

# Online Research @ Cardiff

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository: <http://orca.cf.ac.uk/85342/>

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Elbanna, Said, Andrews, Rhys William and Pollanen, Raili 2016. Strategic planning and implementation success in public service organizations: evidence from Canada. *Public Management Review* 18 (7) , 1017 -1042. 10.1080/14719037.2015.1051576 file

Publishers page: <http://dx.doi.org/10.1080/14719037.2015.1051576>  
<<http://dx.doi.org/10.1080/14719037.2015.1051576>>

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See <http://orca.cf.ac.uk/policies.html> for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.





**Strategic Planning and Implementation Success in Public Service Organizations: Evidence from Canada**

Journal:	<i>Public Management Review</i>
Manuscript ID:	RPXM-2014-0262.R2
Manuscript Type:	Article
Keywords:	Formal strategic planning, Strategy implementation success, Involvement, Stakeholder uncertainty, Canada

SCHOLARONE™  
Manuscripts

# Strategic Planning and Implementation Success in Public Service

## Organizations: Evidence from Canada

In this paper, we examine the role that formal strategic planning plays in determining the success of strategy implementation in a set of more than 150 public service organizations from Canada. We also analyze the mediating effects of managerial involvement in strategic planning and the moderating effects of stakeholder uncertainty on the planning-implementation relationship. A structured online questionnaire was used to collect data. Our findings suggest that formal strategic planning has a strong positive relationship with implementation, which, though mediated by managerial involvement, becomes even more salient in the face of stakeholder uncertainty. Several implications of these findings are discussed.

Key words: Strategic planning; strategy implementation; implementation success; managerial involvement; public service organizations: Canada

## Introduction

Strategy implementation is “the realization of strategy and what the firm does” (Håkansson et al., 2012: 182). The successful implementation of strategic decisions is widely thought to be critical to the achievement of organizational aims and objectives (Elbanna, Thanos and Colak, 2014; Schweiger and Sandberg, 1991). This applies as much to public sector organizations as to those in the private sector. Only when the plans of the top management team are executed properly and in full, it is possible to attribute organizational outcomes to the decisions made by management and to feel some confidence that public organizations are masters of their own destiny (Elbanna and Child, 2007); at least within the limits posed by the democratically mandated “authorizing environment” in which they operate (Moore, 1995). Nevertheless, despite widespread recognition of the critical role that strategy implementation success plays in determining organizational achievements amongst public management theorists (Bryson, 2010; Poister, 2010), there remain few studies that actually examine the antecedents of successful strategy implementation in public service organizations (for reviews of the state of art see Bryson, Berry and Yang, 2010; Poister, Pitts and Hamilton, 2010). In fact, the literature on strategy implementation generally remains fragmented and dispersed throughout the general and specialized management literatures, with little systematic investigation of any of the major themes relating to implementation success (Bossidy and Charan, 2011; Elbanna, Thanos and Colak, 2014; Noble, 1999). In this paper, we seek to cast light on a critical issue running through scholarly debates about strategic management in the public sector and the implementation of key decisions: the role that formal strategic planning can play in determining strategy implementation success.

1  
2  
3 Strategic planning is a set of concepts, procedures and tools that organizations use when  
4  
5 determining their overall strategic direction and the resources required to achieve strategic  
6  
7 objectives (Bryson, 2011). Although aspects of strategic planning are common to all types of  
8  
9 organizations, the application of planning processes needs to be carefully tailored to the public  
10  
11 sector environment when applied by public service organizations (Bryson, 2011). In particular,  
12  
13 public managers have to build-in the perspectives and needs of those stakeholders with whom  
14  
15 they must co-operate and collaborate in order to achieve organizational goals (Bryson, Crosby  
16  
17 and Bryson, 2009). Not only is the formal strategic planning undertaken by public service  
18  
19 organizations an important indicator of top management's commitment to developing and  
20  
21 implementing coherent and comprehensive organizational strategies (Boyne, 2010), it is also a  
22  
23 key means for promoting inclusive public management in a democratic society (Bryson et al,  
24  
25 2009). The more time and effort that is devoted to analyzing the internal and external  
26  
27 environment, and developing and evaluating strategic options, the more managers may feel  
28  
29 confident that the outcome of that process will be a positive one (Camillus, 1975; Capon, Farley  
30  
31 and Hulbert, 1987). As such, the basic assumption underpinning the practice of strategic  
32  
33 planning is that it is rational to invest resources in formulating good plans because this will  
34  
35 vastly improve the prospects of implementation success (Mintzberg, 2000).  
36  
37  
38  
39  
40  
41  
42

43  
44 Despite the popularity of the idea that planning matters for implementation, there have  
45  
46 been few empirical studies of the connection between planning and implementation in public  
47  
48 service organizations using primary and secondary data on those organizations (Bryson, Berry  
49  
50 and Yang, 2010; Poister, Pitts and Hamilton, 2010). Moreover, little attention has been devoted  
51  
52 to the boundary conditions of the relationship between formal strategic planning and strategy  
53  
54 implementation success. In particular, the active participation of managers in the strategic  
55  
56  
57  
58  
59  
60

1  
2  
3 planning process is typically regarded as essential for making strategic decisions work (Elbanna,  
4 Thanos and Colak, 2014; Floyd and Wooldridge, 1994), and as such managerial involvement in  
5  
6 planning is likely to mediate the connection between strategy formulation and strategy  
7  
8 implementation success (Collier, Fishwick and Floyd, 2004; Floyd and Wooldridge, 1997).  
9  
10

11  
12  
13 At the same time, formal strategic planning could potentially enable public service  
14  
15 organizations to better manage the support from stakeholders that is needed to achieve strategic  
16  
17 objectives (Pfeffer and Salancik, 1978). This is especially important in the public sector, since  
18  
19 the context in which public organizations operate has a massive influence on organizational  
20  
21 behaviour and outcomes (see O'Toole and Meier, 2015). In particular, the ways in which public  
22  
23 organizations respond to stakeholders has become increasingly important as those organizations  
24  
25 have needed to do more to collaborate and co-operate with the diverse actors who have a stake in  
26  
27 the process of strategy implementation (and formulation) (Osborne, 2006).  
28  
29  
30

31  
32 Does formal strategic planning improve the implementation of strategic plans in public  
33  
34 service organizations? Might the connection between planning and implementing strategies be  
35  
36 attributable to the active involvement of managers? Does strategic planning have an even bigger  
37  
38 implementation pay-off under conditions of stakeholder uncertainty? To answer these questions,  
39  
40 we examine the relationship between strategic planning and strategy implementation success, the  
41  
42 mediating role of managerial involvement and the moderating role of stakeholder uncertainty  
43  
44 using data drawn from a survey of senior public sector managers in Canada.  
45  
46  
47

48  
49 During the past two decades, strategic planning in Canadian governments has gained  
50  
51 importance in response to increasing public demands for accountability and transparency. For  
52  
53 example, since the late 1990s, the federal government has required government departments and  
54  
55 agencies to produce annual Reports on Plans and Priorities (RPP) (Pollitt and Bouckaert, 2004).  
56  
57  
58  
59  
60

1  
2  
3 The RPPs, which detail departmental priorities by strategic outcome, program, and expected  
4 results for a three-year period, play an important role in the Government's planning and resource  
5 management processes, as well as provide a basis for ministerial accountability to Parliament by  
6  
7  
8  
9  
10 allowing comparisons of the actual results published in annual performance reports against the  
11 plans (Treasury Board Secretariat Canada, 2014)<sup>1</sup>. To further improve the efficiency and  
12 effectiveness of such administrative functions, the Priorities and Planning Sub-Committee on  
13 Government Administration was created in 2012 (Office of Prime Minister of Canada, 2012)<sup>2</sup>.  
14  
15  
16  
17  
18  
19 At the provincial level, although implementation can vary significantly, all ten Canadian  
20 provinces also have priority-setting/strategic planning, budgeting, and performance reporting  
21 functions as key elements of their performance management and accountability frameworks  
22 (Canadian Institute of Chartered Accountants, 2004). Hence, the increasing importance of  
23 strategic planning practices across Canadian governments makes the Canadian public sector a  
24 highly relevant and contemporary context in which to examine the strategy planning-  
25 implementation relationship.  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35

36 The paper begins by exploring theoretical perspectives on formal strategic planning and  
37 strategy implementation success, developing hypotheses about the mediating effect of  
38 managerial involvement and stakeholder uncertainty on the planning-implementation  
39 relationship. Following that the data and methods employed in the study are described and the  
40 results of the statistical analyses are reported. The paper concludes by exploring the theoretical  
41 and practical implications of the findings.  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52

---

53  
54 <sup>1</sup> Treasury Board Secretariat Canada, 2014. Government of Canada tables 2014-15 Reports on Plans and Priorities.  
55 Retrieved April 4, 2014 from <http://news.gc.ca/web/article-en.do?nid=822439>.

56 <sup>2</sup> Office of Prime Minister of Canada, 2012. PM announces the establishment of the Priorities and Planning Sub-  
57 Committee on Government Administration. Retrieved April 4, 2014 from [http://pm.gc.ca/eng/news/2012/09/13/pm-  
58 announces-establishment-priorities-and-planning-sub-committee-government](http://pm.gc.ca/eng/news/2012/09/13/pm-announces-establishment-priorities-and-planning-sub-committee-government).  
59  
60

## Background and Hypotheses

Strategy implementation is defined in the literature as “the communication, interpretation, adoption, and enactment of strategic plans” (Noble, 1999: 120). As such, there is clearly a direct connection between the strategic planning process and the subsequent implementation of the decisions emerging from that process. Nevertheless, that connection cannot be taken for granted nor can it be regarded as something easily cultivated or maintained in organizations that are attempting to change strategic direction (Johnson, 2000). Critically, whatever the challenges associated with the development of effective planning processes, the implementation of strategic decisions is regarded as considerably more difficult than their formulation, and is an area where many organizations fail (Nutt, 1999; Hrebiniak, 2006). For organizational leaders, it is therefore important to consider in what ways the link between strategy formulation and implementation can be strengthened to ensure that strategic decisions are fully and properly embedded within the activities of organizational members.

### The Role of formal strategic planning

A key feature of the conventional approach to strategic planning is that the formulation and implementation of plans are sequential activities. Strategy is first deliberately formulated and only then is it put into place. Nevertheless, while this may suggest strategic management is a sequential activity, each of the different stages of the planning process are not typically separate in practice, and organizations invariably evince emergent as well as deliberate or planned strategies concurrently. Control has therefore been identified as central to the implementation process (Noble, 1999), and is something that can be achieved centrally through techniques such as action plans and monitoring. According to advocates of strategic planning in the public sector, effective implementation through formal methods, such as business or project plans that identify



1  
2  
3 tasks with targets, is more likely when activities are clearly defined (Boyne, 2010). All of which  
4  
5 is to say that one way in which public service organizations can seek to bridge the gap between  
6  
7 formulation and implementation is to ensure that they establish strong formal planning  
8  
9 procedures.  
10

11  
12 A number of studies of private firms have found that formal strategic planning is critical  
13  
14 to successful implementation. For example, the use of action plans can help implementers to  
15  
16 translate strategy into a more short term and focused plan (e.g. Hrebiniak and Joyce, 1984; Pinto  
17  
18 and Prescott, 1990). In the public sector, several studies associate formal strategic planning with  
19  
20 improved organizational performance more generally (e.g. Andersen, 2008; Boyne and Gould-  
21  
22 Williams, 2003). Nevertheless, there are some authors who suggest that excessive attention to the  
23  
24 planning process may make decision-making inflexible and thereby lead inexorably to  
25  
26 implementation failure as managers are unable to make incremental adaptations to a plan that is  
27  
28 seemingly set in stone (Hambrick and Connella, 1989; Mintzberg, 2000). Instead, these author(s)  
29  
30 emphasize the need for fluid and open processes of planning and implementation to ensure that  
31  
32 organizations can learn more effectively and respond to changes in the environment when  
33  
34 implementing strategic plans (Montgomery, 2008).  
35  
36  
37  
38  
39

40  
41 Although there is some evidence to suggest that less formal planning processes can  
42  
43 generate effective strategic decisions (see Parsa, 1999), Miller's study (1997) of eleven decisions  
44  
45 from private and public organizations, finds that strategic planning has a stronger positive  
46  
47 influence on the success of implementation than a more ad-hoc approach in which decisions are  
48  
49 made on an incremental basis as situations arise; **in other words, more formal procedures for**  
50  
51 **dealing with eventualities in advance lead to more successful implementation.** In terms of  
52  
53 organizational outcomes in the public sector, Poister, Edwards, Pasha and Edwards (2013) find  
54  
55  
56  
57  
58  
59  
60

1  
2  
3 that “conducting strategic planning efforts within a larger framework of logical incremental  
4 decision-making,... has a positive effect on some dimensions of performance, at least within the  
5 context of the public transit service industry.” Nevertheless, other studies of the effects of  
6 strategy process on public service performance suggest that an incremental approach to decision-  
7 making is more likely to be unsuccessful (Andrews et al., 2009; 2011). Thus, on the balance of  
8 prior theory and the limited available evidence, our first hypothesis is:  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19

20 **H1.** There will be a positive relationship between *formal strategic planning* and *strategy*  
21 *implementation success*.  
22  
23  
24  
25  
26

### 27 **The Mediating Role of Managerial Involvement**

28 The likelihood of implementation success may well be increased by the adoption of formal  
29 planning, but it is still conceivable that those organizations that place undue emphasis on  
30 strategic planning run the risk of “paralysis by analysis” (Lenz and Lyles, 1985). An obsessive  
31 concern with the details of the strategic plan may lead top management to overlook the need for  
32 context-sensitive implementation within the organization, especially the buy-in of those internal  
33 stakeholders responsible for implementing decisions – typically middle managers. To address  
34 this potential pitfall, strategic management theorists draw attention to the role that managerial  
35 involvement in the strategy formulation process can play in improving the quality of strategy  
36 implementation (Floyd and Wooldridge, 1994).  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49

50 The effect of formal strategic planning may be enhanced if all managers are active  
51 participants in the process of developing strategies.<sup>3</sup> In theory, managerial participation in  
52  
53  
54  
55

---

56 <sup>3</sup> Strategic planning in the public sector is distinct from political public policy decision making by elected officials.  
57 Elected officials do not participate in managerial strategic planning per se, and their roles are not part of this study.  
58  
59  
60

1  
2  
3 strategy formulation demonstrates the commitment of top management to the plans that are being  
4 developed (Camillus, 1975), and increases the prospects that there is a genuine sense of  
5 ownership and commitment to strategic plans amongst those responsible for implementing them  
6 (Rajagopalan and Rasheed, 1995). At the same time, implementation quality may be improved  
7 because managerial involvement facilitates the continual adaptation of strategic plans as they are  
8 being implemented ensuring that they are “fit for purpose”. Several studies of private sector  
9 organizations suggest that strategic planning can be enhanced by encouraging managerial  
10 participation in the process. Elbanna, Thanos and Colak (2014), Nutt (1999) and Wooldridge and  
11 Floyd (1990), in particular, find that such participation results in improved implementation. And,  
12 there is good *prima facie* reason for thinking that such participation will also matter in the public  
13 sector, where middle managers, especially, play an increasingly important role in strategy  
14 implementation (Gatenby, et al., forthcoming; Ridder, Bruns and Spier, 2006).

15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

Importantly, it is actually conceivable that the benefits of strategic planning for strategy implementation are attributable to the manager involvement that thoroughgoing planning processes presuppose. That is, that it is not simply the presence of formal planning that matters for implementation success, but the managerial involvement that accompanies effective strategy formulation. Our second hypothesis is therefore:

**H2.** *Managerial involvement* will mediate the relationship between formal strategic planning and strategy implementation success.

### **The Moderating Role of Stakeholder Uncertainty**

Resource dependence theory suggests that organizations must continually seek to acquire control over resources held by other actors and organizations within their environment in order to

1  
2  
3 minimize their dependence on those entities (Pfeffer and Salancik, 1978). By minimizing their  
4 resource dependence, organizations can attain greater control over their own destiny and so build  
5 an ever stronger power base making them immune from external threats. Only by securing as  
6 high a degree of autonomy as possible from the vicissitudes of its stakeholders can any  
7 organization effectively execute its plans (Pfeffer, 1987). For public organizations, the pursuit of  
8 organizational autonomy is particularly challenging given the large number of economic and  
9 political external forces to which they are subject (Vining, 2011), and the diversity of  
10 stakeholders to whom they are accountable (Rainey, 2009). To lessen resource dependence and  
11 gain more autonomy, public organizations may adopt multiple short-term tactics ranging from  
12 internal restructuring to the cooptation of external board members (Pfeffer and Salancik, 1978).  
13 In the long run though, they are likely to need to demonstrate a capacity for fulfilling their  
14 strategic mission (Goodsell, 2011) and a reputation for high levels of reliability and effectiveness  
15 (Carpenter, 2001) if they are to be shape, as well as be shaped by, the demands of powerful  
16 stakeholders, especially elected officials whose requirements may sometimes be less predictable  
17 than other actors (Furlong, 1998). Hence, it seems likely that public service organizations will  
18 need to develop a systematic approach to integrating stakeholder management within their  
19 strategic planning processes and that the impact of this may vary depending on the degree of  
20 uncertainty around stakeholder support.

21  
22 Since there is a need to proactively manage environmental dependencies, the strength of  
23 formal strategic planning may well matter more for strategy implementation success when there  
24 is a higher degree of uncertainty around sources of stakeholder support. Rigorous analysis of  
25 stakeholder needs and demands may therefore be especially important when those needs and  
26 demands are difficult to predict. Although supporters of less formal strategy formulation

1  
2  
3 processes suggest that a flexible approach is needed in the face of environmental uncertainty  
4  
5 (Mintzberg, 1979), it is quite conceivable that more rather than less planning will help public  
6  
7 service organizations deal with uncertain circumstances. As Armstrong (1982) puts it, “if it is  
8  
9 clear what will happen and when, the need for planning seems small” (202). Rather than attempt  
10  
11 to respond to stakeholder uncertainty by making decisions on an ad-hoc basis, increasing formal  
12  
13 strategic planning processes may represent a better means for exerting managerial control over a  
14  
15 challenging operating environment (see Eisenhardt, 1989). In fact, prior research suggests that  
16  
17 perceived environmental uncertainty is often associated with the increased scanning of the  
18  
19 organizational environment that is one of the key components of strategic planning (Daft,  
20  
21 Sormunen and Parks 1988; Ebrahimi, 2000). As a result, our third hypothesis is:

22  
23  
24  
25 **H3.** *Stakeholder uncertainty* will strengthen the relationship between formal strategic planning  
26  
27 and strategy implementation success.  
28

29  
30  
31  
32  
33  
34  
35  
36 The model informing our investigation is depicted in Figure 1. It posits that formal strategic  
37  
38 planning has a direct influence on strategy implementation success, and that this relationship is  
39  
40 mediated by managerial involvement and moderated by stakeholder uncertainty. The variables  
41  
42 included in the model have been of interest to many researchers which increases the scope for  
43  
44 comparing the findings of our study with those of previous investigations. The study model also  
45  
46 incorporates four control variables, which are associated with three types of context, namely,  
47  
48 resource slack, organization size (organization), environmental favorability (environment) and  
49  
50 strategic planning expertise (managerial capabilities).  
51  
52

53  
54  
55 -----  
56 Insert Figure 1 about here  
57 -----  
58

## Method

### Data Collection and Sample

The context for our study is the Canadian public sector. Canada has a three-tier government structure, consisting of federal, provincial, and municipal levels. The three levels account for approximately 35, 45, and 20 percent of the total governmental expenditures, respectively, and all government expenditures are approximately 40 percent of the Gross Domestic Product of Canada (Rosen et al., 2008). At the federal level, the Government of Canada consists of departments and more autonomous agencies, whose authorities are stipulated in their respective federal statutes. Canada follows the principle of federalism, whereby political power is divided in the *Constitution Act* between the federal government and the ten provincial governments (Joseph, 2001), with each level being responsible for relatively distinct services. Although the provincial governments receive transfer payments from the federal government to finance some of their services, they also have the authority to levy their own provincial income taxes and sales taxes on goods and services.

Historically, there has been a sharp increase in provincial government expenditures relative to the total government expenditures (Rosen et al., 2008), indicating an increasing decentralization trend. Canadian municipalities are under the provincial jurisdiction, with their authorities granted by the provincial laws of each province (Joseph, 2001). The majority of funding for municipalities comes from local property taxes, with very little funding from the provinces, often resulting in financial pressures (Noe and Ross, 2004). Given the significant size of the Canadian public sector, and increased public pressures for accountability and transparency (Pollitt and Bouckaert, 2004), effective strategy formulation and implementation are important at all three levels.

1  
2  
3 An online survey of senior public administrators in Canadian public organizations was  
4 conducted during May - June, 2012. Survey participants were identified from the “Governments  
5 of Canada” and “Canadian Almanac and Directory” online databases accessible through the  
6 “Canada’s Information Resource Centre” data portal. In some cases, participant information was  
7 confirmed or supplemented with information from other sources, for example, organizational  
8 websites. Targeted participants were senior public officials with responsibilities for strategic  
9 planning and priority setting in organizations in which English was identified as the primary  
10 language, and for whom e-mail addresses were available.  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21

22 A structured online questionnaire was used to collect data from all three major levels of  
23 Canadian governments. It was organized into four parts: strategic planning and priority setting,  
24 environment and resources, organizational and participant profile, and space for optional  
25 comments. The online survey was administered through an independent Canadian web survey  
26 host provider. Hyperlinks to the survey and the detailed cover letter were inserted into  
27 individually-addressed invitation messages sent through the account established on the survey  
28 host provider’s website. In designing the online survey, close attention was paid to the easiness  
29 of navigation through the survey, readability of the questions, and pleasing professional  
30 appearance. For example, the survey design allowed respondents to answer questions in any  
31 order, and save and modify partially completed responses. The respondents were assured  
32 anonymity and confidentiality of their responses, and they could unsubscribe from follow-up  
33 mailings. The research protocol was approved by the research ethics committee of the Canadian  
34 university which facilitated the conducting of the survey.  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51

52 A total of 1,548 invitations to potential respondents (out of 1,739 names on the initial  
53 mailing list) were successfully delivered via e-mail, after disregarding a few duplicate names  
54  
55  
56  
57  
58  
59  
60

1  
2  
3 detected by the survey host software and undeliverable e-mails. The initial mail-out was  
4 followed by two rounds of reminder e-mails using the same procedures. A total of 222  
5 individuals answered at least some questions and 191 substantially completed the entire survey  
6 by the closing date for a usable response rate of 12 percent. In the case of missing responses to a  
7 few items on a few questionnaires, the analysis is based on the number of completed responses.  
8 The number of participating organizations is 180 or 16 percent of the total of 1,133 organizations  
9 contacted. Multiple respondents were sought from selected organizations to allow the evaluation  
10 of inter-rater reliability. The sample included two respondents from each of 11 organizations. A  
11 profile of participating organizations is presented in Table 1.  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23

24 The survey participants represent organizations in provincial, municipal, and federal  
25 government sectors and, in smaller numbers, in education, health care, and other public agencies.  
26 The number of responses received from each sector is consistent with the number of mail-outs to  
27 each sector. In addition, the proportions of the organizations in the study are roughly  
28 representative of the sizes of the three main sectors (federal, provincial, and municipal) at the  
29 time of the study. This suggests that the study results could be generalizable to the Canadian  
30 public sector. The number of full-time employees in the organizations ranges from 10 to 35,000,  
31 with the mean of 1,696 and the median of 300 full-time employees. Close to 60 percent of the  
32 organizations are quite small with fewer than 500 employees. Approximately one half of the  
33 organizations were established more than 40 years ago, and one quarter of them had established  
34 strategic planning processes more than 20 years ago. The respondents held senior positions, for  
35 example, associate deputy minister, president, chief administrative officer, vice president, and  
36 executive director, with close to two thirds being male.  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60



-----  
Insert Table 1 about here  
-----

We examined nonresponse bias by separating our sample into two sub-samples, early (original mail-out within 3 weeks) and late (reminder mail-outs within the next 5 weeks) respondents, and performed t-tests on the responses of each sub-sample based on the number of employees and the sector. The two-sample t-tests were insignificant at the  $p < 0.05$  level, indicating no significant differences between the two samples. This may suggest that our sample is representative of the population surveyed, but it does not reveal whether or not the two groups of respondents may vary on some other characteristics.

## Measures

Most questions were based on 5-point Likert scales used in prior studies, with some minor adjustments made to wording to reflect the Canadian context. A few items in some questions were initially reverse coded. On the final online questionnaire, a few questions were slightly modified based on comments by two pretest participants (of 19 contacted), two research colleagues and two technical experts on substantive and/or technical matters. Table 2 presents the statements of our measures.

*Strategy implementation success.* We did not find a relevant measure for the success of implementing the strategic plan. Hence, on the basis of reviewing related research (e.g., Elbanna, Thanos and Colak, 2014; Ford, Sharfman and Dean, 2008; Miller, 1997) and our concept of implementation success, that showed “how well a strategic plan has been implemented”, we adapted our measure of strategy implementation success for the purposes of this study.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

*Formal strategic planning.* Considering related research (e.g., Armstrong, 1982; Hopkins and Hopkins, 1997; Song et al., 2011; Wheelen and Hunger, 2012), our concept of formal strategic planning as a set of activities and procedures that organizations use to develop their strategic plan, and the setting in which we conducted our study, namely, the Canadian public service organizations, a new measure of formal strategic planning was developed for the purposes of this study.

*Managerial involvement.* Two aspects of managerial involvement, namely, quantity and quality, have been recognized in the literature on the strategic planning process (Elbanna, 2008). Based on the arguments that quality of involvement reflects the degree to which managers at different organizational levels (Yasai-Ardekani and Haug, 1997) effectively influence strategic choices (Freeman, 1989), our new measure of managerial involvement gauges the quality of managerial involvement of top, middle and operations managers in the planning process.

*Stakeholder uncertainty.* Following Miller and Droge (1986), we used a three-item scale of stakeholder uncertainty. The third item was eliminated from the scale because its total correlation was under the cut-off point of 0.30 and hence the alpha coefficient of the scale was low (i.e. 0.65).

*Control variables.* We controlled for the effects of resource slack since it is widely argued that slack plays an important role in organizational behaviour (Bradley et al., 2011; Elbanna, 2012). Resource slack was measured with a scale of six items successfully developed and used by Elbanna (2012). Organization size was controlled because it has frequently been identified as a factor which can influence strategy processes and outcomes (Titus, Covin and Slevin 2011). In order to more fully specify our study model of implementation success, we followed Dean and Sharfman (1996) and attempted to control for the impact of environmental

1  
2  
3 favorability on the strategy implementation success. The measure of favorability was adapted  
4  
5 from Dean and Sharfman (1996).  
6  
7

8 Scholars have argued that strategic planning expertise is a critical influence on formal  
9  
10 strategic planning (Hopkins and Hopkins, 1997) and organizational performance (Steiner, 1979).  
11  
12 Following Hopkins and Hopkins (1997), strategic planning expertise was measured. Including  
13  
14 the above control variables contributed to developing a more complete model to accurately  
15  
16 assess the impact of our independent variables, namely, formal strategic planning and managerial  
17  
18 involvement, on the success of strategy implementation.  
19  
20  
21

22 -----  
23  
24 Insert Table 2 about here  
25  
26 -----  
27  
28  
29

### 30 **Measurement of Validity and Reliability**

31

32 Scale reliability was evaluated using Cronbach's alpha. The results of alpha coefficients range  
33  
34 between 0.80 and 0.88 for all scales suggesting a very satisfactory degree of internal consistency.  
35  
36 The average variance extracted (AVE) does not go below the recommended value of 0.50 (Hair  
37  
38 et al., 1995). This shows the convergent validity of the study constructs. Problems of memory  
39  
40 failure were mitigated by 1) studying the current practices of strategic planning and priority  
41  
42 setting in the sampled organizations; 2) collecting data from managers of organizational units  
43  
44 who are supposed to have intimate knowledge of the survey questions. This study collected  
45  
46 questionnaires from multiple informants in 11 organizations. An inter-rater reliability analysis  
47  
48 using the Kappa statistic was performed to determine consistency among different raters in each  
49  
50 case. In eight out of the eleven cases, Kappa was found to range between 0.32 and 0.82 with an  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3 average of 0.54, which shows fair to substantial agreement across the answers of multiple  
4 informants (Landis and Koch, 1977), while in three cases, it shows agreement of 0.17 and less.  
5  
6

7  
8 Problems of bias and distortion were mitigated by 1) assuring the strict confidentiality of  
9 responses; 2) explaining how the study can help public-sector managers better understand  
10 strategic planning practices and how they can contribute to sound policy decisions; 3) promising  
11 a summary report of the results to all participants; 4) reversing scale anchors in several places; 5)  
12 using objective data to measure one of our variables, namely, organization size; 6) further  
13 diminishing common method concerns by examining complex relationships, namely, moderation  
14 and mediation hypotheses, which respondents are unlikely able to guess (Elbanna, 2012).  
15 Finally, an unrotated factor analysis of five focal variables resulted in a five-factor solution, as  
16 expected. Hence, common method bias is unlikely to be a concern in our data since a single  
17 factor did not emerge (Podsakoff and Organ, 1986).  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30

### 31 **Empirical Analysis and Results**

32  
33 The means, standard deviations, Cronbach's alphas, average variance extracted (AVE) and  
34 correlations among the variables, are presented in Table 3. All the correlation coefficients  
35 among independent variables are below 0.60. Moreover, tolerance is well above 0.10 and VIF is  
36 well below 10 for all regression models. These results do not suggest multicollinearity problems.  
37 The relatively low to moderate correlations provided evidence of discriminant validity.  
38  
39  
40  
41  
42  
43  
44  
45

46 Following Anderson and Gerbing (1988), we purified the measures by assessing their  
47 validity and unidimensionality. After performing the exploratory factor analysis, a useful  
48 technique for scale construction, a subsequent confirmatory factor analysis (CFA) was conducted  
49 to assess the resulting scales and verify the validity and unidimensionality of the study measures.  
50 Adequate convergent validity for the items was established since all item measures had  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3 standardized factor loadings of more than 0.50 with one exception only (0.43). The results  
4  
5 indicate the good fit of the confirmatory measurement model by different indices ( $\chi^2 = 272.30$ ,  
6  
7 degrees of freedom [df] = 197,  $\chi^2/df = 1.38$ , IFI = 0.96, TLI = 0.93, CFI = 0.96, RMSEA = 0.05,  
8  
9 confidence interval [CI] = 0.03–0.06, PClose = 0.67).  
10  
11

12 -----  
13  
14 Insert Table 3 about here  
15  
16 -----  
17  
18

### 19 20 **Hypotheses Testing**

21  
22 The next step in analyzing the data was to test the hypothesized model using regression analysis  
23  
24 (see Table 4 for results).  
25  
26

27 In order to examine the first hypothesis, we regressed strategy implementation success on  
28  
29 our first independent variable (formal strategic planning), and the five control and moderating  
30  
31 variables (resource slack, organization size, environmental favorability, strategic planning  
32  
33 expertise and stakeholder uncertainty). The first hypothesis that there will be a positive  
34  
35 relationship between formal strategic planning and strategy implementation success was  
36  
37 supported in the hypothesized direction ( $\beta = 0.44$ ,  $p < 0.01$ ) (Model 1 in Table 4). This model  
38  
39 explains 43 percent of the variance of the dependent variable ( $p < 0.01$ ). Following Elbanna and  
40  
41 Child (2007), hierarchical regression was used in order to examine the relative importance of  
42  
43 planning in predicting the success of strategy implementation. Two equations were generated.  
44  
45 First, strategy implementation success was regressed against the five control and moderating  
46  
47 variables. Formal strategic planning was then added into the equation. The addition of formal  
48  
49 planning to the Model with the five control and moderating variables in the next step added  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3 almost 14 percent ( $p < 0.01$ ) to the explained variance of strategy implementation success which  
4  
5 provides additional support to the first Hypothesis.  
6  
7

8 Hypothesis 2 that the effects of formal strategic planning on strategy implementation  
9 success are mediated by managerial involvement was examined following Baron and Kenny  
10 (1986). Model 1 in Table 4 shows that strategic planning significantly affects strategy  
11 implementation success, the dependent variable ( $\beta = 0.44, p < 0.01$ ) and hence achieving the first  
12 condition for the existence of a mediating effect. Model 2 was statistically significant (R-square  
13 = 0.47,  $p < 0.01$ ), and shows that strategic planning significantly affects the mediator variable,  
14 managerial involvement ( $\beta = 0.41, p < 0.01$ ) which achieves the second condition. The  
15 regression shows that when both formal strategic planning and managerial involvement are  
16 incorporated in the same model (Model 3 in Table 4), the results were significant (R-square =  
17 0.47,  $p < 0.01$ ) and the explained variance in strategy implementation success increased  
18 significantly ( $\Delta R^2 = 0.04, p < 0.01$ ). Although we found that both variables – formal strategic  
19 planning ( $\beta = 0.32, p < 0.01$ ) and managerial involvement ( $\beta = 0.28, p < 0.01$ ) were significantly  
20 related to strategy implementation success, the explanatory value of strategic planning went  
21 down when the mediating variable, managerial involvement, was included in the regression as  
22 shown in Model 3 ( $\beta = 0.32, p < 0.01$ ) compared to its explanatory value in Model 1 ( $\beta = 0.44, p$   
23  $< 0.01$ ). This supports the third and fourth conditions for the existence of a mediating effect. In  
24 conclusion, the above results show a partial mediation effect of managerial involvement since the  
25 impact of formal strategic planning on strategy implementation success was reduced when the  
26 mediator, managerial involvement, was controlled for in Model 3. Hence, Hypothesis 2 is  
27 supported.  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3 Hierarchical moderated regression was used to examine Hypothesis 3 concerning the  
4 moderating effect of stakeholder uncertainty on the relationship between formal strategic  
5 planning and strategy implementation success. Prior to the creation of the interaction terms, we  
6 mean-centered the independent variable (i.e., strategic planning) and the moderator (i.e.,  
7 stakeholder uncertainty) based on the recommendation of Aiken and West (1991). As  
8 demonstrated in Table 4 (Model 4), stakeholder uncertainty positively moderates the relationship  
9 between formal planning and strategy implementation success since the interaction term  
10 produced a significant  $\Delta R^2$  ( $\Delta R^2 = 0.02, p < 0.01; \beta = 0.15, p < 0.01$ ). To illustrate the nature of  
11 the interaction, we plotted the equation at high (i.e., 1 SD above the mean value) and low values  
12 (i.e., 1 SD below the mean value) (Aiken and West, 1991). As depicted in Figure 2, at high levels  
13 of stakeholder uncertainty the relationship between strategic planning and strategy  
14 implementation success becomes stronger ( $\beta = 0.36, t = 5.66, p < 0.01$ ), compared to low levels ( $\beta$   
15 = 0.18,  $t = 2.77, p < 0.01$ ). These results lend empirical support to Hypothesis 3 that the higher  
16 the level of stakeholder uncertainty, the greater the positive impact that formal strategic planning  
17 will exert on strategy implementation success.  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38

39 -----  
40 Insert Table 4 about here  
41 -----  
42 -----  
43 -----  
44 -----  
45

46 Insert Figure 2 about here  
47 -----  
48  
49 -----  
50

## 51 Discussion

52  
53  
54 Strategy implementation is widely held to be a critical element of the strategy process and hence,  
55 to fully understand the connections between strategy process and public service outcomes,  
56  
57  
58  
59  
60

1  
2  
3 scholars should also assess how well strategies are implemented (Bryson, Berry and Yang, 2010;  
4 Poister, Pitts and Hamilton, 2010). Our study contributes to filling this gap in the literature by  
5 providing scholars and practitioners of strategic management in the public sector with some  
6 important insights into strategy implementation and pointing to the variables which may  
7 influence its success in Canada's public organizations. First, we provide evidence showing the  
8 impact of strategic planning on strategy implementation success, which lends support to our first  
9 hypothesis about the value of formal planning. Although this proposition has been widely  
10 discussed, it is rarely examined in the public sector, in which managerial strategic planning  
11 follows, and is based on, public policy decisions made by elected officials. A major strength of  
12 strategic planning is its ability to reduce uncertainty by inducing managers to look ahead and  
13 forecast the future, at least within the political term of the current government. It in turn helps to  
14 foresee changes, examine their impact, and develop appropriate responsive actions. It also helps  
15 in coordinating and integrating efforts, knowledge, and capabilities across the organization,  
16 which can contribute to successful strategy implementation.  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35

36 However, a central concern in the strategy process literature has been the relative merits  
37 of planned and emergent approaches in strategy formulation (Andrews et al., 2011; Elbanna and  
38 Child, 2007). Our findings indicate that a planned or formal approach to strategy enhances its  
39 implementation in traditional bureaucratic public organizations, which typically operate within  
40 constraints posed by prior public policy decisions and short-term political orientation. This  
41 finding differs from the prior arguments of several scholars who advocate decentralized and  
42 emergent strategy formulation (e.g., Mintzberg, 2000). The difference between our results and  
43 some in prior research may be explained in part by methodological and structural differences. As  
44 pointed out by Poister et al. (2013), the impact of strategic planning may vary considerably  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60



1  
2  
3 depending on the specification of the dependent variables, namely, the dimensions of the  
4 organizational outcomes under observation. For example, since strategy implementation is  
5 amenable to managerial control and highly affected by strategy formulation, formal strategic  
6 planning may be important, particularly in public organizations where outcomes are typically  
7 difficult to control and manage. As such, effective control in the public sector may be best  
8 exercised *ex ante*, that is, through formal planning, instead of *ex post* through organizational  
9 performance measurement. Hence, it is not surprising that formal strategic planning would lead  
10 to superior strategy implementation in public organizations.  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21

22 Second, another contribution of this research is that it leads to a better understanding of  
23 the connection between strategic planning and strategy implementation success in public  
24 organizations. In particular, it shows that, in addition to its direct effect, formal planning has an  
25 indirect effect on strategy implementation in part through the mediating role of managerial  
26 involvement which provides support to our second hypothesis. This finding reflects Canadian  
27 practices, as department managers are responsible for implementing public policy and priorities  
28 approved at political levels, that is, managerial involvement is essential to formal planning and  
29 implementation processes. Future research should examine the effects of other mediating  
30 variables, such as employee strategic alignment, organizational learning and flexibility, which  
31 may influence the planning-implementation relationship (e.g., Ouakouak and Ouedraogo, 2013).  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45

46 Third, the study supports our third hypothesis and shows that for public organizations  
47 operating in less stable or unstable environments, formal strategic planning can be especially  
48 beneficial for implementation under conditions of uncertainty. Environmental variables may  
49 moderate the planning-implementation relationship by strengthening its effects, as is the case in  
50 this study. Due to a large number of diverse stakeholders and their interdependency in public  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3 organizations, particularly in the decentralized Canadian public sector, stakeholder uncertainty is  
4 especially relevant. Nevertheless, the strategy-implementation relationship may also be  
5 moderated by other important variables in addition to stakeholder uncertainty; and hence future  
6 research needs to take into account the moderating effects of other environmental factors, such as  
7 economic uncertainty; environmental complexity; political uncertainty; and organizational  
8 factors, such as past performance and structure.  
9

### 17 **Implications and conclusion**

20 This study carries some implications for practicing public managers. First, although they are not  
21 directly involved in public policy decisions, they should know that their efforts to strategically  
22 plan for their organizations is neither a waste of time nor resources, but can, in fact, lead to  
23 successful strategy implementation. This is an indication that formal strategic planning is  
24 beneficial to public organizations. Second, the fact that strategic planning has a positive and  
25 significant impact on managerial involvement in strategic planning may mean that one of the  
26 outcomes of this involvement is the enhancement of managers' commitment to and alignment  
27 with public policy and organizational priorities, in addition to helping managers to acquire the  
28 knowledge necessary for strategy implementation, which in turn increases the possibility of its  
29 success. In other words, to get the full benefit of formal strategic planning, public managers  
30 should conduct it in a way that enhances the effective involvement of managers in its process.  
31 Third, managers should exercise caution when tempted to assume only a direct relationship  
32 between strategy formulation and implementation because this relationship may be moderated by  
33 other factors such as stakeholder uncertainty.  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52

53 Our study has some inherent limitations that should be kept in mind when interpreting  
54 and applying our results. **The first important limitation is our low survey response rate. Another**  
55  
56  
57  
58  
59  
60

1  
2  
3 **potential** limitation concerns the inherent subjectivity and possible bias of the items used in our  
4  
5 survey. Moreover, the single respondent design requires caution in interpreting the results; and it  
6  
7 would have been preferable to have had multiple respondents in order to minimize the level of  
8  
9 systematic response bias. **Fourth**, the sampled organizations belong to variant government  
10  
11 sectors, e.g., federal, provincial and municipal. Hence, the same hypotheses could be examined  
12  
13 in sub-samples, controlling for type of sector. In addition, due to data limitations we are unable  
14  
15 to identify which specific stakeholder groups are the source of uncertainty on this occasion.  
16  
17 Studies that compared the moderating influence of different groups on the planning-  
18  
19 implementation success relationship would be extremely valuable, particularly those that cast  
20  
21 light on the relationship between bureaucrats and politicians.  
22  
23  
24  
25

26  
27 Future research could enhance the understanding of strategic management specifically in  
28  
29 public organizations in several ways. First, researchers can examine the impact of blending  
30  
31 formal strategic planning with logical incrementalism on strategy implementation success and  
32  
33 search for the optimal approach to use them in practice, which can further develop management  
34  
35 theory (see, Elbanna and Child, 2007; Poister et al., 2013). Second, it is beneficial for future  
36  
37 research to carefully consider other determinants of strategy implementation success, since it is  
38  
39 largely influenced by a host of variables, some reasonably controllable by public organizations,  
40  
41 e.g., organizational, capabilities, systems and processes, and others mostly beyond their control,  
42  
43 e.g., economic conditions and political instability.  
44  
45  
46  
47  
48

49 In conclusion, the research presented in this study has contributed to the knowledge of  
50  
51 strategic management and theories of strategy implementation in general and concludes that what  
52  
53 public managers do, in terms of strategic planning practices, **matters for their organizations and**  
54  
55 **the implementation of their strategies.**  
56  
57  
58  
59  
60

Table 1: Profile of participating organizations

Characteristic	Number	Percentage*
<b>A. Sector</b>		
1. Federal government	13	6.8
2. Provincial government	83	43.5
3. Local government	58	30.4
4. Government-controlled agency or board	11	5.8
5. Education	8	4.2
6. Health care	5	2.6
7. Other	<u>13</u>	<u>6.8</u>
Total	<u>191</u>	<u>100.0</u>
<b>B. Size (number of employees)</b>		
1. Less than 500	110	58.2
2. 500- 999	31	16.4
3. 1,000-4,999	30	15.9
4. 5,000 or greater	<u>18</u>	<u>9.5</u>
Total	<u>189</u>	<u>100.0</u>
<b>C. Age of organization</b>		
1. Less than 10 years	27	14.2
2. 11 – 20 years	30	15.8
3. 21 – 30 years	13	6.8
4. 31 – 40 years	19	10.0
5. Greater than 40 years	<u>101</u>	<u>53.2</u>
Total	<u>190</u>	<u>100.0</u>
<b>D. Establishment of strategic planning processes</b>		
1. Less than 5 years ago	34	18.1
2. 6 – 10 years ago	45	24.0
3. 11 – 15 years ago	41	21.8
4. 16 – 20 years ago	22	11.7
5. Over 20 years ago	<u>46</u>	<u>24.5</u>
Total	<u>188</u>	<u>100.0</u>

\*The percentages may not add to 100 percent due to rounding off.

Table 2: Research measures

<p><i>Strategy implementation success</i></p> <ul style="list-style-type: none"> <li>- To what extent did your organization properly implement its strategic plan? (minimal extent [1], great extent [5])</li> <li>- How well has each implementation task been completed? (very poorly [1], very well [5])</li> <li>- How important has each implementation task been for this strategic plan? (minimally important [1], very important [5])</li> <li>- In general, how satisfied are you with the implementation of this strategic plan? (very satisfied [1], very unsatisfied [5]) (reverse coded)</li> </ul>
<p><i>Formal strategic planning</i> (minimal emphasis [1], great emphasis [5])</p> <ul style="list-style-type: none"> <li>- Determining the organization's mission</li> <li>- Developing major long-term objectives</li> <li>- Assessing the external environment</li> <li>- Assessing the internal environment</li> <li>- Generating strategic options</li> <li>- Evaluating strategic options</li> <li>- Gaining commitment to the strategic plan</li> </ul>
<p><i>Managerial involvement</i> (highly ineffective participation [1], highly effective participation [5])</p> <ul style="list-style-type: none"> <li>- How would you describe the participation of top management in developing your strategic plan?</li> <li>- How would you describe the participation of middle managers in developing your strategic plan?</li> <li>- How would you describe the participation of operations managers in developing your strategic plan?</li> </ul>
<p><i>Stakeholder uncertainty</i> (strongly disagree [1], strongly agree [5])</p> <ul style="list-style-type: none"> <li>- Our stakeholders' preferences are fairly easy to forecast</li> <li>- Actions of our stakeholders are quite easy to predict</li> <li>- Our organization has to frequently change its services and practices to keep up with stakeholders' expectations</li> </ul>
<p><i>Resource slack:</i> (strongly disagree [1], strongly agree [5])</p> <ul style="list-style-type: none"> <li>- It is very difficult to get approval for a project that is worth doing. (reverse coded)</li> <li>- In terms of the availability of money, our organization's situation is tight. (reverse coded)</li> <li>- Our organization has difficulty obtaining sufficient funds to deliver its services. (reverse coded)</li> <li>- Our organization has difficulty obtaining sufficient funds to introduce new services. (reverse coded)</li> <li>- Our organization has difficulty in implementing its strategic plan because of the lack of the required resources. (reverse coded)</li> <li>- Our organization has easy access to resources for development and improvement.</li> </ul>
<p><i>Origination size:</i> The number of full-time employees as reported by the respondents</p>
<p><i>Environmental favorability</i> (strongly disagree [1], strongly agree [5])</p> <ul style="list-style-type: none"> <li>- We faced negative unanticipated environmental conditions during the implementation of our strategic plan, which hindered its success. (reverse coded)</li> </ul>
<p><i>Strategic planning expertise</i> (very Low [1], very high [5]) How do you evaluate the level of expertise that exists to perform strategic planning in your organization?</p>

Table 3: Descriptive statistics and correlations

Variables	Mean	S.D.	Alpha	AVE	1	2	3	4	5	6	7	8
1. Strategy implementation success	3.75	0.71	0.80	0.57	1							
2. Resource slack	2.57	0.78	0.85	0.50	0.38**	1						
3. Formal strategic planning	3.85	0.90	0.88	0.50	0.59**	0.32**	1					
4. Managerial involvement	3.55	0.75	0.80	0.59	0.59**	0.34**	0.58**	1				
5. Stakeholder uncertainty	2.74	0.90	0.84	NA	-0.02	-0.03	0.02	0	1			
6. Organization size	1696	4459	NA	NA	-0.08	0.00	0.04	-0.14	0	1		
7. Environmental favorability	3.04	0.99	NA	NA	0.11	0.26**	0.11	0.10	-0.05	0.01	1	
8. Strategic planning expertise	3.59	0.92	NA	NA	0.44**	0.20**	0.44**	0.51**	-0.10	0.02	0.06	1

\*\* Correlation is significant at the 0.01 level; \* Correlation is significant at the 0.05 level.

Table 4: Results of regression analysis

Variables	Model 1 Strategy implementation success regressed on predictors	Model 2 The mediator (managerial involvement) regressed on predictors	Model 3 Strategy implementation success regressed on predictors and the mediator	Model 4 Strategy implementation success regressed on predictors, the mediator and the interaction term of moderator (stakeholder uncertainty)
Formal strategic planning	0.44**	0.41**	0.32**	0.34**
Stakeholder uncertainty	-0.01	0.03	-0.01	-0.01
Resource slack	0.20**	0.15*	0.16**	0.18**
Organization size	-0.10	-0.17**	-0.06	-0.07
Environmental favorability	-0.01	0.00	-0.01	-0.00
Strategic planning expertise	0.21**	0.31**	0.12	0.10
Managerial involvement			0.28**	0.27**
Stakeholder uncertainty × formal strategic planning				0.15**
$R^2$	0.43**	0.47**	0.47**	0.49**
Adjusted $R^2$	0.41**	0.45**	0.45**	0.47**
$\Delta R^2$ from Model 1 to Model 3			0.04**	
$\Delta R^2$ from Model 3 to Model 4				0.02**

\*\* Significant at the 0.01 level; \* significant at the 0.05 level.

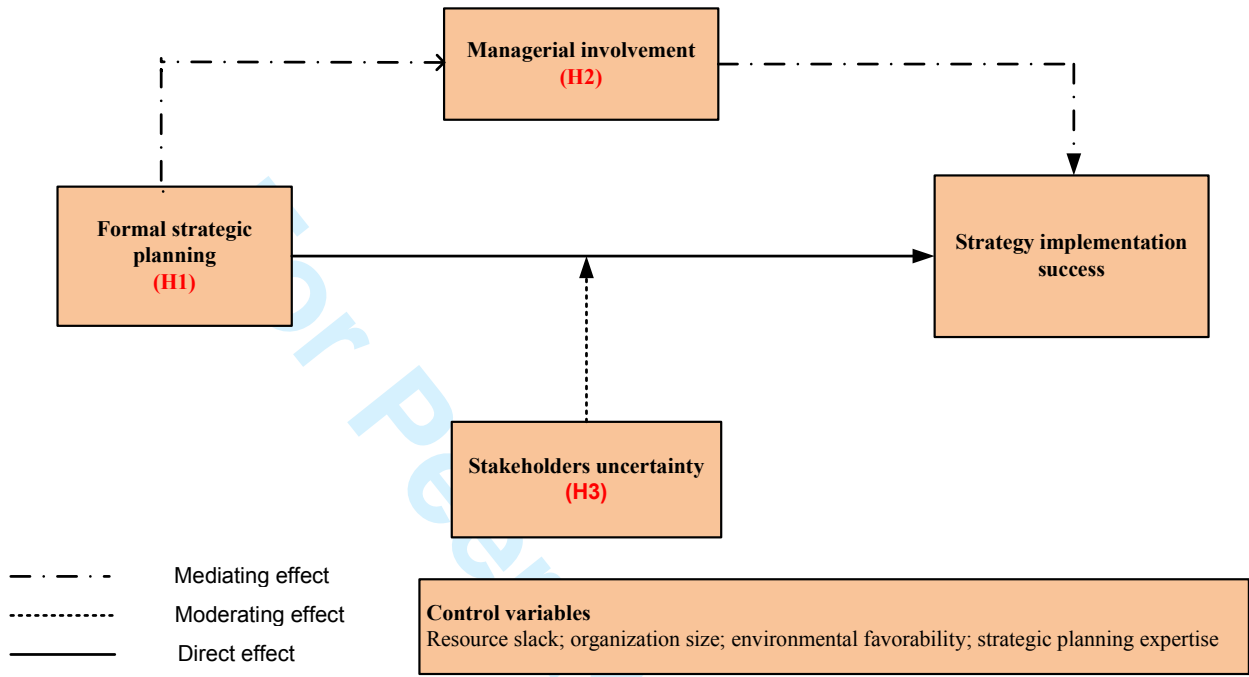


Figure 1: Research model



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

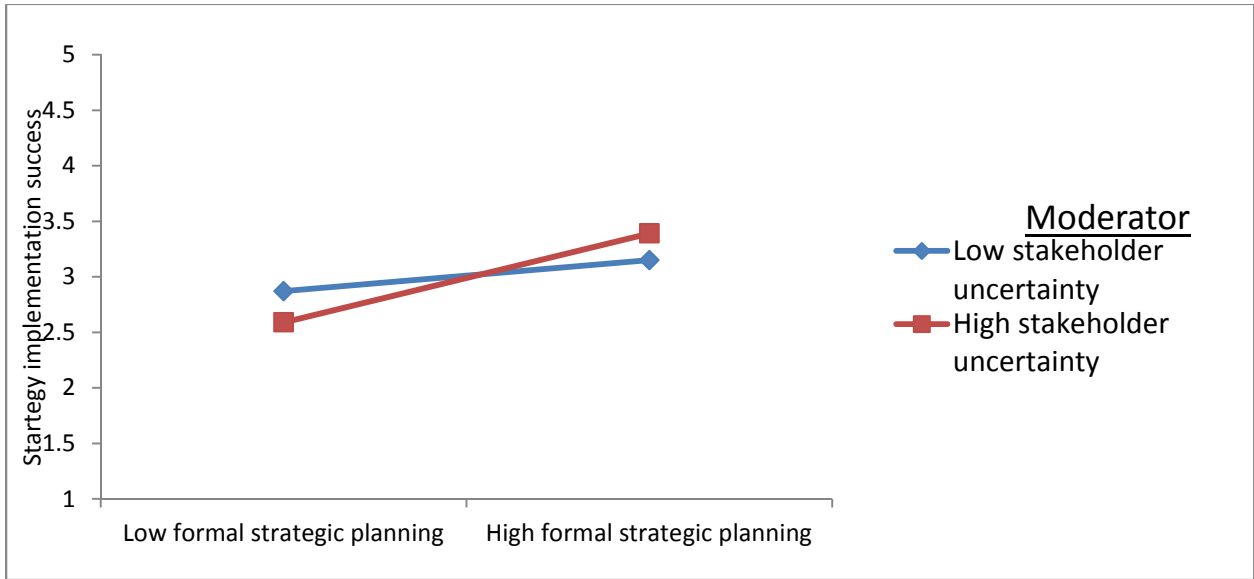


Figure 2: Interaction plot

## References

- 1  
2  
3  
4  
5  
6 Aiken, L. S., and West, S. G. (1991) *Multiple Regression: Testing and Interpreting Interactions*.  
7 London: Sage.
- 8 Andersen, S. (2008) The Impact of Public Management Reforms on Student Performance in  
9 Danish Schools. *Public Administration*, 86:2 pp541-558
- 10 Anderson, J., and Gerbing, W. (1988) Structural Equation Modelling in Practice: A Review and  
11 Recommended Two Stage Approach. *Psychological Bulletin*, 27:1 pp5-24
- 12 Andrews, R., Boyne, G., Law, J., and Walker, R. (2009) Strategy Formulation, Strategy Content  
13 and Performance: An Empirical Analysis. *Public Management Review*, 11:1 pp1- 22
- 14 Andrews, R., Boyne, G., Law, J., and Walker, R. (2011) Strategy Implementation and Public  
15 Service Performance. *Administration and Society*, 43:6 pp643- 671
- 16 Armstrong, J. S. (1982) The Value of Formal Planning for Strategic Decisions: Review of  
17 Empirical Research. *Strategic Management Journal*, 3:3 pp197-211
- 18 Baron, R. M., and Kenny, D. A. (1986) The Moderator-mediator Variable Distinction in Social  
19 Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of*  
20 *Personality and Social Psychology*, 51:6 pp1173-1182
- 21 Bossidy, L., and Charan, R. (2011) *Execution: The Discipline of Getting Things Done*. London:  
22 Random House.
- 23 Boyne, G.A. (2010) Strategic Planning. In: R. Ashworth, G.A. Boyne and T. Entwistle (eds),  
24 *Public Service Improvement: Theories and Evidence*. Oxford: Oxford University Press.
- 25 Boyne, G.A., and Gould-Williams, J. (2003) Planning and Performance in Public Organizations.  
26 *Public Management Review*, 5:1 pp115-132
- 27 Bradley, S. W., Wiklund, J., and Shepherd, D. A. (2011) Swinging a Double-edged Sword: The  
28 Effect of Slack on Entrepreneurial Management and Growth. *Journal of Business*  
29 *Venturing*, 26:5 pp537-554
- 30 Bryson, J. M. (2010) The Future of Public and Nonprofit Strategic Planning in the United States.  
31 *Public Administration Review*, 70:S1 ppS255-S267
- 32 Bryson, J. M. (2011) *Strategic Planning for Public and Nonprofit Organizations*, 4th Edition,  
33 New York: Wiley
- 34 Bryson, J.M., Berry, F.S., and Yang, K. (2010) The State of Public Strategic Management  
35 Research: A Selective Literature Review and Set of Future Directions. *American Review*  
36 *of Public Administration*, 40:5 pp495-521
- 37 Bryson, J. M., Crosby, B.C., and Bryson, J. K. (2009) Understanding Strategic Planning and the  
38 Formulation and Implementation of Strategic Plans as a Way of Knowing: The  
39 Contributions of Actor-Network Theory. *International Public Management Journal*, 12:2  
40 pp172-207
- 41 Camillus, J.C. (1975) Evaluating the Benefits of Formal Planning Systems. *Long Range*  
42 *Planning*, 8:3 pp33-40
- 43 Canadian Institute of Chartered Accountants (2004) *Accounting Bases used in Canadian*  
44 *Government Budgeting: Research Report*. Toronto: Canadian Institute of Chartered  
45 Accountants.
- 46 Capon, N., Farley, J., and Hulbert, J. (1987) *Corporate Strategic Planning*. New York: Columbia  
47 University Press.
- 48 Carpenter, D. P. (2001) *The Forging of Bureaucratic Autonomy: Reputations, Networks and*  
49 *Policy Innovations in Executive Agencies, 1862-1928*. Princeton, NJ: Princeton  
50 University Press.
- 51  
52  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 Collier, N., Fishwick, F., and Floyd, S. (2004) Managerial Involvement and Perceptions of  
4 Strategy Process. *Long Range Planning*, 37:1 pp67-83
- 5  
6 Daft, R.L., Sormunen, J., and Parks, D. (1988) Chief Executive Scanning, Environmental  
7 Characteristics, and Company Performance: An Empirical Study. *Strategic Management*  
8 *Journal*, 9:2 pp123-139
- 9  
10 Dean, J. W., and Sharfman, M. P. (1996) Does Decision Process Matter? A Study of Strategic  
11 Decision Making Effectiveness. *Academy of Management Journal*, 39:2 pp368-396
- 12  
13 Ebrahimi, B.P. (2000) Perceived Strategic Uncertainty and Environmental Scanning Behavior of  
14 Hong Kong Chinese Executives. *Journal of Business Research*, 49 pp67-77
- 15  
16 Eisenhardt, K. (1989) Making Fast Strategic Decisions In High-Velocity Environments.  
17 *Academy of Management Journal*, 32:3 pp543-576
- 18  
19 Elbanna, S. (2008) Planning and Participation as Determinants of Strategic Planning  
20 Effectiveness: Evidence from the Arabic Context. *Management Decision*, 46:5 pp779-  
21 796
- 22  
23 Elbanna, S. (2012) Slack, Planning, and Organizational Performance: Evidence from the Arab  
24 Middle East. *European Management Review*, 9:2 pp99-115
- 25  
26 Elbanna, S., and Child, J. (2007) Influences on Strategic Decision Effectiveness: Development  
27 and Test of an Integrative Model. *Strategic Management Journal*, 28:4 pp431-453
- 28  
29 Elbanna, S., Thanos, I., and Colak, M. (2014) An Exploratory Study of the Determinants of the  
30 Quality of Strategic Decision Implementation in Turkish Industrial Firms. *Journal of*  
31 *General Management*, 40:2 pp 27-46
- 32  
33 Floyd, S., and Wooldridge, B. (1994) Dinosaurs or Dynamos: Recognizing Middle  
34 Management's Strategic Role. *Academy of Management Executive*, 8:4 pp47-57
- 35  
36 Floyd, S., and Wooldridge, B. (1997) Middle Management's Strategic Influence and  
37 Organizational Performance. *Journal of Management Studies*, 34:3 pp464-485
- 38  
39 Ford, C. M., Sharfman, M. P., and Dean, J. W. (2008) Factors Associated with Creative Strategic  
40 Decisions. *Creativity and Innovation Management*, 17:3 pp171-185
- 41  
42 Freeman, E. B. (1989) Effectiveness of Strategic Planning: A Multidimensional View. *Academy*  
43 *of Management Best Papers Proceedings*, pp12-16. Washington DC.
- 44  
45 Furlong, S. (1998) Political Influence on the Bureaucracy: The Bureaucracy Speaks. *Journal of*  
46 *Public Administration Research and Theory*, 8:1 pp39-66
- 47  
48 Gatenby, M., Rees, C., Truss, C., Alfes, K., and Sloane, E. (forthcoming) Managing Change, or  
49 Changing Managers? The Role of Middle Managers in UK Public Service Reform.  
50 *Public Management Review*.
- 51  
52 Goodsell, C. F. (2011) *Mission Mystique: Belief Systems in Public Agencies*. Washington, DC:  
53 CQ Press.
- 54  
55 Hair, J. F., Anderson, R., Tatham, R., and Black, W. C. (1995) *Multivariate Data Analysis with*  
56 *Readings* (1st ed.). London: Prentice-Hall.
- 57  
58 Håkansson, D. D., Burton, R. M., Obel, B., and Lauridsen, J. T. (2012) Strategy Implementation  
59 Requires the Right Executive Style: Evidence from Danish SMEs. *Long Range Planning*,  
60 45:2-3 pp182-208
- 61  
62 Hambrick, D.C., and Cannella, A.A. (1989) Strategy Implementation as Substance and Selling.  
63 *Academy of Management Executive*, 3:4 pp278-285
- 64  
65 Hopkins, W. E., and Hopkins, S. A. (1997) Strategic Planning-Financial Performance  
66 Relationships in Banks: A Causal Examination. *Strategic Management Journal*, 18:8  
67 pp635-652

- 1  
2  
3 Hrebiniak, W. (2006) Obstacles to Effective Strategy Implementation. *Organizational Dynamics*,  
4 35:1 pp12-31  
5  
6 Hrebiniak, L. G., and Joyce, W. F. (1984) *Implementing Strategy*. New York: Macmillan.  
7  
8 Johnson, G. (2000) Strategy through a Cultural Lens. Learning from Managers' Experience.  
9 *Management Learning*, 31:4 pp403-426  
10  
11 Joseph, T. W. (2001) *Essentials of Canadian Politics and Government*. Toronto: Prentice Hall.  
12  
13 Landis, J. R., and Koch, G. G. (1977) The Measurement of Observer Agreement for Categorical  
14 Data. *Biometrics*, 33:1 pp159-174  
15  
16 Lenz, R.T., and Lyles, M. (1985) Paralysis by Analysis: Is your Planning System Becoming too  
17 Rational? *Long Range Planning*, 18:4 pp64-72  
18  
19 Miller, S. (1997) Implementing Strategic Decisions: Four Key Success Factors. *Organizational  
20 Studies*, 18:4 pp577-602  
21  
22 Miller, D. and Droge, C. (1986) Psychological and Traditional Determinants of Structure.  
23 *Administrative Science Quarterly*, 31:4 pp539-560  
24  
25 Mintzberg, H. (1979) *The Structuring of Organizations*. Englewood Cliffs, NJ: Prentice Hall.  
26  
27 Mintzberg, H. (2000) *The Rise and Fall of Strategic Planning*. New York: Free Press.  
28  
29 Montgomery, C. A. (2008) Putting leadership back into strategy. *Harvard Business Review*,  
30 January.  
31  
32 Moore, M. H. (1995) *Creating Public Value: Strategic Management in Government*. Cambridge,  
33 MA: Harvard University Press.  
34  
35 Noble, C. H. (1999) The Eclectic Roots of Strategy Implementation Research. *Journal of  
36 Business Research*, 45:2 pp119-134  
37  
38 Noe, P. C., and Ross, A. C. (2004) *The Law of Municipal Finance*. Markham: LexisNexis  
39 Canada.  
40  
41 Nutt, P. (1999) Surprising but True: Half the Decisions in Organizations Fail. *Academy of  
42 Management Executive*, 13:4 pp75-90  
43  
44 O'Toole, L. J. Jr., and Meier, K.J. (2015) Public Management, Context and Performance: In  
45 Quest of a More General Theory. *Journal of Public Administration Research and Theory*,  
46 25:1 pp237-256  
47  
48 Osborne, S.P. (2006) The New Public Governance? *Public Management Review*, 8:3 pp377-387  
49  
50 Ouakouak, M. L., and Ouedraogo, N. (2013) The Mediating Role of Employee Strategic  
51 Alignment in the Relationship between Rational Strategic Planning and Firm  
52 Performance: A European Study. *Canadian Journal of Administrative Sciences / Revue  
53 Canadienne des Sciences de l'Administration*, 30:3 pp143-158  
54  
55 Parsa, H.G. (1999) Interaction of Strategy Implementation and Power Perceptions in Franchise  
56 Systems: An Empirical Investigation. *Journal of Business Research*, 45:2 pp173-185  
57  
58 Pfeffer, J. (1987) A Resource Dependence Perspective on Interorganizational Relations. In: M.S.  
59 Mizruchi and M. Schwartz (eds), *Intercorporate Relations: The Structural Analysis of  
60 Business*: 22-55. Cambridge, UK: Cambridge University Press.  
Pfeffer, J., and Salancik, G. (1978) *The External Control of Organizations: A Resource  
Dependence Perspective*. New York: Harper and Row.  
Pinto, J. K., and Prescott, J. E. (1990) Planning and Tactical Factors in the Project  
Implementation Process. *Journal of Management Studies*, 27:3 pp305-327  
Podsakoff, P. M., and Organ, D. W. (1986) Self-reports in Organizational Research: Problems  
and Prospects. *Journal of Management*, 12 pp531-544

- 1  
2  
3 Poister, T. H. (2010) The Future of Strategic Planning in the Public Sector: Linking Strategic  
4 Management and Performance. *Public Administration Review*, 70:S1 ppS246-S254  
5  
6 Poister, T. H., Pitts, D. W., and Edwards, L. H. (2010) Strategic Management Research: A  
7 Review. *The American Review of Public Administration*, 40:5 pp522-545  
8  
9 Poister, T. H., Edwards, L. H., Pasha, O. Q., and Edwards, J. (2013) Does Performance  
10 Management Lead to Better Outcomes. *Public Administration Review*, 73:4 pp625–636  
11  
12 Poister, T. H., Edwards, L. H., Pasha, O. Q., and Edwards, J. (2013) Strategy Formulation and  
13 Performance: Evidence from Local Public Transit Agencies. *Public Performance and  
14 Management Review*, 36:4 pp585-615  
15  
16 Pollitt, C., and Bouckaert, G. (2004) *Public Management Reform: A Comparative Analysis* (2<sup>nd</sup>  
17 ed.). New York: Oxford University Press.  
18  
19 Rainey, H. G. (2009) *Understanding and Managing Public Organizations*, 4th ed. San Francisco,  
20 CA: Jossey Bass.  
21  
22 Rajagopalan, N., and Rasheed, A. M. A. (1995) Incremental Models of Policy Formulation and  
23 Non-incremental Changes: Critical Review and Synthesis. *British Journal of  
24 Management*, 6:4 pp289-302  
25  
26 Ridder, H-G., Bruns, H-J., and Spier, F. (2006) Managing Implementation Processes: The Role  
27 of Public Managers in the Implementation of Accrual Accounting - Evidence from Six  
28 Case Studies in Germany. *Public Management Review*, 8:1 pp87-118  
29  
30 Rosen, H. S., Wen, J-F., Snoddon, T., Dahlby, B., and Smith, R. S. (2008) *Public Finance in  
31 Canada* (3<sup>rd</sup> ed.). Toronto: McGraw-Hill Ryerson.  
32  
33 Song, M., Im, S., Bij, H. v. d., and Song, L. Z. (2011) Does Strategic Planning Enhance or  
34 Impede Innovation and Firm Performance? *Journal of Product Innovation Management*,  
35 28:4 pp503-520  
36  
37 Schweiger, D.M., and Sandberg, W.R. (1991) The Team Approach to Making Strategic  
38 Decisions. In: H.G. Glass (ed.), *Handbook of Business Strategy*: 1-20. Boston: Warren,  
39 Gorham and Lamont.  
40  
41 Steiner, G. S. (1979) *Strategic Planning*. New York: Free Press.  
42  
43 Titus, V. K., Covin, J. G., and Slevin, D. P. (2011) Aligning Strategic Processes in Pursuit of  
44 Firm Growth. *Journal of Business Research*, 64:5 pp446-453  
45  
46 Vining, A. R. (2011) Public Agency External Analysis Using the ‘Five Forces’ Framework.  
47 *International Public Management Journal*, 14:1 pp63-105  
48  
49 Wheelen, T. L., and Hunger, J. D. (2012) *Strategic Management and Business Policy: Toward  
50 Global Sustainability*. New Jersey: Prentice Hall.  
51  
52 Wooldridge, B., and Floyd, S. (1990) The Strategy Process, Middle Management Involvement  
53 and Organisational Performance. *Strategic Management Journal*, 11:3 pp231-241  
54  
55 Yasai-Ardekani, M., and Haug, R. S. (1997) Contextual Determinants of Strategic Planning.  
56 *Journal of Management Studies*, 34:5, pp 729-767  
57  
58  
59  
60

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

**Revision of Manuscript: RPXM-2014-0262:  
"Strategic planning and implementation success in public service organizations:  
Evidence from Canada"**

*Public Management Review*

Dear Professor Stephen Osborne

Thank you very much for giving us the opportunity to revise our paper. We would also like to thank the first reviewer for his/her positive feedback and the second reviewer for the additional useful suggestions to improve the paper. We have carefully responded to all suggestions of the second reviewer as shown below.

Thank you for your consideration; we look forward to hearing from you.

The authors

**Responses to Reviewer # 2 Comments**

1.	<p><b>Comment:</b></p> <p>I think this paper makes a noteworthy contribution to the literature. It gets at important questions about the linkages between strategic planning, managerial engagement, stakeholder uncertainty, and implementation success. It appears to be well and competently done. There are some issues around claimed validity and sample size that need to be acknowledged, but basically the paper is well done. This revision is much improved over the first version. I just have a few comments:</p> <p><b>Response:</b> Thanks for your positive feedback on our previous revision and encouragement. We have addressed the remaining issues as shown below.</p>
2.	<p><b>Comment:</b></p> <p>P. 7, lines 51-58. I would rephrase "...as situations arise; in other words, more formal procedures for dealing with eventualities in advance lead to more successful implementation."</p> <p><b>Response:</b> This is a very helpful comment. This sentence has now been rephrased in line with the reviewer's suggestion.</p>
3.	<p><b>Comment:</b></p> <p>P. 15, line 30. Pre-validated how? From what you say later, I don't know how to interpret this.</p> <p><b>Response:</b> We have edited this sentence to remove this confusion. Thanks!</p>

1 2 3 4 5 6 7 8 9 10	4. <b>Comment:</b> P. 15, line 53. What current measure of strategy implementation success?  <b>Response:</b> It refers to the measure we used in our study. We modified the concerned sentence to clearly show this meaning.
11 12 13 14 15 16 17 18	5. <b>Comment:</b> P. 24, line 56. An important potential limitation is your pretty low survey response rate. You need to acknowledge that here.  <b>Response:</b> Thank you for bringing our attention to address this important limitation. Please, see Page 24.
19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	6. <b>Comment:</b> P. 25, line 52. Add to the last sentence "... matters for their organizations and the implementation of their strategies."  <b>Response:</b> We have added the suggested words. Thank you.