Project benefit management: A conceptual framework of target benefit formulation

Ying-Yi Chih *, Ofer Zwikael 1

Research School of Management, ANU College of Business and Economics, The Australian National University, Canberra, ACT 0200, Australia

Received 29 October 2013; received in revised form 15 April 2014; accepted 3 June 2014

Available online 20 June 2014

Abstract

Successful realization of project benefits is strongly associated with organizational performance. Formulating project target benefits is regarded as the first and critical step in the benefit management process. In this study, we drew upon relevant theories and conducted in-depth interviews with senior managers in Australia to develop a conceptual framework of project target benefit formulation and corresponding propositions. Our findings highlight the important role of project target benefits in funding decision-making and suggest seven criteria for their appraisal (strategic fit, target value, measurability, realism, target date, accountability and comprehensiveness) and four constructs which improve the formulated target benefits (a formal benefit formulation process, senior executive leadership, senior executive supports, and public service motivation). These findings extend the current literature on project benefit management by providing a holistic view on how project target benefits should be formulated and appraised.

© 2014 Elsevier Ltd. APM and IPMA. All rights reserved.

Keywords: Project benefit realization; Target benefit formulation; Public sector; Project funding decision-making

1. Introduction

Projects are important means to implement organization strategies (Morris and Jamieson, 2005). Benefit realization from projects is thus strongly associated with successful organizational performance (Zwikael and Smyrk, 2011). Project benefits are “the flows of value that arise from a project” (Zwikael and Smyrk, 2012: 11). For example, one benefit of the Australia National Security Hotline project is “increased reporting level of suspicious behavior by members of the public” (ANAO, 2010), which in turn contributed to the achievement of a national-level objective of “enhanced national security.”

Target benefits are those set for a proposed project prior to its commencement, with the expectation they will be realized at its completion. Formulating and appraising project target benefits are considered the first and critical step to ensure successful benefit realization (Bradley, 2010). In particular, project target benefits form a vital part of the business case (Williams and Samset, 2010), which is the basis for project funding and prioritization decisions (Young, 2006). Once approved, target benefits become the basis for ongoing project performance review. A proper formulation and appraisal of such information is thus essential.

Despite of their recognized importance in ensuring the “choice of the right project” (Williams and Samset, 2010), very little is known in the literature about how project target benefits should be formulated and even less how they should be appraised. Literature on project benefit formulation and appraisal is too broad in scope, hence failing to provide sufficient insights on how they should be performed. For example, Managing Successful Projects, a leading benefit management approach developed by the UK government (OGC, 2009), outlines four steps in project target benefit formulation: (1) identify the benefits; (2) select objective measures that reliably prove the benefits; (3) collect the baseline measure; and (4) decide how, when and by whom the benefit measures will be collected.
However, despite providing high-level guidance of the process, no satisfactory details are provided on how these steps should be executed and what affects their effectiveness. Moreover, no other research has yet identified antecedents for well-formulated project target benefits. Another limitation with the current literature is lack of information regarding target benefit appraisal, except that they should be “measurable” (OGC, 2009). Jenner (2009) suggested two additional potential criteria for appraising project target benefits—being “robust” and “realizable.” Yet, it remains unclear whether these two appraisal criteria are sufficient and how to determine if target benefits are “robust and realizable.” Given these gaps in the literature and the importance of target benefit formulation for project benefit realization, we aim to answer two research questions: (1) “how should the formulated project target benefits be appraised?” and (2) “what are the factors that may improve the formulated project target benefits?”

“One size does not fit all” (Shenhar, 2001) suggests that the context within which the project occurs matters. In this paper we choose to focus on public organizations as our research context for several reasons. First, public projects worldwide continually fail to realize their target benefits (Kwak and Smith, 2009). For example, the UK Office of Government Commerce (OGC) found that “30–40% of systems to support business change deliver no benefits whatsoever” (OGC, 2005). Failure in realizing target benefits from public projects significantly affects national growth. Furthermore, governments worldwide are under increasing pressure to meet public needs within more restricted budgets, calling for more informed and justifiable project funding decisions. Finally, government projects are usually concerned with a wide variety of stakeholders (Crawford et al., 2003) and diverse benefits (e.g., improved public service and improved education quality). This diversity in target benefits adds another level of complexity to their formulation and appraisal, and as such reinforces the need for this research.

In the next sections, we first present the theoretical underpinning of our research. Second, we describe the research methodology and present our findings in forms of a conceptual framework and a series of propositions. We continue to discuss the theoretical and managerial implications and conclude with suggestions for future research.

2. Theoretical background

2.1. Project benefit management

Researchers (e.g., Shenhar and Dvir, 2007) have recognized the limitations and the misleading nature of the traditional output-focused project management approach. Particularly, this approach focuses on efficient delivery of project outputs (e.g., an artifact such as a bridge) on time, on budget and according to specifications (the so-called iron triangle), while neglecting the importance of project benefit realization. Literature (e.g., Samset, 2009; Zwikael and Smyrk, 2012) has shown that a project can still be a failure even if the iron triangle is met. One such example is the Los Angeles (LA) Metro project (Shenhar and Dvir, 2007). Consequently, there is a shift in the literature towards benefit-oriented project management. This line of research emphasizes the strategic roles of projects (e.g., Artto et al., 2008; Kolltveit et al., 2007), aiming to link organizational strategies and project benefit realization (e.g., Eweje et al., 2012). Within this research stream, some researchers conceptualize projects as value creation processes (e.g., Winter and Szczepanek, 2008) and project success as a multi-dimensional concept requiring various measures and leadership focus (e.g., Chang et al., 2013; Zwikael and Smyrk, 2012). Others discuss the challenges in the project front-end phase (e.g., Williams and Samset, 2010; Yu et al., 2005) and illustrate how project benefits can be managed through structured governance frameworks (e.g., Klakegg et al., 2008; Williams et al., 2010). A comparison of the benefit-oriented and output-focused paradigms is presented in Table 1. Our research expands this line of work by focusing on the project target benefit formulation.

2.2. Challenges of project target benefit formulation in the government context

Formulating and appraising project target benefits are challenging tasks, because benefits are often dynamic and mean differently to various stakeholders (Chang et al., 2013). This difficulty is amplified in the government context where ambiguity and stakeholder management issues are multifaceted and complex (Crawford et al., 2003). As a result, most organizations were

<table>
<thead>
<tr>
<th>Table 1 Output-focused vs. benefit-oriented project management.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Managerial focuses</strong></td>
</tr>
<tr>
<td>Project objectives</td>
</tr>
<tr>
<td>Performance evaluation</td>
</tr>
<tr>
<td>Project leadership focus</td>
</tr>
<tr>
<td><strong>Benefit-oriented project management</strong></td>
</tr>
<tr>
<td><strong>Multiple objectives:</strong></td>
</tr>
<tr>
<td><strong>Performance evaluation</strong></td>
</tr>
<tr>
<td><strong>Project leadership focus</strong></td>
</tr>
</tbody>
</table>
found to poorly formulate project target benefits (Lin and Pervan, 2003). Furthermore, project target benefits should be formulated prior to the selection of project outputs to ensure a strong linkage with organizational strategic goals (Zwikael and Smyrk, 2012). However, the majority of existing benefit management frameworks and industry standards take the view that benefits are formulated to support pre-determined project outputs (e.g., Bradley, 2010; OGC, 2009). This view emphasizes more on getting projects approved rather than on formulating target benefits that support organizational strategic goals. Consequently, project target benefits are often inflated and costs and complexity are underrated (Jenner, 2009; Lin and Pervan, 2003). For example, in the UK government, “there is a demonstrated, systemic tendency for project appraisers to be overly optimistic... appraisers tend to overstate benefits, and underestimate timings and costs” (HM Treasury, 2003). Such optimism bias has led to significant delays, cost overruns and unrealized benefits of projects (Flyvbjerg et al., 2005). Finally, most proposed projects’ target benefits are vague (Norris, 1996), leading to the difficulty in determining whether they are realized.

The LINK project funded by the State government of Victoria, Australia well represents all the above-mentioned problems. This project was initiated to replace Victoria Police’s existing database of crime incidents and personal particulars. According to Victoria’s Ombudsman (2011), the business case was “rushed to meet budget timelines and to fit within the funding already allocated by the government” (p. 62) and many target benefits “were not measurable, but were written to confirm government support” (p. 64). For example, one target benefit of “a reduction in crime of five per cent” was revealed to be a “big statement,” “pretty rough” and “never measurable” (p. 64). As a result, after a waste of AUD$59 million and 4 years of government resources, the project was closed in June 2011.

The high level of complexity and demonstrated failure in practice indicate a pressing need for a rigorous investigation into how project target benefits are formulated and appraised.

2.3. Goal-setting theory

Goal-setting involves establishing a standard or objective for performance at various organizational levels such as strategic, tactical and operational goals (Gunasekaran et al., 2001). Strategic goals refer to organizational-level business objectives. This set of goals will direct the formulation of tactical goals at project-level, which in this paper is termed project target benefits. Operational goals (e.g., budget and schedule for output delivery) are the lowest level objectives set to support the achievement of tactical goals. The importance to ensure an alignment of these three sets of goals is well-supported in the literature (e.g., Irani, 2002). Accordingly, researchers have proposed approaches such as the logical framework approach (LFA) to explicitly link highest level goals, intermediate outcomes, outputs and inputs of a project (Baccarini, 1999). Since its introduction, LFA has been widely used in the international development project context to facilitate result-oriented project monitoring and evaluation (Baccarini, 1999). In alignment with previous project goal-oriented approaches following a search for a comprehensive construct to appraise project goals, we draw upon goal-setting theory to develop the theoretical foundation for this study.

Rich literature (e.g., Fried and Slowik, 2004; Locke and Latham, 2002) on goal-setting theory has provided strong empirical evidence supporting the positive impact of explicit and clear goals on enhanced performance. Specifically, goal-setting theory suggests that goals must meet a set of characteristics to be most effective. First, goals must be described in a specific manner to reduce ambiguity in what is expected. For example, setting a precise target figure is more specific than a vague “do-your-best” statement. Second, goals need to be measurable, meaning to have measures and associated threshold to enable a determination on whether they have been achieved. Third, goals should be achievable, which is significantly related to situational constraints, such as the resources assigned and the means employed to achieve the goals. Fourth, the goals should be relevant to achieving the desirable outcomes. For example, if employees believe their goals are relevant to organizational strategies, they will behave and act in line with these goals (Veld et al., 2010). Finally, goals should have a time frame for completion to enable monitoring their progress towards goal achievement.

The literature has identified factors which contribute to goal-setting. The first one is greater participation in a goal formulation process. This can increase the probability of finding appropriate strategies, leading to more realistic goals (Locke and Latham, 2002). To facilitate such participation in a group goal-setting situation, a structured goal-setting process is needed. Effective leadership is another important factor as it can “influence the activities of an organized group in its efforts towards goal-setting and goal achievement” (Stogdill, 1950: 3). If leaders articulate a compelling organizational vision and help their subordinates understand how their missions fit into the “big picture,” this will contribute to the establishment of realistic and relevant goals (Morgeson et al., 2010). The extent of organizational support can also influence goal choice and commitment. When the organizational support is perceived to be high, employees are more willing to pursue long-term and challenging goals (Fried and Slowik, 2004). Individuals’ motivation is another influential factor. People with stronger motivation are more likely to set challenging goals and be persistent in pursuing them (Locke and Latham, 2002).

Goal-setting in the public sector is challenging due to its legal, political and public constraints. Furthermore, goals in the public sector are not as clear-cut as those in the private sector and very difficult to specify and measure (Rodgers and Hunter, 1992). The diverse and vagueness nature of public benefits also make it difficult to motivate employees and assess goal achievement. Given that the prior research on goal-setting theory focuses mainly on the private sector, we complement the goal-setting literature with empirical interview data from practice.

3. Research methodology

This research aims to understand how project target benefits are formulated and appraised. As suggested by Eisenhardt (1989), we use well-established theories from relevant disciplines to guide our research, and further complement such by gathering additional
knowledge from practice through qualitative interviews with government managers. As this study is exploratory in nature, a qualitative interview approach is considered appropriate (Lee et al., 1999) and can potentially bridge the gap between theories and practice (Breese, 2012).

3.1. Research setting and participants

We conducted semi-structured interviews with senior managers from Australian government agencies. We chose to focus on Australian government agencies because of their strong emphasis on project benefit management practices. For example, benefit realization is captured as a core practice in the PRINCE2 (Projects in Controlled Environments) methodology used by over half of the Australian government agencies (Gershon, 2008).

Potential participants were selected through a purposive sampling strategy (Kerlinger, 1986) based on their involvement in formulating and appraising project target benefits. The constraint on the experience in appraising target benefits limited our potential participants to senior managers. Invitations for interview participations were sent via emails and follow-up phone calls. Fifteen senior managers who met above criteria agreed to participate. Among which, seven were from service delivery agencies (e.g., providing educational services and supports to communities), five from capability development agencies (e.g., building the innovation capabilities in government and developing generic frameworks for public agencies), and three from IT support agencies. The majority of participants were at SES level 1 with an average of 16 years working experience. The participant profile is summarized in Table 2. All participants played an active role in formulating and appraising target benefits and managing benefit realization processes for high level government projects. In other words, they have accumulated relevant and heterogeneous knowledge on project target benefit formulation and appraisal. This allowed us to develop a comprehensive understanding on the subject matter.

3.2. Data collection

Our interviews focused on (1) ascertaining the strategic importance of project target benefits in the public sector, (2) identifying the criteria for appraising project target benefits, and (3) deriving the factors that may improve the formulated project target benefits. The sample interview questions are provided in Table 3. The semi-structured interview approach can keep the participants focused on the interview questions while also allowing them to discuss additional relevant practices. Each interview lasted approximately one hour and all interviews were recorded and transcribed for data analysis.

3.3. Data analysis

The interview transcripts were coded and analyzed with reference to prior goal-setting theory literature. This was achieved through an iterative process involving looking at the data from different perspectives at different times as recommended by Miles and Huberman (1994). First, we read each transcript several times to get familiar with them and grasp each participant’s general conception. Second, we reviewed the transcripts systematically to search for criteria for appraising project target benefits. We did so initially by manually coding data into the theoretical dimensions derived from the goal-setting theory presented earlier in this paper: specific, measurable, achievable, relevance and time-bounded. As we

Table 2
Participant profile.

<table>
<thead>
<tr>
<th>Participant position/ID</th>
<th>Agency type</th>
<th>APS level</th>
<th>Experience (years)</th>
<th>Role descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>D (A)</td>
<td>C</td>
<td>EL 2</td>
<td>25</td>
<td>Design a project management framework for the use by other government agencies</td>
</tr>
<tr>
<td>D (B)</td>
<td>S</td>
<td>EL 2</td>
<td>20</td>
<td>Involved in the benefit management of mostly communication projects</td>
</tr>
<tr>
<td>AD (A)</td>
<td>S</td>
<td>EL 1</td>
<td>12</td>
<td>Assist in an ongoing administration and improvement of the education service delivery</td>
</tr>
<tr>
<td>GM (A)</td>
<td>IT</td>
<td>SES 2</td>
<td>20</td>
<td>Build or respond to government needs in providing services to end users</td>
</tr>
<tr>
<td>GM (B)</td>
<td>C</td>
<td>SES 2</td>
<td>25</td>
<td>Oversee government initiatives supporting the development and advancements of industries</td>
</tr>
<tr>
<td>GM (C)</td>
<td>IT</td>
<td>SES2</td>
<td>26</td>
<td>Supervise the implementation and management of Information and Communications Technology initiatives to support the daily function of a department</td>
</tr>
<tr>
<td>NM (A)</td>
<td>S</td>
<td>SES 1</td>
<td>25</td>
<td>Plan and lead the business improvement processes</td>
</tr>
<tr>
<td>NM (B)</td>
<td>S</td>
<td>SES 1</td>
<td>25</td>
<td>Develop and articulate the new policy proposals and the business cases for service delivery reforms</td>
</tr>
<tr>
<td>NM (C)</td>
<td>S</td>
<td>SES 1</td>
<td>5</td>
<td>Develop a quality assurance program including laying out the expected outcomes and the activities required to achieve the outcomes</td>
</tr>
<tr>
<td>NM (D)</td>
<td>IT</td>
<td>N/A</td>
<td>25</td>
<td>Coordinate and oversee business-driven IT projects</td>
</tr>
<tr>
<td>NM (E)</td>
<td>C</td>
<td>SES 1</td>
<td>N/A</td>
<td>Evaluate the performance of government policies and programs</td>
</tr>
<tr>
<td>NM (F)</td>
<td>C</td>
<td>SES 1</td>
<td>N/A</td>
<td>Manage and measure the benefits of government initiatives</td>
</tr>
<tr>
<td>NM (G)</td>
<td>C</td>
<td>SES 1</td>
<td>25</td>
<td>Involve in the development of an outcomes framework to provide the basis for evaluating the performance of a program</td>
</tr>
<tr>
<td>PM (A)</td>
<td>S</td>
<td>SES1</td>
<td>N/A</td>
<td>Develop policies and the quality assurance framework for the program</td>
</tr>
<tr>
<td>ES (A)</td>
<td>S</td>
<td>EL 1</td>
<td>12</td>
<td>Provide support to national manager in defining and managing benefits from the initiatives</td>
</tr>
</tbody>
</table>

Positions: D = Director; AD = Assistant Director; GM = General Manager; NM = National Manager; PM = Program Manager; ES = Executive Secretary.
Agency type: S: service delivery; C: capability development; IT: information technology support.
did so, two new criteria, accountability and comprehensiveness, emerged which were then included in our further analysis. In this process, we further clustered critical interview quotes under the coding scheme to ensure the consistency between data and theory. We repeated this process until we were confident with our interpretations of the data.

We then shifted our analysis to identify factors that may contribute to project target benefits following a similar approach. We began with the coding of the data into theoretically derived categories — structured process, incentives, leadership, and executive supports — as previously discussed. In this process, financial incentives were proven to be less-relevant in the government context. Instead, an individual’s “intrinsic motivation” to serve the public emerged as a strong contributor and thus was included for further data analysis. This is consistent with public administration literature suggesting Public Service Motivation (PSM) – “a particular form of altruism or pro-social motivation that is animated by specific dispositions and values arising from public institutions and missions” (Perry et al., 2010, p. 682) – is an important driver for performance in the public sector. Empirical findings across cases are summarized in Tables 4 and 5.

### 4. Conceptual framework and propositions

Project funding decisions can significantly influence project and organizational performance. Yet, they are usually made at a time when the available information is limited. Such a lack of information and/or use of irrelevant information can lead to poor project decisions (Williams and Samset, 2010). Given the vital role of project target benefits in a business case, well-formulated target benefits can provide reliable and valid input into the project funding decision-making process. This, in turn, contributes to public transparency, supports a reliable setting of its deliverables, and reduces project cost, duration and level of risk (Zwikael and Smyrk, 2011). Our findings suggest seven appraisal criteria to assure the quality of project target benefits, four constructs that may improve the formulated target benefits and one contextual moderating variable. These results are depicted and discussed in forms of an emergent

---

### Table 3

Sample interview questions.

<table>
<thead>
<tr>
<th>Ice-breaking question:</th>
<th>Core questions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Could you please talk about your role in formulating target benefits?</td>
<td>• How do you identify and define target benefits for projects/programs?</td>
</tr>
<tr>
<td>• How do you determine the quality of target benefits?</td>
<td>• What are some factors you think may contribute to the quality of target benefits? (What do you think can improve the quality of target benefits?)</td>
</tr>
<tr>
<td>Follow-up questions: (to explore further details and/or clarify information):</td>
<td></td>
</tr>
<tr>
<td>• Could you give me an example of that?</td>
<td></td>
</tr>
<tr>
<td>• Could you explain that further?</td>
<td></td>
</tr>
</tbody>
</table>

### Table 4

Descriptions of the criteria for appraising project target benefits.

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Brief description</th>
<th>Example</th>
<th>Supporting cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic fit</td>
<td>Fit into the organization’s strategy</td>
<td>Shorter duration of finalizing a rebate file is aligned with the organization’s strategy to enhance operational efficiency</td>
<td>D(A); D(B); AD(A); GM(A); GM(B); NM(A); NM(B); NM(C); NM(D); NM(E); NM(F); PM(A); ES(A)</td>
</tr>
<tr>
<td>Target value</td>
<td>Have a baseline, a target value with specific (positive or negative) direction</td>
<td>A reduced time of 25% for finalizing a rebate file at the tax office</td>
<td>D(A); GM(A); GM(B); NM(A); NM(B); NM(C); NM(D); NM(E); NM(F); PM(A); PM(A); ES(A)</td>
</tr>
<tr>
<td>Measurability</td>
<td>Be measurable through the use of either a direct measure or an indirect indicator</td>
<td>Time (in minutes) per tax rebate file is calculated automatically from the tax information system</td>
<td>D(A); D(B); AD(A); GM(A); GM(B); NM(A); NM(B); NM(C); NM(D); NM(E); NM(F); PM(A); PM(A); ES(A)</td>
</tr>
<tr>
<td>Realism</td>
<td>Be realistic, given the context in which the organization is operating and its constraints</td>
<td>Target value is similar to actual data in a benchmark country</td>
<td>D(A); AD(A); GM(A); GM(B); NM(A); NM(B); NM(C); NM(D); NM(E); NM(F); ES(A)</td>
</tr>
<tr>
<td>Target date</td>
<td>Have a set date for realization</td>
<td>Target benefit is realized within one year from project approval</td>
<td>D(A); GM(A); GM(B); NM(A); NM(B); NM(C); NM(D); PM(A); ES(A)</td>
</tr>
<tr>
<td>Accountability</td>
<td>Have a benefits owner</td>
<td>National tax office manager</td>
<td>D(A); D(B); AD(A); GM(A); GM(B); NM(A); NM(B); NM(C); NM(D); PM(A); ES(A)</td>
</tr>
<tr>
<td>Comprehensiveness</td>
<td>Be considered from a variety of aspects, for example comprise both financial and non-financial benefits, or comprise both operational, tactical and strategic level benefits</td>
<td>In addition to shortening process time (operational/ non-financial benefit), other target benefits expected from this project include increased customer satisfaction, reduced cost and increased quality</td>
<td>D(A); D(B); AD(A); GM(A); GM(B); NM(A); NM(B); NM(C); NM(D); NM(E); NM(F); PM(A); ES(A)</td>
</tr>
</tbody>
</table>

conceptual framework (Fig. 1) and associated propositions in this section.

4.1. Project target benefits

Project target benefits must be properly formulated to support reliable project funding decisions and ensure their realization (Cooke-Davies, 2007). Our participants suggested that project target benefits can be appraised based on whether they fit into organizational strategic goals, have target values and dates, and are measurable and realistic. These criteria are consistent with the goal characteristics suggested by goal-setting theory, namely, Specific (target values), Measurable (measurable), Achievable (realistic), Relevant (strategic fit) and Time targeted (target date). Two additional criteria, namely “accountability” and “comprehensiveness,” emerged from our data as specifically important in the public sector. These seven criteria are further discussed below.

4.1.1. Strategic fit

As projects are initiated to implement organizational strategies, their target benefits should align with organizational strategic goals (Artto et al., 2008; Morris and Jamieson, 2005). The needs for project benefit formulation were found to be triggered from either top-down (e.g., compliance with new laws approved by parliament) or bottom-up (e.g., from operational areas) directions. The former case is resulted from high-level strategic goals. In the bottom-up paradigm, however, attention is required to address the potential bias problem (Reitzig and Sorenson, 2013), under which an organizational subunit may inappropriately favor its own projects over others. In this case, our participant suggested a “retro-fitting” consideration to ensure a project-strategy alignment. This was described by National Manager F: “We work in both directions. So there’s an element of retro-fitting to make sure people are focusing on the right outcomes, rather than just paying money out.”

4.1.2. Target value

Target benefits must be specifically defined to prevent different interpretations by stakeholders to ensure a clear allocation of resources and responsibility for managing their realization (Breese, 2012; Norris, 1996). To meet this specificity requirement, target benefits should have a baseline and target value described in either absolute (e.g., achieved a customer satisfaction score of eight on a 10-point scale) or relative terms (e.g., increased current score by 10%). National Manager B supported this view by stating: “The benefits need to be well defined – that they have a baseline, they have an interim and an end target...So having a benefits plan. What are the outcomes we are looking for, what’s the baseline, what’s the target and what’s the reporting capability.”

4.1.3. Measurability

Our participants consistently emphasized that target benefits must be measurable to enable a determination on whether they are realized; that is, target benefits must have agreed measures (Cooke-Davies, 2007). However, several participants pointed out the difficulty in setting measures for certain complex and dynamic target benefits. For example, Director A stated: “Some [benefits] are easy to do metrics for, we can quantify them and some less easy. Some are long term and the benefits are ongoing.” As a guideline, the measures chosen for target benefits must allow future assessment of benefit realization (Zwikael and Smyrk, 2012) and comply with regular government reporting requirements (Heinrich, 2002). In line with Williams and Samset (2010), our participants
further recommended regular reviews and updates on the measures to account for a turbulent project environment.

4.1.4. Realism
Target benefits should be realizable (Jenner, 2009), that is, being “realistic given the context in which the organization is operating and the constraints it has” (Ward and Daniel, 2006: 29). This view was reflected by National Manager E: “I think too it's about being realistic, about what you can achieve. So not over promising. Knowing where you've started from. Knowing what you are trying to achieve.” The realism of target benefits is a holistic consideration on other aspects (e.g., the assigned target value and date). Benchmarking the target benefits against other similar projects can be an effective way to ensure this realism (to be further discussed in a later section).

4.1.5. Target date
Our participants suggested that benefits should have a set target date for their realization, as described by General Manager A: “There's a work plan with a start and delivery date. It's all clear. From what date, we start measuring the benefit now and how well we are tracking.” Such a target date is important not only for continuous monitoring but also for final evaluation of benefit realization (Breese, 2012).

4.1.6. Accountability
In the government context, multiple agencies may have collaborative ownership of the ultimate benefits. Our participants thus highlighted the need to establish clear lines of accountability for benefit realization. Assigning a project owner – the person held accountable for securing the project’s target benefits (Zwikael and Smyrk, 2011) – is considered an effective way of addressing this accountability issue (Olsson et al., 2008). National Manager B described how this is operationalized: “What we’ve done is have accountability statements for all our senior execs and we’ve put all of these benefits and outcomes into their accountability statements which are basically their performance agreements.” Such a clear and visible line of accountability can enhance the achievability of target benefits (Cooke-Davies, 2007; Lin and Pervan, 2003).

4.1.7. Comprehensiveness
In line with Breese (2012) and Jenner (2009), our participants further pointed out the need to include a complete web of benefits. This is particularly important for public projects as they are normally concerned with various organizational and social issues and stakeholder needs. This viewpoint is reflected in the diverse types of benefits mentioned in the interviews. For example, National Manager D mentioned the inclusion of both financial and non-financial benefits: “We try to look at financial benefits in terms of efficiencies and savings to the organization but also in terms of non-financial benefits around improved quality of outcomes, reduction in complaints from customers and improved stakeholder perceptions, improved customer perceptions, etc.” Unfortunately, there is no universal answer as to what can be considered “comprehensive,” because it varies from one case to another. As a guideline, Henderson and Ruikar (2010) suggested different categories of target benefits including direct/indirect, short/long term, internal/inter-organizational and economical/cultural benefits.

Proposition 1. Project target benefits can be appraised based on whether they fit into organizational strategic goals, whether they have a target value, target date and assigned accountability for their realization, and whether they are measurable, realistic and comprehensive.

Table 4 provides a summary of the above-discussed target benefit appraisal criteria with a public project example and a list of supporting cases.

4.2. Antecedents of project target benefits

Our participants also suggested a total of nine factors that may improve formulated target benefits. We grouped these factors into four constructs with reference to those derived from the goal-setting literature as described in Section 2. Because goal-setting theory suggests a formal goal-setting process, we grouped three factors related to the benefit formulation process under the first construct heading of “a formal benefit formulation process.” Goal-setting theory further supports the important role of individuals’ motivation. As discussed in Section 3.3, we found that “public service motivation” is a key performance driver in the public sector. Thus, two factors related to individuals’ motivation were categorized under this heading. Effective leadership is another important aspect in goal-setting theory. Two leadership-related factors were thus grouped into the heading of “senior executive leadership.” The remaining two factors were related to organizational support and hence were placed under the fourth construct heading of “senior executive support.” Additionally, we identified “innovative climate” as a contextual moderating variable. Table 5 provides a summary of these four constructs with corresponding factors and a list of supporting cases, followed by detailed discussions of each of the constructs.

4.2.1. A formal benefit formulation process
Our findings supported Doherty et al. (2012)’s view on the need for a formal benefit formulation process to ensure successful benefit realization. Nonetheless, we found that the levels of formality in formulating target benefits vary across public agencies. In some, a formal process was simply unavailable, while in others, it was either embedded in existing budgeting systems, or under development. Despite so, three process-related factors emerged from our interviews and are discussed next.

The first critical factor suggested by our participants is stakeholder engagement in formulating target benefits, which is in line with Breese (2012). Public project stakeholders who need to be engaged in target benefit formulation may include governing stakeholders (e.g., senior executives), supporting stakeholders (e.g., IT departments) and end users. It is essential to engage the “Right stakeholder for the right reason at the right time” (National Manager D). National Manager D...
continued to describe the interactive engagement between high-level governing and supporting stakeholders: “There is the phase of engaging your governing stakeholders and putting to them around what the issue is about and gaining early support for the idea ……which then lets us get into engagement with stakeholders at lower levels to start pulling apart what I call the ideation element.” This stakeholder engagement practice can ensure that the formulated target benefits comprehensively reflect different stakeholder needs, create early buy-in from stakeholders and improve the achievability of target benefits (Bryson and Bromiley, 1993).

The second critical factor suggested by our participants is cross-functional collaboration. The public governance structure is complex involving national, regional and local government levels. Thus this cross-functional collaboration is essential in developing a “shared view” and clarifying accountability for benefit realization among different agencies. National Manager C stated: “Having to work across, having to keep in mind the government outcomes that are required and have that as the very key shared understanding of what the outcomes should be as a starting point and then if we have to go and renegotiate it at least we’ve got a view of that.” Indeed, the fragmentation of views can negatively affect the benefit realization management process (Doherty et al., 2012).

Our participants further suggested a benchmarking approach for the formulated target benefits. This was achieved by comparing the formulated target benefits with those set for similar projects, or getting feedbacks from third parties (e.g., external consultancy) and key stakeholders (e.g., end users). For example, National Manager B described their benchmarking practices: “We did a lot of international benchmarking as well. We looked at the lessons learnt from the UK social security reforms. Their implementation wasn’t a good experience. They didn’t have their benefits well defined and they had unintended consequences and they got things they didn’t expect to get. We will be in the same boat so we’re also looking out for those things.” This benchmarking approach can ensure the realism of the project target benefits and serve as a quality assurance mechanism (Flyvbjerg et al., 2005). In an early project phase, such a quality assurance mechanism is proved to be valuable as demonstrated in the cases of Norwegian and UK’s governance frameworks for public projects (Klakegg et al., 2008; Williams et al., 2010).

Proposition 2. The use of a formal benefit formulation process can improve project target benefits. Such a process should enable stakeholder engagement, facilitate cross-functional collaboration and integrate quality assurance undertakings (e.g., benchmarking).

4.2.2. Public service motivation

Our findings support the positive impact of managers’ PSM on the formulated target benefits. Specifically, with high levels of PSM, managers are more likely to do things for the public good and give “frank and fearless advice.” They will also be more committed to the benefit formulation process, leading to well-formulated project target benefits.

The public sector is often subject to political pressures (Crawford et al., 2003). This poses a dilemma for managers: whether to act in pursuit of long-term public good or meet the short-term objectives of the government minister in charge. Sometimes, managers may be forced to compromise long-term benefits for short-term achievements and/or to sacrifice difficult-to-measure benefits for easy-to-measure benefits. Our participants suggested that this dilemma may be partially addressed if organizations have clear and consistent long-term strategic goals. Within this broad picture, managers may seek further opportunities, which can be subject to short-term election cycles. National Manager C described this: “We’ve got the same [overall] goals and objectives of [the program] in place after they were set five years ago with obvious reviews in the meantime. So while everything else has been changing, those have remained, they’ve been tested but remained relatively consistent and I think that's important.”

Proposition 3. Project target benefits will improve when public managers possess a high level of public service motivation. Yet, government agencies should maintain clear and consistent long-term strategic goals while leaving some flexibility for managers to seek short-term opportunities.

4.2.3. Senior executive leadership

Senior executive leadership refers to senior managers’ ability to present and communicate an organization’s vision (Berson et al., 2001). Such leadership is critical in target benefit formulation because it will direct the project orientation. Our participants highlighted the need to have a senior executive holding an overall perspective of the agency to lead the target benefit formulation process. This was stated by Program Manager A: “There has to be someone who keeps track of the total picture at a high level. I think that’s really important because especially on very technical projects it can be very easy for silos to develop and people can be working quite effectively in their silos, their niche, and when it all comes together it doesn’t gel because something happens in one silo isn’t communicated to another…. So that overall view and overall management.”

In the government context, it is also important to have “a single accountable lead” when multiple agencies are involved. National Manager D elaborated on this: “One of those [factors contributing to the quality of target benefits] would be a single accountable lead … you need to have one responsible senior manager who’s leading it, we actually name two, we have a senior [position title] who’s responsible and then the lead manager…it’s one clear governance pathway, a single line pathway up, not matrix style, one to one reporting line, from your lead manager, to your sponsor, right up to your governing body.”

Proposition 4. The presence of strong senior executive leadership can improve project target benefits. This should involve a senior executive holding an overview of the agency’s vision and serving as a single accountable lead, especially when various agencies are involved.

4.2.4. Senior executive support

In this research, we defined senior executive support as the extent to which top management allocates sufficient resources and provides authority to the implementation of an initiative (Pinto and
Proposition 5. The presence of strong executive support in the forms of resource allocation and executive commitment can improve project target benefits by ensuring the acquisition of critical resources and means for benefit formulation.

4.2.5. Innovative climate

Contingency theory suggests that organizational effectiveness depends on an organization’s ability to adjust to its environment (Thorgren et al., 2010). In other words, the “context” surrounding a project can influence its benefit formulation practices and results. Accordingly, one contextual variable, organization’s innovative climate, was found to potentially moderate the relationships between the above-discussed constructs and project target benefits. Innovative climate, “composed of a learning philosophy, strategic decision, and transfunctional benefits that direct all organizational strategies and actions” (Sigauw et al., 2006: 560) can explain why some organizations are more successful in securing project benefits than others. Specifically, “employees in an innovative climate are more open to new ideas and more willing to change and adapt” (Acur et al., 2010: 918), and such support for creativity can affect the way managers approach the benefit formulation process (e.g., facilitate cross-functional collaboration), leading to better results (e.g., more comprehensive target benefits). General Manager B described this: “It’s a very ‘can do’ culture. People will collaborate to get things done. I think as it comes to being better in recognizing and understanding benefits.”

Proposition 6. Innovative climate will moderate the influence of all four constructs on project target benefits. When an agency’s innovative climate is high the positive impact of all four constructs on project target benefits will be enhanced, whereas a low level of innovative climate will weaken their impact.

5. Discussion

Projects are important means to enhance organizational performance. Consequently, there is a growing interest in the literature on the business perspective of projects (e.g., Kollivé et al., 2007; Morris and Jameson, 2005) within which benefit management is one main focus. This paper expands this line of research by providing insights on how project target benefits should be formulated and appraised; and thus offers several theoretical and managerial implications.

Theoretically, with a focus on the government context, based on integration of related theories (e.g., goal-setting, public service motivation, and leadership theories) and practices (e.g., interviews with public sector managers), we developed a conceptual framework of project target benefits. We suggest that project target benefits must fit into the organization’s strategic goals, be measurable and realistic, and have target values and dates. This is consistent with the SMART goal characteristics suggested in goal-setting theory. In addition, our data suggest that target benefits must also be comprehensive and assigned clear accountability for their realization. We further identified four constructs that potentially improve formulated target benefits. These constructs include the use of a formal benefit formulation process and the presence of strong senior executive leadership, senior executive supports and managers with high levels of public service motivation. An agency’s innovative climate was also found to potentially enhance the contributions of these four constructs. This theoretical framework contributes to project benefit management literature by providing a holistic view on project target benefit formulation. It also contributes to the strategy implementation literature by facilitating an understanding on how to integrate organizational strategic goals into project target benefits.

Our findings also have critical managerial implications for project governance particularly on ensuring that (1) the right projects are chosen and (2) the objectives of the funded project are achieved (Turner, 2006; Williams et al., 2010). Specifically, the criteria we proposed specify what information needs to be provided and thus can be used as a guideline in formulating project target benefits. This can further assure the quality and reliability of information inputs to support informed and justifiable project funding decisions, which in turn can increase the likelihood of project success (Lechner and Floyd, 2012). This set of appraisal criteria can be also integrated into the established project governance frameworks. For example, Norway and UK have established governance frameworks for public projects (Klakegg et al., 2008; Williams et al., 2010). One aim of these frameworks is to “lift the standard for underlying documents” (Samset et al., 2006: p.6) and thus these frameworks integrate independent internal and external parties to review early project concepts. The criteria suggested in this article can provide these reviewing parties a common ground for such evaluations.

Our proposed criteria can also contribute to the achievement of project objectives through specifying a clear accountability and facilitating a continuous monitoring and controlling (Crawford and Bryce, 2003). The accountability criterion requires that for each project a project owner is nominated to act on behalf of the government agency to secure the project benefits (Olsson et al., 2008; Zwikael and Smyrk, 2012). This establishes a clear line of accountability for benefit realization. Other criteria such as the measures, target values and target dates of target benefits can lay the information trail for ongoing monitoring and controlling towards benefit realization (Crawford and Bryce, 2003). In other words, they form “the means of monitoring performance” (Turner, 2006, p.93).

Our findings provided further information on how the formulated target benefits can be improved through...
organizational- and individual-related constructs. Such understanding contributes to building "the structure through which the objectives of the project are set" (Turner, 2006, p. 93). Specifically, we suggested public agencies establish a structured target benefit formulation process. This process should enable stakeholder engagement, facilitate cross-functional collaboration and integrate benchmarking practices. Moreover, public agencies should create a culture that emphasizes project benefit management. This may be achieved by providing strong executive support and commitment on benefit management practices. Public agencies should also encourage managers to be more broadly concerned with the organizational strategic goals and public needs instead of the narrow task-oriented project objectives. In part, this will require managers to proactively negotiate and engage with different institutions, including operational units within and/or across agencies and various stakeholder groups.

6. Conclusions

Literature places an increasing emphasis on the management of project benefits to ensure organizational strategic goals are achieved. This article advances our knowledge on how project target benefits can be formulated and appraised in the government context. Properly formulated target benefits can support informed project funding decisions and ensure appropriate strategic attention from project managers and team members (Shenhar et al., 2001). All these together can increase the likelihood of successful benefit realization and strategy implementation (Lechner and Floyd, 2012). Given the exploratory nature of this study, further work is needed in several directions. First, to increase the practical impact of the framework, future empirical research can test it in different contexts (e.g., in different government agencies, non-for- profit organizations, the private sector and across countries). Such studies can validate the framework and identify additional relevant contextual factors. Additionally, whereas most of the constructs we proposed can be operationalized using established scales, more rigorous research is needed to develop scales for two new constructs: project target benefits and formal benefit formulation process. Thirdly, even though the constructs in the framework are presented independently, they may be interdependent; hence, future studies can examine how these constructs interact with each other. Finally, it is also necessary to empirically investigate the relative importance of each proposed construct (e.g. Zwikaël and G Bloberson, 2006).

Conflict of interest statement

There is no conflict of interest.

References


McCutcheon, D.M., Meredith, J.R., 1993. Conducting case study research in


functional approach to understanding leadership structures and processes. J.
Manag. 36, 5–39.

Morris, P., Jamieson, A., 2005. Moving from corporate strategy to project

in Information Systems: Evaluation and Management. Chapman & Hall,

OGC, London, UK.

OGC (Office of Government Commerce), 2009. Managing successful projects

ownership: implications on success measurementMeas. Bus. Excell. 12 (1),
39–46.

Perry, J.L., Hondeghem, A., Wise, L.R., 2010. Revisiting the motivational
bases of public service: twenty years of research and an agenda for the

Pinto, J.K., Prescott, J.E., 1990. Planning and tactical factors in the project

Reitzig, M., Sorensen, O., 2013. Biases in the selection stage of bottom-up

Rodgers, R., Hunter, J.E., 1992. A foundation of good management practice in

Samset, K., 2009. Projects, their quality at entry-and challenges in the front-end

Shenhar, A.J., 2001. One size does not fit all projects: exploring classical

Approach to Successful Growth and Innovation. Harvard Business School
Press, Boston, MA.

multidimensional strategic conceptLong Range Plan. 34, 699–725.

orientation: a framework for study and integration of innovation research. J.

Stogdill, R., 1950. Leadership, membership and organization. Psychol. Bull. 47,
1–14.

Thorgren, S., Wincent, J., Anokhin, S., 2010. The importance of compensating
strategic network board members for network performance: a contingency

Turner, J.R., 2006. Towards a theory of project management: the nature of the
project governance and project management. Int. J. Proj. Manag. 24 (2),
93–95.

Veld, M., Pauw, J., Boselie, P., 2010. HRM and strategic climates in
hospitals: does the message come across at the ward level? Hum. Resour.

Victoria Ombudsman, 2011. Own motion investigation into ICT-enabled


T.Williams, T., K.Samset, K., 2010. Issues in front-end decision making on

Williams, T., Klakgng, O.J., Maghnussen, O.M., Glasspool, H., 2010. An
investigation of governance frameworks for public projects in Norway and

Winter, M., Szczepanek, T., 2008. Projects and programmes as value creation
Manag. 26, 95–103.

Yin, R.K., 2003. Case Study Research: Design and Methods, third ed. Sage,
Thousand Oaks, CA.

R.Young, R., 2006. Case studies – how boards and senior management have
governed IT projects to succeed (or fail)HB280Standards Australia,
Sydney.

orientated proposal for assessing project successInt. J. Proj. Manag. 23,
436.

Zwikael, O., Globerson, S., 2006. From critical success factors to critical

Zwikael, O., Smyrk, J.R., 2011. Project management for the creation of
organisational value. Springer-Verlag, London.

O.Zwikael, O., J.R.Smyrk, J.R., 2012.A general framework for gauging the
performance of initiatives to enhance organisational valueBr. J. Manag. 23,
S6–S22.