Over Half a Century of Strategic Planning Performance Research – What Have We Been Missing?

ABSTRACT

Purpose

The purpose of this paper is to provide a review of literatures and previous studies on the relationship between strategic planning and performance and propose conceptual designs and hypotheses using multidimensional constructs to advance our understanding of this relationship, contribute to existing debates in the extant literature and make recommendations.

Design/methodology/approach

A semi-systematic literature and previous studies (studied by various groups of researchers within diverse disciplines) review approach has been used in this paper to contribute to the debate on whether strategic planning affects performance and how. Using more recent knowledge about the strategic planning concept, the semi-systematic review looked at how research within strategic planning has progressed over the past five decades and its relationship with performance.

Findings

In the past the strategic planning performance relationship has been treated as a black box and this paper proposes that the conceptualisation of a number of constructs and the inclusion of strategy implementation will help converting the black box into a white box. To strengthen support for the debate regarding the relationship between strategic planning and performance this paper proposes a further conceptual/operational design, mathematical expressions, and hypotheses to be tested empirically in further studies. The proposal provides a conceptualisation of the major constructs (strategy development; strategy implementation; and performance), and the use of strategy implementation as a mediator and/or as a moderator in the planning performance relationship.

Research limitations/implications

This study is limited due to fact that the findings have not been tested empirically, it is not a cross-sectional and/or a longitudinal research, and only a limited number of dimensions of strategy development and strategy implementation have been used. In addition, the approach used is a semi-systematic review followed by

quantitative thinking, which in turn, typically assumes the relevance of and a warrant mainly from a positivist epistemology.

Originality/value (mandatory)

The proposed design developed in this paper ensures that core issues in planning performance relationships research are addressed. Furthermore, the inclusion of strategy implementation in planning performance relationship studies means that the whole chain of activities in the strategy process is being considered, drawing a complete and comprehensive conclusion on how strategic planning affects an organisation's performance. In addition, by separating strategy implementation and by not combining it with formulation/formation activities will theoretically and analytically help to evaluate the importance or role of each stage of the strategy process. Moreover, the conceptualisation and operationalisation of the key concepts as multidimensional constructs contribute to past research gaps. Finally, this paper provides some clarity to many contradictory findings concerning the strategic planning and performance relationship.

Keywords:

Strategic Planning, Strategy Development, Strategy Implementation, Organisational Performance, Conceptual design, Multidimensional measures, mediator/moderator.

Introduction

There is a particular and special area of strategy research that has captured the attention of strategy researchers for over half a century and that is the relationship between formalized strategic planning and performance. From the earliest writings (Ansoff, 1965) to what today is called strategic planning (Jaques *et al,* 2001; Philips and Moutinho, 2014; Wolf and Floyd, 2017; George *et al*., 2019; Desmidt and Meyfroodt, 2021), it has been expected that strategic planning will result in better performance outcomes. As the old adage says, "*If you fail to plan, you plan to fail.*" Over the past half a century a large body of research has focused on the use of strategic planning as a tool for performance improvement. However, two features of this literature warrant initial comment.

First, despite that considerable effort has been made to measure the relationship between strategic planning and performance (Najjar, 1966; Guynes, 1969; Ansoff *et al*., 1970; Brews and Hunt, 1999; Goll and Rasheed, 1997; Grant, 2003; Thune and House 1970; Stanwick and Pleshko, 1995; Glaister and Falshaw, 1999; Glaister

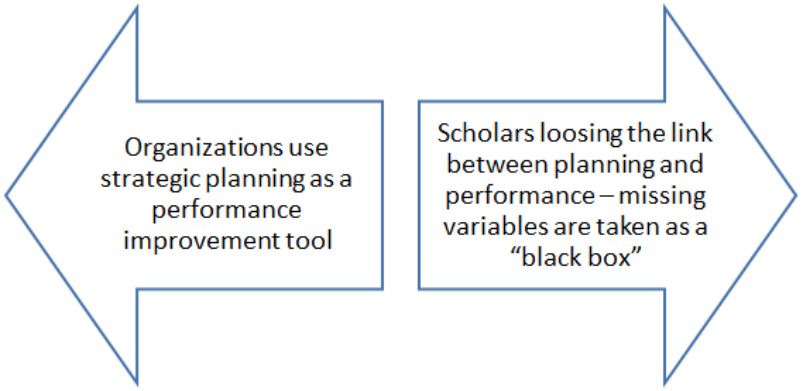
et al., 2006; Hamann, 2017; George et al., 2019) the results of these studies have been mixed and findings have been inconsistent and counterintuitive (Brews and Hunt, 1999; Pearce *et al*., 1987). Some studies found a performance benefit associated with planning (Armstrong 1991; Berman *et al*., 1997; Bracker and Pearson 1986; Grant, 2003; Miller and Cardinal 1994; Rhyne 1986). Some studies suggest that the relationship is at best weak and tenuous (Brews and Hunt, 1999; Pearce *et al*., 1987). Other studies were unable to establish a link (Fredrickson and Mitchell 1984; Lyles *et al*., 1993; Rhyne 1987; Robinson and Pearce, 1984). So, concrete conclusions among interested parties remain elusive. Yet, inconsistencies have led some writers to reject formal strategic planning as a single best way to plan (Mintzberg, 1994a). According to this position, strategic planning is dysfunctional, yields too much rigidity, does not encourage innovative and adaptive thinking and is, therefore, irrelevant (Miller and Cardinal, 1994, Mintzberg, 1978; Mintzberg, 1991; Pearce *et al*., 1987).

Second, much of the referenced extant literature is dated and this too is significant. Academic studies on strategic planning have dwindled and, as observed over a decade ago by Whittington and Cailluet (2008: 242), the genre "*has slowed to a trickle*". In that decade-old review on strategic planning studies, Whittington and Cailluet (2008: 243) observe that there has been only one published report in the premier strategy journal, *Strategic Management Journal* (see Grant, 2003). They note however, that there is more interest in journals that are sensitive to practitioner concerns such as the *Harvard Business Review*, *Long Range Planning* and *Sloan Management Review*. A review of the current literature further supports Whittington and Cailluet (2008) view that practitioners seems to now dominate such that some of the best seller books on the subject are from practitioners (see e.g. McChesney *et al*., 2016; Hrebiniak, 2013). Notwithstanding that the whole subject domain of strategic management and strategic process are changing and there is need for recent studies to capture these changes and highlight the impact on organisations and individuals, this lack of attention persists. The most comprehensive recent review of strategic planning studies confirms this (see Wolf and Floyd, 2017, p1755). Others highlight that recent publications focus less on empirical research (see e.g. the Table 2 in Wolf and Floyd, 2017; and also Table 4 of Philips and Moutinho, 2014). They are mostly conceptual (Giraudeau, 2008; Jennings, 2000); a meta-analysis of previous studies (George et al., 2019) or focus on the strategy-as-practice (SAP) perspective, which analyzes the micro processes involved in strategic planning (see e.g. Whittington, 2006; Spee and Jarzabkowski, 2011).

However, it is also important to note, strategic planning has been and is still widely used by organizations (Glaister and Falshaw, 1999; Grant 2003; Cailluet, *et al*., 2005; Rigby and Bilodeau 2005 and 2007; Hodgkinson *et al*. 2006; Gkliatis and Koufopoulos, 2013; Hamann, 2017). The notion that formalized strategic planning is dead is far from reality and, as noted by Whittington and Cailluet (2008: 243), 80% of reported companies are

using it as a tool for performance improvement. The most recent Bain & Company survey reports[1] usage and overall satisfaction are still rated very high – albeit usage has declines somewhat (see Bain & Company, 2018). They also state that from 2006 – 2017 strategic planning has remained among the top ranked management tools used by organizations worldwide (see Rigby and Bilodeau, 2018; and also see similar at PwC Strategy&, 2019). Again, in more recent times George *et al*, (2019) undertook a meta-analysis of 31 empirical studies also concluded that strategic planning has a positive, moderate, and significant impact on organizational performance. In general, there are diverging forces within the study and application of strategic planning that can be summarize as follows in Figure I:

Figure I[2]: Skepticism Versus Acceptance of Strategic Planning



It follows, therefore, that given the inconsistency of previous findings, the recent relative paucity of research and the continued use of and recognition of worth of strategic planning, that there is scope to return to the subject. Therefore, the aim and purpose of this paper is to provide some clarity to the many contradictory findings concerning the strategic planning and performance relationship; explore the categorization of the problem; ask what has been missing that has made findings inconclusive; and in additional, conceptually propose a way to overcome it.

We begin by exploring studies that measure a link between planning and performance and categorise how researchers over the past half a century have studied this relationship. We note that there are some methodological/measurement-related issues that needs further investigation. We also posit that inconclusiveness could be due to some missing variables taken as a "black box" effecting the conceptualization of the problem, note a white box alternative and propose that key the concepts – strategy planning and strategy

[1] Bain & Company is a consulting firm who every year or two since 1993 have conducted research to identify 25 of the most popular and pertinent management tools.
[2] The sources of all figures in this paper are of the authors own design.

implementation – should be measured using multidimensional measures informed by knowledge and understanding from recent previous studies that have investigated these concepts.

We then develop and provide a research design that takes in recognition the operationalisation challenges emanating from methodological/measurement-related issues, and that can be used overcome the gaps, inconsistencies and issues identified. We end this paper with a discussion and conclusion the importance on strategic implementation and how that could be the resolution of missing link in strategic planning studies.

Reasons for Inconclusiveness in Strategic Planning Studies

We can trace the roots and motivation of Strategic Planning Studies over the past half a century or more. Early evidence that organizations had been formally undertaking strategic planning are provided by Ansoff *et al.* (1970) and Thune and House (1970) who reviewed organizations as far back as 1947 and 1958 respectively. These studies were significant milestones in the strategic planning literature. It is no surprise that almost all reviews on strategic planning performance cite these early pioneers' work (see also Karger and Malik, 1975). Thereafter, a good starting point in tracing the roots of strategic planning research can be found in the subsequent narrative reviews and meta-analyses undertaken (notably, Armstrong 1982; Pearce *et al.*, 1987; and more recently Hutzschenreuter and Kleindienst, 2006; Hamann, 2017; Philips and Moutinho, 2014; Wolf and Floyd, 2017; George *et al*, 2019).

All these initial publications neglect the problem of implementation (see Sull *et al.*, 2015; Hrebiniak, 2013; McChesney *et al.*, 2016). Various reasons have been put forward over the years to explain inconsistencies and counterintuitive findings in strategic planning performance research. These can be decomposed into five categories: substantive factors, planning sophistication level, methodological/measurements problems, conceptual/operationalization simplifications and importantly the related neglect of strategy implementation (Brews and Hunt, 1999; Hrebiniak, 2006, 2013; Miller and Cardinal, 1994; Phillips and Moutinho, 2000). There have been previous reviews that have focused on substantive factors and planning sophistication level (see e.g. Miller and Cardinal, 1994; Goll and Rasheed, 1997). For this paper our focus areas will be on methodological/measurements problems, conceptual/operationalization simplifications and the most important of all, the related neglect of strategy implementation. We note that these three issues are interrelated.

First, there have been serious concerns about methodological, conceptual simplifications and measurement issues; which were highly noticeable in the early works and the form these took contributed to inconsistencies in findings (Bergh et al, 2017; Aguinis et al., 2018). Key issues were the inability of researchers to clearly define

what was being measured, the crude classifications of planning behaviors (the sole use of dichotomous or trichotomous classifications), and poor conceptualizations/operationalisation. As noted by some researchers (Boyd, 1991; Boyd, Gove and Hitt, 2005; Brews and Hunt, 1999); these studies failed to operationalize the key constructs adequately, resulting in issues of measurement error, poor reliability and validity. This led Boyd, Gove and Hitt (2005) to conclude that to resolve the debate on the strategic planning performance relationship, future research should focus on construct measurement.

Second, the planning to performance relationship could also be more complex than had previously been supposed. Most past studies used simplistic conceptualizations in contrast to sister disciplines in business management. For example, in Organizations studies (Gunkel *et al*, 2016); in Marketing (Babin *et al*, 2008) and in HRM (Ringle *et al*., 2018), - all have used more complex research designs, as compared to strategic planning research.

Third, in all the initial studies, the focus has been on trying to find a relationship between the drawing up of plans and organization performance. There is little mention of how these plans, when drawn up, will be put into action. The earlier discussions suggest that planning (or solely the capacity to draw up plans) will thus dominate the planning-performance relationship. However, the most sophisticated plans, if not put into action; result in the status quo (Heracleous, 2000). Also, Hambrick and Cannella (1989: 278) state that, "*Without successful implementation, a strategy (plan) is but a fantasy*." Studies drew conclusions from an assessment of the firm's ability to produce the strategic plan rather than assessing whether and how it was put into action – the implementation of the plan (Chebat, 1999; Parsa, 1999; Pearce *et al*., 1987; Whittington and Cailluet, 2008). Conceptually, researchers have depicted the relations as shown in Fig II, where the strategy planning construct (which in most cases is operationalised as strategy formulation/formation) is direct to the performance construct. This implies that the issue of how the strategy was implemented is absent from this conceptualization and operationalisation. It can therefore be concluded from the above that in the strategic planning-performance literature, the issues relating to strategy implementation have been neglected, and treated as a *black box* or at best bundled with the strategy formulation aspect of the strategy process (Hrebiniak, 2013; Mintzberg, 1994; Phillips and Moutinho, 2000; Flander, 2010).

Fig II: Conceptualisation of the Planning – Performance Relationship

Detaching or Separating Formulation from Implementation

One of the important debates on the nature and concept of strategy is on the detachment or separation of strategy formulation from strategy implementation (see Mintzberg, 1994a: 227 - 228; 1994c: 15). In their concluding remarks on the Learning School of Thoughts, Mintzberg *et al.* (1998: 208) wrote that, "*... strategy development must above all take the form of a process of learning over time, in which, at the limit, formulation and implementation becomes indistinguishable*". Some other authors favour a separation of formulation from implementation (e.g. Hrebiniak, 2006; Hrebiniak and Joyce, 1984; Hrebiniak, 2013; Elbanna *et al.*, 2013). For instance, Hrebiniak, (2006: 13) states emphatically that "*Strategy formulation and implementation are separate, distinguishable parts of the strategic management process. Each can be differentiated and discussed separately, conceptually and practically*". He however notes that it will be a mistake if the "…*view (is held) that one group of managers does innovative, challenging work (planning), and then "hands off the ball" to lower-levels for execution (implementation)*" Here the emphasis on separation is on the actors and not on the activities of the process. So, this criticism is to do with separating the various actors of the stages and not the stages themselves. Since the basic premises of emergent strategy comes from learning through actions; then it will be dysfunctional if the actors of the activities are separated from each other. Even those on the side of non-separation; acknowledge that one can, for the purpose of analysis, conceptually view the stages as separate (Jarzabkowski *et al*, 2013; Mintzberg and Quinn, 1996:48). This is also the position taken by most writers of academic's textbooks such that in most textbooks this is the emphasis (Barney and Hesterly, 2018: 26-33; Grant, 2016: 8; Johnson, *et al*, 2017: 12 – 15; Lynch, 2018).

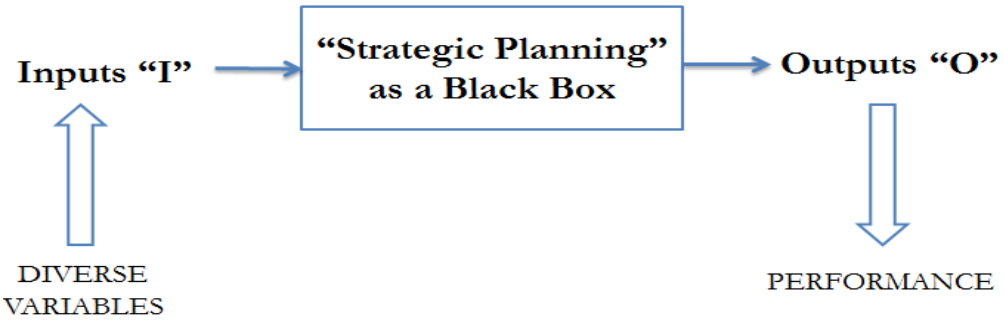
So basically, the detachment fallacy here is to say that formulators and implementors could be the same group of people since inputs from both processes help define the strategy and a detachment of one from each other will be dysfunctional. These formulators and implementers working together is at the heart of strategic human resource management (SHRM) when it comes to strategy implementation (Becker and Huselid, 2006). Greer *et al.*, 2017), construe it at as a "*all hands on deck*" approach which must have all units within the organisation "*getting their hands dirty*" so as to achieve the strategic intensions of the organisation (Mistry *et al.*, 2016). So, whichever side one takes on the detachment of formulation – implementation debate, an evaluation of the contributing or important role played by each of the activities should be of interest to all. Also, it may be that implementation rather could be everybody's common ground in these debates; since both sides are concerned with it being relegated to a lesser role.

The Black Box in Strategic Planning Studies

It has long been the concern of several writers; King (1983); Pearce *et al.*, 1987; Hambrick and Cannella (1989); Hopkins and Hopkins, 1997 – and more later by Whittington and Cailluet (2008) that the whole strategy process should not be taken as a black box; since all that happens inside should be of interest. However, a closer examination indicates that initial frameworks used is to treat strategic planning-performance as a *black box* highlighting (see Figs III)

This treatment offers a different perspective to address strategic planning and its impacts among organizational performance, in which research will provide the most common inputs (I) taken by scholars and practitioners vs desired strategical outputs (O). The general idea pretends to determine the most common variables immersed within the processes that affects the performance of the organization.

Figure III.- Strategic Planning as a Blackbox Framework.



From Black Box Concept of the Strategy Process to a White Box Concept

A black box concept or analysis is mostly attributed to the works of Wilhelm Cauer who published his ideas in their most developed form in 1941 (see Cauer, *et al.*, 2000). It is a concept mostly written about in philosophy and science (Latour, 1999; Bijker *et al.*, 1987; Winner, 1993). In such a concept, we are only interested in the input and output of the box (see Fig III). Whatever is in between the input and output is considered as a black box and ignored. In philosophy, a prominent theory on the black box concept is the so called "black box theory of consciousness", which states that the mind is fully understood once the inputs and outputs are well defined, and generally couples this with a radical scepticism regarding the possibility of ever successfully

describing the underlying structure, mechanism, and dynamics of the mind (Friedenberg and Silverman, 2006). In other words, we cannot open the mind and simply "*peek*" inside. We can only do something to the mind and from the results guess what goes on inside. It is also well used in marketing and consumer behaviour (Sandhusen, 2000) and health service research (Feshbach, 1979).

An alternative view of this is that found in science and engineering, where a black box is a device, system or object which can (and sometimes can only) be viewed solely in terms of its input, output and transfer characteristics without any knowledge of its internal workings (Beizer and Wiley, 1996; Ashby, 1956). Such a device or system could be a transistor or an algorithm. The difference here is that in science and engineering it is now possible and of interest for the inner components or logic to be available for inspection in the system (such as a free software/open source programme). In such a situation, we are no longer referring to it as a black box; but rather a white, glass or clear box. Such a free software/open source programme and opening of the black box has now resulted in tremendous advances in technology. Similarly, the notion of examining what is in the black box is now of interest to those in social science to illustrate what could be hidden and thus ignored (see e.g. Pelled *et al.*, 1999; Mintzberg *et al*, 1998, pg. 370; Sirmon *et al.*, 2007).

Analogously and similarly, in the discussions on the separation of formulation from implementation, although some writers advocate that such separation is artificial, the view taken by this paper is that it will be conceptually and analytically useful to look into the strategy process, identify major activities in the process, and separate these in order to find the unique contributing roles of these activities. It was also established in the previous discussion that even for those who do not favour a separation, their bone of contention was separating the actual actors (the group of persons that carries out the activities) in the strategy process more than separating the activities themselves. It could then be worthwhile to view the strategy process as a white box instead of a black box. This supports the views of Hrebiniak (2006; 2013) and Hrebiniak and Joyce (2001) who advocate that separation could help explain the variation in performance of different organisations. However, and equally, this in a way also supports the view of those who have advocated that we should not separate the actors in the whole strategy process since if we do we could be over-emphasising the importance of one department from the other and not considering that each of the activities in the strategy process are equally valuable (Becker and Huselid, 2006; Mistry *et al.*, 2016; Greer, *et al.*, 2017).

The definition and Operationlisation of Strategic Planning Constructs – a Methodological and Measurement Issue.

Constructs comes from conceptual definitions which are first operationalised from the concepts before being measured. Several authors in management (see e.g. Adcock and Collier, 2001; Goertz, 2006; MacKenzie *et al.*, 2011) have highlighted the need of a good conceptual definition which should identify the set of fundamental characteristics or key attributes that are common (and potentially unique) to the phenomenon of interest; since a lack of conceptual clarity causes a number of problems—both at the conceptual and the operational levels; increases the likelihood of a mismatch between the concept and measures or manipulations of it (Locke, 2012; Molloy et al., 2011; Suddaby, 2010). For example, Heggestad et al (2019) noted the importance of getting construct measurement right since it is a foundation on which organizational science is built. Netemeyer, Bearden, and Sharma (2003) notes that one of the main causes of these measurement problems is a poor definition of the concept in the first place. A vague and ambiguous definitions conveys only in a general way information about the nature of the variable and is of little value in providing guides for the development of appropriate operations and could results in the operationalization of a construct may be either deficient or contaminated (e.g., poor item generation, poor selection of indicators for its measurement, focusing on only some aspects of the conceptual definition and ignoring others, poor choice of a manipulation, etc.). It is the view of this paper that, this is the issue of the past strategic planning studies

Conceptual definition come by examining the noted that the domain of the construct (or concept) is uniquely a function of the theories and knowledge of the concept (Ghiselli *et al.*, 1981; Heggestad et al., 2019). It becomes important to examine theories and knowledge of the concept of strategy and see whether, over time, these have improved. Therefore, an important consideration that has influenced planning performance studies is the ongoing debate on the nature, theory and practice of strategy (Ansoff, 1965; Hrebiniak, 2006; Hrebiniak and Joyce, 1984; Mintzberg, 1994a).

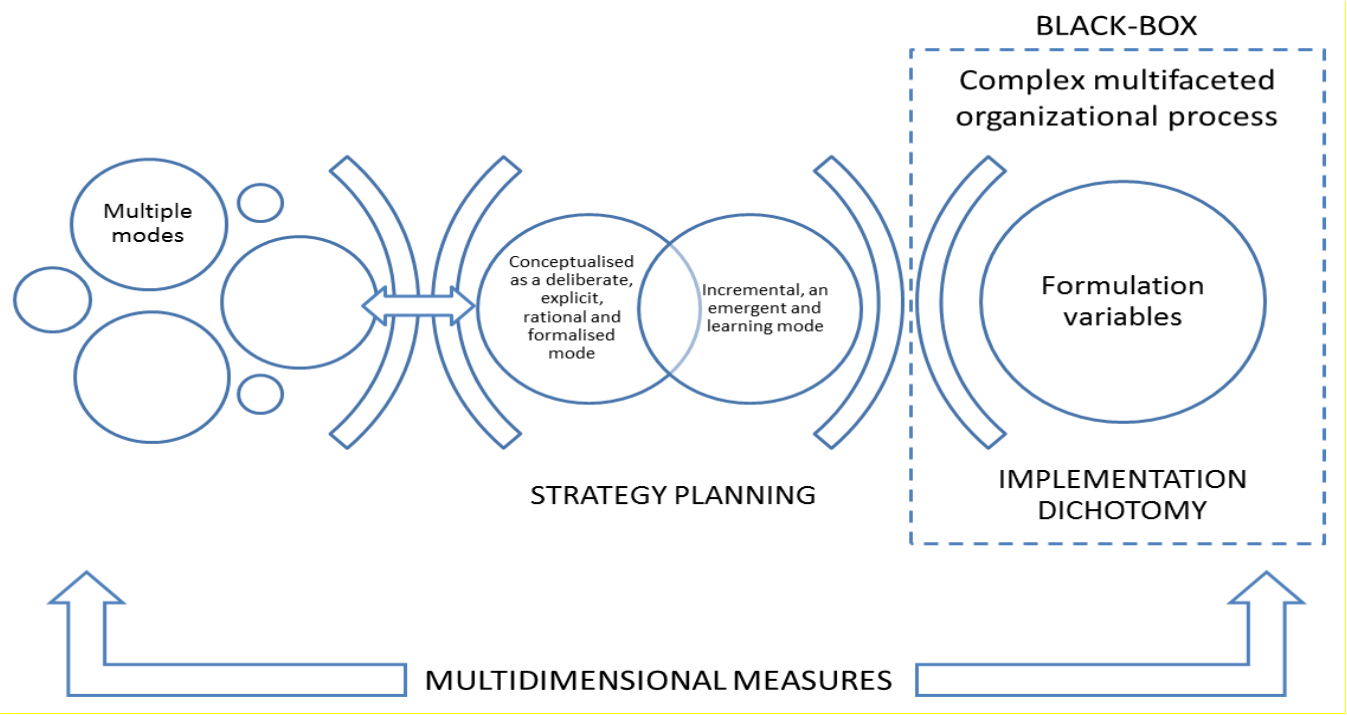
Within the organizational contexts, many lenses have been used to examine strategy, and more recent lenses includes employing behavioural, institutional, political and resource-based theories as "lenses" for examining formulation in strategic planning. However, the most keenly contested debate had been on the discussions below.

There is a large body of early literature where strategy is viewed as based on the rational, comprehensive or synoptic model. (Andrews, 1971; Ansoff, 1965; Hofer and Schendel, 1978,). However, in contrast, also in the early texts, there are those who advocate an incremental, emergent and learning view of strategy (Lindblom,

1979; Mintzberg, 1973; Quinn 1980; Wrapp 1984). This is often referred to as the *synoptic* versus *incremental* views of strategy or the debate of *emergent* versus *deliberate* strategies. This debate, also sometimes referred to as between the '*design*' and '*process*' schools of thought (Brews and Hunt, 1999; Grant, 2003), raises two important issues which are of interest in any planning–performance study.

First, should the planning construct be conceptualised as a deliberate, explicit, rational and formalised mode or as an incremental, an emergent and learning mode? However, as noted by Hart (1992) and Goold (1992), rather than viewing planning in this dichotomous mode, there is commonly a mix of both approaches by organisations in their strategy development process. This view was later empirically tested, and the conclusion was that most organizations use a more composite approach in planning (Anderson, 2004; Anderson and Nielson, 2009; Brews and Hunt, 1999). The findings also confirm that effective organisations engage in more complex strategy development processes that recognise multiple modes, instead of a single mode (see Fig IV). Consequently, knowledge of strategy development has increased over the years; and conceptualisation and operationalisation of this concept could benefit from using composite modes rather than a single mode (Patanakul and Shenhar, 2012; Papke-Shields and Wright, 2017).

Figure IV: Strategy Planning/Implementation related issues model.



The second issue is the formulation - implementation dichotomy (Hrebiniak, 2006; 2013; Mintzberg *et al*., 1998). Those who normally favour a deliberate, explicit and formalised way of planning advocate a separation of formulation and implementation; while those who favour incrementalism, which is an emergent and learning way of planning, do not. Most past studies in planning – performance have tended to aggregate formulation and implementation variables into a single measure for planning (Hopkins and Hopkins, 1997: 642). This approach introduces two issues.

There is the danger of unequal emphasis placed on some of the activities; and this was the concern of some early writers and theorists in strategic management (Armstrong, 1982; Hopkins and Hopkins, 1997; Pearce and Robinson, 1994). The suggestion was that positive results from strategic planning are more likely to be realised by placing relatively equal emphasis on each component of the strategy process. Although in some studies, there has been inclusion of strategy implementation variables (Hahn and Powers 1999; Hopkins and Hopkins, 1997; Phillips and Moutinho, 2000); however, a closer examination of these will show that only small emphasis was placed on this activity. As noted by King (1983); Whittington and Cailluet (2008); and Flander (2010) somehow what happens between planning and performance is unfortunately treated more like a *black box*; and there is a planning to performance gap.

In the research done so far, strategic planning is defined as a composing of strategy formulation and implementation; and sometimes the addition of other activities like feedback/control (see e.g. Wolf and Floyd, 2017; Philips and Moutinho, 2014). This definition seems to try and mimic what we have come to know as the strategic management process or stages. Clearly in the strategic management process/stages, there is a process/stage of strategy development and a process/stage of strategy execution (see e.g. Barney and Hesterly, 2018: 26-33; Grant, 2016: 8; Johnson, *et al*, 2017: 12 – 15; Lynch, 2018). However, there also seems to be a disagreement on whether to consider the strategy development stage as comprising a formulation or formation approach (see e.g. Johnson, *et al*, 2017; Wolf and Floyd, 2017); and also the bundling of all the stages in the strategic planning process means some stages could be overshadowed or missed out in the conceptualisation of the model. Consequently, the danger as noted by Boyd, Grove and Hitt (2005: 244) is that such aggregation in construct operationalization is not appropriate because there is the tendency to hide some sub-constructs and *mask* them as single variables. In the past, similar criticisms had also been expressed by other strategy theorists like Montgomery *et al*. (1989) and Snow and Thomas (1994). When such aggregation occurs, the unique variances explained by these separate constructs are lost, which does not assist explanations of study outcomes. If implementation issues are important in the whole planning–performance relationship, then their omission could present a methodological error. So, a facet of such conceptualisation is that implementation

related variables may be important in explaining why some firms perform better, and these implementation variables could explain more variance in the firm's performance than those of strategy development variables (Hrebiniak and Joyce, 2001).

Strategic Planning Constructs – Using Multidimensional Conceptualisations

Various researchers in management, organisation behaviour (Bhargava *et al.*, 1994; Chakravarthy, 1986) and in the field of statistics (Blalock, 1979; Cook and Campbell, 1979; Cronbach *et al.*, 1972) have noted that certain concepts are multifaceted and more complex than the way in which they are represented in studies. For this reason, it is better to use multi-dimensional measures to represent the concepts, to capture the breadth and comprehensiveness of them and provide a holistic representation of complex phenomena. This enables the researchers to match broad predictors with broad outcomes and allows for more variance to be explained (Hanisch *et al.*, 1998; Ones and Viswesvaran, 1996;). As noted by Ghiselli *et al.* (1981), over time and as our knowledge of the concept increases, what once was represented by a simple variable may now be a complex variable. For this reason, it has been suggested by some researchers (Bagozzi and Phillips, 1982; Boyd *et al*, 2005; Katsikeas et al., 2006) that future studies should increasingly use multidimensional measures to help explain these complex phenomena. Examples have been Bailey *et al.* (2000) and Murphy and Shiarella (1997), who used multidimensional measures for strategy development and job satisfaction respectively. Also, unlike strategic planning research where limited efforts have been made (see e.g. Papke-Shields and Wright, 2017), in more recent times in other areas of the management literature this methodological advantage of using multidimensional measures has caught on (see e.g. Asiaei and Jusoh, 2015; Caputo *et al*, 2019; Gunkel *et al*, 2016).

So, and finally, the problems discussed above on past planning-performance relationship studies suggest that the concepts of interest are multifaceted and more complex than previously envisaged. For this purpose and more recently some writers (see e.g. George et al, 2019; Bryson et al., 2018) had proposed there need to look into this multidimensional aspects since much variation could be observed and affect planning-performance relationship.

Therefore, in this paper, we would propose that the two key concepts – strategy planning and strategy implementation – should be measured using multidimensional measures; and using the acquired knowledge and understanding from studies that have investigated these concepts. The respective dimensions themselves should be represented by multiple indicators, when possible. This will directly address the concerns of Boyd *et al.* (2005: 252), who strongly recommended that significant attention should be placed on measurement in

strategic management research by the use of multiple rather than single indicators for specific constructs, as well as the application of more indexes and scales to ensure high reliability of the measures used. As noted by Kuester *et al.* (1999), such multidimensional conceptualisations offer a coherent structure of multifaceted, interdisciplinary knowledge pertaining to the domain of a concept and this should help in resolving the problem at hand – which for this context involves the inconsistencies and counterintuitive findings in planning-performance studies.

Conceptual Designs for the Strategic Planning Performance Relationships – Our Proposals

We noted above and as shown in Fig III how the strategic planning performance relationship had been conceptualised and operationalised, and where implementation is completely absent and ignored. Despite a context of inconsistent findings the conceptual Strategic Planning – Performance relationship that has been stated in past studies (Boyd and Reuning-Elliot, 1998; Hopkins and Hopkins, 1997; Pearce *et al.*, 1987) follows most often that of Miller and Cardinal (1994: 1650) - '*Strategic planning positively affects performance, or more specifically, the amount of strategic planning a firm conducts positively affects its financial performance.'* This definition also highlights that most previous studies tends to use financial performance as the outcome variable.

As discussed above and will be illustrated in the conceptual diagrams below, the key concepts required to be considered in the strategic planning performance studies should be strategy planning, strategy implementation and performance. Given that many past researchers did not explicitly define key variables, to avoid similar ambiguity, these will be defined in this paper.

Definition and Operationalisation of Strategy Planning

There are many definitions for the word *strategy*; most of which are similar and are unified that this word represents a long-term plan that enables the organisation to outperform its rivals (Barney and Hesterly, 2018; Grant, 2016; Johnson, *et al*, 2017; Lynch, 2018). For this paper, the word "*strategy*" will be defined using the definition offered by Barney and Hesterly (2018) as the long-term plan (or theory), position, direction and scope of an organisation, which aims to achieve competitive advantages for the organisation, to meet the needs of markets and fulfil stakeholder expectations. Strategy planning will be operationalised separately as the strategy development part of the strategy process. Strategy planning – the strategy-development process - is defined as the scanning, evaluation and the decision-making process in order to select the long-term plan (or theory) of the organisation. In this paper, strategy planning is thus concerned with the process of formulation/formation and the making of a strategic choice.

Most of the past studies cited above have tended to conceptualise and operationalise the strategy development stage as a single mode – formulation or formation of strategy. As noted previously, some empirical studies have suggested that organisations using a multiple mode approach for the strategy development process perform better (Andersen, 2004, Andersen and Nielsen, 2009; Bailey *et al*., 2000). Within the management literature it is accepted that the domain of the construct (or the concept) is uniquely a function of the theories and knowledge of the concepts (Nunally, 1968; Trochim, 2006); and over time as our knowledge increases, our representation of that concept will also increase (see also Ghiselli *et al*., 1981; Sreenkemp and Trijp, 1991). So, over the past decades – and as knowledge of strategy development has increased - conceptualisation and operationalisation of strategy development could benefit from using multiple modes in a composite form, rather than a single mode.

The strategy is usually a mix of formalised and deliberate as well as emergent and is supported by empirical research. Example, this mix was the termed "*planned emergence"* by Brews and Hunt (1999) and Robert Grant (2003), and more recent as *rational adaptive planning approach* by Patanakul and Shenhar (2012) and Papke-Shields and Wright (2017). We propose that the dimensions of formalisation and adaptivity are used to represent this combination.

We have noted that strategy development could also be considered as a decision-making activity and the comprehensiveness of that decision is vital to the strategy development process (Fredrickson and Laquinto, 1989; Fredrickson and Mitchell, 1984; Miller and Friesen, 1983). So, we propose, comprehensiveness is included in the dimensions in the operationalisation of the strategy development construct to represent the comprehensive and thoroughness in the decision-making aspect in the strategy development processes.

During the strategy development stage, organisations use various analytical aids and tools in a sophisticated approach to arrive at the decision point and for selecting the strategy (Rigby and Bilodeau, 2007; Arend *et al.,* 2017; Vuorinen *et al*., 2018). Clark and Scott (1999: 36) defined strategy tools as "*a generic name for any methods, models, techniques, tools, frameworks, methodologies and approaches which provide decision support*". So, finally included in the operationalisation of the strategy development construct is the sophistication dimension; which is the use of various analytical aids and tools in a sophisticated approach to arrive at the strategy.

In summary, the four strategy development dimensions operationalised and measured as a multidimensional construct are:

- **Formalisation:** strategy development, considered as a deliberate, explicit and rational approach.
- **Adaptivity:** strategy development, considered as an implicit and informal, incremental and emergent (over time) approach.
- **Sophistication:** the use of various analytical aids and tools in to arrive at the decision point and for selecting the strategy.
- **Comprehensiveness:** a thorough approach to the decision-making activity in the selection of the strategy.

The dimensions proposed here have been used in previous studies in measuring the construct; however, in most cases they have been used separately in a single mode as a measure of strategic planning.

Definition and Operationalisation of Strategy Implementation

Strategy implementation is concerned with the process of putting the firm's strategy into action in order to achieve results for the organisation. The firm puts its strategy into action by making use of its managerial and organisational capabilities and skills.

Similar to the definition of the term strategy; the definition of strategy implementation is virtually the same offered by various strategic management writers (Barney and Hesterly, 2018; Grant, 2016; Johnson, *et al*, 2017; Lynch, 2018). If we review some of these definitions; then strategy implementation can be defined as *the realisation, execution, or putting into action of the organisation strategy through programmes, projects or tasks*. Strategy implementation, therefore, is also concerned with the translation of strategy into organisational actions through organisational structure and design, resource planning/allocation and the management of strategic change.

A review of several authors who have written on strategy implementation (see Galbraith and Kazanjian, 1986; Aaltonen and Ikavalko, 2002; Noble, 1999; Okumus, 2003; Yang *et al*., 2010; Ho *et al*., 2014), shows that these factors that impacts on strategy implementation could be grouped into two main variables: structures, organizational and managerial skills. Recently some researchers (de Oliveira *et al*., 2018; Amoo *et al*., 2019) suggested these sub-activities could include project/programmes, the design of the organisational structure, resource allocation, communicating; feedback/control and evaluation processes, compensation policy, and managing change.

Performance in Strategic Planning Studies

In strategic planning research, organizational performance is taken as a distal outcomes and often this dependent variable has been economic/financial performance measures (Brew and Hunt, 1999; Fredrickson and Mitchell, 1984; Rogers, Miller and Judge, 1999; Hamann et al. 2013; Wolf and Floyd, 2017). This position in the past studies could be on how early writers had conceived as the purpose for strategic planning. For example, as noted by Porter (1980) and Barney and Hesterly (2018), the essence of undertaking strategic planning is to gain competitive advantage over rivals – which are mostly measured as the economic/financial position of the organization. This operationalization of the performance construct has been the focus of much debate and research in strategic management literature (Chakravanhy, 1986; Delios and Beamish, 1999; Lenz, 1981; Rowe and Morrow, 1999; Simerlv and Li, 2000; Venkatraman and Prescott, 1990). The majority of measurements in strategic planning tend to use objective performance measures and focus on the economic benefits of undertaking the strategic planning activities. In a study by Boyd and Reuning-Elliot (1998), more than three-quarters of the relevant studies undertaken between the periods 1982 and 1993 focused on the economic benefits of strategic planning (see also Hamann et al. 2013).

In more recent research, several writers (see e.g. Andersen, Boesen, and Pedersen 2016; Hubbard 2009; Walker Boyne, and Brewer 2010; Fisk 2010; Walker and Andrews 2015) have argued that performance should be construed in a multi-dimensional aspect instead of predominate position of using only economic/financial measures. So, in pursuant of this, other management and organisational related dimensions like innovation, efficiency and effectiveness (Radin 2006), responsiveness and outcomes as well as more "governance"-related dimensions like as societal outcomes, environmental friendliness of an organisation and responsiveness to clients had been proposed and used (George *et al*, 2019).

Although, all of the above are considered extremely important when assessing an organisation's performance and effectiveness, there will always be challenges in obtaining data for such non-financial performance indicators.

Mediation and Moderation in Strategic Planning Research[3]

There are two main approaches to introduce the *black box* (implementation) into the strategic planning to performance relationship. First, this could be as a moderator, where the Implementation constructs are interacting with the planning performance relationship. Second, as a mediator, where the Implementation

[3] Some of the methods and approaches used in the following research design are an adaption of recent works by Caputo *et al* (2018 and 2019); Gunkel *et al* (2016); and Ringle *et al.* (2018).

construct is directly in the middle and mediates the relationship, and we are now looking at the indirect effects of planning on performance. Notwithstanding, there have been some mediation/moderation studies in strategic planning research (see e.g. Rau *et al*, 2020), we in the following sections, provide details on our proposal of research design options that could be use.

Strategy Implementation as a Moderator

The concept of moderation in testing relationships has caught on in business and management research (Caputo *et al*, 2018; Alatailat *et al*, 2019; Rau *et al*, 2020). Simply put, a moderator variable could change (interact) the relationship between the predicting and the predicted variables (Dawson, 2014; Preacher *et al*, 2007, pg. 191), and most studies tends to use the product indicant of the predicting and the moderator variable as a third variable in the model (Aiken and West, 1991; Hayes, 2018).

In our proposed conceptual model, the four (4) types of strategy development independent variables will be hypothesised as having a direct relationship with the two (2) Performance dependent variables, and this relationship is also moderated by a number of Strategy Implementation mediating variables (e.g. five in this proposal). There will be also a number of control variables e.g. organisational size; environmental turbulence; etc.

Moderation: Proposed Model Specification and Hypothesis Testing

For the purpose of hypotheses generation and testing, we can conceptualise two models, based on the two main dependent variables, i.e. *Performance 1* (*P1*) and *Performance 2* (*P2*). With reference to Fig V, we derived equations for model 1 and 2 as follows:

Model 1:

$$P1 = \alpha_0 + \alpha_1(FM) + \alpha_2(AD) + \alpha_3(SH) + \alpha_4(CP) + \alpha_5(IP_i) + \alpha_6(FM \text{ x } IP_i) + \alpha_7(AD \text{ x } IP_i) + \alpha_8(SH \text{ x } IP_i) + \alpha_9(CP \text{ x } IP_i) + \alpha_{10}(CV_{1\text{-n}}) + \varepsilon_1$$

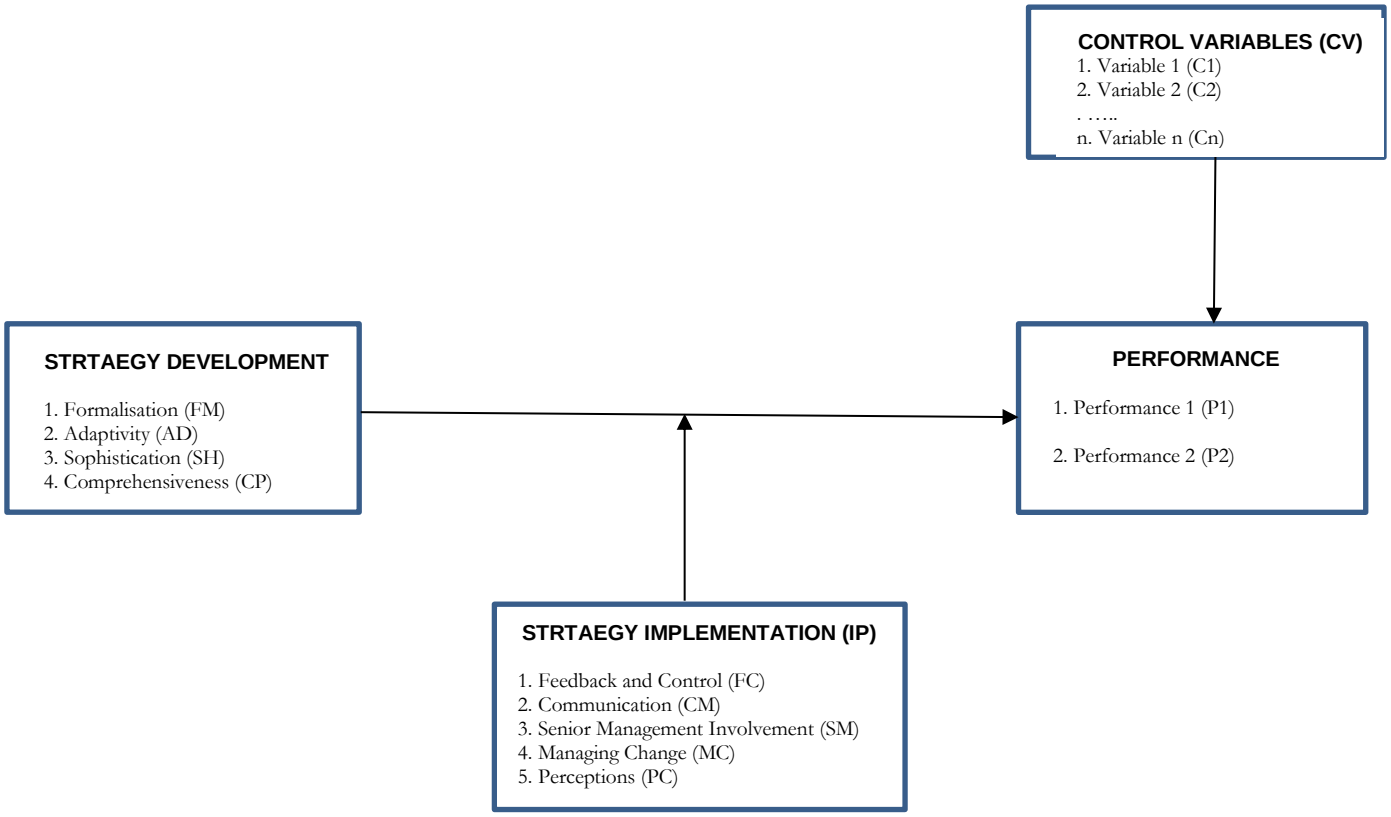
Model 2:

$$P2 = \beta_0 + \beta_1(FM) + \beta_2(AD) + \beta_3(SH) + \beta_4(CP) + \beta_5(IP_i) + \beta_6(FM \text{ x } IP_i) + \beta_7(AD \text{ x } IP_i) + \beta_8(SH \text{ x } IP_i) + \beta_9(CP \text{ x } IP_i) + \beta_{10}(CV_{1\text{-n}}) + \varepsilon_2$$

Please note: Where the $\alpha_{1\text{-}10;}$ and $\beta_{1\text{-}10}$ are the coefficients of the respective independent variables; $\alpha_{0;}$ and β_0 are the constant terms; and ε_1 and ε_2 are the residual/error terms. Also, where $i = 1 - 5$ as illustrated in Fig V; (e.g. IP_1 = Feedback and Control (FC); IP_2 = Communication (CM); etc.) and $CV_{1\text{-n}}$ = control variables (*n* being the number of control variables used in the model).

Regarding the five Strategy Implementation variables interacting with the two main dependents, we could then test for 2 x 5 regression equations (a total of 10 in all). We recommend the use of Moderated Multiple Regression Analysis (MMRA) for testing all the ten (10) equations (see e.g. Caputo *et al*, 2018). It is also recommended that all variables are mean-centered (Aiken and West, 1991; Dawson, 2014), and entered in the regression analysis in a hierarchical order as follows: first control variables; then the four strategy development types; then enter the moderator variable; finally the interacting terms as a product term of the moderator with each of the four types of strategy development types.

Fig V: Strategy Implementation as a Moderator in the Strategic Planning – Performance Studies



Strategy Implementation as a Mediator

When it comes to using a variable as a mediator, there is even more debate in the literature on how we proceed (Sobel 1982; Baron and Kenny, 1986; Preacher and Hayes 2004; Jabeen *et al*., 2015),). Mediating variables suggest that the effects of independent variables are achieved indirectly through that variable and in that situation, we could have both direct and indirect effects (see e.g. Preacher *et al*, 2007, pg. 188).

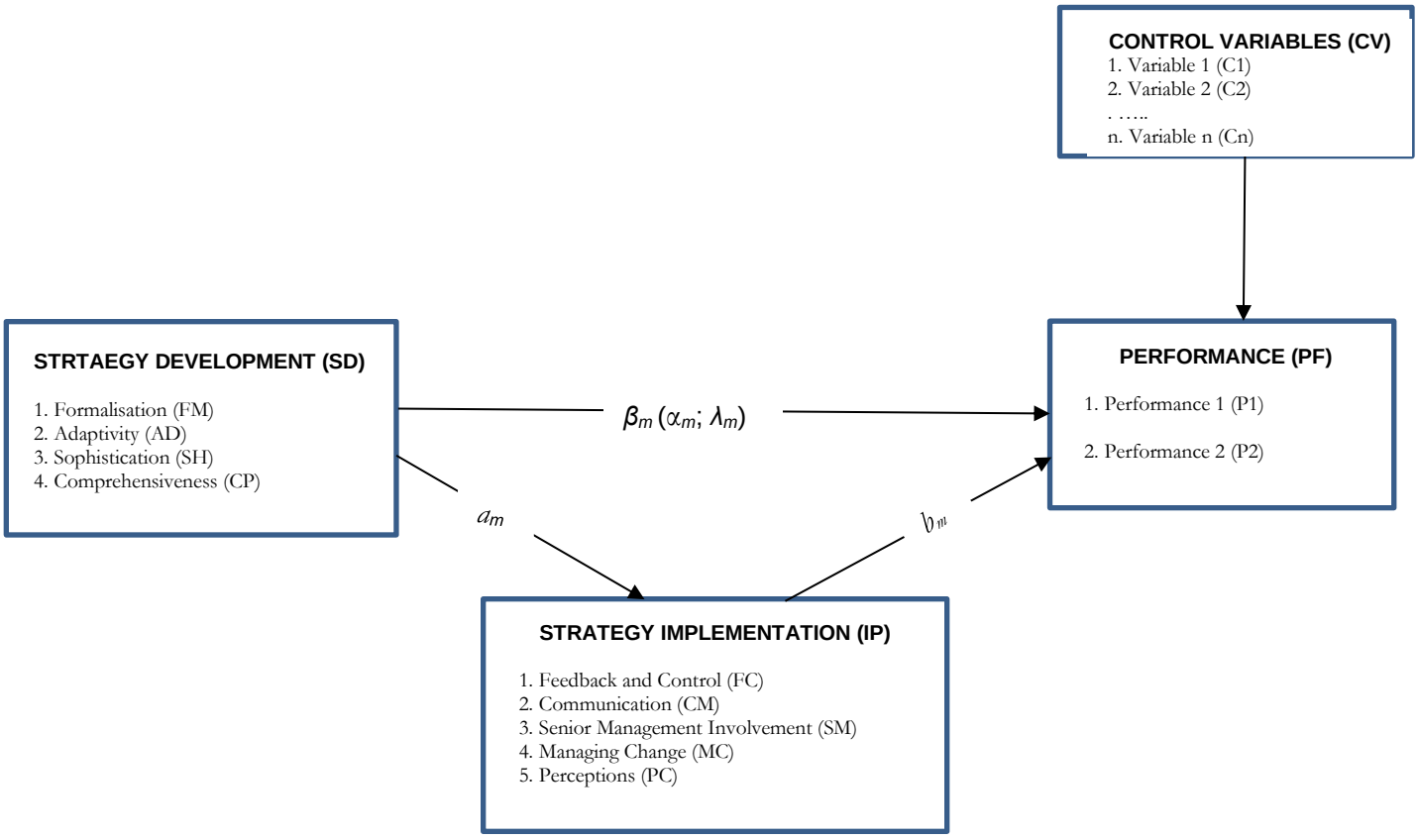
We propose the use of Strategy Implementation as a mediator variable in the relationship between strategy development and performance, and while in the moderation testing above, where the dimensions of strategy

implementation were used as aggregates, here, it is proposed it is used as a second order higher construct. As can be seen in Figure VI, our theoretical model comprises two dependent variables (*Performance 1* and *Performance 2*), four independent variables (i.e., the four strategy development dimensions – *Formalisation*, *Adaptivity*, *Comprehensiveness*, *Sophistication*), and one second-order higher construct as a mediation variable (i.e. *Strategy Implementation*).

Mediation: Proposed Model Specification and Hypothesis Testing

Due to the many debates on how to test for mediation, we go through the process below that we propose could be used.

Fig VI: Strategy Implementation as a Mediator in the Strategic Planning – Performance Studies



Please Note: β_m and a_m are the coefficients of the SDs (with m taking the values of 1 – 4 for the respective SDs, FM; AD; SH; CP); and α_m and λ_m are the specific coefficients of i.e. *Performance 1* (*P1*) and *Performance 2* (*P2*) respectively. b_m is the coefficient for the relationship between IP and PF.

With reference to our Conceptual testing model in Fig VI and using the Hayes (2018, pg. 6) simple mediation and also as illustrated by Preacher *et al.* (2007, pg. 188), we suggest the setup of the mediation process by adapting the approach of Caputo *et al.*, (2019) and using the following equations.

$$IP = a_o + a_m(SD) + \varepsilon_1 \qquad \text{equ. (1)}$$

and $$PF = \beta_0 + \beta_m(SD) + b_m(IP) + \varepsilon_2 \qquad \text{equ. (2)}$$

where a_0 and β_0 are the constant terms; β_m and a_m are the coefficients of the SDs (with m taking the values of 1 – 4 for the respective SDs, FM; AD; SH; CP); b_m is the coefficient for the relationship between IP and PF; and ε_1 and ε_2 are the residuals/error terms for estimating the two equations. For simplicity in all subsequent equations, the residual terms are not denoted (see e.g. Hayes, 2018, pg. 6). Also, for simplicity, we have not included the control variables.

Combining equ. (1) and equ. (2)

$$PF = \beta_0 + \beta_m(SD) + b_m[a_0 + a_m(SD)]$$
$$= \beta_0 + \beta_m(SD) + b_m a_o + b_m a_m(SD)$$

and rearranging $$PF = [\beta_0 + b_m a_o] + \beta_m(SD) + b_m a_m(SD) \qquad \text{equ. (3)}$$

So, from equ. (3), $[\beta_0 + b_m a_o]$ now represents the constant terms. For the testing and conclusion reached about the hypothesis, the β_m are thus the direct coefficients and if significant then it could be concluded that the direct hypotheses will be supported and if not then they are not supported.

Several methods and approaches suggested in the literature when one wants to test if mediation exists (Kenny, 2008; Preacher *et al*, 2004). The Sobel test (1982) and the causal approach by Baron and Kenny (1986) are some approaches that could be used – and these are not without their problems. For instance, the Baron and Kenny (1986) causal approach has been criticised for its low in statistical power (Fritz and MacKinnon, 2007; Hayes, 2009), whiles Sobel test in most cases could require that the sampling distribution of the indirect effect should to be normal. Some researchers thus suggest the use of bootstrapping (Bollen and Stine, 1990; Hayes, 2009). This has now become more popular since the advent of more sophisticated analytical software's, like Structural Equation Modelling (SEM). As noted by Caputo *et al.*, (2019), caution though needs to be taken that the sample used in the analysis should be large enough to reduce the risk of committing a type 1 error (Koopman *et al*, 2015 suggests that $n > 100$).

In our equ. (3) above, let's now represent the coefficients $b_m a_m$ by γ_m. Then γ_m now represents the indirect coefficients of the respective SDs and if they are significant, then we can conclude that there is a full mediation of the SDs to PF relationships by IP and any mediation hypothesis are supported; and if not, then there is no mediation by IP and the respective hypotheses are not supported. If for any SD both β_m and γ_m are significant, then we will conclude that there is only partial mediation. We can now put the two performance types (PF) and also the four strategy development dimensions (SD) in equ. (3), and again for simplicity the constant is not denoted in the final two equations below (see e.g. Hayes, 2018, pg. 6). For the two performance types, we could specify the following:

For the Performance 1 (P1) lets now use α to represents the betas, (β_m)

$$P1 = \alpha_1(FM) + \gamma_1(FM) + \alpha_2(AD) + \gamma_2(AD) + \alpha_3(SH) + \gamma_3(SH) + \alpha_4(CP) + \gamma_4(CP)$$

For the Performance 2 (P2), we have (let's now use λ to represents the betas, (β_m)

$$P2 = \lambda_1(FM) + \gamma_1(FM) + \lambda_2(AD) + \gamma_2(AD) + \lambda_3(SH) + \gamma_3(SH) + \lambda_4(CP) + \gamma_4(CP)$$

With the use of SEM software, the indirect standardised coefficients (γ_m) and the p-values for a simple mediation test as like we have in our model shown in Fig. VI could then be determined.

Proposed Hypotheses Development and Set up

We propose that a number of ways hypotheses could be developed and tested for both when Strategy Implementation is acting either as a moderator or a mediator. According to our proposed conceptual models in Figs V, VI and VII, the following could be hypothesised:

H1a – 4a: The direct relationships between the four Strategy Development dimensions and Performance 1 (e.g. *Strategy development through formalisation will be negatively related to Performance*)

H1b – 4b: The direct relationships between the four Strategy Development dimensions and Performance 2 (e.g. *Strategy development through formalisation will be positively related to Performance*)

Specifically, when Strategy Implementation is acting as a mediator, the mediation hypotheses could be

H1c - 4c: Strategy Implementation will mediate the relationship between the four Strategy Development dimensions and Performance 1 (e.g. *Strategy Implementation will mediate the relationship between Strategy development through adaptivity and Performance 1*)

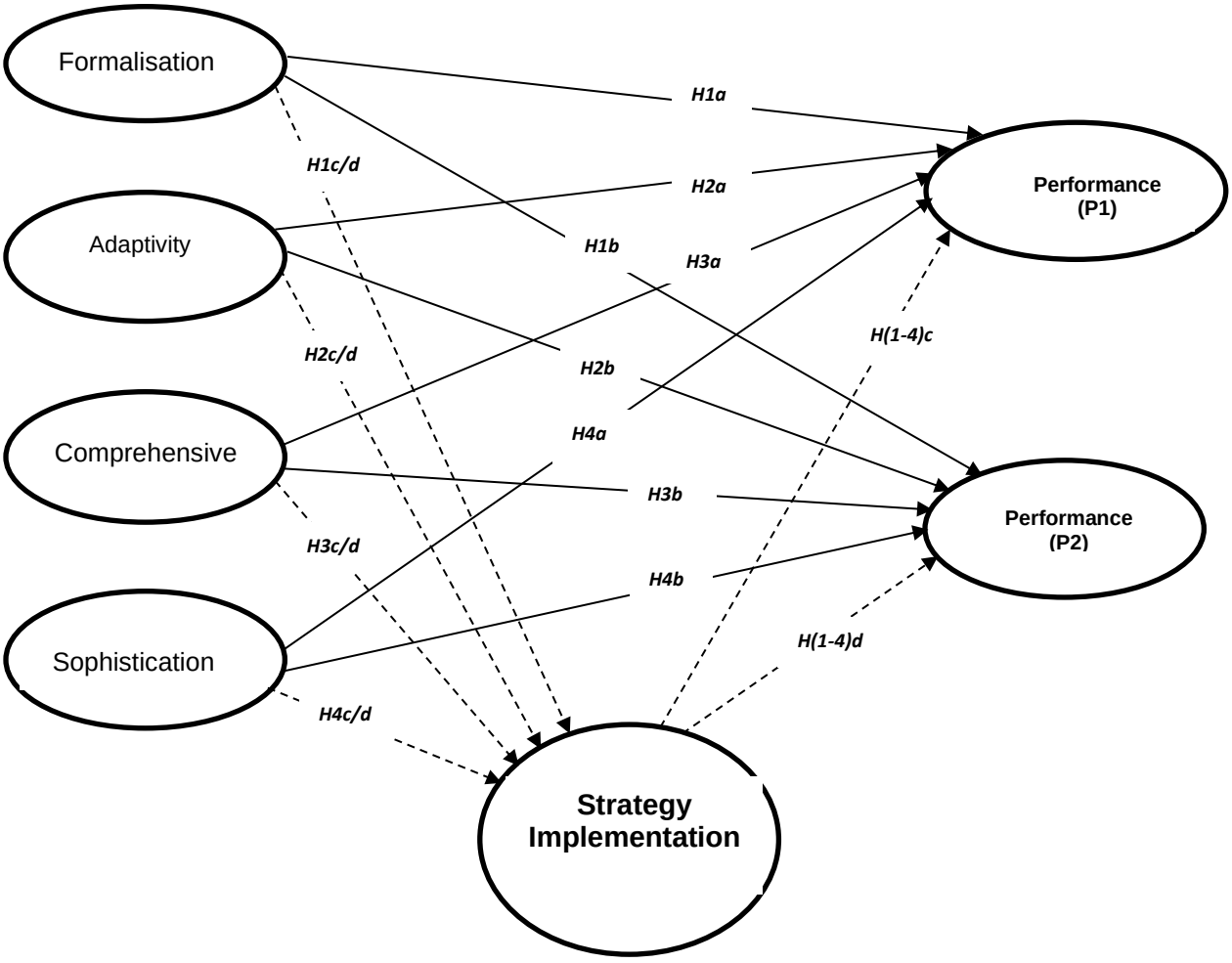
H1d – 4d: Strategy Implementation will mediate the relationship between the four Strategy Development dimensions and Performance 2 (e.g. *Strategy Implementation will mediate the relationship between Strategy development through adaptivity and Performance 2*)

Similarly, when Strategy Implementation is acting as a moderator, then the following could be hypothesised:

H1c – 4c: Strategy Implementation will moderate the relationship between the four Strategy Development dimensions and Performance 1 (e.g. *Strategy Implementation will positively interact with the relationship between Strategy development through adaptivity and Performance 1*)

H1d – 4d: Strategy Implementation will moderate the relationship between the four Strategy Development dimensions and Performance 2 (e.g. *Strategy Implementation will positively interact with the relationship between Strategy development through adaptivity and Performance 2*)

Fig. VII: Conceptual Diagram Showing the Various Hypotheses when Strategy Implementation is a Mediator.



NOTES:
Direct hypotheses are denoted as H1a/b to H4a/b. Broken arrows are the indirect effect (hypotheses). E.g. H1a: will be the hypothesis that *Formalisation* will have a direct relationship with *Performance P1*; H1b will be the hypothesis that *Formalisation* will have a direct relationship with *Performance P2,* etc. Also, the H1c will the hypothesis that *Strategy Implementation* will mediate the relationship between *Formalisation* and *Performance P1*; H1d will the hypothesis that *Strategy Implementation* will mediate the relationship between *Formalisation* and *Performance P2* etc.

We have presented the above hypotheses as simple and straight-forward as possible. However, we are aware these could be more elaborately presented. In this vein, we leave it for future researchers to consider other designs, for example an overarching framework for study of strategic planning and its linkages with other constructs in the broader strategy process. Alternatively, a deeper discussion on the links between the different dimensions of the constructs featured in the design could also be further investigation to advancing our knowledge around such issues. For example, to what direction will the various Strategy Implementation dimensions, feedback & control or senior management involvement take when moderating/mediating the relationships between comprehensiveness and performance or adaptivity and performance. All these could be taken into consideration when an empirical study is embarked upon using our proposed design.

Discussions

The above proposed design ensures that core issues in planning performance relationships research will be addressed. Furthermore, there are several benefits that arise from this proposal:

First, the inclusion of strategy implementation in planning performance relationship studies means that the whole chain of activities in the strategy process is being considered, drawing a complete and comprehensive conclusion on how strategic planning affects an organisation's performance. The limited use of, or complete exclusion of, strategy implementation measures in planning studies commits a methodological error and creates internal validity problems. It was noted by past researchers (e.g. Pearce *et al*., 1987; Hrebiniak, 2006, 2013; Miller and Cardinal, 1994; Phillips and Moutinho, 2000), how the non-evaluation of implementation plans produced by strategic planning efforts is not only flawed in analyses, but also could explain why there are so many inconsistencies in past research findings. This should also address the concern of Hopkins and Hopkins (1997: 637) and others who noted that better results are realised if equal emphasis is placed on each component of the strategic planning process (see also Dimma, 1985; Hopkins, 1987).

Second, detaching or separating strategy implementation and not bundling it up with formulation/formation activities will theoretically and analytically help to evaluate the importance or role of each stage of the strategy process. It was noted that the uniquely explained variances in firm performance could help in our

understanding of what happens in the black box of the planning to performance gap (Hambrick and Cannella, 1989; King, 1983; Whittington and Cailluet, 2008; Flander, 2010).

Third, the conceptualisation and operationalisation of the key concepts as multidimensional constructs should address the criticisms made of past research (Boyd, Grove and Hitt, 2005; Montgomery, Wernerfelt, and Balakrishnan, 1989; Snow and Thomas, 1994) that planning is measured as a one-dimensional construct instead of considering other dimensions of planning. Therefore, the use of four dimensions in operationalising the strategy development construct should contribute to the suggestions that most often organisations uses a more multiple approach in a composite mode in their strategy development processes (Andersen and Nielsen, 2009; Bailey, Johnson and Daniels, 2000; Patanakul and Shenhar, 2012; Papke-Shields and Wright, 2017).

Fourth and finally, notwithstanding some mediation/moderation studies in strategic planning research (see e.g. Rau *et al*, 2020), the proposed design uses a more sophisticated approach in both the design and analytical techniques like structural equation modelling (SEM), could help to unearth many findings concerning the relationships since techniques like SEMS are able to also model measurement errors (Hair *et al*, 2014). This should also address concerns by past researchers that strategy research tends to use crude conceptualisation and analytical techniques and thus failing to represent findings.

Conclusion

Many strategy texts trace origins to Sun Tzu's "*The Art of War*" written in 400 B.C. (see e.g. Clegg et al., 2017, Pg. 3). Warfare in this vein focuses the whole idea of a strategy on the actions (i.e. the implementation) that will be taking place (Sull *et al*., 2015). In this literature review and methodological paper, we have looked at how strategic planning performance research has proceeded over the past five decades and suggest that there is still no conclusive evidence that planning results in better performance outcomes. One key reason is the neglect of a vital component of study, i.e. strategy implementation (Hrebiniak, 2013). McChesney *et al*., (2016) is the number 3 bestseller book in Strategy and Completion (according to Amazon) and makes very poignant point of this neglect by observing that "*when it comes to strategy and execution, although it is agreed that the biggest challenge is the execution, most business Schools teach more strategy than execution* (see pg. xxiii). The fact that one can contrive an excellent menu for preparation of a meal, does not necessarily mean that the food will taste good. The taste will also depend on how the meal is cooked. So, analogously, good strategy requires putting it into action as an aspect of performance to be evaluated. The strategic planning performance relationship has been treated as a black box and we propose that the inclusion of strategy implementation will help resolve this. To support our position, we have proposed further conceptual/operational design, mathematical expression, and

hypotheses regarding how one can study this relationship. Our proposal includes better conceptualisation of the major constructs (strategy development; strategy implementation; and performance), and the use of strategy implementation as a mediator and/or as a moderator in the planning performance relationship.

Strategic planning research waned in the strategy discipline due to criticism (Miller and Cardinal, 1994; Mintzberg, 1978) and because of the advent of more fashionable areas, like strategic learning (Mintzberg, 1991; Sirén and Kohtamäki, 2016) and strategy as practice (Whittington, 2006; Spee and Jarzabkowski, 2011). However, strategic planning is perhaps due a renaissance (see Wolf and Floyd, 2017; Bryson *et al*., 2018; Bellamy *et al*, 2019; Posch and Garaus, 2020; Meyfroodt and Desmidt, 2021; Hughes and Hodgkinson, 2020) and this is for a number of reasons. First, strategic planning is still used by many organisations and seen as an important tool for performance improvement (Rigby and Bilodeau, 2018). Second, academic studies indicate that strategic planning and exercises like strategy workshops are an institutional process or routine for most organisations (Hodgkinson, *et al*., 2006; Healey *et al*., 2015). Third, in universities and places of higher education, we still teach strategic planning tools and techniques (Jarzabkowski *et al*., 2013; Johnson, *et al*, 2017; Lynch, 2018), knowing that they are useful for managers in practice (Wright *et al*., 20143; Oliveira *et al*., 2013). It is our intention that this paper encourages other researchers to use the conceptual design set out here to produce findings that foster progress.

As a final comment, we would note some limitations. First, elaborate complex empirically grounded research requires funding and is unlikely to be cheap (albeit if effective must be considered cost effective). Secondly, we have used particular dimensions of strategy development and strategy implementation. Future researchers may identify other dimensions that could be suitable for divergent contexts. We define strategy as *the long-term planning*… (Johnson, *et al*, 2017), so the question of cross-sectional and longitudinal research comes into play when considering the strategic planning to performance relationship. It is an additional challenge to address this issue in strategy research. More fundamentally, our approach is rooted in quantitative analysis, which in turn, typically assumes the relevance of and a warrant from a positivist epistemology. There are, of course, significant limits to this in philosophy of social science, though quantitative methods are not by nature tied to positivism, since this is a matter of methodology not method (Powell, 2002; Mir and Watson, 2001; Bellamy *et al*., 2019). In any case, nothing in our proposals excludes constructionist or constructivist influenced and inductive work as potentially insightful regarding strategic planning and the performance relationship. Our intent is progressive and open to dialogue (see e.g. Rabetino *et al*, 2021).

Implications

The inclusion of strategy implementation in the strategic planning-performance relationship model and the proposed conceptual/operational design, mathematical expression, and hypotheses regarding how one can study this relationship has significant potential impact on the actual organisational performance because of strategic planning with implications for leaders, managers, decision makers and other key stakeholders. Furthermore, the separation of strategy implementation from strategy formulation/formation activities will theoretically and analytically help to evaluate the importance or role of each stage of the strategy process. This paper also provides a conceptualisation of the major constructs and shows to both academics and practitioners how strategy implementation can be used as a mediator and/or as a moderator in the planning-performance relationship. Finally, the inclusion of strategy implementation in the planning-performance relationship means that the whole chain of activities in the strategy process is being considered uncoupled, drawing a complete and comprehensive conclusion on how strategic planning affects an organisation's performance.

REFERENCES

Aaltonen, P., and Ikavalko, H. (2002). Implementing strategies successfully. *Integrated manufacturing systems, 13*(6), 415-418.

Ackoff, R. (1999). Transformational leadership. *Strategy and Leadership, 27*(1), 20-25.

Aiken, S. L., and West, S. G. (1991). *Multiple Regression: Testing and Interpreting Interactions*. Newbury Park, CA: Sage Publications.

Alatailat, M., Elrehail, H., & Emeagwali, O. L. (2019). High performance work practices, organizational performance and strategic thinking: A moderation perspective. International Journal of Organizational Analysis.

Amit, R., and Livnat, J. (1988). Diversification strategies, business cycles and economic-performance. *Strategic Management Journal, 9*(2), 99-110.

Amoo, N, Hiddlestone-Mumford, J., Ruzibuka, J. and Akwei, C. (2019) Conceptualizing and measuring strategy implementation – a multi-dimensional view. Strategic Change. 28(6), 445-467.

Andersen, T. (2004). Integrating decentralized strategy making and strategic planning processes in dynamic environments. *Journal of Management Studies, 41*(8), 1271-1299.

Andersen, T., and Nielsen, B. (2009). Adaptive strategy making: The effects of emergent and intended strategy modes. *European Management Review, 6*(2), 94-106.

Andrews, K. R. (1971). *The Concept of Corporate Strategy*: Dow Jones and Irwin.

Ansoff, H., Avner, J., Brandenburg, R., Portner, F., and Radosevich, R. (1970). " Does planning pay off? The effects of planning on success of acquisitions in American firms". *Long Range Planning, 3*(2), 2-7.

Ansoff, H. I. (1965). *Corporate strategy*. New York: McGraw-Hill.

Ansoff, H. I. (1991). Critique of henry mintzberg's 'the design school: reconsidering the basic premises of strategic management'. *Strategic Management Journal, 12*, 449-461.

Aguinis, H., Ramani, R. S., and Alabduljader, N. (2018). What you see is what you get? Enhancing methodological transparency in management research. Academy of Management Annals, 12(1), 83-110.

Armstrong, J. (1991). Strategic planning improves manufacturing performance. *Long Range Planning, 24*(4), 127-129.

Armstrong, J. S. (1982). The value of formal planning for strategic decisions - review of empirical-research. *Strategic Management Journal, 3*(3), 197-211.

Ashby, W. Ross; *An introduction to cybernetics*, London: Chapman and Hall, 1956, chapter 6: *The black box*, pp. 86–117.

Asiaei, K., and Jusoh, R. (2015). A multidimensional view of intellectual capital: the impact on organizational performance. *Management Decision, 53*(3), 668-697.

Atkinson, H. (2006). Strategy implementation: a role for the balanced scorecard? *Management Decision, 44*(10), 1441-1460.

Babin, B. J., Hair, J. F., and Boles, J. (2008). Publishing research in marketing journals using structural equation modeling. *Journal of Marketing Theory and Practice, 16*(4), 279-286.

Bagozzi, R. P., and Phillips, L. W. (1982). Representing and testing organizational theories - a holistic construal. *Administrative Science Quarterly, 27*(3), 459-489.

Bailey, A., Johnson, G., and Daniels, K. (2000). Validation of a multi-dimensional measure of strategy development processes. *British Journal of Management, 11*(2), 151-162.

Bain & Company. (2018). Strategic Planning. Retrieved (date: April 23, 2019) from https://www.bain.com/insights/management-tools-strategic-planning/

Barney, J., and Hesterly, W. S. (2018). *Strategic Management and Competitive Advantage: Concepts and Cases*. New Jersey Pearson Education.

Baron, R. M., and Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, *51*(6), 1173–1182.

Baysinger, B., and Hoskisson, R. (1989). Diversification strategy and R and D intensity in multiproduct firms. *Academy of Management Journal*, 310-332.

Becker, B., and Huselid, M. (2006). Strategic human resources management: where do we go from here? *Journal of Management, 32*(6), 898-925.

Beizer, B., and Wiley, J. (1996). Black box testing: Techniques for functional testing of software and systems. *Journal of iEEE Software, 13*(5), 98.

Bellamy, L. C., Amoo, N., Mervyn, K., and Hiddlestone-Mumford, J. (2019). The use of strategy tools and frameworks by SMEs in the strategy formation process. International Journal of Organizational Analysis, 27(2), 337-367.

Bergh et al (2017) Is there a credibility crisis in strategic management research? Evidence on the reproducibility of study findings. Strategic Organization, Vol. 15(3) 423 –436

Berman, J., Gordon, D., and Sussman, G. (1997). A study to determine the benefits small business firms derive from sophisticated planning versus less sophisticated types of planning. *The Journal of Business and Economic Studies, 3*(3), 1-11.

Bhargava, M., Dubelaar, C., and Ramaswami, S. (1994). Reconciling Diverse Measures of Performance: A Conceptual Framework and Test of a Methodology. *Journal of Business Re search, 31*, 235–246.

Bijker, W. E., Hughes, T. P., and Pinch, T. J. (1989). *The social construction of technological systems: New directions in the sociology and history of technology*: MIT press.

Blalock, H. (1979). Social Statistics, revised 2nd edn: New York: McGraw-Hill.

Bollen, K. A., and Stine, R. A. (1992). Bootstrapping goodness-of-fit measures in structural equation models. *Sociological Methods and Research*, *21*(2), 205–229

Boyd, B. K. (1991). Strategic-planning and financial performance - a meta-analytic review. *Journal of Management Studies, 28*(4), 353-374.

Boyd, B. K., Dess, G. G., and Rasheed, A. M. A. (1993). Divergence between archival and perceptual measures of the environment - causes and consequences. *Academy of Management Review, 18*(2), 204-226.

Boyd, B. K., Gove, S., and Hitt, M. A. (2005). Consequences of measurement problems in strategic management research: The case of Amihud and Lev. *Strategic Management Journal, 26*(4), 367-375.

Boyd, B. K., and Reuning-Elliot, E. (1998). A measurement model of strategic planning. *Strategic Management Journal, 19*(2), 181-192.

Bracker, J., and Pearson, J. (1986). Planning and financial performance of small mature firms. *Strategic Management Journal, 7*(6), 503-522.

Brews, P. J., and Hunt, M. R. (1999). Learning to plan and planning to learn: Resolving the planning school/learning school debate. *Strategic Management Journal, 20*(10), 889-913.

Bryson, John M., Lauren Hamilton Edwards, and David M. Van Slyke. 2018. Getting Strategic about Strategic Planning Research. Public Management Review 20(3): 317– 39.

Brown, D., and Laverick, S. (1994). Measuring corporate performance. *Long Range Planning, 27*(4), 89-98.

Cailluet, L., Rose, T., and R. Whittington. (2005). The Rise (and Rise) of Strategic Planning: an Historical and Comparative Study of Strategy as a Practice in France and the United Kingdom. *Paper at British Academy of Management conference, Oxford.*

Caputo, A., Ayoko, O. B., and Amoo, N. (2018). The moderating role of cultural intelligence in the relationship between cultural orientations and conflict management styles. *Journal of Business Research, 89*, 10-20.

Caputo, A., Ayoko, O. B., Amoo, N., and Menke, C. (2019). The relationship between cultural values, cultural intelligence and negotiation styles. *Journal of Business Research*, *99*, 23-36.

Cauer, E., Mathis, W., and Pauli, R. (2000). *Life and work of Wilhelm Cauer (1900-1945)*.

Chakravarthy, B. (1986). Measuring strategic performance. *Strategic Management Journal, 7*(5), 437-458.

Chakravarthy, B. (1987). On tailoring a strategic planning system to its context: some empirical evidence. *Strategic Management Journal, 8*(6), 517-534.

Chandler, A. D. (1962). Strategy and Structure: Chapters in the History of American Industrial Enterprise. *Cambridge, Massachusetts: MIT Press.*

Chebat, J. C. (1999). Special issue on strategy implementation and assessment research: Research on implementation deserves as much attention as strategy formulation. *Journal of Business Research, 45*(2), 107-109.

Clark, D. N., and Scott, J. L. (1999). Strategic Level MS/OR Tool Usage in the United Kingdom and New Zealand: A Comparative Survey. *Asia-Pacific Journal of Operational Research, 16*(35).

Clegg, S. R., Schweitzer, J., Whittle, A. and Pitelis, C. (2017). Strategy: theory and practice. Sage Publications.

Cook, T., and Campbell, D. (1979). *Quasi-experimentation: Design and analysis for Field Settings*: Rand McNally Chicago.

Cool, K., and Schendel, D. (1987). Strategic group formation and performance: the case of the US pharmaceutical industry, 1963-1982. *Management Science, 33*(9), 1102-1124.

Crittenden, V., and Crittenden, W. (2008). Building a capable organization: The eight levers of strategy implementation. *Business Horizons, 51*(4), 301-309.

Cronbach, L., Gleser, G., Nanda, H., and Rajaratnam, N. (1972). *The dependability of behavioral measurements: Theory of generalizability for scores and profiles*: Wiley New York.

Dawson, J. F. (2014). Moderation in management research: What, why, when, and how. Journal of Business and Psychology, 29(1), 1-19.

de Oliveira, C. A., Carneiro, J., and Esteves, F. (2018). Conceptualizing and measuring the "strategy execution" construct. *Journal of Business Research*.

De Wit, B., and Meyer, R. (2004). *Strategy: Process, Content, Context. An International Perspective* (3 ed.): Thomson Learning.

Delios, A., and Beamish, P. (1999). Geographic scope, product diversification, and the corporate performance of Japanese firms. *Strategic Management Journal, 20*(8), 711-727.

Desmidt, S., and Meyfroodt, K. (2021). What motivates politicians to use strategic plans as a decision-making tool? Insights from the theory of planned behaviour. Public management review, 23(3), 447-474.

Dess, G. (1987). Consensus on strategy formulation and organizational performance: competitors in a fragmented industry. *Strategic Management Journal*, 259-277.

Dess, G. G., Lumpkin, G. T., and Eisner, A. (2008). *Strategic Management: Text and Cases* (4th ed.): McGraw-Hill Higher Education, New York, NY.

Dimma, W. (1985). Competitive strategic planning. *Business Quarterly, 50*(1), 22-26.

Eisenhardt, K. (1989a). Agency theory: An assessment and review. *Academy of Management Review, 14*(1), 57-74.

Eisenhardt, K., and Bourgeois, L. J. (1989). *Charting strategic decisions: Profile of an industry star; In M. Van Glinow and S. Mohrmann (Eds.), Managing complexity in high technology organizations, systems and people*: New York: Oxford University Press.

Eisenhardt, K. M. (1989b). Making Fast Strategic Decisions in High-Velocity Environments. *The Academy of Management Journal, 32*(3), 543-576.

Elbanna, S., Child, J., and Dayan, M. (2013). A model of antecedents and consequences of intuition in strategic decision-making: evidence from Egypt. *Long range planning, 46*(1-2), 149-176

Feshbach, D. (1979). What's inside the black box: A case study of allocative politics in the Hill-Burton Program. *International Journal of Health Services, 9*(2), 313-339.

Flander, J. D. (2010). *Strategy Execution Heroes: Business Strategy Implementation and Strategic Management Demystified, a practical performance management guidebook for the successful leader:* The performance factory. https://the-performance-factory.be/en

Flapper, S., Fortuin, L., and Stoop, P. (1996). Towards consistent performance management systems. *International Journal of Operations and Production Management, 16*, 27-37.

Fredrickson, J. W., and Iaquinto, A. L. (1989). Inertia and creeping rationality in strategic decision-processes. *Academy of Management Journal, 32*(3), 516-542.

Fredrickson, J. W., and Mitchell, T. R. (1984). Strategic decision-processes - comprehensiveness and performance in an industry with an unstable environment. *Academy of Management Journal, 27*(2), 399-423.

Friedenberg, J., and Silverman, G. (2006). Mind as a black box: The behaviorist approach. *Cognitive science: An introduction to the study of mind*, 85-88

Fritz, M. S., and MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological science*, *18*(3), 233–239.

Galbraith, J., and Kazanjian, R. (1986). *Strategy Implementation: Structure, Systems and Process*: West St Paul, MN.

George, B., Walker, R. M., and Monster, J. (2019). Does strategic planning improve organizational performance? A meta-analysis. Public Administration Review, 79(6), 810-819.

Ghiselli, E. E., Campbell, J. P., and Zedeck, S. (1981). *Measurement theory for the behavioral sciences*. Oxford: W.H. Freeman.

Giraudeau, M. (2008). The drafts of strategy: Opening up plans and their uses. *Long range planning, 41*(3), 291-308.

Gkliatis, I., and Koufopoulos, D. (2013). Strategic planning practices in the Greek hospitality industry. *European business review, 25*(6), 571-587.

Glaister, K. W., and Falshaw, J. R. (1999). Strategic Planning: Still Going Strong? *Long Range Planning, 32*, 107-116.

Glaister, K.W. Falshaw, R. J. and Tatoglu, E. (2006) "Evidence on formal strategic planning and company performance", *ManagementDecision*, Vol.44 Issue:1,pp.9-30

Goll, I., and Rasheed, A. (1997). Rational decision-making and firm performance: The moderating role of environment. *Strategic Management Journal, 18*(7), 583-591.

Goold, M. (1992). Research notes and communications design, learning and planning - a further observation on the design school debate. *Strategic Management Journal, 13*(2), 169-170.

Grant, R. M. (2003). Strategic planning in a turbulent environment: evidence from the oil majors. *Strategic Management Journal, 24*, 491.

Greer, C. R., Lusch, R. F., and Hitt, M. A. (2017). A service perspective for human capital resources: A critical base for strategy implementation. *Academy of Management Perspectives, 31*(2), 137-158.

Gunkel, M., Schlaegel, C., and Taras, V. (2016). Cultural values, emotional intelligence, and conflict handling styles: A global study. Journal of World Business, 51(4), 568–585.

Guynes, C. S. (1969). *An analysis of Planning in Large Texas Manufacturing firms; Unpublished Doctoral Dissertation.* Texas Tech University.

Hahn, W., and Powers, T. (1999). The impact of strategic planning sophistication and implementation on firm performance. *The Journal of Business and Economic Studies, 5*(2), 19-35.

Hair Jr, J., Sarstedt, M., Hopkins, L., and Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European business review, 26*(2), 106-121.

Hambrick, D., and Cannella Jr, A. (1989). Strategy implementation as substance and selling. *The Academy of Management Executive*, 278-285.

Hamann, P., and Maik, J. (2017). Towards a contingency theory of corporate planning: a systematic literature review. *Management Review Quarterly, 67*(4), 227-289

Hamann PM, Schiemann F, Bellora L, Guenther TW (2013) Exploring the dimensions of organizational performance: a construct validity study. Organ Res Met 16:67–87. doi:10.1177/1094428112470007

Hanisch, K., Hulin, C., and Roznowski, M. (1998). The importance of individuals' repertoires of behaviors: The scientific appropriateness of studying multiple behaviors and general attitudes. *Journal of Organizational Behavior, 19*(5), 463-480.

Hart, S. (1992). An integrative framework for strategy-making processes. *Academy of Management Review, 17*(2), 327-351.

Hart, S., and Banbury, C. (1994). How strategy-making processes can make a difference. *Strategic Management Journal, 15*(4), 251-269.

Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication monographs*, *76*(4), 408–420.

Hayes, A. F. (2018). Partial, conditional, and moderated moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, *85*(1), 4–40. doi:10.1080/03637751.2017.1352100

Healey, M. J. (1991). 'Obtaining information from businesses', In: Healey, M.J. (ed.) Economic Activity and Land Use, Harlow.

Heggestad, E. D., Scheaf, D. J., Banks, G. C., Monroe Hausfeld, M., Tonidandel, S., and Williams, E. B. (2019). Scale adaptation in organizational science research: A review and best-practice recommendations. Journal of Management, 45(6), 2596-2627.

Heracleous, L. (2000). The role of strategy implementation in organization development. *Organization Development Journal, 18*(3), 75-86.

Hodgkinson, G. P., Whittington, R., Johnson, G., and Schwarz, M. (2006). The Role of Strategy Workshops in Strategy Development Processes: Formality, Communication, Co-ordination and Inclusion. *Long Range Planning, 39*, 479-496.

Hofer, C. W., and Schendel, D. j. a. (1978). *Strategy formulation : analytical concepts*. St. Paul: West Pub. Co.

Ho, J. Y., Wu, A., and Wu, S. Y. C. (2014). Performance measures, consensus on strategy implementation, and performance: evidence from the operational-level of organizations. *Accounting, Organizations and Society*, 39, 38-58.

Hopkins, W. (1987). Developing Planning Skills of Engineers in Management Training. *Journal of Management in Engineering, 3*(3), 249-256.

Hopkins, W. E., and Hopkins, S. A. (1997). Strategic planning-financial performance relationships in banks: a causal examination. *Strategic Management Journal, 18*(8), 635-652.

Hoskisson, R. E., Hitt, M. A., Johnson, R. A., and Moesel, D. D. (1993). Construct validity of an objective (entropy) categorical measure of diversification strategy. *Strategic Management Journal (1986-1998), 14*(3), 215.

Hrebiniak, L. (2013). *Making strategy work: A guide to effective execution and change*: Upper Saddle River: Wharton School Publishing.

Hrebiniak, L., and Joyce, W. (2001). "*Implementing Strategy: An Appraisal and Agenda for Future Research*," in Michael Hitt, R. Edward Freeman, and Jeffrey Harrison (eds.), Handbook of Strategic Management (pp. 602-626): Blackwell Business.

Hrebiniak, L. G. (2006). Obstacles to effective strategy implementation. *Organizational Dynamics, 35*(1), 12-31.

Hrebiniak, L. G., and Joyce, W. F. (1984). *Implementing strategy*.

Hrebiniak, L. G., and Joyce, W. F. (1985). Organizational adaptation - strategic choice and environmental determinism. *Administrative Science Quarterly, 30*(3), 336-349.

Hughes, P., and Hodgkinson, I. (2020). Knowledge management activities and strategic planning capability development. European business review.

Hunt, E. (1962). *Concept learning: An information processing problem*: Wiley.

Hutt, M., Reingen, P., and Ronchetto Jr, J. (1988). Tracing emergent processes in marketing strategy formation. *The Journal of marketing*, 4-19.

Hutzschenreuter, T., and Kleindienst, I. (2006). Strategy-process research: What have we learned and what is still to be explored. *Journal of Management, 32*(5), 673.

Jabeen, F., Behery, M. and Abu Elanain, H. (2015), "Examining the relationship between the psychological contract and organisational commitment: The mediating effect of transactional leadership in the UAE context", International Journal of Organizational Analysis, Vol. 23 No. 1, pp. 102-122.

Jaques, E., Bygrave, C., & Lee, N. (2001). Aligning multiple time horizons and multiple functions in strategic planning and budgeting. The International Journal of Organizational Analysis.

Jarzabkowski, P. (2008). Strategy as Practice. *In Barry, D and Hansen, H. (eds) The Sage Handbook of New Approaches to Management and Organizations. London, UK: Sage*, 364-378.

Jarzabkowski, P., Giulietti, M., Oliveira, B., and Amoo, N. (2013). "We Don't Need No Education"-Or Do We? Management Education and Alumni Adoption of Strategy Tools. *Journal of Management Inquiry, 22*(1), 4-24. doi:10.1177/1056492612460588

Jarzabkowski, P., and Wilson, D. (2006). Actionable Strategy Knowledge - A Practice Perspective. *European Management Journal, 24*(5), 348-367.

Jennings, D. (2000). PowerGen: the development of corporate planning in a privatized utility. *Long Range Planning, 33*(2), 201-219

Johnson, G., Whittington, R., Scholes, K., Angwin, D., and Regnér, P. (2017). *Exploring strategy*: 11th Ed. Pearson Education Ltd.

Kargar, J., and Parnell, J. (1996). Strategic planning emphasis and planning satisfaction in small firms: an empirical investigation. *Journal of Business Strategies, 13*(1), 42-64.

Karger, D., and Malik, Z. (1975). Long range planning and organizational performance. *Long Range Planning, 8*(6), 60-64.

Katsikeas, C. S., Samiee, S., and Theodosiou, M. (2006). Strategy Fit and Performance Consequences of International Marketing Standardization. *Strategic Management Journal, 27*(9), 867–890.

Kenny, D., and Judd, C. (1984). Estimating the nonlinear and interactive effects of latent variables. *Psychological Bulletin, 96*(1), 201-210.

King, W. (1983). Evaluating strategic planning systems. *Strategic Management Journal, 4*(3), 263-277.

Koopman, J., Howe, M., Hollenbeck, J. R., and Sin, H.P. (2015). Small sample mediation testing: Misplaced confidence in bootstrapped confidence intervals. *Journal of Applied Psychology*, *100*(1), 194

Kudla, R. (1980). The effects of strategic planning on common stock returns. *Academy of Management Journal, 23*(1), 5-20.

Laitinen, E. (2002). A dynamic performance measurement system: evidence from small Finnish technology companies. *Scandinavian Journal of Management, 18*(1), 65-99.

Latour, B. (1999). *Pandora's hope: essays on the reality of science studies*: Harvard university press.

Liedtka, J. M. (1998). Linking Strategic Thinking With Strategic Planning. *Strategy and Leadership, 26*(4), 30.

Lindblom, C. (1979). Still muddling, not yet through. *Public administration review, 39*(6), 517-526.

Lipsky, M. (1978). "*Standing the study of public policy implementation on its head*". In WD Burnham and M. Weinberg (Eds.) "American politics and public policy". Cambridge, MA: MIT Press.

Lorange, P., and Vancil, R. (1977). *Strategic planning systems*: Prentice Hall.

Lumpkin, G., and Dess, G. (1995). Simplicity as a strategy-making process: The effects of stage of organizational development and environment on performance. *Academy of Management Journal, 38*(5), 1386-1407.

Lyles, M. A., Baird, I. S., Orris, J. B., and Kuratko, D. F. (1993). Formalized planning in small business: increasing strategic choices. *Journal of Small Business Management, April*, 38-50.

Mankins, M., and Steele, R. (2006). Stop making plans; start making decisions. *Harvard Business Review, 84*(1), 76.

Meyfroodt, K., and Desmidt, S. (2021). Can rational planning stimulate cooperative behaviour? How perceived self-efficacy mediates the relationship between strategic plan use, performance information use and strategic voice by local councillors. Public management review, 23(6), 818-842.

McChesney, C., Covey, S., and Huling, J. (2012). *The 4 disciplines of execution: Achieving your wildly important goals* (Vol. 34): Simon and Schuster.

Miller, C. C., and Cardinal, L. B. (1994). Strategic Planning and Firm Performance: A Synthesis of More than Two Decades of Research. *The Academy of Management Journal, 37*(6), 1649-1665.

Miller, D., and Friesen, P. (1983). Strategy-making and environment: The third link. *Strategic Management Journal*, 221-235.

Mintzberg, H. (1973). *The nature of managerial work*: New York: Harper and Row.

Mintzberg, H. (1973). Strategy-making in three modes. *California Management Review, 16*(2), 44-53.

Mintzberg, H. (1978). Patterns in strategy formation. *Management Science, 24*, 934-948.

Mintzberg, H. (1990). The design school - reconsidering the basic premises of strategic management. *Strategic Management Journal, 11*(3), 171-195.

Mintzberg, H. (1991). Learning-1, planning-0 - reply. *Strategic Management Journal, 12*(6), 463-466.

Mintzberg, H. (1994a). The Fall and Rise of Strategic Planning. *Harvard Business Review, 72*, 107-114.

Mintzberg, H. (1994b). *The rise and fall of strategic planning*. New York ; London: Prentice Hall.

Mintzberg, H. (1994c). Rethinking Strategic Planning Part I: Pitfalls and Fallacies. *Long Range Planning, 27*(3), 12 - 21.

Mintzberg, H., Ahlstrand, B. W., and Lampel, J. (1998). *Strategy safari : a guided tour through the wilds of strategic management*. New York: Free Press.

Mintzberg, H., and Quinn, J. B. (1996). *The strategy process : concepts, contexts, cases* (3th ed.). London: Prentice Hall International.

Mintzberg, H., and Waters, J. A. (1985). Of Strategies, Deliberate and Emergent. *Strategic Management Journal, 6*, 257-272.

Mistry, S., Barrick, M. R., Kirkman, B. L., and Hitt, M. A. (2018). *TMT Strategy Implementation Tasks and Firm Performance: Teamwork Processes and Interdependence*. Paper presented at the Academy of Management Proceedings.

Montgomery, C., Wernerfelt, B., and Balakrishnan, S. (1989). Strategy content and the research process: A critique and commentary. *Strategic Management Journal*, 189-197.

Murphy, K. R., and Shiarella, A. H. (1997). Implications of the multidimensional nature of job performance for the validity of selection tests: Multivariate frameworks for studying test validity. *Personnel Psychology, 50*(4), 823-854.

Najjar, M. A. (1966). *Planning in small manufacturing companies: An empirical study*. Unpublished Unpublished Doctoral Dissertation, Ohio State University.

Noble, C. H. (1999). The eclectic roots of strategy implementation research. *Journal of Business Research, 45*(2), 119-134.

Oliveira, B., Giulietti, M., and Amoo, N. A. (2013). Revisiting a neglected topic: How do managers use management education in management practice?. In Academy of Management Proceedings (Vol. 2013, No. 1, p. 15665). Briarcliff Manor, NY 10510: Academy of Management.

Okumus, F. (2003). A framework to implement strategies in organizations. *Management Decision, 41*(9), 871-882.

Ones, D. S., and Viswesvaran, C. (1999). Bandwidth-fidelity dilemma in personality measurement for personnel selection. *Journal of Organizational Behavior, 17*(6), 609-626.

Papke-Shields, K. E., and Boyer-Wright, K. M. (2017). Strategic planning characteristics applied to project management. *International Journal of Project Management, 35*(2), 169-179.

Patanakul, P., and Shenhar, A. J. (2012). What project strategy really is: The fundamental building block in strategic project management. *Project Management Journal, 43*(1), 4-20.

Parsa, H. G. (1999). Interaction of strategy implementation and power perceptions in franchise systems: An empirical investigation. *Journal of Business Research, 45*(2), 173-185.

Pearce, J., and Robinson, R. (1994). *Strategic management: Formulation, implementation, and control*: Irwin Chicago etc.

Pearce, J. A., Freeman, E. B., and Robinson, R. B. (1987). The tenuous link between formal strategic-planning and financial performance. *Academy of Management Review, 12*(4), 658-675.

Pelled, L., Eisenhardt, K., and Xin, K. (1999). Exploring the black box: An analysis of work group diversity, conflict, and performance. *Administrative Science Quarterly, 44*(1), 1-3.

Phillips, P. A. (1996). Strategic planning and business performance in the quoted UK hotel sector: results of an exploratory study. *International Journal of Hospitality Management, 15*(4), 347-362.

Phillips, P. A., and Moutinho, L. (2000). The Strategic Planning Index: A Tool for Measuring Strategic Planning Effectiveness. *Journal of Travel Research, 38*(4), 369-379.

Phillips, P., and Moutinho, L. (2014). Critical review of strategic planning research in hospitality and tourism. Annals of Tourism Research, 48, 96-120.

Podsakoff, P. M., MacKenzie, S. B., and Podsakoff, N. P. (2016). Recommendations for creating better concept definitions in the organizational, behavioral, and social sciences. Organizational Research Methods, 19(2), 159-203.

Porter, M. (1980). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*.

Posch, A., and Garaus, C. (2020). Boon or curse? A contingent view on the relationship between strategic planning and organizational ambidexterity. Long range planning, 53(6), 101878.

Priem, R., Rasheed, A., and Kotulic, A. (1995). Rationality in strategic decision processes, environmental dynamism and firm performance. *Journal of Management, 21*(5), 913-929.

Preacher, K. J., and Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior research methods, instruments, and computers*, *36*(4), 717–731.

Preacher, K. J., Rucker, D. D., and Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate behavioral research*, *42*(1), 185–227.

Pryor, M., Anderson, D., Toombs, L., and Humphreys, J. (2007). Strategic Implementation as a Core Competency: The 5P's Model. *Journal of Management Research, 7*(1), 3-17.

PwC Strategy&. (2019). Organization and strategy management trends. Retrieved from https://www.strategyand.pwc.com/me/home/strategic_foresight/functional_expertise/organizational_change_management/trends. Retrieved on April 25, 2019

Quinn, J. B. (1980). *Strategies for Change: Logical Incrementalism* Homewood, IL: Richard D. Irwin.

Rabetino, R., Kohtamäki, M., and Federico, J. S. (2021). A (re) view of the philosophical foundations of strategic management. International Journal of Management Reviews, 23(2), 151-190.

Radin, B. A. (2006). Challenging the performance movement: Accountability, complexity, and democratic values. Georgetown University Press.

Ramanujam, V., and Venkatraman, N. (1987). Planning system characteristics and planning effectiveness. *Strategic Management Journal, 8*(5), 453-468.

Rau, D., Flores, L., and Simha, A. (2020). A moderated-mediated examination of the relations among strategic planning, organizational learning, slack and firm performance. Management Decision.

Reger, R. K., Duhaime, I. M., and Stimpert, J. L. (1992). Deregulation, strategic choice, risk and financial performance. *Strategic Management Journal, 13*(3), 189-204.

Rhyne, L. (1986). The Relationship of Strategic Planning to Company Performance. *Strategic Management Journal, 7*, 423-436.

Rhyne, L. C. (1987). Contrasting planning systems in high, medium and low performance companies. *Journal of Management Studies, 24*(4), 363-385.

Rigby, D., and Bilodeau, B. (2005). The Bain 2005 management tool survey. *Strategy and Leadership, 33*(4), 4-12.

Rigby, D., and Bilodeau, B. (2007). Selecting Management Tools Wisely. *Harvard Business Review, 85*(12), 20-22.

Rigby, D., and Bilodeau, B. (2018). *Management Tools and Trends Survey 2017*. Retrieved (date: 23 April, 2019) from https://www.bain.com/insights/management-tools-and-trends-2017

Ringle, C. M., Sarstedt, M., Mitchell, R., and Gudergan, S. (2018). Partial least squares structural equation modeling in HRM research. *The International Journal of Human Resource Management*, 1-27

Rogers, P. R., Miller, A., and Judge, W. Q. (1999). Using information-processing theory to understand planning/performance relationships in the context of strategy. *Strategic Management Journal, 20*(6), 567-577.

Rowe, W. G., and Morrow Jr, J. L. (1999). A note on the dimensionality of the firm financial performance construct using accounting, market, and subjective measures. *Canadian Journal of Administrative Sciences, 16*(1), 58-71.

Sandhusen, R. (2000). Marketing. In: Hauppauge, New York: Barron's Educational Series.

Simerly, R. L., and Li, M. (2000). Environmental dynamism, capital structure and performance: a theoretical integration and an empirical test. *Strategic Management Journal, 21*(1), 31-49.

Sirmon, D. G., Hitt, M. A., and Ireland, R. D. (2007). Managing firm resources in dynamic environments to create value: Looking inside the black box. *Academy of Management Review, 32*(1), 273-292.

Sirén, C., and Kohtamäki, M. (2016). Stretching strategic learning to the limit: The interaction between strategic planning and learning. *Journal of Business Research*, 69(2), 653-663.

Snow, C. C., and Thomas, J. B. (1994). Field-research methods in strategic management - contributions to theory building and testing. *Journal of Management Studies, 31*(4), 457-480.

Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological methodology*, *13*, 290–312.

Spee, A. P., and Jarzabkowski, P. (2011). Strategic planning as communicative process. Organization Studies, 32(9), 1217–1245.

Stanwick, P. A., & Pleshko, L. P. (1995). Relationships of environmental characteristics, formalized planning, and organizational design to performance. The International Journal of Organizational Analysis.

Sull, D., Homkes, R., and Sull, C. (2015). Why strategy execution unravels—and what to do about it. Harvard Business Review, 93(3), 57-66.

Thune, S. S., and House, R. J. (1970). Where long-range planning pays off - findings of a survey of formal, informal planners. *Business Horizons, 13*(4), 81-87.

Veliyath, R., and Shortell, S. M. (1993). Strategic orientation, strategic-planning system characteristics and performance. *Journal of Management Studies, 30*(3), 359-381.

Venkatraman, N., and Grant, J. H. (1986). Construct measurement in organizational strategy research - a critique and proposal. *Academy of Management Review, 11*(1), 71-87.

Venkatraman, N., and Prescott, J. E. (1990). Environment strategy coalignment - an empirical-test of its performance implications. *Strategic Management Journal, 11*(1), 1-23.

Venkatraman, N., and Ramanujam, V. (1986). Measurement of business performance in strategy research - a comparison of approaches. *Academy of Management Review, 11*(4), 801-814.

Watts, R., and Zimmerman, J. (1990). Positive accounting theory: A ten year perspective. *Accounting Review, 65*(1), 131-156.

Whittington, R. (2006). Completing the Practice Turn in Strategy Research. *Organization Studies (01708406), 27*, 613-634.

Whittington, R., and Cailluet, L. (2008). The Crafts of Strategy: Special Issue Introduction by the Guest Editors. *Long Range Planning, 41*(3), 241-247.

Winner, L. (1993). Upon opening the black box and finding it empty: Social constructivism and the philosophy of technology. *Science, Technology, Human Values, 18*(3), 362-378.

Wolf, C., and Floyd, S. W. (2017). Strategic Planning Research: Toward a Theory-Driven Agenda. Journal of Management, 43(6), 1754–1788.

Wright, R. P., Paroutis, S. E., and Blettner, D. P. (2013). How useful are the strategic tools we teach in business schools?. Journal of Management Studies, 50(1), 92-125.

Wrapp, H. E. (1984). 'Good managers don't make policy decisions'. *Harvard Business Review,, 62*(4), 8 - 21.

Yang, L., Sun, G., and Eppler, M. (2010). *Making strategy work: a literature review on the factors influencing strategy implementation*. In P. Mazzela, and W. Kellermanns, Handbook of Research on Strategy Process, (pp.165-181). Cheltenham, UK: Edward Elgar Publishing