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A Synthetic Strategy Implementation Model

While strategic management and especially strategy crafting has been discussed extensively, the execution of strategy in general, and modelling of strategy implementation in particular, are rarely discussed. This research aims to develop a comprehensive hybrid model of strategy implementation by critically examining existing strategy execution models based on their similarities and differences. Through extensive search in hundreds of strategy-related books and thousands of papers in top 10 academic journals, we have identified nine strategy implementation models, which can be categorised into two distinguished generations. Forty elements that shape these existing models are determined and then organised into ten groups and two individual factors based on their similarities in a systematic manner to create a synthetic model of strategy implementation. Validity of this hybrid model is being tested based on the collected primary data from 800-1000 organisations from different industries through questionnaire surveys and interviews.

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Abstract

While strategic management and especially strategy crafting has been discussed extensively, the execution of strategy in general, and modelling of strategy implementation in particular, are rarely discussed. This research aims to develop a comprehensive hybrid model of strategy implementation by critically examining existing strategy execution models based on their similarities and differences. Through extensive search in hundreds of strategy-related books and thousands of papers in top 10 academic journals, we have identified nine strategy implementation models, which can be categorised into two distinguished generations. In addition, this study has investigated similarities and differences of these models individually when compared against all other models based on three criteria: research design, validity/reliability, and the models' components. We find that these models are different from each other in terms of number of their components, different formats (system-based, process-based, casual, or haphazard), and appreciation of environmental factors. While models from the first generation are simple, their components and structures are mainly different from each other. In contrast, although second generation's models are more sophisticated, their elements and formats are considerably similar to each other. Forty elements that shape these existing models are determined and then organised into ten groups and two individual factors based on their similarities in a systematic manner to create a synthetic model of strategy implementation. Validity of this hybrid model is being tested based on the collected primary data from 800-1000 organisations from different industries through questionnaire surveys and interviews in our ongoing research.

Keywords: Strategy implementation, strategy implementation model, hybrid strategy implementation model, taxonomy of strategy implementation models, Porterism

Introduction

As recently argued by MacLennan (2011, p. 3), "strategy execution is a seriously under-researched area without an established theoretical basis". In a similar vein, Flood and his co-authors (2000, p. 243) claim that "strategy implementation, like any action-oriented human activity, needs theory based on research to identify the key factors to evaluate and the key levers to push to achieve desired results". However, only very few authors have tried to suggest a model for implementing strategy (see De Flander, 2010; Galbraith & Nathanson, 1978; Hrebiniak & Joyce, 1984; Kaplan & Norton, 2008; MacLennan, 2011; Morgan *et al.*, 2007; Stonich, 1982; Syrett, 2007; and Thompson & Strickland, 1986). This paper aims to critically compare these models in order to shade light on the complex nature of modelling strategy implementation.

In addition to theoretical value, strategy implementation has remarkable pragmatic usage. A survey conducted by the *Economist Intelligence Unit* (2004) revealed that barely 40% of executives rated their companies as being successful at execution. Another survey suggested that companies typically realize only about 60% of their strategies' potential values because of breakdowns in both planning and execution (Mankins & Steele, 2005, p. 66). *Fortune* magazine estimated that 70% of chief executive officer's departures are the consequences of strategy execution failures (Charan & Colvin, 1999, p. 72). Yet another study found that half of all strategic decisions fail to get implemented (Nutt, 1999, p. 84). Others have suggested that upward of 70% of strategies fail to achieve intended objectives upon implementation (Corboy & O'Corrbui, 1999, p. 29). Each of these studies has limitations, but together they paint a picture that reflects the impression of experts in the field – an alarmingly small portion of strategies are implemented successfully (MacLennan, 2011, p. 1).

In the remaining of the paper, we first define some critical notions. Next we introduce all existing strategy execution models, which is followed by the research methodology employed in this study. Then, the findings are discussed. Finally, this paper is closed by conclusions and recommendations for further research.

Definitions

The word ‘*strategy*’ has been used by academics, practitioners, militaries, politicians and even laymen to convey very different meaning. It is believed that the origin of the word ‘*strategy*’ comes from the Greek word of ‘*strategos*’, which means “the art of the general” with a military root (Galbraith & Nathanson, 1978, p. 3). According to Galbraith and Nathanson (1978, p. 3) “strategy, means a specific action, usually but not always accompanied by the development of resources, to achieve an objective decided upon in strategic planning”. As the definition highlights, these authors claim that strategy is more about action than just a planning. While there are many strategy-related concepts, notions of ‘strategy formulation’ as well as ‘strategy implementation’ are two key ones amongst the rest.

Hofer and Schendel (1978, p. 11) define ‘*strategy formulation*’ as “the process of deciding the basic mission of the company, the objectives that the company seeks to achieve, and the major strategies and policies governing the use of the firm’s resources to achieve its objectives.” Paul Stonich (1982, p. xvii) distinguishes strategy formulation and implementation by suggesting *formulation* is about ‘where’ the firm is today and ‘where’ it should be tomorrow, whereas *implementation* is about ‘how’ to get the company from where it is today to where it should be tomorrow. By emphasising on process-based nature of execution, MacLennan (2011, p. 1) defines *strategy implementation* as “the process of indirectly manipulating the pattern of interactions an organization has with its environment in order to achieve its overall objective”. This definition has at least two weaknesses. One is limiting strategy execution to an organisation’s environment and disregarding critical in-organisation factors. The other weakness is the claim that impacts of strategy implementation on an organisation’s pattern of interactions are secondary and ‘*indirect*’.

Strategy implementation is best defined by Eccles (1994, p. 10) as “the action that moves the organization along its choice of route towards its goal – the fulfilment of its mission, the achievement of its vision” so in brief, “strategy implementation is the realization of intentions” (Eccles, 1994, p. 14). Unlike MacLennan (2011), Eccles (1994) considers strategy execution as the main agent in moving entire organisation towards intended objectives that justify crucial role of strategy implementation.

AN INTRODUCTION TO STRATEGY IMPLEMENTATION MODELS

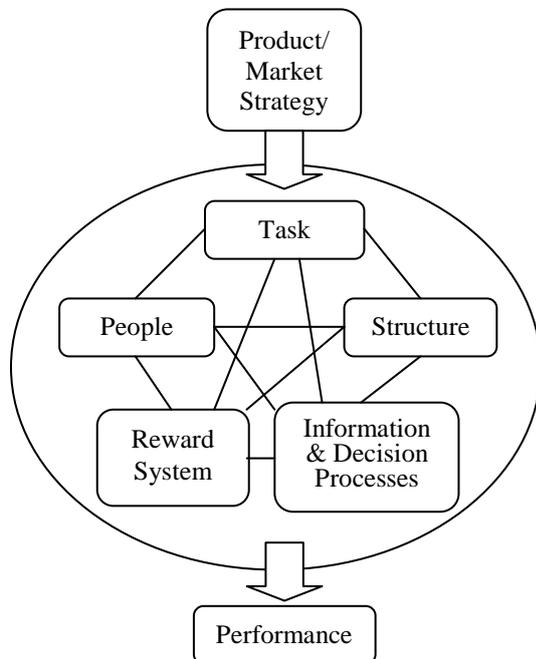
There are nine identified strategy implementation models. Each of these models has their own functions, advantages and disadvantages that will be discussed in this paper. In this section, these models are presented and argued in a chronological order so evolution of the models can be seen in the period from 1978 to 2012.

Galbraith & Nathanson’s Model of Strategy Implementation

Jay Galbraith and Daniel Nathanson of University of Pennsylvania introduced a model in 1978, which is considered to be the first Strategy Implementation Model. Although there had been some models on strategic management that partly referred to implementation, Galbraith and Nathanson’s model is the first framework that mainly focuses on strategy execution. The model is designed based on systemic perspective (input, process, and output) though without

justification. It proposes that product/ market strategy as the input of this system is processed by a combination of five interrelated elements, including ‘*task*’, ‘*people*’, ‘*structure*’, ‘*reward system*’ and finally ‘*information and decision processes*’. Together they create ‘*performance*’ (Galbraith & Nathanson, 1978, p.2).

Figure 1: Galbraith & Nathanson’s Model of Strategy Implementation



Source: Galbraith & Nathanson (1978, p. 2)

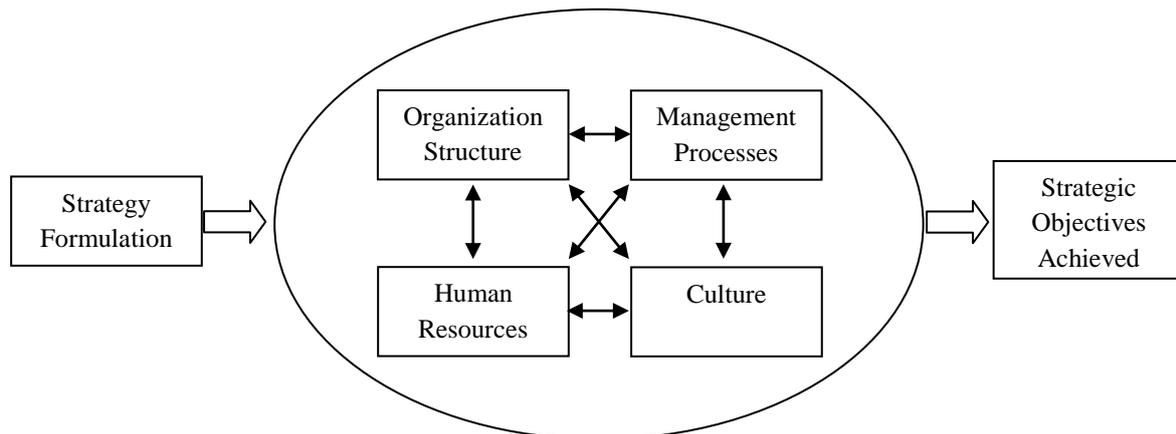
Galbraith and Nathanson as other strategic management scholars of 1960s, 1970s and even 1980s, were under the influence of Chandler’s doctrine (1962) that puts high emphasis on organisational structure while crafting or implementing strategy. According to Galbraith and Nathanson (1978, p. 6), an organisation has a variety of structural forms and organisational processes to choose from when implementing a chosen strategy. The choice of structural forms makes an economic difference; that is all structural forms are not equally effective in implementing a given strategy. By organisation form they mean a comprehensive design of structure, systems, and processes (1978, p. 1). Therefore, they suggest that managers should allocate the time and effort necessary to plan their organisational form, just as time and effort are allocated for the formulation of other plans.

They were well aware of the fact that there are, however, other variables in addition to structure to be considered if a firm is to marshal its resources effectively and implement its strategy. As a secondary factor to structural forms and processes, Galbraith and Nathanson discuss impacts of human resources, tasks, reward systems, and information transaction. They note that the organisation must be designed to facilitate the proper selection, training, and development of its employees. Staff must be able to perform their tasks and thereby carry out the desired strategy. Congruent reward systems must provide the incentive necessary for employees to work effectively and in harmony with the organisation’s goals. Information must also be available to control and coordinate activities, to measure performance effectively, and to monitor and plan (Galbraith & Nathanson, 1978, p. 6). Although based on today’s requirements for 21st century organisations this model looks very basic and incomplete, surely as the first strategy execution model it was a master piece in its own era.

Stonich Model of Strategy Implementation

The second Strategy Implementation Model was developed in 1982 by Paul Stonich. Compared with Galbraith and Nathanson's model the only new element in Stonich's model is culture. Similar with Galbraith and Nathanson's model, this is a system-based model where *strategy formulation* as input is being processed by four interrelated elements of *organization structure*, *management processes*, *human resources* as well as *culture* to achieve *strategic objectives* as outputs.

Figure 2: Stonich Model of Implementing Strategy



Source: Stonich (1982, p. xviii)

According to Stonich (1982, p. xvii), effective implementation of strategy requires a constant effort to match and fit together these five basic elements that drive the organisation. It is argued by Stonich and his colleagues (1982, p. xviii) that the process by which a strategy is formulated is extremely important to the strategy's success. The appropriate process involves not only developing the "right" economic answer, but also ensuring that it can be implemented within the particular company. He claims (1982, p. 2) that a successful strategy is (a) analytical and fact-based; and (b) implementation-oriented and consensus-oriented so the strategy formulation process needs to emphasise these two critical dimensions.

Organisational *culture* is one of the components of Stonich's model. All organisations have cultures that delineate, in an unofficial and usually unspoken way, the "rules of the game". It is how things are really done. Recognising the ramifications of the firm's culture is especially critical when implementing strategy because, in many respects, culture- more than any other element- dictates what can and will be done. Knowing how to assess the cultural risks inherent in a chosen strategy is a necessary skill for the effective manager of strategy (Stonich, 1982, p. 33).

The other element is *organisation structure*, which has been discussed by other scholars (Chandler, 1962; Channon, 1973; Galbraith & Nathanson, 1978) prior to Stonich. Stonich's model (1982, p. 48) indicates attempting to implement a desirable strategy can sometimes be constrained by the structure in place- that is, there may be a poor fit between the strategy and the structure. When this occurs, managers must investigate alternative structuring possibilities that will drive the chosen strategy, and in some cases the strategy may have to be refocused to fit the existing structure.

Human resources- the organisation's people, their skills, experience, ability, and style- is part of the model. Stonich (1982, p. 67) notes that implementing a strategy without people with the required skills, attitude, and training will lead to disaster. Managers should make wise choices among alternative strategies to fit the human resources available, developing

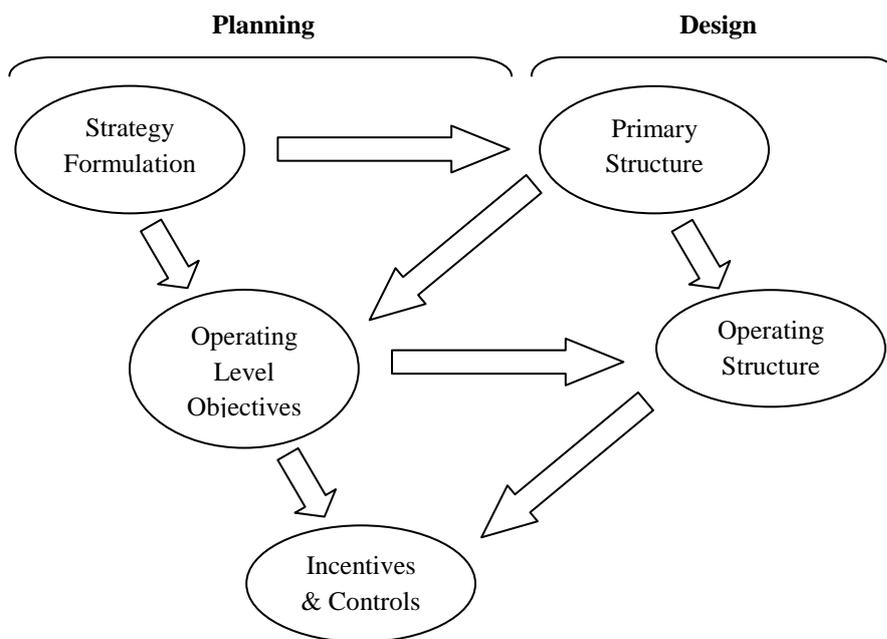
skills for existing members of staff or hiring the new employees needed to bring the strategy to fruition.

The last component of Stonich’s model is *management process* that covers some of the critical issues in organisations. Management processes including planning, programming, budgeting and rewarding processes, make up the vital “nervous system” of the firm that directs and sends signals throughout an organisation and stimulates its movement towards the chosen objectives (Stonich, 1982, p. 89).

Hrebiniak & Joyce’s Model of Strategy Execution

Two years after Stonich’s model, in 1984, Lawrence Hrebiniak of University of Pennsylvania and William Joyce of Dartmouth College unveiled their strategy execution model. Although both models have five elements, some of these elements are considerably different from each other. The other difference between these two models is their developers’ perspectives regarding the nature of strategy implementation. While Stonich’s model considers strategy execution as a system, Hrebiniak and Joyce’s model sees strategy implementation as a step-by-step process.

Figure 3: Hrebiniak & Joyce Model of Strategy Execution



Source: Hrebiniak & Joyce (1984, p. 10)

The five factors in the Hrebiniak and Joyce’s model are *strategy formulation*, *operating level objectives*, *incentives & controls*, *primary structure*, and *operating structure*. They can be categorised into two groups: Planning (first three elements) and Organisational Design (last two factors). This grouping is drawn based on the understanding that strategy implementation is nothing but two basic activities of Planning, and Organisational Design (Hrebiniak & Joyce, 1984, p. 9), which is a very simplistic perspective. It is evident that Hrebiniak and Joyce’s model was heavily influenced by Chandler’s work (1962) on ‘*Strategy and Structure*’.

It was developed to address two questions: What decisions and actions can be taken by managers who are implementing strategy? And how can these decisions be organised to meet the criteria of logic, action, and contingent prescription? (Hrebiniak & Joyce, 1984, p. 4). Like Stonich's model, the starting point of the Hrebiniak & Joyce's model is *strategy formulation*. The process of formulating corporate strategy or plans for the entire organisation is the beginning for implementation actions. As argued by Hrebiniak & Joyce (1984, p. 32), strategy formulation includes the setting of long-term objectives and the requisite plans for their achievement.

Primary structural choice is the other factor in this model. It is a solution for the problem of occurred complexity due to a breakdown of a corporate level strategy into smaller elements and, ultimately, short-range objectives. To facilitate the attainment of complex strategic objectives and plans, they must be reduced to smaller, more manageable portions. The successful implementation of strategy depends on the decision about primary organisational structure in order to create the operating units that are most appropriate for this reduction process (Hrebiniak & Joyce, 1984, p. 71). In a similar fashion to Chandler (1962), Hrebiniak and Joyce (1984) state that main organisational structure should follow the strategy to grantee successful strategy implementation.

The third component of the Hrebiniak & Joyce's model is the establishment of *operational-level objectives* (the strategic and short-term objectives of the major differentiated units of the organisation). According to Hrebiniak & Joyce (1984, p. 96) objectives must now be set in consistence with the choice or definition of structure. The process of setting operating-level objectives also includes the translation of long-term strategic aims into specific short-term objectives for the operating units.

Hrebiniak & Joyce (1984, p. 129) define the fourth elements of their model, *operating structure*, as "the structure and, to some degree, related processes (e.g. coordination) within the major units that represent the primary structure of the organization". Built on Lawrence and Lorsch's work (1967), Hrebiniak and Joyce (1984, p. 154) state that decisions about operating structures fall into two broad categories: structural differentiation, or how to divide labour to achieve operating objectives; and integration, namely, the methods to be used to coordinate the various activities that have been segmented by differentiation decisions.

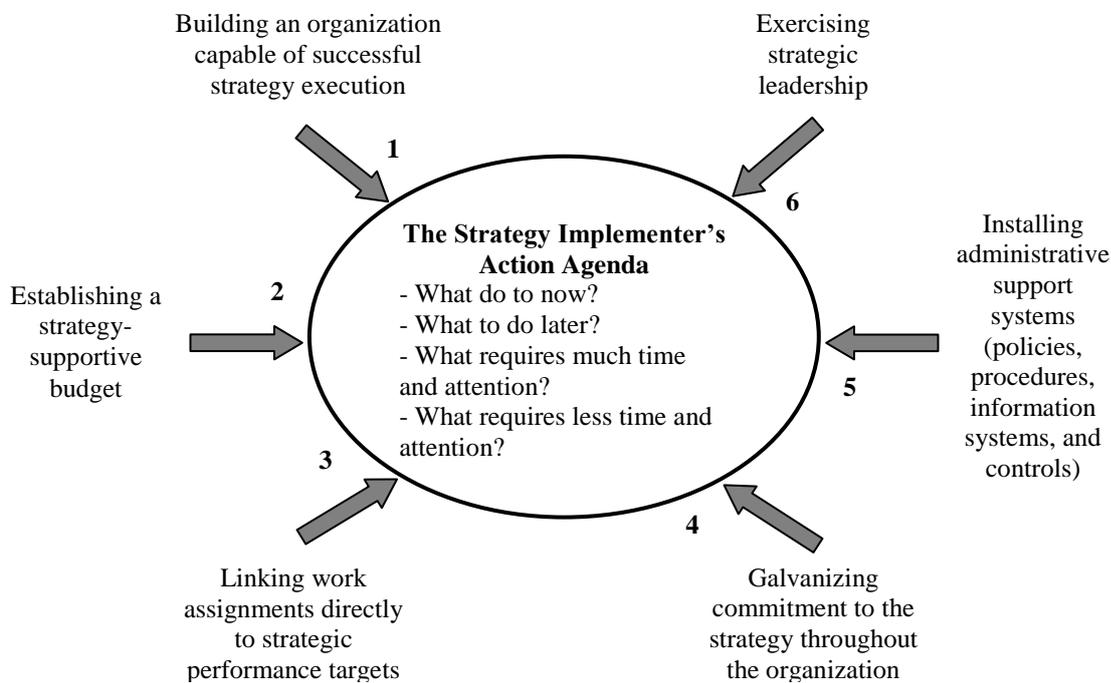
The fifth piece of the model is *incentives and controls*. In agreement with Lorange's necessity of performance control (1980) and Thorndike's *Law of Effect* (1905), "behaviour that is reinforced tends to be repeated", Hrebiniak and Joyce (1984, p. 187) comment that to motivate behaviour that is consistent with short-term and strategic objectives, it is vital to develop rewards and controls that take into account and integrate the short-term operation of the organisation and its needs for long-run survival.

Thompson & Strickland's Strategy Implementation Model

Thompson and Strickland (1986) developed a model (in the third edition of their book) by emphasising on the key tasks that should be done by general managers in implementing strategy. Thompson and Strickland's model, unlike all other models, considers strategy implementation as a combination step-by-step process and cause and effect correlation between each of the model's six elements and strategy execution. The six stages/tasks of their model are 1- building an organization capable of successful strategy execution; 2- establishing a strategy-supportive budget; 3- linking work assignments directly to strategic performance targets; 4- galvanizing commitment to the strategy throughout the organization; 5- installing administrative support systems (policies, procedures, information systems, and controls); and 6- exercising strategic leadership.

Thompson and Strickland (1986, p. 266) believe that the very first stage/task in strategy implementation is “*building an organisation capable of successful strategy execution*”. They argue that successful strategy execution depends greatly on good internal organisation and competent personnel. In this regard, three main organisational issues are developing an internal organisation structure that is responsive to the needs of strategy; building and nurturing the skills and distinctive competences in which the strategy is grounded and to see, generally, that the organisation has the managerial talents, technical know-how, and competitive capabilities it needs; and finally, selecting people for key positions (Thompson & Strickland, 1986, p. 266). Thompson and Strickland’s idea is too idealistic when it assumes that a company should be very special with advanced structure and top staff to might be able to implement strategy. With this precondition, consequently, very few companies would be able to go to the second stage (out of six) of strategy implementation.

Figure 4: Thompson & Strickland’s Strategy Implementation Model



Source: Thompson & Strickland (1986, p. 264)

Developing a *strategy-supportive budget* is the second stage in this model. Thompson and Strickland (1986, p. 287) note that budgets and programmes go hand in hand. Programmes lay out detailed, step-by-step action plans, and budgets specify the costs of the planned activities. They recommend that not only must a strategy-implementer oversee ‘who gets how much’ but the budget must also be put together with an equal concern for ‘getting the biggest bang for the buck’ that is reasonable suggestion.

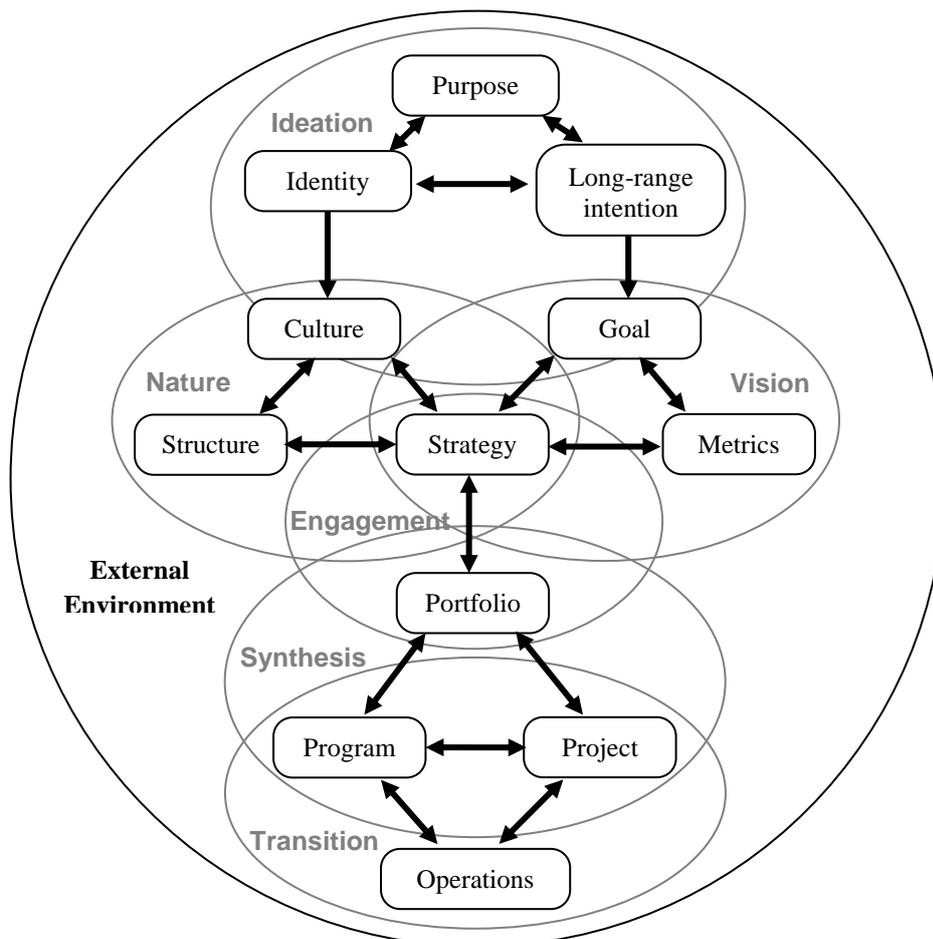
The third stage/task is *making connection between designated works and performance objectives*. As argued by Thompson and Strickland (1986, p. 288) defining jobs and assignments in terms of the strategic results to be accomplished (not just in terms of the duties and functions to be performed) adds an equally important linkage. The task of generating, maintaining, and otherwise orchestrating organisation-wide *commitment to strategy implementation* is considered as the fourth stage, which is composed of four aspects: motivating organisational units and individuals to execute the strategic plan and achieve the targeted results; building a strategy-supportive corporate culture; creating a strong results

orientation and a spirit of high performance; and linking the reward structure to actual strategic performance (Thompson & Strickland, 1986, pp. 292-293). The next stage is installing internal *administrative support systems* which fit the needs of strategy. To put it simply, Thompson and Strickland (1986, p. 305) claim that strategy execution depends on establishing appropriate types of strategy-facilitating policies and procedures, getting the right strategy-critical information on a timely basis, and utilising suitable controls that are needed to keep the organisation on its strategic course. The last stage of the model is *exerting strategic leadership*, which in turn requires managers to play roles as chief entrepreneur, chief administrator, crisis solver, task-master, resource allocator, and so on (Thompson & Strickland, 1986, p. 310). In contrary to Thompson and Strickland’s perspective that limits leadership to just the very last stage of strategy execution, strategic leadership should be exercised not only in all stages of strategy implementation but even in all stages of strategy formulation (Balogun & Jarzabkowski, 2009; Golden & Ma, 2003; Porac, *et al.*, 1999).

Morgan, Levitt & Malek’s Strategic Execution Framework

Morgan, Levitt and Malek (2007) design a new strategy implementation framework entitled Strategic Execution Framework focusing on six imperatives with twelve elements. Although it has been named Strategic Execution Framework, more than half of its elements are about strategy formulation (see Morgan, *et al.*, 2007, p. 17).

Figure 5: Morgan, Levitt & Malek’s Strategic Execution Framework



Source: Morgan *et al.* (2007, p. 240)

The 'ideation' imperative emphasises clarification and communication of *identity*, *purpose*, and *long-range intention*. Regarding the 'vision' imperative, Morgan *et al.* (2007, p. 62) argue that many organisations fail to execute their strategy because people simply cannot connect the dots between what the strategy says, what specific *goals* it is directed toward, and what *metrics* can be used to navigate forward progress. The link between an organisation's *culture*, *strategy*, and *structure* is covered in the 'nature' imperative where the hidden transformative projects of realignment for strategic execution are most likely to reside (Morgan *et al.*, 2007, p. 94). Morgan, Levitt and Malek (2007, p. 21) accommodate three imperatives of 'ideation', 'vision', and 'nature' within the *strategy-making* domains.

The *project leadership* domains include three imperatives of 'engagement', 'synthesis', and 'transition'. According to Morgan *et al.* (2007, p. 62), what differentiates one organisation from another in terms of strategic execution is the discipline of *engaging* the strategy with the tailored portfolio of projects and programmes to invest in. While the 'synthesis' domain focuses on monitoring and continuously aligning the *project* and *program* with strategy, the 'transition' imperative highlights importance of transferring projects crisply to operations to reap the benefits (Morgan *et al.*, 2007, p. 241).

This model that limits itself to project management, contradicts itself by illustrating step-by-step stages of strategy formulation and execution from *purpose* to *operations* while claiming that "navigating the model does not require a step-by-step, sequential journey through the six domains" (Morgan *et al.*, 2007, p. 16). In brief, the core point that the authors falls short in convincing the readers is that strategy execution can only happen when the six essential domains of the model are in alignment and when all six align with the external environment.

Syrett's Pathway to Strategy Execution

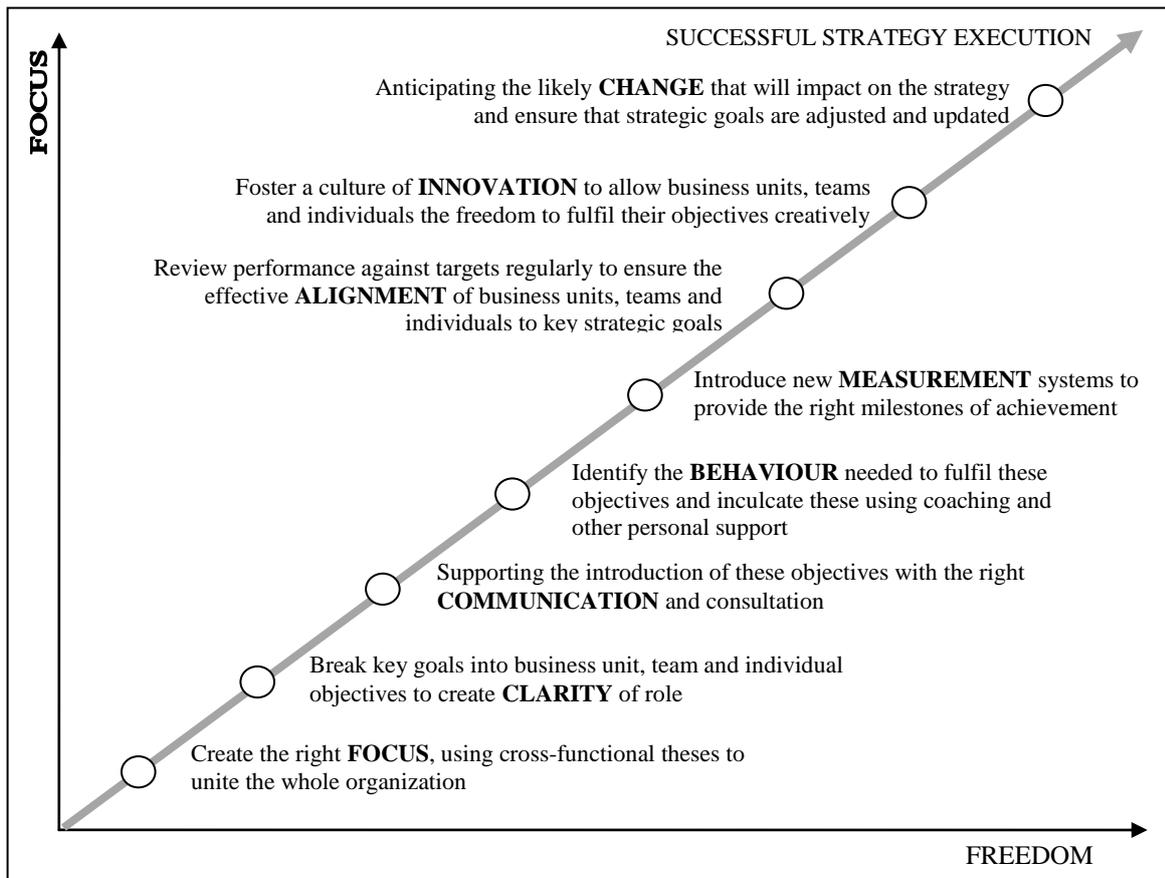
Syrett publishes his book "*Successful Strategy Execution*" that embodies a strategy implementation model, the Pathway to Strategy Execution, in December 2007. The model is a step-by-step guideline with eight steps (focus, clarity, communication, behaviour, measurement, alignment, innovation and change) in two dimensions of *focus*, and *freedom* (Syrett, 2007, p. 132).

Although Syrett explains each dimension and each step separately, he fails to rationalise any connection between the eight steps and two dimensions because such a relationship does not exist. He claims that successful strategy execution depends on two factors: a *focus* on the right strategic goals and the *freedom* granted to all parts of the organisation (Syrett, 2007, p. 131).

According to Syrett (2007, p. 136) the eight steps are as follows: rely upon cross-functional team to create the right *focus*; *clarify* roles by dividing the main goals into business unit, team and individual objectives; introduce these objectives with the right *communication*; detect and support objective-supporter *behaviour*; develop required *measurement* of achievement; ensure the effective *alignment* of strategic goals and performance in the organisation; create a culture of *innovation* that support objective fulfilment creatively; and adjust strategic goals to possible *change*. Some of these steps are pretty the same such as focus and clarity or alignment and change. All of these steps are basically just preparation for strategy implementation but the main issue of actual strategy execution is missing in this model.

Syrett like some other scholars disregards actual complexity of implementing strategy, which arises due to interconnectivity amongst elements of strategy implementation, by adopting a linear and step-by-step approach to strategy execution.

Figure 6: Syrett's Pathway to Strategy Execution



Source: Syrett (2007, p. 132)

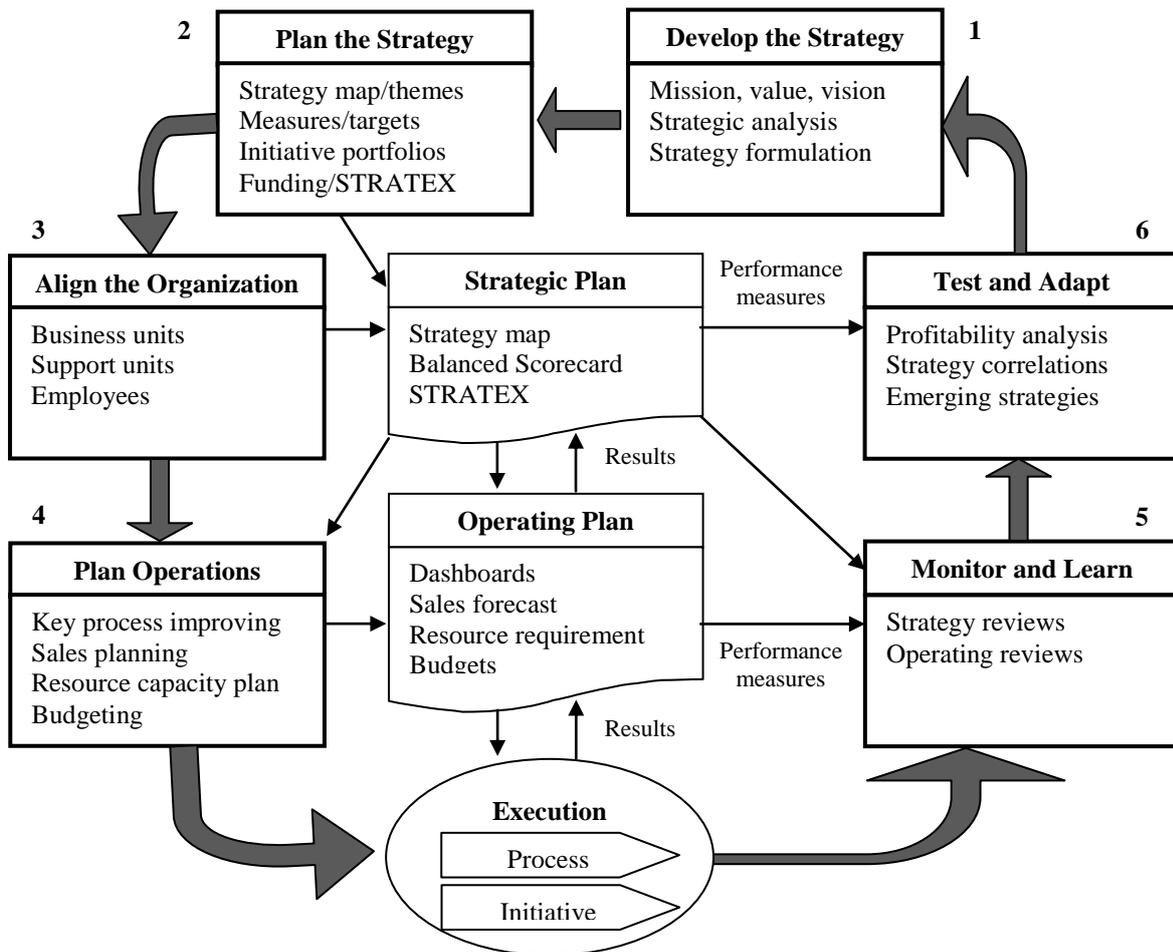
Kaplan & Norton's Management System for Strategy Execution

Kaplan and Norton, known for their Balanced Scorecard, introduced their Management System for implementing strategy in 2008. Kaplan and Norton's model is a circular step-by-step process with 6 stages. As described by Kaplan and Norton (2008, pp. 8-9) first, managers need to *develop the strategy*, next, they *plan the strategy* to have a strategic plan, then, the organisation should be *aligned* with the strategy, after that, managers should *plan operations* in form of an operating plan, later, after execution of operational plan the organisation would required to *monitors and learns* about results and possible difficulties raised, the sixth stage is *testing and adapting* strategy based on collected data regarding the operations and situation. Apart from the first and sixth stages, impacts of external environment on the rest of strategy implementation are ignored.

Kaplan and Norton's model is a circular framework that conveys unreasonable logic of unlimited repetition in a closed system. Due to circular nature of this model, concepts of progress and innovation would be meaningless. Although this is a model for strategy implementation, *execution* by itself is not one of the six stages.

This model has been developed based on focus group research on just 12 companies that have been using the Balanced Scorecard technique (Kaplan & Norton, 2008, p. viii). Kaplan and Norton completely disregarded the vast majority of organisations that do not use Balanced Scorecard so their findings, which have underpinned this model, do not have any external validity and therefore cannot be generalised.

Figure 7: Kaplan & Norton's Strategy Execution Model



Source: Kaplan & Norton (2008, p. 8)

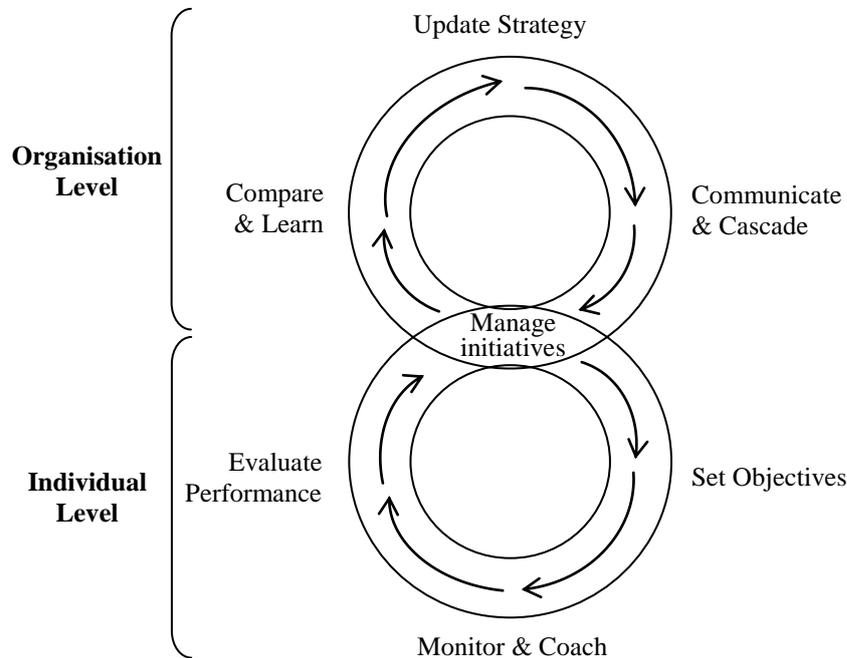
De Flander's 'the 8'- Strategy Execution Framework

De Flander, a management consultant, in his self-published book has developed a strategy execution framework in 2010 that he calls it 'the 8'. He is obsessed with the work of Kaplan and Norton, hence borrowed too much from their 2008 model into his own one. Although the same as Kaplan and Norton's model, De Flander's model is a circular step-by-step process, having two circles, one for organisation level the other for individual level, create this incorrect assumption that just some of the implementation tasks should be done again and again forever at either organisation level or individual level.

The eight stages of De Flander's model start with reviewing and *updating current strategies* (no sign of new strategy), and continue with *communicating* strategy to others, *cascading* the company's strategy by breaking it down into smaller chunks for the next organisational level, *comparing and learning* from the executed strategy (there is no executing stage), *managing initiatives* by selecting and prioritising right actions, *setting objectives* for individuals, *monitoring and coaching* employees, and *evaluating performance* of individual staff (De Flander, 2008, pp. 23-27). As it is evident, these eight steps are not in logical order. For instance the fourth stage is comparing and learning from the implemented

strategy, meaning strategy is expected to be executed already, while the next three stages are about how to prepare for implementation, indicating strategy has not been implemented yet.

Figure 8: De Flander’s ‘the 8’ - Strategy Execution Framework



Source: De Flander (2010, p. 23)

Regardless of De Flander’s claims, there is no evidence to show that this model was developed based on a proper academic research. The only source of primary data in this research seems to be interviews with 4-5 managers. However, there is no any connection between the contents of these interviews and the elements of De Flander’s model.

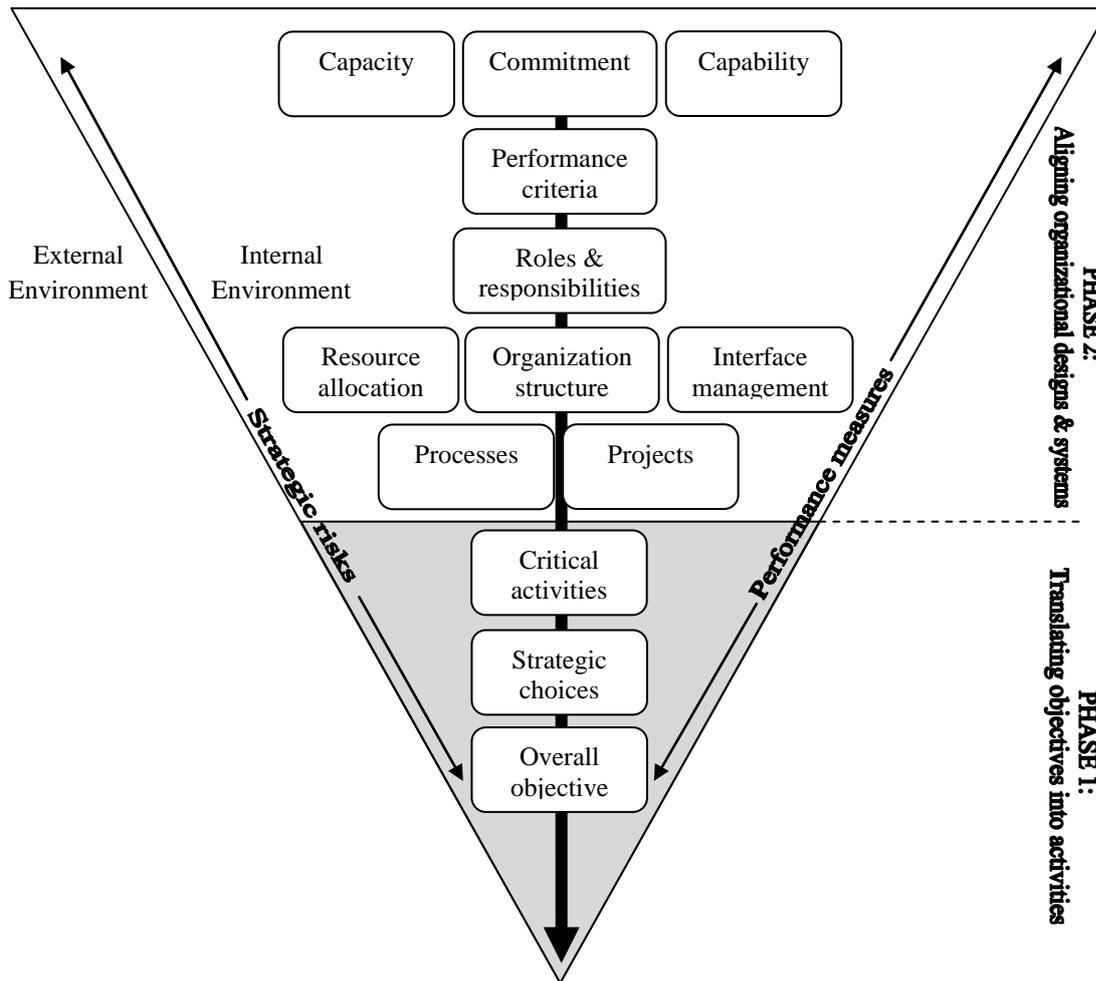
MacLennan’s Inverted Pyramid Framework

The most recent model for strategy implementation was introduced by Andrew MacLennan in 2011. This model seems to be based on longitudinal case studies in just two organisations, so this research has an embedded limitation in external validity.

Compare to Kaplan and Norton’s research (2008) that utilised focus group of 12 companies, MacLennan’s research and its findings are much more limited but it is more reliable due to employing longitudinal case study instead of focus group. Likewise majority of strategy execution models, MacLennan’s model is a step-by-step process with logically sequential set of tasks.

This model encompasses thirteen tasks that are divided into two phases. Phase 1 includes three tasks (*overall objective, strategic choices, and critical activities*), would translate organisation’s general objectives into series of activities. Phase 2, which embodies ten tasks (*processes, projects, resource allocation, organisation structure, interface management, roles & responsibilities, performance criteria, capacity, commitment, and capability*), would create alignment among organisational designs and existing systems (MacLennan, 2011, pp. 59-65).

Figure 9: MacLennan's Inverted Pyramid Framework



Source: MacLennan (2011, p. 57)

According to MacLennan (2011, p. 58) sequence of the tasks for managers in the model is as follow: setting general objectives; making strategic choices to support achievement of the objectives; defining critical activities by breaking down the strategic choices; separating temporary critical activities (projects) from continuous ones (processes); designing an appropriate organisation structure; allocating resources to the projects and processes; managing interfaces between SBUs; assigning roles and responsibilities; defining performance criteria; creating required commitment, capacity and capability; detecting possible strategic risks as well as performance measurers; and finally, conducting internal and external environmental analysis that MacLennan put it as the last task but it should be done as the very first activity (Alexander, 1985; Herold, 1972). Unlike De Flander's model (2008), sequence of tasks in MacLennan's model is mainly (but not totally) logical and reasonable.

RESEARCH METHODOLOGY

It is an accepted fact that theory-building should mainly rely on qualitative methodology (Guba & Lincoln, 1996; Patton, 1990; Strauss & Corbin, 1998), such as interviews and ethnography; though for theory-testing the best methodology to utilise is quantitative (Balnaves & Caputi, 2001; Kerlinger, 1997), such as a questionnaire survey. Regarding the research aim and question, this study is going to create a model for successful strategy

implementation (theory-building) and then test the validity and viability of the suggested model (theory-testing); thus, the only suitable research design is mixed methodology (Tashakkori & Teddlie, 2003a,b). Regarding research strategy, both surveys and case study strategies have their own strengths and limitations. However, keeping in view the nature and purpose of the research, surveys have been used to collect data. Moreover, surveys are used in this research as this study intended to collect a larger amount of data in a limited time and using limited resources (Saunders *et al.*, 2009).

To fulfil the requirements of the research aim, objectives and questions, this research needs both primary data and secondary data. The primary data are being collected through interviews and a semi-structured questionnaire survey. The intention is to randomly select 40-50 high-performing organisations (by using the stratified sampling method) from each industry. According to the North American Industry Classification System (NAICS), there are 20 categories for industries so altogether 800-1000 organisations are being chosen. The questionnaire survey is being conducted in all 800-1000 successful organisations; however, just one company from each industry is being selected randomly for interviewing (20 interviews altogether). The source of the required secondary data will be official reports of the organisations and market research reports and analysis, which is available publicly in professional and reliable databases such as the Global Market Information Database (GMID), Global Insights, and Frost & Sullivan.

Likewise the data collection, data analysis stages also pursue a triangulation approach by using a variety of methods and tools in order to shed light on the complex nature of strategy implementation and its related data. The most appropriate identified statistical methods of data analysis for this study are 'Factor Analysis' (Thurstone, 1947), 'Structural Equation Modelling' (Haavelmo, 1943) and the 'Scientific Model of Causality' (Heckman, 1997, 2000, 2001). For analysing interviews a non-statistical technique, thematic analysis is being used.

FINDINGS and DISCUSSIONS

Just nine frameworks have been developed in 33 years, from the introduction of the first strategy implementation model by Galbraith and Nathanson in 1978 to the development of the last model by MacLennan in 2011. These nine models have shaped two distinguished generations. Twenty-one years gap separate these two eras from each other. These two generations of strategy execution models are different from each other in terms of number of their elements, interaction amongst their elements, variety of formats (system-based, process-based, causal, or haphazard), and regarding/disregarding environmental factors.

First generation of strategy implementation models encompass 4 frameworks: Galbraith and Nathanson (1978); Stonich (1982); Hrebiniak and Joyce (1984); and Thompson and Strickland (1986). The models in the first generation have just 5-7 components. Generally there are high interactions among elements of these models that have been illustrated by using multi two-sided arrows. Formats of these models are varied; two of them have system-based structure (Galbraith & Nathanson, 1978; Stonich, 1982), one of them is process-based (Hrebiniak & Joyce, 1984) and the other has causal format (Thompson & Strickland, 1986). External environment is completely ignored in all of these models.

Five frameworks build the second generation of strategy execution models including Morgan *et al.*, 2007; Syrett, 2007; Kaplan & Norton, 2008; De Flander, 2010; and MacLennan, 2011. Unlike the first generation, models of the second generation have more components (8-17 elements) with low interactions among their elements (except Morgan, *et al.*, 2007), and low variety in their format because all the 5 models have a process-based structure (except De Flander's model partly has a haphazard format too). External environment is taken into consideration directly in two of these models (MacLennan, 2011;

Morgan, *et al.*, 2007) and indirectly in two others (De Flander, 2010; Kaplan & Norton, 2008).

Table 1: Taxonomy of Generations of Strategy Implementation Models

Generation Criteria		Strategy Execution Models	
		First Generation	Second Generation
Number of Elements	5-7	✓	
	8-17		✓
Interaction among Elements	High	✓	
	Low		✓
Variety of Formats	High	✓	
	Low		✓
External Environment	Regarded		✓
	Disregarded	✓	

Source: Developed for this study

There is a noticeable timing gap between end of the first generation of strategy implementation models in 1986 and starting of the second generation of the models in 2007. The main reason for creating 21 years of dark-age in the development of strategy execution was “Porterism” or ‘Porter’s school of thought’, which refers to the specific school of thought that perceives, defines and redefines business and its strategies to create *competitive advantage*. Michael Porter of Harvard Business School is the father and founder of “Porterism”. Although fundamentally there is nothing wrong with ‘Porterism’, obsessions with this school of thought drained majority of existing research resources for two decades in favour of this perspective, which consequently paralysed other circuital aspect of strategic management research including study of strategy implementation and its modelling.

In addition to comparing and contrasting strategy execution models by considering the generation they are belong to, this study investigates similarities and differences between these models individually when compared against all other models. The nine identified models are compared and analysed based on three criteria as follows:

- Research design
- Validity/Reliability
- Models’ components

Table 2: Employed Research Design in Strategy Execution Models

Research Design		Strategy Execution Models							
		First Generation of Models				Second Generation of Models			
		Galbraith & Nathanson (1978)	Stonich (1982)	Hrebiniak & Joyce (1984)	Thompson & Strickland (1986)	Morgan <i>et al.</i> (2007)	Syrett (2007)	Kaplan & Norton (2008)	De Flander (2010)
Research Strategy	Survey						✓		
	Case study						✓		✓
	Archival analysis							✓	
	Personal knowledge	✓		✓	✓	✓	✓		✓
	Personal experience		✓					✓	✓
Research Method/ Tool	Interview							✓	✓
	Observation								✓
	Focus group						✓		
	Data mining						✓	✓	
	Literature review	✓		✓	✓	✓			✓
	Nothing		✓						

Source: Developed for this study

The adopted ‘*research design*’ in developing these strategy execution models seems to be eclectic. In the majority of these models there is little or no discussion regarding research design or methodology. It seems that, when developing strategy implementation models, many authors simply relied on their personal or professional experience or knowledge instead of proper academic research. As reflected in Table 2, while the first generation of strategy implementation models have been developed based on single research strategy (mainly personal knowledge) or research method (literature review being dominant), the second generation of the models are mainly built on triangulation of research strategies and tools.

Table 3: Validity/Reliability of Research on Strategy Execution Models

Validity/Reliability Criteria		Strategy Execution Models								
		First Generation of Models				Second Generation of Models				
		Galbraith & Nathanson (1978)	Stonich (1982)	Hrebiniak & Joyce (1984)	Thompson & Strickland (1986)	Morgan <i>et al.</i> (2007)	Syrett (2007)	Kaplan & Norton (2008)	De Flander (2010)	MacLennan (2011)
Capability of researcher	High	✓		✓	✓	✓		✓		✓
	Medium		✓				✓			
	Low							✓		
Clarity of aim and questions	High		✓	✓		✓		✓		✓
	Medium				✓		✓		✓	
	Low	✓								
Suitability of research design	High							✓		✓
	Medium	✓		✓	✓	✓	✓		✓	
	Low		✓							
Internal Validity	High							✓		
	Medium		✓	✓	✓	✓				✓
	Low	✓					✓			
Construct Validity	High									
	Medium			✓	✓	✓		✓	✓	✓
	Low	✓	✓				✓			
External Validity	High					✓				
	Medium	✓	✓	✓	✓		✓		✓	
	Low							✓		✓
Reliability of collected data	High				✓					✓
	Medium	✓		✓		✓		✓		
	Low		✓				✓		✓	
Rigour in analysis	High	✓		✓	✓					
	Medium		✓			✓	✓	✓		✓
	Low								✓	
Suitability of discussion	High			✓	✓	✓		✓		✓
	Medium	✓	✓				✓			
	Low								✓	
Connection of findings with model	High			✓	✓	✓		✓		✓
	Medium	✓	✓				✓			
	Low								✓	

Source: Developed for this study

Validity/Reliability is another criterion on which these models are assessed. The degree to which these models are reliable and conducted research (if any) is valid depends on capability of the researcher; clarity of the research aim, objectives, and research questions; appropriateness of the utilised research designs; lack or existence of internal, construct and external validities; reliability of the collected primary and secondary data; rigour in analysing

these primary and secondary data; logical explanation of the findings; and direct connection amongst the findings and the model's components. In brief, none of these strategy execution models completely fulfil all the criteria mentioned so they lack high level of validity/reliability; however, some of the models have average degree of validity/reliability (see Table 3).

There is a considerable variation among strategy execution models in terms of the number and nature of the *elements* that shape each of these models (see Table 4).

Table 4: Elements of Strategy Implementation Models

Elements of Models	Strategy Execution Models								
	First Generation of Models				Second Generation of Models				
	Galbraith & Nathanson (1978)	Stonich (1982)	Hrebiniak & Joyce (1984)	Thompson & Strickland (1986)	Morgan <i>et al.</i> (2007)	Syrett (2007)	Kaplan & Norton (2008)	De Flander (2010)	MacLennan (2011)
Human Resources	✓	✓				✓			
Firm's Structure	✓	✓	✓		✓				✓
Operating structure			✓						
Systems				✓					
Processes	✓	✓					✓		✓
Projects					✓				✓
Strategy Formulation		✓	✓				✓		
Communication						✓		✓	
Commitment				✓					✓
Culture		✓			✓	✓			
Operating objective			✓				✓	✓	
Reward System	✓	✓	✓						
Control			✓						
Task	✓							✓	✓
Strategy	✓				✓			✓	
Performance	✓				✓				
Achieved objective		✓							
Capacity building				✓					✓
Supportive budget		✓		✓			✓		
Alignment				✓		✓	✓		
Procedures				✓					
Strategic leadership				✓					
Purpose/objective					✓				✓
Identity					✓				
Mid-range Goal					✓				
Long-rang Goal					✓				
Measurement/metrics/evaluation					✓	✓	✓	✓	✓
Portfolio					✓				
Program		✓			✓				
Focus						✓			
Goal break down						✓		✓	✓
Innovation						✓			
Adjustment/adapt						✓	✓	✓	
Strategy planning		✓		✓			✓		✓
Monitor & Learn							✓	✓	
External environment					✓		✓	✓	✓
Capability				✓					✓
Clarity of roles						✓			✓
Resource allocation									✓
Coordination									✓

Source: Developed for this study

In general, each model has been developed based on dominant paradigm at a time, previous strategy models, possibly results of the research as well as the developer's expertise, experience, and personal idea. As illustrated in Table 4, forty different elements that are building blocks of these nine strategy execution models have been identified. Some of these factors are noticeably similar to each others such as alignment and coordination, though some others are very different from each other such as culture and firm's structure. While some of the components are only used in one model (e.g. portfolio, identity, and focus) the others are common in 3-4 models (measurement/metrics, firm's structure, and goal break down).

By considering all three criteria (models' components, research design, and validity/reliability) that are used for analysing these nine models of strategy implementations, it is apparent that the Inverted Pyramid Framework by MacLennan (2011) and the Management System for Strategy Execution by Kaplan and Norton (2008) are more appropriate models compare to the rest of the models.

Systems Theory as a Base for Modelling Strategy Implementation

Karl Ludwig von Bertalanffy, a biologist, is known as the the founding father of the General Systems Theory. Shortly after introduction of the systems theory, Boulding (1956) identified functions and important implications of this theory in business and management. The various conceptual frameworks of the systems approach and related areas have much to offer for the construction of an holistic methodology (Laszlo and Krippner, 1998). According to Laszlo and Krippner (1998, p. 54) a *system* is "a group of interacting components that conserves some identifiable set of relations with the sum of the components plus their relations (i.e., the system itself) conserving some identifiable set of relations to other entities (including other systems)". In the words of Macy (1991, p. 72), "a system is less a thing than a pattern".

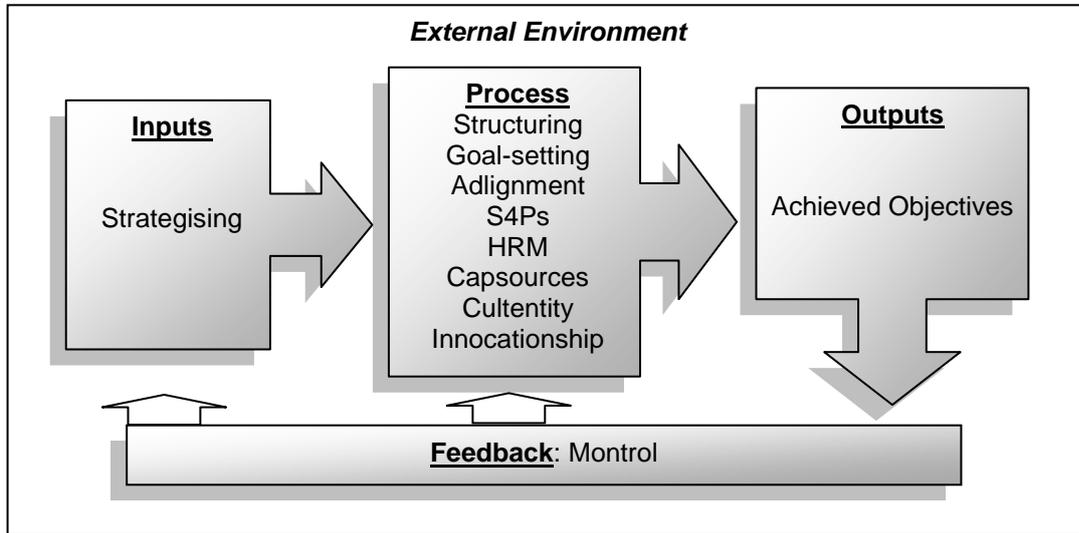
The systems theory (von Bertalanffy, 1955) has chosen as the main theoretical framework in shaping the hybrid model of strategy execution due to nature of this research, which is multidimensional phenomena with connection to external environment, and capability of this theory to provide a full picture of strategy implementation practices (Boulding, 1956). That is to say, "The advantage of systems theory is its potential to provide a trans-disciplinary framework for a simultaneously critical and normative exploration of the relationship between our perceptions and conceptions and the worlds they purport to represent" (Laszlo and Krippner, 1998, p. 50).

After considering all of the above discussions, especially the ones about forty components of all existing strategy execution models (see Table 4) we decided to develop a comprehensive model of strategy implementation by synthesising all of the forty identified elements based on the systems theory. To avoid unmanageable complexity, these forty factors are grouped based on their resemblances to each other that resulted in forming ten collections and two individual elements. A name is given to each of these ten groups of factors. Some of these names are created by merging names of the elements inside of each group. For example, term '*Montrol*' is a hybrid of two words: monitoring and control. Likewise, the term '*Innovationship*' is combination of three elements including innovation, communication, and leadership.

These forty factors and their grouping are as follow: *montrol* (monitoring & learning, control, and measurement/metrics/evaluation), *strategising* (strategy formulation, strategy, strategy planning, and portfolio analysis), *structuring* (organisational structure, and operating structure), *goal-setting* (focus/direction, purpose/objective, goal breaks down, long-rang goal, mid-range goal, and operating objective), *adlignment* (adjustment/adapt, and alignment), *S4Ps* (systems, processes, projects, procedures, program, and reward system), *human resource management (HRM)* (human resources, tasks, clarity of roles, and performance),

capsources (capability, capacity building, resource allocation, and supportive budget), *cultentity* (culture, identity, and commitment), *innocationship* (innovation, communication, strategic leadership, and coordination), *achieved objectives*, and finally *external environment*. So as it is evident, classifying these forty factors based on their similarities or logical connectivity has led to creation of ten groups of factors and two individual elements.

Figure 10: Strategy Implementation as a System



Source: developed for this research

These ten sets of factors as well as the two standalone elements have a systemic connection to each other (von Bertalanffy, 1955). They are arranged in this form due to the fact that the components of this model shape a system that changes its inputs (strategising) into appropriate outputs (achieved objectives) through sets of well-managed and quality processes and systems (structuring, goal-setting, adlignment, S4Ps, human resource management, capsources, cultentity, and innocationship) with required feedback (montrol). All of these elements are affected by 'external environment' (see Figure 10).

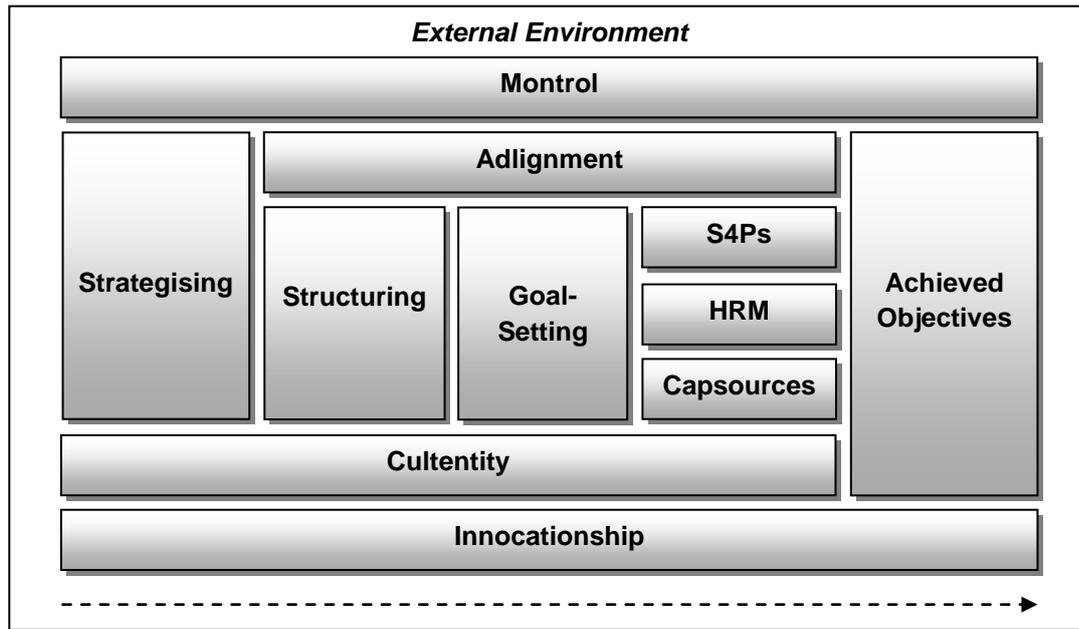
Synthesising a Strategy Implementation Model

The systems theory is a reliable and useful framework to shape overall format of the strategy execution model; however, a detailed and comprehensive model like strategy implementation one would need more than just general format. There is a need for a complementary concept to assist in assembling forty elements of this study's model. The notion of *puzzle* can contribute to development of details of the strategy implementation model. Although puzzle games are used for conducting research in business (see Jordan *et al.*, 2011), the concept of puzzle has not been used as a theoretical framework. The strategy execution model has some parts, the same as pieces of a puzzle, which are required to be positioned in suitable location to create a meaningful relationship, likewise a puzzle. The synergetic arrangements of the different elements that influence successful strategy implementation to create a *Synthetic Strategy Implementation Model* can guarantee long-lasting and reliable provision and continuity of success in deployment of the strategy at any for profit and non-for-profit organisations.

Model building as a theory-development practice is a complex process that requires high level of familiarity with the relevant theories as well as having an analytical mind with some degrees of aspiration and imagination. For sake of simplicity and in order to make it easier

for readers to understand, a *Synthetic Strategy Implementation Model* is considered as a puzzle with some pieces with different shapes and sizes. Each piece of this main puzzle, in fact, is a smaller puzzle or a *sub-puzzle* itself that has some parts of its own. Although pieces of these sub-puzzles are known and they are borrowed from the existing strategy execution models, the way these sub-pieces are arranged to form a piece for the main puzzle, a *Synthetic Strategy Implementation Model*, is done for the first time in this research. After creating each piece of the main puzzle, we arranged these parts by following the systems theory to invent strategy implementation puzzle as it is illustrated in figure 11.

Figure 11: The Synthetic Model of Strategy Implementation



Source: developed for this study

It is necessary to consider at least three interrelated notions of systems theory, puzzle and common sense to understand the logic in arranging pieces of this strategy implementation puzzle. There are chains of interconnected activities with different degrees of presence and impacts that start with strategising and end with achieved objectives. While *strategising* (strategy formulation, existing strategy, strategy planning, and portfolio analysis) is considered to be the beginning point of strategy implementation, two sets of activities, *montroul* (monitoring & learning, control, and measurement/metrics/evaluation) and *innocationship* (innovation, communication, strategic leadership, and coordination), are expected to be present in entire process of executing the strategy. *Cultentity* (culture, identity, and commitment) apart from the end results, achieved objectives, has remarkable affects on all other efforts. *Adlignment* (adjustment/adapt, and alignment), as crucial group of attempts, begins its existence immediately after strategising and finish just before achieved objectives. From operational point of view, the first pack of activities after strategising would be *structuring* (organisational structure and operating structure) that would be followed by *goal-setting* (focus/direction, purpose/objective, goal breaks down, long-rang goal, mid-range goal, and operating objectives). After clarifying goals and objectives in all levels for all departments and teams in goal-setting stage, three simultaneous sets of functions should be in place to implement the strategy successfully. These include *S4Ps* (systems, processes, projects, procedures, program, and reward system), *human resource management* (human resources, task, clarity of roles, and performance), and *capsources* (capability, capacity

building, resource allocation, and supportive budget). All of these activities are done in context of *external environment*.

CONCLUSIONS

There is a consensus among academic scholars regarding a lack of theoretical based research in strategy implementation (Flood *et al.*, 2000; Galbraith & Nathanson, 1978; Hrebiniak & Joyce, 1984; MacLennan, 2011; Morgan *et al.*, 2007; and Thompson & Strickland, 1986). Adverse consequences of these shortcoming for practitioners are even higher as correctly noted by MacLennan (2011, p. 1) “The challenge of implementing strategy successfully is one that faces managers across the globe and in organizations of every kind” so “the failure rate of planned strategies remains remarkably high”.

During 33 years, from the introduction of the first strategy implementation model by Galbraith and Nathanson in 1978 to the development of the last model by MacLennan in 2011, just nine frameworks have been developed. In late 1980s, 1990s and first half of 2000s due to obsession of strategic management scholars with works of Michael Porter (e.g. generic strategies, competitive strategies, 5 forces, and supply chain management) for 21 years (from 1986 to 2007) nobody attempted to introduce a new strategy implementation model. The main reason for this void period in the development of strategy implementation was “*Porterism*” or ‘*Porter’s school of thought*’, which refers to the specific school of thought that perceives, defines and redefines business and its strategies to create *competitive advantage*.

This paper attempts to develop a hybrid strategy implementation by comparing the nine strategy execution models. We classified them into two generations. While models from the first generation are simple but disregard impacts of external environment, and their components and formats are different from each other. In contrast, although the second generation’s models are more sophisticated and accommodate effects of external environment, their elements and formats are considerably similar to each other. In addition, this study has investigated similarities and differences of these models individually when compared against all other models based on four criteria: preliminary issues, research design, validity/reliability, and the models’ components.

All of the discussions in this paper have highlighted the fatal weakness regarding number of strategy execution models and their patchy and incomplete components and formatting. So we decided to develop a comprehensive model of strategy implementation by synthesising all of the forty identified elements based on the systems theory. To avoid unmanageable complexity, these forty factors are grouped based on their resemblances to each other that resulted in forming ten collections and two individual elements.

The synthetic strategy implementation model has developed based on three interrelated notions of systems theory, puzzle and common sense. The ten sets of factors as well as the two standalone elements have a systemic connection to each other (von Bertalanffy, 1955). They are arranged in this form due to the fact that the components of this model shape a system that changes its inputs (strategising) into appropriate outputs (achieved objectives) through sets of well-managed and quality processes and systems (structuring, goal-setting, adlignment, S4Ps, human resource management, capsources, cultentity, and innocationship) with required feedback (montrol). All of these elements are affected by ‘external environment’.

This research has contributed to strategic management in general and strategy implementation in particular, by introducing the *synthetic strategy implementation model* as well as developing new concepts including introduction of two generations of strategy execution models, taxonomy of strategy implementation models, notion of *Porterism* and its

negative impacts on strategy execution, by critical comparisons of existing strategy implementation models.

This study is part of an ongoing research. Thereby, functionality and validity of the synthetic strategy implementation model is under investigation based on the primary data from 800-1000 organisations. There is a need for fresh start and fundamental improvement in thought, approach, and research endowment due to the identified difficulties of existing research regarding strategy implementation models, including poor *research design* (see Table 2), and low to medium level of *validity and reliability* of the conducted research (see Table 3). It is highly recommended to conduct a set of well-planned research by designing suitable research methodology and make more efforts in collection of primary data by capable academics. Possible differences in the pattern of strategy implementation in different countries, industries, and companies with different sizes should also be investigated.

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