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Public Sector Strategy Classification System for Shared Service Identification

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ABSTRACT

The purpose of this conceptual paper is to address the lack of consistent means through which strategies are identified and discussed across theoretical perspectives in the field of business strategy. A standardised referencing system is offered to codify the means by which strategies can be identified, from which new business services and information systems may be derived. This taxonomy was developed using qualitative content analysis study of government agencies' strategic plans. This taxonomy is useful for identifying strategy formation and determining gaps and opportunities. Managers will benefit from a more transparent strategic design process that reduces ambiguity, aids in identifying and correcting gaps in strategy formulation, and fosters enhanced strategic analysis. Key benefits to academics are the improved dialogue in strategic management field and suggest that progress in the field requires that fundamentals of strategy formulation and classification be considered more carefully. Finally, the formalization of strategy can lead to the clear identification of new business services, which inform ICT investment decisions and shared service prioritisation.

Keywords

Strategy, Business Services, ICT Investment, IT Shared Service prioritization, content analysis, taxonomy

INTRODUCTION

The strategic management literature is populated by various taxonomies of strategies. Some of these taxonomies are widely used by researchers while others are neglected (Chrisman, Hofer, and Boulton, 1988). The taxonomy suggested by Porter (1980) is one widely cited in the strategic management literature. A standardized strategy taxonomy enables business executives to ensure coverage of key strategic domains. In addition, it enables the IT planning group to identify strategic activities requiring enhancement in the articulation and implementation of the Enterprise Architecture and value proposition for current IT projects and programs, thus guiding ICT investment decisions. In particular, business services can be mapped to business strategy (Kohlborn, Korthaus, Chan and Rosemann, 2009), from which the development program for IT shared services can be determined. The purpose of this paper is to explore the depth of current strategy taxonomies and propose an extension enabling the derivation of new business services and the identification of support information systems for IT shared service development and delivery.

There are different approaches for developing a strategy taxonomy, dependent on the definition of strategy. Hofer and Schendel (1978) noted that strategy represents the content outcome of the strategy formulation process. The research in this paper is built on this premise. Other scholars such as Chandler (1962) regard strategies as integrated decisions, actions or plans designed to set and achieve organisational goals. Van Cauwenbergh and Cool (1982) describe strategies as orienting metaphors or frames of reference. More recently, Fuller (2010) used stakeholder-based approach in classifying business strategies. According to Chrisman et al (1988) and Bock (1973), though these approaches have conceptual appeal, the resultant classification schemes are flawed and, in particular, the existing approaches and classification schemes have limited relevance to public agencies. They confuse strategy processes and strategy content, consist of simplistic taxonomies, and do not take sufficient account of constraints faced by public organisations (Boyne and Walker, 2004; Charih, 2000; Wechsler and Backoff, 1987). Programs of management reform frequently require public managers to develop new strategies that will lead to better performance (Boyne and Walker, 2004; Charih, 2000; Nutt and Backoff, 1995), but there are other strategy types addressing political, environmental and structural issues. There is a need for a clearer understanding of strategy sets of public service organisations.

This article takes into account the existing need of development of a better classification scheme specifically for public sector organisations. The paper first describes the concept of strategy and the objectives and attributes of classification systems. It next discusses the applied approach of using strategy content analysis based on published government strategies. The paper

then concludes by presenting an improved classification scheme for public sector organisation that takes into account all the necessary attributes for developing one generalized classification system.

CONCEPTUAL FOUNDATIONS

Strategy Definitions

The strategy literature reflects the complexity and diversity of strategic thought (Hutchinson, 2001). Many people use the words *strategies, plans, policies, objectives, and goals* interchangeably (Wang and Ghose, 2006; Bennett, 1996). There are various meanings to the word strategy and so it is not surprising to observe that there is no commonly accepted and universal definition of strategy (O'Regan and Ghobadian, 2002). The Greek origin of strategy means art of war (Feurer and Chaharbaghi, 1995). In military terms, strategy refers to an important plan (Pun, 2005). In a business environment, the concept of strategy has evolved over time. Chandler (1962) defines strategy as the *determination of the basic long-term goals and objectives of an enterprise, the adoption of course of action and the allocation of resources necessary for carrying out these goals*. Ansoff (1976) on the other hand defines strategy as *the selection of product mix and markets oriented toward the achievement of an impedance match between the firm and the environment*. Evered (1983) suggests that strategy is *a process for generating viable directions that lead to a satisfactory performance in market place*. Mintzberg (1994) defines a strategy as *a plan, or something equivalent a direction, a guide or course of action into the future, a path to get from here to there*. Finally, according to Chrisman et al (1988), the strategy description provided by Hofer and Schendel (1978) is one of the most aligned with the views of scholars. According to this description, a strategy describes the fundamental characteristics of the match that an organisation achieves among its skills and resources to the opportunities and threats in its external environment that enables it to achieve its goals and objectives.

Researchers have also focused on levels and components of business strategy. Hofer and Schendel (1978) stated that business strategies consist of three interrelated sub-strategies: investment, competitive and political. Several strategy components have also been proposed by the academicians that provides the nature of the *match* that strategy represents: Investment intensity; Scope and domain; Growth vector; Distinctive competences or resource deployments; Types of competitive weapons; Competitive or differential advantage; Segment differentiation; Synergy; and Timing (Chrisman et al, 1988).

The discussion about strategy in the literature is focused mainly on private sector organisations with a focus on either corporate level or business level strategy. The studies on public sector strategies are a few with emphasis more on differences between private and public sector strategies. For example, Ring and Perry (1985) mentions about different context factors, constraints and behavioral consequences as an argument towards differentiating strategy management of public and private sector. Nutt and Backoff (1995), in their quest to develop a strategy classification for public sector strategies, equated them with third sector organisations and felt there is a requirement to balance needs with responsiveness in order to fashion a strategy.

Governments are organized into departments or agencies; either term is used interchangeably in this paper. The term agency means a government line of business with its own executive and minister. Government agencies are similar to other complex organisations as they operate in changing environments that impose several rapidly changing demands, requiring substantial adaptive capacity (Wechsler and Backoff, 1987). This occurs because of the frequency of changes in power and subsequent changes in the machinery of government. In addition, government agencies also respond to changes in budgets forced by the global financial crisis and shifting government priorities. Organisations make use of their strategies in order to position them in terms of the threats and opportunities in their environments. Since contexts and environments differ from one sector to another and from one product or service to another, researchers have worked to identify and classify organisational strategies (Mintzberg, 1988; Wechsler and Backoff, 1987; Porter, 1980; Miles and Snow, 1978). However, government departments as distinct type of public organisations have not been the subject of studies designed to identify their strategies (Charih, 2000).

The strategies of government agencies are affected by various factors, including pressures from the elected representatives, demands and interests of powerful constituents, specific mandates and jurisdictions, centralised resource allocation mechanisms, and requirements of collaboration and competition fashion the types of strategies in public sector (Charih, 2000; Nutt and Backoff, 1992; Wechsler and Backoff, 1987). In Australian state governments, the departments and agencies operate within the framework of a parliamentary government. Generated from the political will to fulfil mandates in a given field, the agencies have to deal with factors such as collective cabinet responsibility, ministerial accountability, and the program of the party in power. Further, the agency's strategic room to manoeuvre is conditioned by political imperatives, the departmental mandate, the division of powers between the various departments and agencies and the various levels of government, and the demands and support originating in the environment of these organisations (Charih, 2000).

We conclude that a lack of understanding about strategy of public sector organisations is reflected in limited taxonomy and typology development in this area. This paper seeks to develop a strategy classification system addressing this gap.

Strategy Classifications

Classification is the development of a system or scheme in order for researchers to arrange entities into taxonomy based on their similarities, differences, and relationships to one another as determined or inferred from their most fundamental characteristics (Chrisman et al, 1988; Mayr, 1982; McKelvey, 1982). A classification scheme includes one category of taxonomy whereas classification system has one or more categories of taxonomy. Thus, taxonomy can be said as the theory and practice of delimiting and classifying different kind of entities (Chrisman et al, 1988; Mayr, 1982; McKelvey, 1982). So, a taxonomy not only includes the classification system but also, the theory on which the classification system is built and the methods employed to construct it (Chrisman et al, 1988).

When classifying strategies, researchers have often used the terms typology and taxonomy interchangeably (Charih, 2000). Researchers such as Hambrick (1984) and Pinder and Moore (1979) propose distinction between typology and taxonomy. A typology is generated by a conceptually derived approach and then tested in terms of first-level and mid-range theories. Taxonomies, on the other hand, are empirically derived and are useful in developing mid-range theories. Doty and Glick (1994) further add that taxonomy is appropriate to the study of strategies, because it helps classify phenomena in exhaustive and mutually exclusive categories.

As a mode of classification, a typology groups strategies according to a range of attributes. In classifying the strategies, it becomes possible to identify the various effective strategic organisational behaviours. Researchers thus recognise that strategy is the result of the interaction of forces both internal and external to the organisation (Charih, 2000). The most popular typology to date has been developed by Miles and Snow (1978) and has four basic strategies of defender, prospector, analyser and reactor. The typologies developed so far focus mainly on strategies of private sector with a few exceptions.

There are various studies such as strategies for declining industries (Harrigan, 1980), strategies for dealing with competitive forces and aggressive competitors (Porter, 1985; MacMillan, 1980), promotion of innovation (Lodahl and Mitchell, 1980), and mergers (Reed, 1988) have been considered for developing typologies. Typologies have been developed to suggest when to use particular type of strategies (Nutt and Backoff, 1995). Some of the well known typologies based on strategy content study and their dimensions are presented in Table 1.

Paine and Anderson (1977)	Adaptive, planning, entrepreneurial Dimensions: Amount of control over desired changes
Harrigan (1980)	Entrepreneurial, adaptive, planning Dimensions: Source of idea
Mintzberg (1981)	Early exit, milk the investment, shrink selectively, hold position, increase investment Dimensions: Amount and timing of investment
Meyer (1982)	Weather the storm, ignore the storm, experiment Dimensions: Leader attitude
Miles and Cameron (1982)	Domain offense, domain defense, domain creation Dimensions: market orientation and innovativeness
Galbraith and Schendel (1983)	Harvest, build, continue, climb, niche cashout Dimensions: Level of investment and specialisation
Lawrence and Dyer (1983)	Re-adaptive, prospector, defender, analyser Dimensions: resource scarcity and information scarcity
Nutt and Backoff (1995)	Developer, entrepreneur, custodial and stabiliser Dimensions: Environmental conditions

Table 1 Strategy typologies (adapted from Nutt and Backoff, 1995)

A few studies on typologies and taxonomies specifically for the public sector are by Wechsler and Backoff (1987), Nutt and Backoff (1992) and Charih (2000). The first two studies focused on typologies whereas the third study focused on taxonomy of strategies. The typology proposed by Nutt and Backoff (1992) offers five organisational strategies: bureaucrat, director, accommodator, compromiser and mutualist. The bureaucrat and director strategies respond moderately or a great deal to pressures for action, but are not responsive in terms of accountability. The accommodator and compromiser react favourably, moderate to high on the scale, to pressures for action, and assume greater accountability to the external environment. The mutualist strategy responds high to environmental pressures and high to external accountability (Nutt and Backoff 1992, pp 87-94).

The study conducted by Wechsler and Backoff (1987) identifies three strategies: developmental, protective and political. Charih (2000) focused on the strategic actions for Canadian government departments and proposed seven strategies. The taxonomy developed by Charih (2000) builds upon earlier works of Nutt and Backoff (1992); Rubin (1988) and Wechsler and Backoff (1987), who have developed typologies addressing public sector strategies.

Similar to strategy definitions, there is a clear need to understand different terminologies while going for strategy classification. The literature is still ambiguous about the terms typology and taxonomy. Further, Chrisman et al (1988) mention in their paper about classification scheme and classification system and they include categories of taxonomy. Category according to them is a rank or level in a hierarchical classification which is composed of taxonomy to which the given rank is assigned. So, it is necessary to understand what actually is being developed and whether developed classification system, taxonomy or typology can be generalized or specific to certain domain as public or private sector organisations. The focus of our work is to develop a classification system using a study of public sector agencies and progressing towards a generalized taxonomy.

Strategy Content Analysis

Most of the literature about strategy type, distinguish strategic content (the organisation's products, services, markets, etc.) from process, or how the strategic content was created. The public sector literature has focused mainly on the description and assessment of organisational strategy content. Though examination of strategy content is comparatively new to the public sector, with a few notable examples to date (Nutt and Backoff, 1995). For example, Rubin (1988) develops interesting strategic types around the leadership posture of a top manager. Wechsler and Backoff (1987) trace the evolution of strategy in state government, showing how strategic change occurs over time and with changes in administration and the party in power.

In much of the management literature, strategy is presented from a process perspective (Wechsler and Backoff, 1987). The term strategy process refers to how objectives and actions are selected or formulated (Hart 1992). The outcome of this process is strategy content itself, which is "a pattern of action through which organisations propose to achieve desired goals, modify current circumstances and/or realise latent opportunities" (Rubin, 1988, pp 88). According to Boyne and Walker (2004), strategy content can be conceptualised at two levels. First as a general approach, that "describes the organisation's position and how it interacts with its environment". It is referred as *strategic stance*. Second as *strategic actions*, this involves "the specific steps that an organisation takes to operationalize its stance".

The first requirement is for a clearer understanding of the strategies of public service organizations. Existing classification schemes of organizational strategies have limited relevance to public agencies. They confuse strategy processes and strategy content, consist of simplistic taxonomies, and do not take sufficient account of the constraints faced by public agencies. A small literature on organizational strategies in public service organizations has evolved since the early 1980s but overall the studies remains small and sketchy (Boyne and Walker, 2004).

The overarching objective of this research is to develop a robust and generic protocol of developing and articulating a service-strategy map and producing specific as-is service strategy maps for a state government in Australia.

TOWARDS A NEW CLASSIFICATION SCHEME

Charih (2000) in his study encountered strategies which are most frequent, relatively frequent and infrequent. This formed the basis of our classification scheme development. Further, our study of the strategic plans of agencies of the state government helped in identifying the three layers of strategies. These layers are called kernel, cluster and individual. A kernel strategy is a strategy in common across all agencies. A cluster strategy is a strategy shared by a subset of agencies in such a way as to be thematically linked. An individual strategy is a strategy applicable in to only one agency. The agency in the context of our study refers to an administrative division of a government.

Services support strategies. A kernel service is a service used by every agency. A cluster service is a service used by a subset of agencies, again thematically linked. An individual service is a service used by only one agency. Kernel services are important across all agencies and resourcing their ICT support requirements will provide whole of government benefit. Similarly, identification of cluster services required in key agencies can also realize greater ICT benefit by providing focused systems development for shared services. Clearly kernel business services affect the entire enterprise and should be the target for shared service development. Similarly, cluster services for key agencies may also be of greater benefit for shared service development than other services which do not contribute to strategy attainment.

Services are high-level elements found in the process reference model. A process reference model can be an artifact produced in the business architecture level 1 development of an enterprise architecture model. There are three levels of such reference processes: management, core and enabling. There are three types of process reference models: kernel process

reference model depicting all the processes in common across all agencies; cluster process reference models depicting processes in use in specific clusters of agencies and individual process reference models, showing those unique processes found only in specific agencies. Thus, the goal for this research is to provide to the IT steering group the relative importance of business services supporting strategy attainment, thus informing ICT investment decisions.

CONDUCT OF THE RESEARCH

As a first step, the data source for this study was constructed. This was a file consisting of the strategy statements for 20 different government agencies. The file was produced from extracts of the strategic plan for each agency, as well as the whole-of-government strategy set.

The analysis was conducted in different phases. The first phase of analysis used word frequency count and thematic analysis of the consolidated strategy file. The text was analysed using a tool, Leximancer (ver. 3.0). The tool helped in identifying the major concepts and themes of the strategies. This phase of analysis though generated concepts and themes as required but was not helpful in differentiating strategies as kernel, cluster and unique. This phase also helped us in understanding the limitations and advantages of the tool.

The second phase of the analysis is termed as refined thematic analysis. In this phase we refined the text, to use the tool to its maximum potential and with a hope of getting the desired result. Refinement of text was achieved by:

- Removing redundant labels such as Government, Management, Service/Services.
- Removing capitals of each sentence.
- Ensuring only proper nouns were capitalized.
- Sorted alphabetically to remove department bias.

In this phase we also refrained from using count of themes and focused on relevance of theme in the strategy text.

Table 2 presents the variation in emerged themes (presented in their order of relevance) from the analyses in Phase 1 and 2. From the table, it can be observed there are similarities in themes emerging from both phases of analysis, though their order of relevance is changed. Leximancer as a tool cannot be used for sophisticated analysis but provides useful initial understanding for further analysis. The analysis so far has provided us a snapshot of the concepts and themes of the strategies.

PHASE 1	Revealed Themes	Theme Size
	Support, Development, Management	37%
PHASE 2		
	Industry, Ensure, Development	37%
	Ensure, Provide, Development	50%
	Development	100%

Table 2 Concepts and themes: Phase 1 and Phase 2

We were able to classify strategies as follows:

- Kernel strategies include themes – Improve and Support (Aggregate relevance $\geq 2.5 - 3.5$)
- Cluster strategies include themes – Provide, Implement and Develop (Aggregate relevance < 2.5 and ≥ 1.5)
- Individual strategies include themes – Including, Ensure, Infrastructure and Clients (Aggregate relevance < 1.5)

Based on the outcome from first two phases of our analysis, we concluded that themes alone do not reveal the underlying strategy structure. We also observed from literature that developing or using existing taxonomies of strategies provided another way of understanding the formulation of strategies (Fuller, 2010; Charih, 2000; Wechsler and Backoff, 1987). Table 3 provides a brief description of the derived strategy taxonomy adapted mainly from the work of Charih (2000), Wechsler and Backoff (1987).

Strategy type	Focal activities	Strategy type	Focal activities
Internal	Improvement of management processes and systems Improvement of production processes Reorganisation or modification of structures Development of human resources and corporate culture	Service improvement and development	Improvement of quality and services Development of new services Marketing of services Development of research and inventories
Reorientation	Redefinition of different levels of jurisdiction Privatisation Opting-out or withdrawal	Political	Extension, promotion, or defence of sectoral interests Political reinforcement and persuasion Regulation and control of the sector Modification of legislative framework governing the sector
Environmental	Conservation/protection of resources and cultural heritage Education/awareness of clients/citizens	Partnership	Partnership or co-operation

Table 3 Strategy taxonomy description (adapted from Charih (2000); Wechsler and Backoff (1987))

From this taxonomy, it was observed that *Internal strategy and service improvement and development strategy* components were common across all twenty government agencies and thus were kernel strategies. Similarly, *political, environmental, and partnership* strategies (common for 8,8, and 12 agencies respectively) were cluster strategies, and *status quo* and *reorientation* strategies (common for 2 and 1 departments respectively) were individual strategies. There were status quo strategies, which either maintain or continue existing activities.

CONCLUSION

The paper has identified the existing weakness and gaps in the existing literature of strategic management and more from public sector organisations' perspective. The paper also identified issues related to the definitions and descriptions of the notion of strategy. The purpose of this paper has been to address this important issue in a manner that would enhance the dialogue across theoretical perspectives within the academic and practitioner community.

This paper has provided the foundations for building a system for classifying business strategies by specifying the contents and spread that must be considered in developing such a system. It identified that kernel strategies did exist and that these belonged to the *internal strategy and service improvement and development strategy* components of the taxonomy. In addition, cluster strategies were identified and belonged to *political, environmental, and partnership* components of the taxonomy. From this work, business services supporting these kernel and cluster strategies can be identified, fostering the development of shared services focused on strategic attainment. These components of the business architecture can inform ICT investment decisions, particularly for IT shared service development and delivery. The paper proposed that kernel or cluster services (for key agencies) should be the focus for shared service development and delivery.

This taxonomy and the referencing system supports enhanced discussion within our research discipline of differing theoretical approaches to the field and may lead to the development of a service-strategy mapping. The limitation at present is generalizability outside public service organisations, which we aim to overcome through empirical studies in private sector organisations. Researchers can modify and test the taxonomy and the classification system empirically in multiple organisational contexts or conceptually continue to employ their preferred theoretical approaches while invoking the standardised referencing system. Practitioners will have greater descriptive clarity through which business strategies may be identified and pursued. Collectively, both academicians and practitioners may use the classification system in ways best suited to their individual needs while enabling a common understanding by those from differing theoretical perspectives.

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