

Clarifying strategic alignment in the public procurement process

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791

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Abstract

Purpose – While the need for strategic alignment in public management has been recognized, there is a lack of conceptual clarity to support its application in practice. Focusing on the specific field of public procurement, this paper clarifies and illustrates how the concept of strategic alignment can be applied when strategizing the public procurement process.

Design/methodology/approach – The current literature on strategic alignment in public procurement is critically reviewed to identify ambiguities that hamper its application in practice. Based on this review, an analytical framework is developed that conceptualizes strategic alignment as that between the procurement instruments used in a sourcing project and the corresponding higher-level strategies. The framework is empirically illustrated by applying it in a case study that reconstructs the procurement strategy for an innovation project.

Findings – Strategic alignment in the public procurement process can be demonstrated by identifying, explicating and logically linking reasoning and trade-off decisions on competing priorities across multiple levels and dimensions of strategy.

Originality/value – Although creating alignment between policy and public procurement practice is generally held to be important in the public management literature, it is only discussed on high levels of abstraction. This paper provides clarity by investigating alignment in greater detail.

Keywords Bid design, Procurement strategy, Strategic alignment, Strategy formation

Paper type Research paper

Introduction

Public procurement, the purchasing of goods, services and works by governments and state-owned enterprises, is a key economic activity. It represents approximately 12% of gross domestic product in OECD countries, ranging from 4.9% in Mexico to 19.5% in the Netherlands (OECD, 2019).

While public procurement is increasingly recognized as a potential strategic instrument and a lever for achieving government policy goals (OECD, 2019), there is a lack of evidence about how public procurement can contribute. Little is known about how procurement is implemented, what factors and actors determine its effectiveness and success and how public procurers deal with the often conflicting goals that they have to combine (Grandia and Meehan, 2017).

In particular, Grandia and Meehan (2017, p. 303) observe “a lack of alignment between policy and public procurement practice”. Although the need for alignment affects all government administrative functions, alignment in public procurement is particularly important because it has a significant impact in terms of public spending and value creation. Currently this can be illustrated by the attempts of governments worldwide to procure

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sufficient COVID-19 vaccine doses. It thus seems that creating alignment is vital if public procurement is to be used as an effective strategic policy tool.

However, despite its relevance, the concept of alignment is little studied in the public procurement literature. Although alignment between government policy and public procurement has been addressed in previous research (e.g. [Glas et al., 2017](#); [Patrucco et al., 2017a](#)), the application of this general concept in the specific context of public procurement has not been adequately clarified.

One major shortcoming in the limited literature on strategic alignment in public procurement is that the conceptualizations used hardly consider the public procurement process. This is remarkable given that public procurement is often defined by its operational process of acquiring goods, services and supplies ([OECD, 2019](#); [Patrucco et al., 2017b](#); [Thai, 2009](#)). This process has even been called “the ‘heart’ of the procurement system in public institutions, as its activities are the main determinants of final performance and can support or hinder policy-level decisions” ([Patrucco et al., 2017b](#), p. 252). Given that the procurement process is such a hallmark of public procurement, and that establishing strategic alignment is so important, it is vital to provide conceptual clarity and clear empirical examples of how the two concepts are related.

To address this shortcoming, the present paper takes a first research step by exploring how strategic alignment can be *demonstrated*. This focus is based on the assumption that the *creation* of strategic alignment should be viewed as a strategizing process that involves the “action, interaction and negotiation of multiple actors and the situated practices that they draw upon” ([Jarzabkowski et al., 2007](#), p. 7). While the alignment creation process may thus involve many aspects, identifying its outcome is probably more straightforward.

Further, to investigate the procurement process, this paper considers the strategic alignment between *procurement instruments* and *higher-level strategies*. As will be explained later, this interpretation of strategic alignment is similar to the private sector definition used by [Sogaard et al. \(2019, p. 161\)](#), who define it as “the consistency of purchasing strategies and activities with corporate objectives”.

Knowing how to demonstrate strategic alignment in the public procurement process is not only relevant for evidencing public procurement’s contribution to broader policy and government objectives. It is also relevant for public organizations aiming to evolve from strategic planning to strategic management. To actually realize strategic plans, public procurement needs to be aligned with these plans. From a public management perspective, such alignment makes public procurement an implementation activity and thus part of strategic management as defined by [Bryson and George \(2020\)](#). Despite this being an important perspective, most of the strategy implementation literature focuses only on performance measurement and management.

The paper is organized as follows. The next section provides a critical discussion on the conceptual clarity of strategic alignment in the public procurement literature. Key constructs from this, and from related fields of study, are subsequently used to develop an analytical framework for strategic alignment. Then, to illustrate how the framework can be utilized in practice, the paper presents a case study in which the strategic alignment is reconstructed for a specific sourcing project. The discussion and conclusions sections highlight the theoretical and practical implications of this study.

Critical review of strategic alignment in public procurement

Strategic alignment has its origins in contingency theory ([Chandler Jr, 1962](#); [Drazin and Van de Ven, 1985](#); [Ginsberg and Venkatraman, 1985](#)). Contingency theory holds that there is no best way to manage an organization, and that performance will be enhanced by creating a fit between a variable and the contingency ([Spina et al., 2016](#)). Both in public management and

the public procurement literature, contingency theory is often used to study organizational strategy and structure (e.g. Bakker *et al.*, 2008; George *et al.*, 2019; Glas *et al.*, 2017; Jacobsen and Johnsen, 2020; Meier *et al.*, 2010; Patrucco *et al.*, 2019a, b). In this type of research, contingency theory is understood as implying that an organization performs better when its structure is properly aligned with both its strategy and the context within which it operates (Patrucco *et al.*, 2019a).

However, investigating this “strategy – structure fit” is not the only way to perceive contingency theory. Another understanding of contingency theory concerns aligning the various strategies, both internal and external to a public sector organization, across multiple hierarchical strategic levels (e.g. Patrucco *et al.*, 2017a). These hierarchical levels range from the macro-level (e.g. governmental or organizational strategies) to the micro-level (e.g. the contract awarding strategy for a given tendering procedure). This perspective on strategic alignment can be characterized as a “strategy – strategy fit”.

Public management research on the strategy–strategy fit is scarce. Rather than analyzing how overall strategies are operationalized, research has focused on characterizing the overall content of a public agency’s strategy in terms of generic strategic stances and actions (e.g. Andrews *et al.*, 2009; Boyne and Walker, 2004; Edwards *et al.*, 2016; Hodgkinson and Hughes, 2019; Poister *et al.*, 2010). This is despite the general idea of strategizing being to explore how aspirations can be actually achieved in a given context (Bryson and George, 2020). This requires the operationalization of the overall strategy content if strategies are to be implemented and thus achieve goals and create public value (Moore, 1995).

The strategy–strategy fit is also a relevant perspective because it has a strong connection with the new public management (NPM) principles identified in previous research (Alonso *et al.*, 2015; Gruening, 2001; Hood, 1991). It relates in particular to NPM’s adoption of strategic management, which has recently been defined as “an approach to strategizing by public organizations or other entities which integrates strategy formulation and implementation, and typically includes strategic planning to formulate strategies, ways of implementing strategies, and continuous strategic learning” (Bryson and George, 2020, p. 13).

This study thus aims to clarify how strategic alignment, interpreted here as the strategy–strategy fit, can be demonstrated in the public procurement process. This process has been described as a range of activities, including bid design, bid evaluation and negotiation, contract awarding and contract management (Patrucco *et al.*, 2017b). The framework developed by (Patrucco *et al.*, 2017a) is the only one we have identified that conceptualizes strategic alignment in relation to the public procurement process and, therefore, this serves as the main basis for the present paper.

Patrucco *et al.* (2017a) propose assessing the strategic alignment of a public procurement strategy along four dimensions:

- (1) Vertical: alignment with broader political strategies;
- (2) Horizontal: alignment with departmental strategies;
- (3) External: alignment with the supply market;
- (4) Internal: alignment across the five pillars of a public organization’s strategy: its (1) make-or-buy strategy, (2) organizational strategy, (3) category strategy, (4) process strategy and (5) awarding strategy.

Of these, the internal dimension is of prime interest for the present paper, with at least pillars (4) process strategy and (5) awarding strategy being clearly related to the procurement process. The process strategy defines how procurement activities are executed, and the awarding strategy defines how suppliers are selected and contracts awarded (Patrucco *et al.*,

2017a). Procurement activities such as bid design, bid evaluation, negotiation and awarding (Patrucco *et al.*, 2017b) are affected by these strategies.

Notwithstanding the merits of this framework, it lacks conceptual clarity. The first and main problem is that conceptual clarity is lacking with regard to the process of how strategic alignment can be created (Venkatraman and Camillus, 1984). Venkatraman and Camillus (1984) distinguish the *elements* that need to be fitted together to achieve the desired configuration from the *process* of arriving at that configuration. While the framework by Patrucco *et al.* (2017a) identifies elements of fit (strategies on multiple levels and dimensions), but it does not seem to address the process of achieving alignment. In other words, while the framework indicates *that* certain strategies need to be aligned, it does not explain *how* this can be achieved, or how the outcome of this process can be demonstrated. Overall, it thus remains unclear exactly what constitutes alignment and how it can be achieved.

The second conceptual problem is that there is no clear interpretation of strategy in the framework by Patrucco *et al.* (2017a). Strategy is inherently an ambiguous term. Five different meanings (plan, pattern, position, perspective and ploy) can be attributed to strategy, and it can further not only be intended or realized but also unrealized or emerging (Mintzberg *et al.*, 2009). Patrucco *et al.*'s (2017a) framework appears to assume a "cascade" of strategies (Poister *et al.*, 2010) down through the organization, and that these strategies refer to plans. However, it is unclear whether other meanings or types of strategy would require different conceptual approaches. For instance, some researchers take a more dynamic view on strategic alignment by measuring the extent to which procurement plans are continuously adapted to changes in strategic planning (Sogaard *et al.*, 2019). Clarity on this point is critical because it determines the applicability of the framework.

The third conceptual problem is that the perspective from which alignment is assessed is unclear. It has been argued that public procurement cannot be considered strategic if it ignores the role of politicians (Murray, 2009). That is, the political perspective constitutes a relevant perspective. However, there are other relevant perspectives since the procurement process involves various types of staff and management levels. Identifying the perspective is important because it is unlikely that politicians, managers, public buyers and researchers will all assess alignment in exactly the same way. For instance, based on private sector purchasing research, procurement officials have a more tacit understanding of the alignment concept than researchers and describe their strategies as being based on several contingencies including internal, external, technological and product- or supply-based factors (Sogaard *et al.*, 2019). Perspective thus clearly matters.

The final conceptual problem identified is that the framework by Patrucco *et al.* (2017a) lacks a central proposition. That is, why should the framework's particular form of alignment be striven for? For instance, the form of strategic alignment proposed by Baier *et al.* (2008) is argued to result in superior financial performance for the strategic business unit. However, how Patrucco *et al.* (2017a) perceive performance and the supporting central proposition remains unclear. Performance in itself is also a concept that requires clarification (Andersen *et al.*, 2016). It is therefore ambiguous what form of performance gain could be expected if alignment as proposed by Patrucco *et al.* (2017a) was achieved. This problem is exacerbated by the framework's ambiguity with regards to the general distinction between strategy formation and implementation (Mintzberg *et al.*, 2009). Given that the framework's internal domain seems to pertain to strategy formation only, it follows that alignment with procurement process activities in the contractual phase (e.g. contract management) is not considered. Clarity on this point is important because strategy implementation is frequently the graveyard of strategy (Grundy, 1998). Performance can only be related to strategy formation if the strategy is implemented (Poister *et al.*, 2010).

To summarize, while strategic alignment is generally seen as an important concept, it is unclear how the strategic alignment concept can be usefully applied in the specific context of

the public procurement process. Further clarification is required to create a more workable application of the concept. Therefore, the present paper investigates how strategic alignment in the public procurement process can be demonstrated in practice.

Framework development

To create greater clarity with regards to strategic alignment in the public procurement process, the present study develops an analytical framework that builds on the strategy dimensions and the notion of multiple levels of strategy proposed by [Patrucco et al. \(2017a\)](#). Improved conceptual clarity is sought in two ways. First, several of the ambiguities identified above can be clarified by explicitly stating one's position. For example, it was noted above that the framework of [Patrucco et al. \(2017a\)](#) is unclear about whether or not it includes strategy implementation. To avoid ambiguousness in this regard in the present paper, we explicitly state that the scope of our framework concerns only part of the strategic management process as defined by [Poister et al. \(2010\)](#). As will be explained later, it includes plan formulation and strategy content but excludes strategy implementation. Second, conceptual clarity can be sought by descending the "abstraction ladder" ([Hayakawa and Hayakawa, 1991](#)) with respect to the interpretation of strategy. Unless strategy in the context of the public procurement process is concretized, it is difficult to turn abstract thought into action. Although [Patrucco et al. \(2017a\)](#) identify elements that need to be aligned, these elements are still described at high levels of abstraction and it is thus unclear how alignment can be demonstrated in practice. Therefore, to concretize strategy, our framework applies the notion of procurement instruments ([Plantinga et al., 2019](#)), which refers to the set of documents, methods and systems needed to execute the procurement process.

At the heart of our analytical framework is the assumption that strategy, in the sense of "a plan" ([Mintzberg et al., 2009](#)), essentially comprises two elements: (1) reasoning and (2) decision-making on competing priorities. Both reasoning and decision-making involve multiple levels and dimensions of strategy. Consequently, strategic alignment can be understood as the consistency of reasoning and decision-making on competing priorities across multiple levels of strategy. These notions of reasoning, decision-making and consistency are further elaborated below. However, given that these are viewed against a conceptual background of multiple levels of strategy, this background is first clarified.

Multiple levels of strategy

In both the public and private sector procurement literature, procurement strategy is perceived as a hierarchy of strategies rather than one all-encompassing strategy ([Hesping and Schiele, 2015](#); [Murray, 2009](#); [Patrucco et al., 2017a, b](#)). A hierarchy of strategy development stages emerges when general strategy is disaggregated into executable and controllable activities ([Hesping and Schiele, 2015](#)). However, the various procurement strategy levels distinguished in the private sector purchasing literature ([Hesping and Schiele, 2015](#)) differ from those in the public sector procurement literature ([Patrucco et al., 2017a](#)). The present study does not expand on these differences, but simply assumes that some kind of strategy hierarchy is present that ranges from high-level governmental and ministerial strategies, down through the public client's organization, to concrete operational strategies to run the tendering procedure. Also, in contrast to the framework by [Patrucco et al. \(2017a\)](#), this study does not refer to the base level of procurement strategy in terms of a process or awarding strategy, but in terms of the *reasoning* and *decision-making* behind procurement instruments.

Reasoning

Viewed from an operational perspective, the essence of public procurement boils down to enacting tendering procedures for specific sourcing projects. Without this, all other activities

in the procurement process are in vain. It follows that, on the operational level, the internal domain of strategic alignment (Patrucco *et al.*, 2017a) involves the use of concrete procurement instruments in a given tendering procedure.

It has been argued that practitioners develop reasoning with regards to the functioning of such procurement instruments (Plantinga *et al.*, 2019). This paper builds further on this notion. Strategic alignment requires *elements* that need to be fitted together to achieve the desired configuration (Venkatraman and Camillus, 1984). In this research it is assumed that at the operational level the required elements are given by such reasoning over procurement instruments.

For example, if a public client aims to contribute to its strategic sustainability goal through a particular sourcing project, it may decide to include a carbon dioxide (CO₂) reduction criterion in the contract awarding criteria. This criterion then needs to be supported by a procurement instrument that defines a CO₂ reduction measurement (e.g. Rietbergen and Blok, 2013) such that bidders can be scored in an objective and transparent manner. Strategic alignment then amounts to the sustainability strategy being operationalized through a CO₂ reduction procurement instrument. The consistency between the two can be substantiated because the reasoning behind this particular procurement instrument is that it helps to reduce CO₂ production in the supply chain.

Trade-off decisions

In the private sector, researchers have described strategic alignment as the fit between business strategy and competing purchasing priorities. The latter refer to managerial objectives, such as cost, quality and innovation that may be set on several organizational levels and whose simultaneous pursuit inherently implies making trade-offs (Baier *et al.*, 2008). Similarly, in the public sector, the term competing priorities is used to refer to a number of priorities that cannot be reconciled completely (Erridge and McIlroy, 2002). Erridge and McIlroy (2002) identify three strands of competing priorities: commercial (e.g. cost and quality), regulatory (compliance with public procurement legislation) and socioeconomic (e.g. employment, social inclusion and sustainability).

According to Glas *et al.* (2017), the existence of these competing priorities calls for prioritizing and a substantial awareness of possible conflicts among them. How competing priorities are perceived depends on the subjectivity of each public procurement organization and its personnel (Glas *et al.*, 2017). In addition to competing priorities, the allocation of budgets and human resources to single procurement projects (PMBOK, 2013) involves calls for prioritizing. On the operational level of bid design (selecting current procurement instruments or developing new ones), prioritizing and the awareness of possible conflicts suggests that public buyers, or the sourcing team in which the public buyer participates, make trade-off decisions with regards to the instruments that operationalize procurement strategy.

Trade-off decisions could involve comparing two alternatives for meeting the same goal, for example using the CO₂ reduction instrument or applying sustainability requirements to the product that is to be procured. Clearly, trade-off decisions can also involve multiple goals. For instance, if a public client aims to contribute to both social and environmental sustainability (e.g. Brammer and Walker, 2011) through a particular sourcing project, it may decide to use a social return criterion in addition to a CO₂ reduction criterion. In that case, relative priorities become apparent by the weight attached to each criterion.

Strategic alignment as consistency in reasoning and decision-making

The notions discussed above facilitate a detailed interpretation of the strategic alignment concept. As such, the consistency needed to achieve strategic alignment (Sogaard *et al.*, 2019)

can be understood as the extent to which multilevel reasoning and decision-making lead to logical means-and-ends relationships. The previous examples also help to illustrate such consistency over multiple levels. The reason for applying a CO₂ reduction procurement instrument is that it will stimulate CO₂ reduction in the supply chain. This instrument thus forms a means to the end formulated in the process strategy: that the tendering procedure should contribute to CO₂ reduction. In turn, the tender procedure is a means in itself. It is a means to the end that procurement should contribute to CO₂ reduction, which in turn is a means to the end that the client organization should achieve environmental sustainability goals.

Consistency in this chain of means-and-ends can be understood in two ways: first, do these relationships follow a logical line of argumentation; second, do alternative logical lines of argumentation better suit the competing priorities? Consistency thus concerns both the reasoning and the decision-making on competing priorities. Assuming that the latter will inevitably require trade-offs, these decisions are also referred to in this paper as trade-off decisions.

Analytical framework

Above, it was argued that, from an operational perspective, strategic alignment concerns the extent that the base-level strategy, i.e. the reasoning behind the design of individual procurement instruments, and the corresponding trade-off decisions fit with those of higher-level strategies. These higher-level strategies may not only concern various levels of procurement strategy but also functional strategies, organizational strategies and political strategies. If all these strategies were perfectly aligned, one could expect a hierarchy of reasoning and trade-off decisions that can be read from top to bottom and from bottom to top. A top-down reading will show *how* achievement of the top-level strategy is supported by the use of certain procurement instruments in a given sourcing project. Reading this hierarchy from bottom to top will show *why* certain procurement instruments are applied in a given sourcing project. The resulting framework is illustrated in Figure 1.

The key to establishing strategic alignment is thus identifying these relationships and ensuring they are logically consistent. However, in practice, this is not straightforward. While this paper refers to “the client” as if it had human-like qualities, clients in reality may be complex organizations with inherent issues of power, conflict and control (Bresnen, 2009). This study therefore employs a strategy-as-practice perspective. This perspective holds that it is not only top-management strategists who engage in activities that lead to strategic outcomes (Löwstedt et al., 2018; Whittington, 2006). Rather, multiple practitioners on various levels and dimensions of strategy may make, potentially conflicting, decisions regarding strategy content.

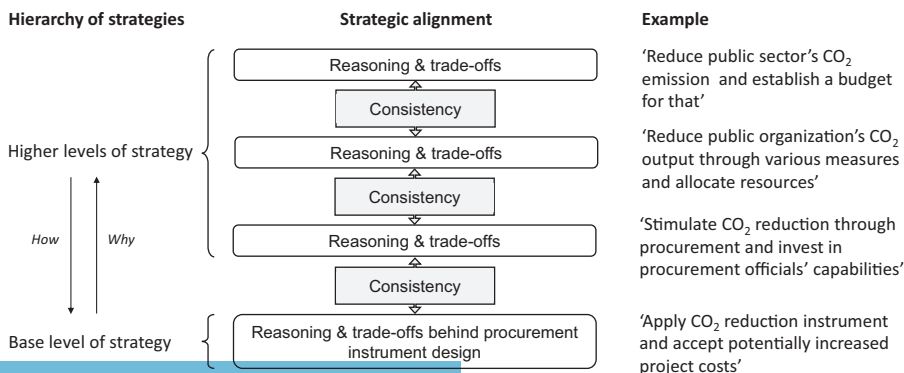


Figure 1. Conceptual framework for strategic alignment

Framework exploration

Case study

To determine whether the theoretical lens offered by the proposed analytical framework helps to get a grip on strategic alignment and the public procurement process, the framework was applied in practice. The single case study methodology (Yin, 2014) was selected to explore the framework for its ability to provide clear empirical illustrations of reasoning and trade-offs on multiple levels and dimensions of strategy and to demonstrate consistency. Since the study aims to concretize strategy, the case focusses on how the design of the specific procurement instruments used in the tendering procedure for a single sourcing project are consistent with higher-level strategies.

Three selection criteria were applied to identify an appropriate case where the particular outcome of interest (strategic alignment) occurs (Dubois and Araujo, 2007). These are that, based on face value, the case should: (1) appear well-aligned; (2) concern a novel procurement system and (3) involve a relatively straightforward procurement system. The reasons for these three criteria are as follows. First, it was assumed that a well-aligned case would offer the best opportunity to reconstruct the reasoning and decision-making on competing priorities across multiple strategy levels. Second, the first application of a novel procurement system implies a change from current practice, suggesting that a new strategy will have been devised. This was seen as advantageous because the origins and subsequent formation of a new strategy would probably be easier to reconstruct than those of a long-standing procurement strategy or policy. Third, a relatively uncomplicated procurement system would make it easier to illustrate details concerning the reasoning and competing priorities.

The case selected concerns a public construction client's first application of a procurement system generally referred to as pre-commercial procurement (PCP) (Iossa *et al.*, 2017). PCP is a form used for the public procurement of innovation (Obwegeser and Müller, 2018). In this case, PCP was used in an application concerning level-crossing safety. The organization in question, ProRail, is a major public construction client in the Netherlands that runs hundreds of tendering procedures each year. The PCP tendering procedure met the three criteria mentioned above since it had gained considerable positive attention both within the client's organization and in the media, suggesting that it probably is well-aligned (1). Also, the case concerned the use of procurement instruments that were both novel to the client (2) and rather straightforward (3).

Case description

Level crossings are a crucial safety issue for railway operators and infrastructure managers. Each year, hundreds of fatal accidents at level crossings occur across Europe and account for one-third of all rail fatalities (Liang and Ghazel, 2018). Most level crossings are protected by either active or passive systems. Active crossings are protected by automated warning systems (flashing lights, barriers etc.) whereas passive crossings provide only a fixed sign, requiring people to stop and look left and right for trains before proceeding.

In 2016, the Netherlands' Ministry of Infrastructure and Environment started a programme to address the high accident rate at passive crossings. The Ministry formulated a twofold strategy. First, the number of passive crossings would be reduced by removing some crossings altogether and by upgrading others to active crossings or installing bridges. Second, because of budget restraints, innovative solutions to increase the safety of existing passive crossings would be stimulated. Based on the philosophy that the testing of concepts speeds innovation ("from talking to testing"), the Ministry defined a timeframe for the testing of new concepts.

The Ministry commissioned the client organization (ProRail) to conduct the programme. Although the client has a broad portfolio of procurement instruments, it was decided to develop new ones for this programme. The development process resulted in a three-stage

procedure called “Proeftuin Nabo”, which can be translated as “testbed for passive crossings”. The goal of this PCP-like procedure was to achieve “cost-effective solutions that increase the safety of existing passive crossings”.

Stage 1 commenced in April 2016 with a media announcement of the procedure inviting potentially interested parties to respond, and 62 ideas were received. Ideas were submitted not only by some of ProRail’s regular contractors, suppliers and consultants, but also by unfamiliar firms and even by some individuals. Evaluation of these ideas by an expert committee led to the selection of 14 promising ideas. In Stage 2, prototypes were developed and evaluated by a committee of technical and behavioral specialists. This resulted in seven innovative concepts going forward to Stage 3 for testing, which started around January 2017. To test prototypes in a realistic but safe setting, dedicated areas of a goods yard of a supplier of railway components were used. Various users and stakeholders, such as transport safety, cyclist and walker associations, farmers and managers of heritage railways, were invited to test and reflect on the prototypes. The evaluations of the tests were finalized in May 2017. This overall procedure was evaluated positively by its participants, the client and its stakeholders, and received both government and national media attention.

Data collection

Data sources included documents, observations and interviews. The documentation included internal project and contracting documents such as the project plan, the contracting plan and the documentation exchanged during the tendering procedure. It also included a booklet that the client developed after the PCP was finished to highlight the positive results and acknowledge the cooperation of the various people involved. The booklet contains positive reflections by various individuals, such as the project manager, the procurement officer, the Ministry representative, technical and behavioral experts and representatives of various stakeholders and end-users involved in the PCP (ProRail, 2017). External documents including the Minister’s reports to parliament and websites reporting on the case (e.g. the Ministry’s procurement expertise center, national media) were also included. Research observations were made during internal presentations by members of the sourcing team. Finally, after producing an initial draft of the reconstructed strategy, two procurement officers involved in the case’s strategy formation process were interviewed to validate and complete this reconstruction.

Reconstruction method

Documents were examined for text elements that could be identified as either reasoning or trade-off decisions. Texts were coded as “reasoning” if they explain why certain choices were made. For instance, where the PCP design involves an information session, the argument that this “session will increase the participant’s understanding of the client’s needs” is viewed as reasoning. Data are identified as “trade-offs on competing priorities” if the reasoning is accompanied by considerations of the consequences of the preferred option or its alternatives.

It was anticipated that not all the reasoning or trade-off decisions could be retrieved from documents alone. For example, a scarcity of resources might impede identifying reasoning, or a shared understanding in a community of practice could mean that documentation was considered unnecessary. In this research, reasoning is considered as *explicit* if it is documented. In contrast, if there are gaps once the explicit reasoning is included in the analytical framework, these are seen as aspects where *implicit* reasoning took place. Such gaps were identified by checking the chain of means-and-ends for missing links and by validating the implicit reasoning through interviews with the two procurement officers. This research can thus be characterized as adopting the public buyer’s perspective, although it should be noted that the procurement officers were asked to adopt this study’s conceptual approach to strategic alignment rather than their own perceptions of the concept.

Case analysis

This section presents the reconstructed strategies in two parts: first, the strategies leading up to the decision to develop two new procurement instruments and, second, the strategy behind the design of one of these instruments. This division makes it possible to provide a detailed presentation of procurement instrument design as a single level of strategy.

Strategy leading to PCP instrument development

Table 1 presents a summary of the reconstructed strategy. The rows summarize the strategy content on various levels of strategy. The “reasoning” column summarizes the main statements that explain how the overall strategy was operationalized. The “trade-off” column provides additional information by clarifying why the reasoning seemed valid for the actor in question. The “organization” and “source” columns show the organizational level at which reasoning and trade-offs were formulated and the primary document in which these were found. The elements marked * in the table are implicit elements used to fill the gaps identified when applying the analytical framework.

Table 1 displays a hierarchy of strategies that was reconstructed from various documents stemming from two organizations: the Ministry and the client (ProRail). If read from top to bottom, the reasoning in the first column can largely be linked logically by adding “therefore”. This reading indicates how top-level strategy is achieved. If read from bottom to top, the next level up shows why procurement instrument development seems logically consistent.

PCP design

Table 2 summarizes the strategy behind the document that describes the PCP *procedure* in terms of the major design choices (first column) and the corresponding reasoning (second column) and trade-offs (third column) that explain these design choices. The PCP *contract*, another procurement instrument developed in this programme, is not elaborated further in this paper. In contrast to Table 1, the rows in Table 2 represent various aspects of the PCP procedure design rather than distinct strategy levels.

Table 2 illustrates that decision-making over competing priorities occurs on the procurement instrument design level as well as on other strategy levels, and that it concerns a variety of aspects throughout the PCP design procedure. In many cases, the trade-offs involve staff resources since the interviews with the procurement officials highlighted that staff resources was a critical issue. Members of the sourcing team continuously had to weigh spending time on this PCP project against other sourcing projects.

Assessment of strategic alignment

Tables 1 and 2 summarize and structure the various strategies. The interviewed procurement officials saw the tables as making explicit what was already clear to them in a more implicit manner, namely that there was a high level of consistency in the reasoning and trade-offs between the various strategy levels and the PCP procedure design.

For the outsider, unfamiliar with procurement practice, the consistency between the PCP procedure design and higher levels of strategy is probably less evident, since knowledge of potential alternative design choices and consequences is necessary to assess the consistency. However, a fair level of consistency is apparent when the top-level strategy reasoning is compared with the reasoning behind the procurement instrument design. The top-level strategy can be traced back to the Ministry’s twofold strategy of continuing to reduce the number of passive crossings while also allocating part of the budget to innovation. While the Ministry did not dictate how to achieve innovation in level-crossing safety, its basic philosophy of going “from talking to testing” seems to have been a prominent driver in the strategy formation process. The PCP procedure design choices made illustrate how this top-level strategy eventually unfolded in a concrete procurement instrument that is clearly

Reasoning (* indicates implicit reasoning)	Trade-off in competing priorities	Organization	Source
Railway safety (including level-crossing safety) is a strategic goal	*Railway safety vs other strategic goals in transport sector	Ministry	Ministry policy
Create programme to target passive crossing (PC) safety, because this lags behind the generally improving railway safety levels	*PC vs other railway safety issues	Ministry	Ministry programme; contract plan
Allocate part of the budget for innovative supply-side solutions. because programme budget is insufficient to apply conventional solutions at all PCs	Conventional PC removal/ upgrade vs opportunity to uncover new cost-effective PC safety measures	Ministry	Ministry programme; contract plan
Commission client to conduct innovation programme with a "from talking to testing philosophy", since desk studies are ineffective here	*Client assignment vs other options	Ministry	Contract plan
*Accept innovation programme assignment because railway safety is a strategic goal	*vs other strategic goals (reliable, punctual and sustainable railways)	Client	Client strategy
Perform market research (desk research, consultation with similar public clients, market consultation, concept design) in order to be better able to formulate the demand, identify potential suppliers, inspire and quickly inform potential suppliers on relevant state-of-the-art technology	*Staff resources vs expected level of innovation effectiveness and risks	Client project team	Contract plan
Approach market in two stages (first innovation testing, then direct tendering) because PC safety is too complex and risks are too high to directly tender for innovations	Risks and resources related to single tender vs multiple tenders	Client sourcing team	Contract plan
*Develop new procurement instruments since nothing in the current portfolio is appropriate for testing PC innovations	*Development process risks vs possibility of creating successful approach	Client sourcing team	(Research)
*Develop new procedure document and contract on the basis of three currently used procurement instruments	*Select and customize current instruments vs start from scratch	Client sourcing team	(Research)

Table 1.
Reconstructed
strategies and
strategy levels

Table 2.
PCP procedure design
with reconstructed
reasoning and
trade-offs

PCP procedure design features	Reasoning (* indicates implicit reasoning)	Trade-off in competing priorities
<i>*General feature:</i> Concise and easy-to-understand PCP tendering procedure document (and contract)	*Make PCP accessible to inexperienced tender participants	*Staff resources vs PCP effectiveness
<i>PCP phase 1: concept selection</i>		
a. Attract attention in multiple ways (other forms of communication in addition to EU publication)	Expand market attention beyond “the usual suspects”	*Staff resources vs level of publicity
b. Information session	Increase participants’ understanding of client’s needs	*Staff resources vs PCP effectiveness
c. Select six innovative concepts for two solution categories (two-page concept descriptions; award criteria: cost, innovation, safety, impact)	(1) Create a set of solutions, since no single solution will suit all PCs (2) Select multiple participants to maintain post-PCP competition	*Staff and budget resources vs PCP effectiveness and future opportunities
<i>PCP phase 2: prototype development</i>		
a. Close PCP contract and pay fixed compensation for prototype development	(1) Secure legal aspects	*Budget resources vs PCP effectiveness (Same as for 1c)
b. Select three prototypes per category for testing (same award criteria as in 1c)	(2) Reward participants’ efforts (As PCP phase 1c)	
<i>PCP phase 3: prototype testing</i>		
a. Provide test facilities	(1) Reduce uncertainties regarding solution feasibility, safety issues and stakeholder acceptance (2) Provide client and end-user feedback on prototypes to the suppliers	*Staff resources vs PCP effectiveness
b. Pay fixed compensation for participant expenses	Reward participants’ efforts	*Budget resources vs PCP effectiveness
c. Determine feasibility of solutions and (if applicable) develop requirement specifications	Gain valuable knowledge on what works (and not), and why, for potential future requirement specifications	*Staff resources vs PCP effectiveness

targeted at gathering, developing and testing innovative concepts. Its design facilitates the overall notion that it is only through the client and divergent end-user groups testing innovative concepts that the complexity of enhancing passive crossing safety will be better understood. As such, the detailed reasoning behind the procurement instrument design logically connects with the mid- and top-level reasoning.

The trade-offs in terms of competing priorities address the second element of strategy identified in this study. From an outsider’s perspective, one can simply conclude that, with hindsight, the trade-offs in terms of competing priorities were apparently sufficiently aligned to result in new and ready-to-use procurement instruments.

Discussion

Selecting public procurement as its general domain, this study develops an analytical framework and applies it in a case study to examine how a strategy–strategy fit can be demonstrated. As such, this study responds to the call by Höglund *et al.* (2018) to do more research on strategy practices in the public sector and to provide case studies on a micro-level of analysis.

One merit of this study's approach is that it provides an empirical example of how public procurement can indeed be used as a strategic instrument and a lever for achieving governmental policy goals (OECD, 2019). The case study demonstrates consistency across multiple levels of strategy, thus providing evidence that a political "from talking to testing" strategy resulted in new, PCP instruments that were designed to gather and test innovative ideas for improving passive crossing safety.

Nevertheless, given the aim of this study, the main question here is to what extent the framework and case study contribute to greater conceptual clarity on the strategic alignment concept. Scrutinizing the framework of Patrucco *et al.* (2017a), this study identified several issues that needed further clarification. The most important issue is that the existing literature is unclear about the process of creating alignment between multiple levels of strategy. The present study clarifies this issue by demonstrating that "strategy" can be usefully conceptualized in the form of reasoning and trade-off decisions, and that the consistency needed to create "strategic alignment" concerns the extent to which the reasoning and trade-off decisions on multiple levels and dimensions of strategy are logically related. Consequently, this study also sheds light on the alignment creation process itself in that it appears that this process in essence involves the verification of consistency between strategy levels before the reasoning and trade-off decisions on an individual level are finalized.

Given that this study concerns a specific case, this raises questions about the generalizability of the findings. Since the aim of this study was to explore how strategic alignment can be demonstrated in a public procurement process, its value should be assessed in terms of the extent to which it can be analytically generalized to other situations (Yin, 2014). In contrast to Patrucco *et al.* (2017a), this study does not assume predefined levels of strategy. This has both advantages and disadvantages. A major advantage is that the reasoning and trade-off decisions used to demonstrate consistency do not need to fit the structure of Patrucco *et al.*'s (2017a) strategy framework. For instance, the lack of a "category strategy" does not necessarily mean that a public organization has a missing link in creating strategic alignment. The present study's analytical framework is thus more flexible. However, the associated disadvantage is that the framework offers little guidance on where to look for strategies, nor how the operationalization of overall strategy can be sensibly organized.

There are other limitations to this study that also need to be considered, some of which are related to the issues identified above. These issues concern the interpretation of strategy, the demarcation of the strategy process and the perspective from which alignment should be assessed. First, although this study presents an example of strategy as a plan that was both intended and realized (Mintzberg *et al.*, 2009), it does not elaborate on the framework's applicability if strategy was interpreted differently. Second, this study only investigates strategy formation, which in this case study ends with the finalized procurement instrument design. Strategy implementation is thus excluded. Given this demarcation, this study does not help clarify how the performance concept (Andersen *et al.*, 2016) should be understood or how it relates to strategic alignment. Third, this research only considers the perspective of the public buyer, and the perspectives of other involved officials may be equally relevant.

Another limitation is that this study's reconstruction of strategic alignment is somewhat subjective. While research on strategic alignment in procurement is usually based on respondents' perceptions (Sogaard *et al.*, 2019), here the reasoning and trade-off decisions were initially established by the researchers and only then verified by the procurement officials involved in the project. Also, assessing the level of alignment between the higher-level strategies and the procurement design involved expert judgment rather than cold logical reasoning. Knowledge of potential alternative design choices given specific supply market characteristics is needed for proper assessment. Finally, it should be noted that while the logic required to demonstrate consistency in reasoning is reasonably verifiable by an outsider, this is much less so when it comes to trade-off decisions. Nevertheless, the reconstructed trade-offs

provide concrete examples of the choices facing “strategists” (Whittington, 2006) on multiple levels. These range from individual considerations regarding spending working hours on this project, as against other projects, to ministerial considerations on budget allocations. Even for the insider, knowledge of the specific contexts within which trade-off decisions are made is probably inherently vague since the trade-offs may concern a mix of priorities on individual, group and organization levels. Therefore, while achieving coherence across competing priorities on multiple levels of strategy is an essential factor in achieving strategic alignment, it is also a very subjective factor to assess.

The study’s main implication for practice is that creating a strategy–strategy fit involves the deliberate verification of consistency between reasoning and trade-off decisions on multiple levels of strategy. Interestingly, given that alignment had to be reconstructed in this case study, it appears that it was, to an extent, achieved organically rather than deliberately. At least, no specific strategic management tools (Höglund *et al.*, 2018) were used to assess alignment while the strategy unfolded, and responsibility for proactively establishing or monitoring alignment was not explicitly allocated. In similar situations, this study’s conceptual framework could be used by practitioners as a tool to deliberately create, assess or demonstrate strategic alignment.

Also, this seemingly organic achievement of alignment seems to indicate that monitoring alignment during the operationalization of strategy requires a distinct routine, one that should make all the reasoning and trade-off decisions involved explicit. Theoretically, this is supported by the concept of procedural rationality (Kaufmann *et al.*, 2012; Simon, 1978), which has been defined as “the extent to which the decision process involves the collection of information relevant to the decision, and the reliance upon analysis of this information in making the choice” (Dean Jr and Sharfman, 1993, p. 589). Procedural rationality implies that both the reasoning and trade-off decisions should be made in a more explicit manner.

Conclusions

While the literature is consistent about the importance of creating strategic alignment in the public procurement process, application of this insight in practice has been hindered by a lack of conceptual clarity. This paper demonstrates that more clarity can be achieved by focusing on the alignment between a public sector organization’s various strategies and procurement instrument design. Since procurement instruments shape the procurement process, the reasoning behind the design of procurement instruments forms the appropriate level of detail to examine the operationalization of procurement strategy. Further, this paper argues that strategic alignment is constituted by a logical chain of reasoning and trade-off decisions on multiple strategic levels. As such, it holds that strategic alignment can be demonstrated in practice by identifying, explicating and logically linking these two elements of strategy content across the various levels of strategy. This insight not only contributes to the theoretical debate about strategic alignment, but is also helpful for practitioners aiming to create or assess strategic alignment in the public procurement process.

Given the exploratory nature of this study, future research is needed to further investigate the strategy–strategy fit in the public procurement process. First, since this paper only clarifies how strategic alignment can be demonstrated and does not expand on how the interaction of multiple actors can lead to such alignment, future research in this direction is needed to complement this study. Second, given that this study is limited to the strategy formation phase, future research could clarify how alignment between strategy and key procurement process activities in the implementation phase, such as contract management, can be demonstrated. Third, future research is required to clarify the performance construct; so that the supposed increase in performance that is generally associated with strategic alignment can be measured. Fourth, having developed an analytical framework for the public procurement context, future research could usefully assess the extent to which it is appropriate for other government functions and public management in general.

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