of potential benefits in the projects.

This hypothesis was strongly confirmed with an average score of 4.8 for the three assertions measuring focus on benefits (Table 2). However, this positive view was tempered by concerns that focus on measuring benefits had led to disregard of benefits that could not be easily made visible (m=3). 1/3 of the managers report such concerns.

These responses are surprisingly positive in comparison to those related to measuring the difficulty of defining and measuring benefits (in RQ1). The answers here should therefore be seen as reflecting a change for the better rather than an absolute ability (which is precisely what the question asks). While the responses indicate a clear support for H2-1, the response to the 4th assertion shows that there was indeed a change of focus towards measurable effects, 68 % score 3 or higher, although the change was not rated as strong.

H2-2: Benefits realization in the Høykom program was perceived as useful.

This hypothesis was also strongly confirmed (Table 3). BM work was very positively received (mean = 4.6). The particular method used in this project was also positively received, however more moderately (average=4,1 for two questions).

The mean of 2.6 on the last assertion is a weak disagree. Many -27 % – found there was at least some unnecessary administrative work involved. This might be a

Table 2. Results for Hypothesis 2-1

H2-1: The opertinent ident					ogram has led	to a more
"Focus on b projects"	penefits manag	gement make	s the organiza	ition better eq	uipped to defin	e effects of
Score	1	2	3	4	5	6
%	3	0	0	20	27	50
Mean: 5.2						
"Focus on b projects"	penefits manag	gement make	s the organiza	tion better equ	uipped to realiz	e effects of
Score	1	2	3	4	5	6
%	3	0	3	17	30	47
Mean: 5.1				<u>. </u>		
"Focus on le projects visible		gement mad	e my project	more concern	ed with making	g effects of
Score	1	2	3	4	5	6
%	7	3	13	37	33	7
Mean: 4.1				<u>. </u>		
"Focus on b	enefits manag	gement led to	less focus on	effects that are	hard to measu	re"
Score	1	2	3	4	5	6
%	14	17	38	24	3	3
Mean: 3					•	

Table 3. Results for Hypothesis 2-2

"The work with benefits management was useful" Score	H2-2: Ben	efits realizati	on in the Høy	kom progran	n was perceiv	ed as useful.	
Score 1 2 3 4 5 6 % 0 7 7 7 40 20 Mean: 4.6 "The report model for benefit plans gave proper support in identifying benefits/effects of the project" Score 1 2 3 4 5 6 % 0 10 13 33 37 7 Mean: 4.2 "The template for benefits realization plan gave proper support for the work with actually realizing benefits" Score 1 2 3 4 5 6 % 0 7 18 46 25 4 Mean: 4 "The routines for reporting benefits added unnecessary administrative work" Score 1 2 3 4 5 6 % 14 45 14 20 7 0							
Nean: 4.6	"The work	with benefits	management v	vas useful"			
Mean: 4.6 "The report model for benefit plans gave proper support in identifying benefits/effects of the project" Score 1 2 3 4 5 6 % 0 10 13 33 37 7 Mean: 4.2 "The template for benefits realization plan gave proper support for the work with actually realizing benefits" Score 1 2 3 4 5 6 % 0 7 18 46 25 4 Mean: 4 "The routines for reporting benefits added unnecessary administrative work" Score 1 2 3 4 5 6 % 14 45 14 20 7 0	Score	1	2	3	4	5	6
"The report model for benefit plans gave proper support in identifying benefits/effects of the project" Score	%	0	7	7	7	40	20
Score 1 2 3 4 5 6	Mean: 4.6						
Score 1 2 3 4 5 6 % 0 10 13 33 37 7 Mean: 4.2 "The template for benefits realization plan gave proper support for the work with actually realizing benefits" Score 1 2 3 4 5 6 % 0 7 18 46 25 4 Mean: 4 "The routines for reporting benefits added unnecessary administrative work" Score 1 2 3 4 5 6 % 14 45 14 20 7 0	"The repor	rt model for be	enefit plans ga	ive proper sup	port in identif	ying benefits/e	ffects of the
% 0 10 13 33 37 7 Mean: 4.2 "The template for benefits realization plan gave proper support for the work with actually realizing benefits" Score 1 2 3 4 5 6 % 0 7 18 46 25 4 Mean: 4 "The routines for reporting benefits added unnecessary administrative work" Score 1 2 3 4 5 6 % 14 45 14 20 7 0	project"						
Mean: 4.2 "The template for benefits realization plan gave proper support for the work with actually realizing benefits" Score 1 2 3 4 5 6 % 0 7 18 46 25 4 Mean: 4 "The routines for reporting benefits added unnecessary administrative work" Score 1 2 3 4 5 6 % 14 45 14 20 7 0	Score	1	2	3	4	5	6
"The template for benefits realization plan gave proper support for the work with actually realizing benefits" Score 1 2 3 4 5 6 % 0 7 18 46 25 4 Mean: 4 "The routines for reporting benefits added unnecessary administrative work" Score 1 2 3 4 5 6 % 14 45 14 20 7 0	%	0	10	13	33	37	7
realizing benefits" Score 1 2 3 4 5 6 % 0 7 18 46 25 4 Mean: 4 "The routines for reporting benefits added unnecessary administrative work" Score 1 2 3 4 5 6 % 14 45 14 20 7 0	Mean: 4.2						
Score 1 2 3 4 5 6 % 0 7 18 46 25 4 Mean: 4 "The routines for reporting benefits added unnecessary administrative work" Score 1 2 3 4 5 6 % 14 45 14 20 7 0	"The temp	late for benef	its realization	plan gave pro	oper support f	for the work w	ith actually
% 0 7 18 46 25 4 Mean: 4 "The routines for reporting benefits added unnecessary administrative work" Score 1 2 3 4 5 6 % 14 45 14 20 7 0	realizing bene	efits"					
Mean: 4 "The routines for reporting benefits added unnecessary administrative work" Score 1 2 3 4 5 6 % 14 45 14 20 7 0	Score	1	2	3	4	5	6
"The routines for reporting benefits added unnecessary administrative work" Score 1 2 3 4 5 6 % 14 45 14 20 7 0	%	0	7	18	46	25	4
Score 1 2 3 4 5 6 % 14 45 14 20 7 0	Mean: 4						
% 14 45 14 20 7 0	"The routing	nes for reporti	ng benefits ad	ded unnecessa	ry administrat	ive work"	
	Score	1	2	3	4	5	6
Mean: 2.6	%	14	45	14	20	7	0
	Mean: 2.6	•					

criticism of this particular model, but the replies should also be seen as a caveat – previous questions have showed benefits realization to be weak and unsubstantiated; the replies to this question exhibit some dissatisfaction with the extra work. This

Table 4. Results for Hypothesis 2-3

H2-3: Age continue with				realization/m	anagement a	re likely to
"It is likely forthcoming p		anization will	continue to u	se some form	of benefits ma	nagement in
Score	1	2	3	1	5	6
%	0	4	11	32	32	21
Mean: 4.6						
"It is like management i		0	vill continue	to use Hoyko	om's method	for benefits
Score	1	2	3	4	5	6
%	4	15	11	41	30	0
Mean: 3.8						

Table 5. Results for Hypothesis 2-4

H2-4: Be		,		to an impro		ore unified
"Practical of the organiz				mployees bett	er understand	other parts
Score	1	2	3	4	5	6
%	0	3	10	30	27	30
Mean: 4.7						
"Making b	enefits visible	makes it easie	er to engage ke	ey staff in the p	project"	
Score	1	2	3	4	5	6
%	0	3	7	43	27	20
Mean: 4.5						
"Focus on individual pro				e organization all goals"	to understan	d if and how
Score	1	2	3	4	5	6
%	0	3	7	27	33	30
Mean: 4.8						
"It has bee	n hard to mai	ke the employ	ees understand	d how the wor	k with benefit	s realization
benefits our o	rganization"					
Score	1	2	3	4	5	6
%	13	17	13	37	13	7
Mean: 3.4						

suggests further attempts to implement benefits management should be careful to focus on measurable benefits, means to realize them, and make sure methods used are as simple and straight-forward as possible.

H2-3: Agencies that have experienced benefits realization/management are likely to continue with some form of benefits management.

Confirming the results on the previous hypothesis, a mean of 4.6 (Table 4) shows that those who have experienced this project positively (first assertion for H2-2) also expect to continue with benefits management (the correlation is significant, sig=.031).

Also confirmatory not all expect to use this particular approach (m=3,8). Correlation between these replies and those for assertions 2 and 3 for H2-2 is also here significant (sig = .017).

H2-4: Benefits management/realization leads to an improved and more unified understanding of the purpose of the organization among the employees.

Table 5 shows that this hypothesis was strongly confirmed (average mean=4,7 for three questions). However, tempering this positive view is that many managers also felt it was hard to motivate the employees (4th assertion in Table 5).

This means, at least, that this understanding is not equally enthusiastically shared by all. It should be noted, again, that the employees were not asked directly. It is an open question whether or not a survey among staff would be more or less negative; however, the numbers show that at least the project managers met some resistance and hesitation.

4.3 Conditions and Challenges for Benefits Management

Our final research question (RQ3) asked more broadly about the preconditions for implementing a benefits management approach in the Norwegian public sector; "What are the main challenges in terms of identifying and realizing benefits from eGovernment projects in Norwegian municipalities?"

H3-1: Norwegian public agencies lack an organizational culture that is necessary to support benefits realization/benefits management.

This hypothesis was rejected (Table 6). Managers generally felt their organisation had a culture where a benefits management approach fits in. They had good financial management, they felt it reasonable to measure costs against effects, and they felt it worthwhile to spend resources on defining and – in particular – measuring effect variables. To caveat this high self-confidence it should be remembered that managers also confirmed difficulties with defining and measuring benefit variables. This means that the positive answers here should rather be interpreted in terms of there being fertile soil for a benefits management approach while there still is some work to be done to properly implement it.

It should be noted that while the last assertion was rejected, still 30 % of the project managers are supporting it which at least indicates that there is indeed an element of worry among the staff.

H3-2: Norwegian public agencies are not aware of available techniques to support benefits realization/management.

The average score on this point was 3 with 56 % answering 3 or 4 (Table 7). This is a rather neutral answer 1/3 of the managers said there are not good such techniques, but we did not go on to investigate whether they don't know about the existence of such methods of if they don't think they are good. One reason we did not ask is because labels on methods may differ; while there is in many municipalities different methods for assessing and follow up on goals these may not be called benefits management. This hypothesis, hence, remains undecided.

Table 6. Results for Hypothesis 3-1

H3-1: Nor support benef				izational cult	ture that is no	ecessary to
				C*	: 11 C	1.1:
organizations'	0	costs agains	t expected be	enefits is not	suitable for pu	blic sector
Score	1	2	3	4	5	6
%	23	43	23	7	3	0
Mean: 2.2	•					
"I would ha	ive liked to us	e more resoui	ces to define l	benefits and ef	fects in my pro	iects"
Score	1	2	3	4	5	6
%	3	17	17	23	27	13
Mean: 4.3						
"I would he	ave liked to u	se more reso	urces to follov	v up and iden	tify benefits an	d effects in
my projects"						
Score	1	2	3	4	5	6
%	0	10	7	43	27	3
Mean: 4.3						
"My organi of new project		od and detaile	ed financial m	anagement ma	aking it easy to	see effects
Score	1	2	3	4	5	6
%	3	7	33	37	17	3
Mean: 3.7						
"My organi projects"	ization has go	od experienc	e of making qu	uantitative ass	essments of eff	ects of new
Score	1	2	3	4	5	6
%	3	20	27	43	3	3
Mean: 3.3						
"The emplo	yees feel thre	atened by rou	tines designed	to support me	easurement of	benefits"
Score	1	2	3	4	5	6
%	23	30	17	20	10	0
Mean: 2.6						

Table 7. Results for Hypothesis 3-2

	H3-2: Norwegian public agencies are not aware of available techniques to support benefits realization/management.								
"There are in the public se	not good techni ector"	ques to suppo	ort work with	defining and fo	llowing up IC	T projects			
Score	1	2	3	4	5	6			
%	10	23	33	23	10	0			
Mean: 3	•	•			•				

Hypothesis 3-3 investigated perceived skills and knowledge available. As Table 8 shows, the assessment of the own organization's capability was generally carefully positive. This means that, overall, municipalities think positively of their capabilities to implement benefits management.

Table 8. Results for Hypothesis 3-3

			ck the compe	tence that is	necessary to s	uccessfully
realize benefits	from ICT-	projects.				
"Practical w	ork with be	enefits manag	ement works l	pest if you inv	olve key indiv	iduals from
different fields i	n the organi	ization"		0 0	Ť	, and the second
Score	1	2	3	4	5	6
%	3	3	3	30	23	37
Mean: 4.8						
"My organiz	ation has ge	enerally good	competence in	defining effec	ts of ICT proje	ects"
Score	1	2	3	4	5	6
%	3	10	14	62	7	3
Mean 3.7						
"My organiz	ation has ge	enerally good	competence in	n following up	effects of ICT	projects so
that they can be	realized"					
Score	1	2	3	4	5	6
%	3	7	24	48	14	3
Mean: 3.7						

Overall these results paint a slightly more positive picture than we hypothesized. The agencies' limited experience with this kind of approach would suggest that BM would not immediately be embraced in relation to eGovernment; but here it was very well received. Another finding which could be positively interpreted is that contrary to our expectations we found no statistical significance for any background variables we used (municipality size, project type, and sector) as concerns satisfaction with the project. Because these variables are typically considered important for the outcome of eGovernment projects we expected that as benefits management requires both professional skill, available municipal data and resources to measure both baseline and outcomes larger municipalities, engineering-type projects and scale advantages (more common in national government sector than in municipalities) might make a difference, but here it did not. One reason for the positive responses might be that many of the questions concern improvements rather than actual measures, and the size of improvements is of course not necessarily related to baseline values. The positive interpretation of this is that the structured work methods of a benefits management approach are applicable with positive results in municipalities of all sizes. We did find one statistically significant correlation, however, namely between size of municipality and likelihood that they would use a BM approach again (sig = .006). This is a very strong correlation. We also found a situation close to significance (sig = .07) on the question if they would use this particular method again. These correlations suggest that, despite the generally positive replies from most, indeed size matters. While applicable everywhere, it seems making the efforts involved with BM appears less deterring in larger municipalities.

There are a few limitations to our study. For instance, the quantitative nature of the study limits our ability to investigate the project managers' competences related to BM. A shallow understanding of BM as e.g. an advanced approach to cost benefit calculations could render different results from a deeper understanding of BM as a managerial process approach running from idea to implementation and use. Further,

as mentioned earlier, our study is based entirely on self assessments. It is possible that qualitative research approaches like interviews or observations could have yielded different results in terms of the actual usefulness of BM as well as the agencies' readiness to adopt BM practices. Finally, our study is limited to investigating the project managers perceptions of BM. Equally interesting would be to study the perceptions of other stakeholders like e.g. the project owners. Further research could address these issues to ensure a broader understanding of issues related to BM adoption in public agencies.

5 Conclusion

In summary, we found project managers more positive towards, and organizations – as self-assessed – more prepared for BM than we thought. Roughly 80 % of the managers considered their early quantifications of expected benefits to be realistic also in retrospect, while some 20 % report their early estimates as being too high. Further, the project managers found the approach useful, and although it was hard to specify benefits they were after all generally able to do that quite well, as of their own estimate. They felt projects became more focused, and they expect to continue working with a benefits management approach. There was, however a statistically significant correlation between size of municipality and the inclination to go on – larger municipalities were more positive. While keeping in mind that the benefits that were identified and quantified in the reported projects represent estimates and not measurements, this study shows that benefits management can be useful – and even welcomed - in eGovernment projects and that demonstrating benefits from such projects can be accomplished.

This research has been focusing on BM projects; once projects are completed further research is necessary to learn if and how the BM approach is implemented in the organization as a regular tool. This will require establishing agreed benefits variables, as well as data collection routines and agreed measures from these. Therefore, our future research will in two consecutive steps investigate project owners' views as well as methods implemented and actual effects achieved.

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