# Conceptualising an integrated planning system

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**Abstract:** This paper explores an innovative approach to planning in organisations based on viewing planning itself as a system. Beginning with an outline of problematic and rigid planning processes, this article advocated for a reconceptualisation of planning itself to accommodate the complex and ever-changing environment in which planning must take place. By using van der Heijden's (1997) strategy paradigms, and Mintzberg and Lampel's (1999) schools of strategy, a heuristic is created for a modular and flexible systems-based approach to planning. Implications for planning practices are considered in light of this novel approach to planning as well as some suggestions for further research.

**Keywords:** planning; systems; philosophical approaches to strategy and planning; integrated planning.

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## 1 Introduction

Bain and Company's 2003 Management Tools Survey (Rigby, 2003) found strategic planning to be the tool of choice in 2002. Executives indicated that in the midst of an "economy in turmoil, investors in retreat, and managers under attack" (Rigby, 2003,p.4) they needed some way to cope with devastating circumstances.

A problem arises in that strategic planning – the most highly used management tool according to Rigby's (2003) survey – is with considerably conflicting supporting research. To clarify, it is unclear if strategic planning is truly effective in delivering a clearer path through uncertain times. In most organisations, planning is considered a formal process. That is, formal planning practices are the "explicit systematic procedures used to gain the involvement and commitment of those principal stakeholders affected by the plan" (Pearce *et al.*, 1987,p.658). Assessment of formal planning practices suggests ambiguity about the relationship between planning and a core measure of success – firm financial performance.

For example, Pearce *et al*. (1987) have provided research suggesting that planning is not significantly linked to firm performance. In their analysis of 18 empirical studies from 1970 to 1983, the authors found that "empirical support for the normative suggestions by strategic planning advocates that all firms should engage in FSP has been inconsistent and often contradictory" (1987,p.671).

More specifically, Pearce *et al*. cite research examples by Shrader *et al*. (1984) and by Scott *et al*. (1981), which both suggest there is no systematic relationship between formal strategic planning and firm performance. Further, these research studies argue that such a relationship is "so tenuous that it is not amenable to direct measurement" (Pearce *et al*., 1987,p.658). Miller and Cardinal (1994) conducted a similar study using meta-analysis techniques. They analysed 21 independent studies regarding the link between planning and firm performance and came to conclusions consistent with those of the study seven years earlier – essentially, that research about the link between formal strategic planning and firm financial performance is conflicting and ambiguous at best.

Pearce *et al*. (1987) originally identified five critical factors and methodological concerns that further research regarding planning in organisations should consider. These were:

1   contextual influences

2   lack of uniformity in operationalisation of planning itself

3   measurement validity (most are still perception based)

4   time frame

5   firm size.

Such research seems to indicate that a problem may exist with the overall approach to planning and that it may be worth exploring other ways of thinking about planning and how most effectively to approach planning in organisations given some of the complications reported in research.

## 2   Problem statement and theoretical framework

This critique of the basic idea that planning will have an impact on performance is not new. Researchers have been investigating the nature of the relationship between formal planning and firm performance for decades. However, the results of their investigations continue to provide ambiguity. The intent of this article is therefore to suggest an alternative *conceptual* approach to the nature of planning in organisations.

The bulk of the planning and strategy literature assumes that organisational planning is a process (Mintzbeg, 1994; Porter, 1985). At its essence, the argument made in this manuscript is that planning should be viewed as a system within the organisation and thus might better be approached from a more integrative perspective than current practices promote. While this distinction may seem trite, its implications have a considerable influence on the nature of planning and strategy in organisations. Further, viewing planning as a system allows strategists a greater amount of flexibility in their efforts to obtain glimpses of the future and it will be argued here that a systems approach to planning can *conceptually* address the five key methodological concerns surfaces by Pearce *et al*. (1987).

Thus, the problem is that the current *process* approach to planning may be unsuitable for capturing and evaluating the nature of planning itself as evidenced by conflicting or ambiguous research (Micklethwait and Woolridge, 1995; Hitt *et al*., 1990). A more modular, flexible, and integrative approach may provoke new approaches to planning and therefore, new ways of operationalising performance measures related to planning. To build the case for viewing strategy as a system, this article considers the current view of planning as a process and then suggests a general account of planning as an integrated system. The article then reviews several 'schools' of planning as advocated by Mintzberg and Lampel (1999) in the context of three 'paradigms in strategy' as advocated by van der Heijden (1997) to illustrate the utility of viewing planning as a system. A planning heuristic is constructed by combining the paradigms and schools. The use of this heuristic provides an integrated view of planning and a framework for discussing strategy as a system itself.

To accomplish its goal of a conceptual shift in how planning is viewed and approached, this article has three core sub-objectives:

1    To generally describe the current view of strategy as a process.

2    To generally describe a view of strategy as a system.

3    To illustrate the utility of viewing planning as an integrated system by describing and combining some views in the planning literature (Mintzberg and Lampel's schools of strategy and van der Heijden's strategy paradigms).

Finally, this article examines the implications of an integrated approach to planning for the five issues and methodological concerns offered by Pearce *et al*. (1987).

### 2.1   Planning as a process

The availability of countless guides to organisational planning and strategy serves as testament to the fact that there are as many different sets of steps for planning as there are consultants to help organisations through them. Indeed, planning is largely thought of as a single process in organisations with little concern for the nature of the engagement in strategy or its ultimate outcomes (Micklethwait and Woolridge, 1995). The problem inherent in this situation is that by selecting a single process for approaching strategy, organisational planners limit their approach to strategy. That is, most strategic planning processes are not compatible and do not interface with other strategic planning processes. Thus, the problem is that most approaches to planning (such as that provided in Figure 1) promote a single view of strategy throughout the entire strategy making event, while the strategy phenomenon is extremely complex, multifaceted, and may require more than a single approach.

Planning is generally viewed as a single process – a series of steps to be conducted within an organisation (Miller and Cardinal, 1994). The Basic Planning Model as depicted by Mintzberg (1994) in Figure 1 is based on a process approach to planning.

**Figure 1**     The Basic Planning Model (Mintzberg, 1994)
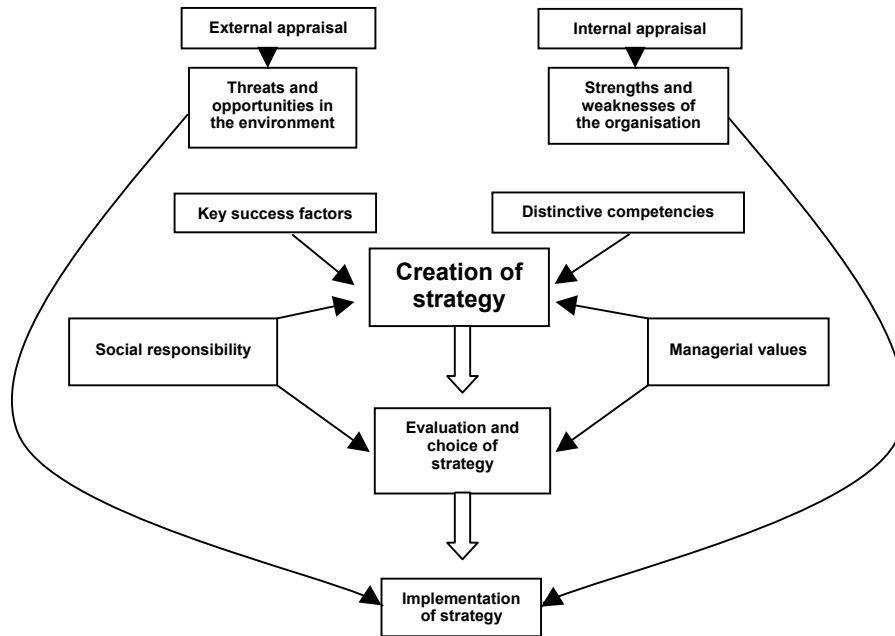


Mintzberg's (1994) basic planning model has been used to demonstrate a variety of common approaches to planning in organisations. It seems clear that this model displays a *process* approach to planning. That is, there are no clearly discernable inputs or processes, and perhaps most importantly, there are no clearly defined outputs. This is not to say that Mintzberg's model has not been useful. On the contrary, the Basic Planning Model has certainly been the basis of planning for many organisations and is inherently valuable because of its ability to synthesise a great deal of planning literature, research and experience in a single model. However, there is, a predictive stance based on a process view that is evident in this model.

### 2.2   *Planning as a system*

With the popularity of publications like *The Fifth Discipline,* there is no need to engage in a detailed discussion of system theory and how it applies in an organisational context. However, the basic definition of a system requires a set of inputs, a process (or multiple processes) and a set of outputs, all of which occur in some contextual environment (Senge, 1990; von Bertalanffy, 1969; Morecroft, 1992).

Swanson (1994) used the diagram in Figure 2 to denote a view of organisations as simple systems. This simple figure allows the components of a system to be seen simply and logically. This article advocates for the conception of planning in the same way. Following the logic employed by the system diagram and the view of planning as a system, planning itself requires a series of inputs processes and outputs (Swanson *et al.*, 1998).

**Figure 2**    An organisation as a simple system (Swanson, 1994)
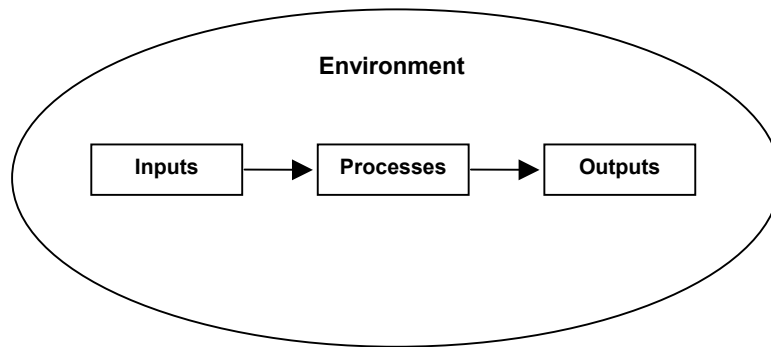


A discussion of planning as a system involves the same components: inputs, processes, and outputs in some kind of environment. Inputs to the planning system involve the need for planning, or some organisational problem for which planning is suggested as a possible solution. The processes involve the sets of steps as discussed earlier in brief. Planning processes can be any of the popular methods or consulting perspectives commonly used for strategy interventions.

It is further argued here that strategic planning generally consists of two distinct processes – option generation, and decision formulation (Swanson *et al*., 1998). Figure 3 depicts planning as a system with two distinct processes.

**Figure 3**    A general planning system
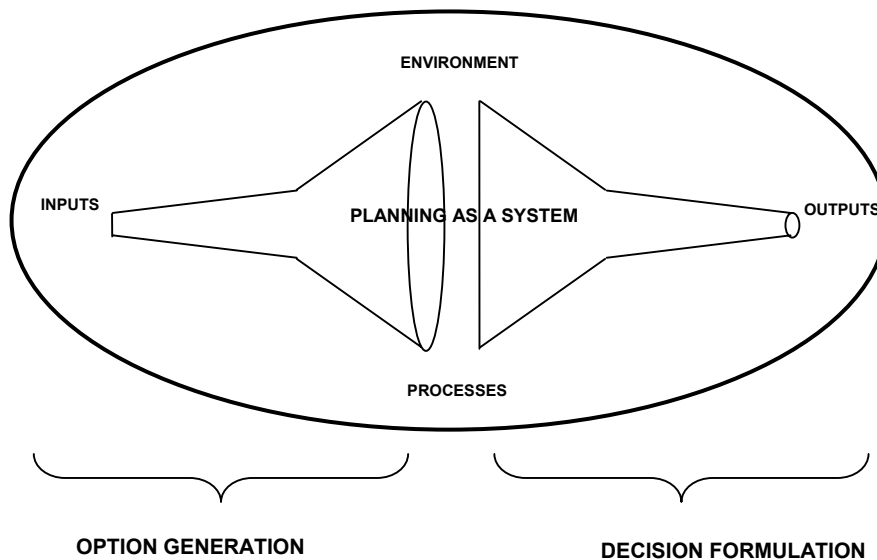
The implications of Figure 3 are that a variety of approaches to generating strategic options exist, as well as a variety of approaches to decision formulation. Thus, approaching planning as a system requires the ability to accommodate a variety of perspectives for each of these strategy components.

Also implied in the structure of Figure 3 is the notion that the first component of strategy – option generation – can be characterised by divergent and challenging thinking. Conversely, decision formulation is concerned with convergent thinking and the idea that ultimately, options must be reduced through decision making. The key assumption in this model is that increasing the options that are considered in planning allows decision-makers a better view of the potential future, and thus, they are more prepared to make better decisions. Of course, this language begs the consideration of what, exactly constitutes 'better' decisions. While this article does not attempt to address the notion of how 'better' decisions might be defined, the suggestion is that the decisions made will be more informed based on a more complete view of the situation under consideration.

## 3   Paradigms in strategy

Thinking on strategy within the last few decades has revealed the development of paradigms of thought in strategic perspectives. In order to place planning in context, it is important to consider the backgrounds of each of these views. Van der Heijden (1997) identified three overarching paradigms of strategic management and planning. They are the rationalist, evolutionist and processual.

### 3.1   The rationalist paradigm

The rationalist paradigm features a tacit and underlying assumption that there is indeed one best solution. The job of the strategist becomes one of producing that one best solution, or the closest possible thing to it. Classic rationalists include Igor Ansoff, Alfred Chandler, Frederick Taylor and Alfred Sloan (Micklethwait and Wooldridge, 1995). The rationalist approach to strategy dictates that an elite few of an organisation's top managers convene, approximately once each year, and formulate a strategic plan. Mintzberg (1990) listed other assumptions underlying the rationalist school:

- predictability, no interference from outside

- clear intentions

- implementation follows formulation

- full understanding throughout the organisation

- reasonable people will do reasonable things.

The majority of practitioners and available literature on strategy is of the rationalist perspective (van der Heijden, 1997). Although it is becoming clear that this view is limited and though the belief in one correct solution wanes, the rationalist perspective is still currently the most common approach to planning found in organisations today.

## *3.2   The evolutionary paradigm*

With an emphasis on the complex nature of organisational behaviour, the evolutionary paradigm suggests that a winning strategy can only be articulated in retrospect (Mintzberg, 1990). In this context it is believed that systems can develop a memory of successful previous strategies. In this case, strategy is thought to be a "process of random experimentation and filtering out of the unsuccessful" (van der Heijden, 1997,p.24). The issue with this perspective is that it is of little value when considering alternative futures. This view also reduces organisation members to characters of chance, influenced by random circumstances (van der Heijden, 1997).

## *3.3   The processual paradigm*

The processual paradigm asserts that although it is not possible to deliver optimal strategies through rational thinking alone, organisation members can instil and create processes within organisations that make it a more adaptive, whole system, capable of learning from its mistakes (van der Heijden, 1997; 2000). Incorporating change management concepts to influence processes, the processual school supports that successful evolutionary behaviour can be analysed and used to create alternative futures. van der Heijden (1997; 2000) offered the following examples of metaphors for explaining the three strategic schools:

1   The rationalistic paradigm suggests a machine metaphor for the organisation.

2   The evolutionary school suggests an ecology.

3   The processual school suggests a living organism.

Because van der Heijden viewed scenarios as a tool for organisational learning, he advocated the integration of these three strategic perspectives, suggesting that: "Organizational learning represents a way in which we can integrate these three perspectives, all three playing a key role in describing reality, and therefore demanding consideration" (van der Heijden, 1997,p.49). It is widely accepted that effective scenario building incorporates all three of these perspectives (Ringland, 1998; Georgantzas and Acar, 1995; Schwartz, 1991).

## 4   Planning schools

Mintzberg and Lampel (1999) provided an overview of ten 'schools' of strategy. In an attempt to summarise the vast literature around strategy and planning, the authors devised ten schools according to ten different views regarding the intent and nature of strategy and planning. While their classification is helpful in analysing planning practices, Mintzberg and Lampel (1999) did not offer a precise description of a truly integrative approach to planning. Thus a core intent of this article is to provide the rationale that successful planning may incorporate several, if not all of the schools proposed by Mintzberg and Lampel. That is, varying approaches to option generation can be coupled with varying approaches to decision formulation in an overall planning system (Swanson *et al*., 1998). To illustrate this link, the ten schools of planning proposed by Mintzberg and Lampel are summarised.

## *4.1   The design school*

The Design school suggests that fit between the organisation and its environment is the most important factor in implementing and considering strategy. By analysing strengths, weaknesses, opportunities and threats, organisational leaders attempt to achieve a maximum fit with the environment through a "deliberate process of conscious thought" (Mintzberg and Lampel, 1999,p.22). The design school is based on a relatively predictive model and aspects of it have been incorporated into many of the other schools (Mintzberg and Lampel, 1999).

## *4.2   The planning school*

The planning school has grown primarily out of Ansoff's (1965) work and dominated the conception of strategy through the 1960s. "Ansoff's book reflects most of the design school's assumptions except a rather significant one: that the process is not just cerebral but formal, decomposable into distinct steps, delineated by checklists, and supported by techniques (especially with regard to objectives, budgets, programs, and operating plans)" (Mintzberg and Lampel, 1999,p.22).

## *4.3   The positioning school*

The positioning school was the dominant view in the 1980s and was given much support and influence by Porter (1980) and consulting firms such as Boston Consulting Group, and McKinsey and Company. "In this view, strategy reduces to generic positions selected through formalised analyses of industry situations. Hence, the planners become analysts" (Mintzberg and Lampel, 1999,p.23). Drawing on roots in military strategy, the positioning school focused on data and the articulation of strategy as a science.

## *4.4   The entrepreneurial school*

The entrepreneurial school focuses on the chief executive as the primary strategist. With a much smaller stream of literature and practice, the environmental school "centred the process on the chief executive; but unlike the design school and opposite from the planning school, it rooted that process in the mysteries of intuition" (Mintzberg and Lampel, 1999,p.23). Thus, strategy was a more vague, metaphoric endeavour driven by the knowledge, skill, and perceptions of an individual.

## *4.5   The cognitive school*

Focusing on creating models of reality for executive teams to test strategies, the cognitive school suggests that strategy is a mental process. Cognitive maps, mental representations, mental models and other terms have been used to communicate the importance of understanding those mental processes. "Particularly in the 1980s and continuing today, research has grown steadily on cognitive biases in strategy making and on cognition as information processing, knowledge structure mapping, and concept attainment" (Mintzberg and Lampel, 1999,p.24).

### *4.6 The learning school*

The learning school has emphasised planning as a learning activity, completely abandoning the notion that the future can be predicted:

> "Dating back to Lindblom's early work on disjointed incrementalism and running through Quinn's logical incrementalism, Bower's and Burgelman's notions of venturing, Mintzberg *et al*.'s ideas about emergent strategy, and Weick's notion of retrospective sense making, a model of strategy making as learning developed that differed from the earlier schools." (Mintzberg and Lampel, 1999,p.24)

This view also sees strategy as an emergent phenomenon and incorporates a cross-section of the organisation into the planning process.

### *4.7 The power school*

The power school has been divided into two perspectives – Micro power and Macro power:

> "Micro power sees the development of strategies within the organisation as essentially political – a process involving bargaining, persuasion, and confrontation among actors who divide the power. Macro power views the organisation as an entity that uses its power over others and among its partners in alliances, joint ventures, and other network relationships." (Mintzberg and Lampel, 1999,p.25)

Ultimately, the power school suggests that people in powerful positions devise strategies.

### *4.8 The culture school*

The culture school is the opposite of the power school. In the cultural view, strategies are devised by collective thought and contribution to the strategy process. The cultural school "focuses on common interest and integration – strategy formation as a social process rooted in culture" (Mintzberg and Lampel, 1999,p.25). This view was popularised in the USA after Japanese management styles were observed at the height of their effectiveness in the 1980s.

### *4.9 The environmental school*

"In this category, we include so-called 'contingency theory' that considers which responses are expected of organisations facing particular environmental conditions and 'population ecology' writings that claim severe limits to strategic choice" (Mintzberg and Lampel, 1999,p.25). The environmental school suggests that the goal of strategic planning is to prepare for as many environmental situations as possible. With a focus on contingency plans and preparedness, the environmental school represents a constantly reactionary stance to environmental conditions.

## *4.10 The configuration school*

The configuration school suggests the use and combination of multiple methods and views as an appropriate approach to strategy:

> "This school, more academic and descriptive, sees organisation as configuration – coherent clusters of characteristics and behaviours – and integrates the claims of the other schools – each configuration, in effect, in its own place." (Mintzberg and Lampel, 1999,p.26)

The ten schools proposed by Mintzberg and Lampel are intended to provide a means by which the diverse, complex and varied nature of the literature around strategy and strategic planning can be summarised. Some conceptual work has linked scenarios to strategic planning (Swanson *et al*., 1998; Torraco and Swanson, 1995) and this research intends to build on that work.

A unique perspective is achieved when the strategy paradigms and planning schools are combined in a matrix. Based on Mintzberg and Lampel (1999), and van der Heijden (1997) the planning schools and strategy paradigms can be combined generally to realise an integrated planning system as depicted in Figure 4. The matrix provided in Figure 4 allows the strategist to further assess or include a variety of approaches to strategy.

**Figure 4**    An integrated planning system

| | Strategy paradigms | | |
| --- | --- | --- | --- |
| *Planning schools* | *Rationalist* | *Evolutionary* | *Processural* |
| Design school | | | |
| Planning school | | | |
| Positioning school | | | |
| Entrepreneurial school | | | |
| Cognitive school | | | |
| Learning school | | | |
| Power school | | | |
| Cultural school | | | |
| Environmental school | | | |
| Configuration school | | | |

## 5 Examples of integrated planning in organisations

There are examples of planning in organisations that illustrate a division in the strategy system. This section offers some brief descriptions of planning in organisations that suffered problems and evolved toward a more integrative approach. While none of the examples reviewed have used the specific heuristic that is the basis of this article, several have exhibited characteristics suggesting problems with and then an integration of many of the perspectives found in Mintzberg and Lampel's and van der Heijden's thinking on planning. Further, as scenario planning has gained increased recognition as a key mode for generating options, it is becoming widely adopted in organisations as a precursor to more traditional planning. Therefore, many of the examples described here involve the addition of scenario planning at the outset of the strategy system.

The planners at Royal Dutch/Shell Oil had several insights as they pioneered the scenario planning technique. After becoming masters at designing technically magnificent scenarios they realised that by focusing on the scenarios themselves, they were overlooking the core purpose of their work – to alter the mental models of the management teams for whom they were developing plans (Senge, 1994). So, once they became proficient at designing challenging scenarios, there was a looming question of "now what?" Using the scenarios to formulate better decisions required a different kind of expertise, thus efforts to combine scenario planning and other forms of strategic planning began.

Argyris and Schon (1996) provided a case study of planning in which the orientation of the executive team contradicted the values of the majority of others involved in the planning system. What might have been assessed as a conflict between the design school and the culture school (Mintzberg and Lampel, 1999) was solved by incorporating both approaches to the planning system at different times as required by the intended outputs of the planning effort.

In 1997, Daimler-Chrysler integrated scenario planning with their more traditional planning process. In so doing, the planning team consisted of multiple smaller teams, each working with a different approach to the problems presented by recent mergers and growth (Tessun, 1997). Tessun (1997) reported that this was the first attempt at explicitly breaking planning into two distinct phases at Daimler-Chrysler; one of exploring options, and one of assessing and making decisions based on consideration of the options and their implications.

## 6 Addressing the methodological concerns

The nature and approach to planning in organisations has drastic implications for the ultimate outcomes of the planning system, and there are multiple factors that research has told us must be considered. Pearce *et al*. (1987) originally identified five critical factors and methodological concerns that further research regarding planning in organisations should consider. These were 1) contextual influences, 2) lack of uniformity in operationalisation of planning itself, 3) measurement validity (most are still perception based), 4) time frame, and finally, 5) firm size. This section describes how the heuristic offered in this manuscript might provide a basis for addressing these methodological concerns.

### *6.1   Contextual influences*

The integrated approach to planning provided in Figure 4 could potentially provide a framework for allowing researchers to more adequately address issues with contextual influences in formal organisational planning. For example, the contextual factors may change from cell to cell in Figure 4. That is, contextual factors might look quite different in a rationalistic/design school approach to planning than they do in a processural/ cultural school approach to planning. Thus, the utility of Figure 4 may be in its ability to more effectively describe varying approaches to planning in organisations and once done, provide the researcher with more knowledge about the critical factors operating within that approach, or the key items left out of that approach.

### *6.2   Lack of uniformity in operationalisation*

The key argument that this is a methodological concern is that contextual influences have been, for the most part, ignored in organisational research with regard to strategy. "Elements of corporate context and their influence on a formal strategic planning – performance relationship were ignored within the 18 studies" (Pearce *et al.*, 1987,p.671).

    The conception of planning presented in Figure 4 as a multifaceted system will certainly not aid in the establishment of uniform operationalisation across varying approaches to planning, but it may provide some consistency for classifying types of operationalisation according to each cell of the Figure. Hopefully, there could be uniform operationalisation of planning measures for each of the rationalistic, evolutionary, and processural planning paradigms.

### *6.3   Measurement validity*

Closely linked with the notion of lack of uniformity in operationalisation, measurement validity is also a key concern in the study of effective strategy systems. "Future researchers should evaluate both the quality of the process and of the output of formal strategic planning if they are to accurately assess formal strategic planning's capacity for improving corporate performance" (Pearce *et al*., 1987,p.672). The debate between concrete measures and perceptions of performance are as yet, not reconciled, but the idea of both concrete and perception measures being used in an overall evaluation system is gaining strength (Swanson, 1999). To clarify, dealing with the abstract concrete of strategy sometimes leads to confusion around what, precisely are the appropriate measures to assess its effectiveness.

    Figure 4, it seems will lend complexity to this debate, and perhaps it may also serve as testament to the fact that extremely complex systems like strategy require extremely complex modes of analysis and assessment. It is, however, possible that both concrete and perception based measurement systems could be developed for and employed within each approach to planning.

*6.4 Time frame*

> "Because strategic planning typically is intended to improve a firm's economic
> performance by the end of a three- to five-year period, measuring the impact of
> the plan outside the targeted time period may give a distorted view. This is
> complicated by the variability in performance time frames and different
> objectives found from firm to firm." (Pearce *et al.*, 1987,p.672)

The heuristic offered in Figure 4 does not provide a view of the time frame involved in
strategic planning that will encompass all of the complexity that arises when considering
varying firm objective and time engagements in planning. While this is surely a difficult
constraint to address, the tools offered in this article may provide the basis for
investigating relationships between particular philosophical orientations toward planning
and potentially related time frames. Sound research will be the only method for
determining the extent to which this heuristic can offer potential explanations of
relationships between time frame and financial performance. To clarify, it seems logical
that as we discover that our tools for explaining what happens in the planning system
may not be reliable, more complex and modular approaches to providing those
explanations must be formulated.

*6.5 Firm size*

Hitt *et al*. (1990) have argued that bureaucratic features of large firms undermine
strategic planning efforts. In their attempts to understand what factors tend to support the
influence of planning and firm performance, Hitt *et al*. concluded that generally, small
firms have an advantage because much bureaucracy is removed from planning.
Conversely, Miller and Cardinal (1994) argued that large firms have an advantage in
planning because of their capital intensity. To reconcile what appeared to be conflicting
conclusions, the authors echo the earlier research of Pearce *et al*. (1987) stating that firm
size is another factor that drastically affects the approach to planning in organisations;
however, there is no clarity about that precise effect. Proceeding to case studies of
companies that adjusted their approaches to planning based on these factors and showed
marked improvement in firm performance provides some confirmation that an integrated
approach to planning might be useful.

## 7   Conclusion

This article has introduced a heuristic for assessing and integrating approaches to
planning and strategy in organisations. The heuristic is based on the conceptual and
summative works of Mintzberg and Lampel (1999) and van der Heijden (1997)
respectively. It has been argued that planning has been and is currently largely
approached from a process perspective, indicating a limited number of options for
engaging in planning, and this article has further advocated a systems approach to
planning by introducing the integrative heuristic.

   While this heuristic may be useful for provoking discussions of an alternative view of
planning in organisations, there is much work to be done to investigate its practicality.
Thus, it is acknowledged that the conceptual nature of this article provides more
questions than it does answers, however, a research agenda can clearly and easily be

articulated based on the heuristic offered in Figure 4, albeit an ambitions one. Research must be done to further examine the methodological concerns originally set forth by Pearce *et al.* (1987), but more specifically, each of these concerns can be explored from a varied theoretical framework. Thus, it might be found that each of the methodological concerns may be addressed differently according to the paradigmatic and/or school orientation that is favoured in the planning system. Case studies or simple descriptive research would lend much to the credibility of the synthesis offered here, however, more detailed studies might benefit from the recognition of the preferred approach to planning according to a classification from the heuristic offered in Figure 4.

The heuristic might also be used as a tool to inform practice in such a way that it is based on theory. That is, each cell of the matrix (for example the cultural school of planning) draws from or favours particular bodies of theory to inform its understanding. A practitioner might use this tool to consider particular theories of organisational culture as they might apply in planning systems. Of course, the cells of the heuristic must be examined with an eye toward filling in those theory domains before such use could prove practical. Thus, a useful next step beyond simple descriptive research to examine varying planning orientations could be further conceptual work that examines theories that seem to particularly inform specific approaches to planning.

Planning is an extraordinarily difficult concept to capture in concrete and measurable ways. Even more difficult and complex is the environment in which planning must transpire. A few decades of research have brought about further fascinating and frustrating questions about the nature of planning and how best to engage in it. While this article does little to directly answer these detailed questions, it does provide an alternative view of planning – particularly that it is a system in itself – and thus, has conceptualised an alternative approach to answering those questions based on a view that is more integrative than that which is currently considered standard.

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