# A Strategy Map Articulated Competence Building Model: A Contingency Approach

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*Abstract*—**This paper offers a conceptual model to examine the relationship between the strategy map approach and a RBV-driven competence building with a contingency perspective. The model also helps examine how the BSC methodology can create distinctive competence and in turn achieve superior profitability for a client organisation.**

*Index Terms*—**Balanced scorecard, contingency theory, resource-based view, strategy map**

## I. INTRODUCTION

Kaplan and Norton introduced the Balanced Scorecard (BSC) approach, initially, as a performance management tool in 1992. A substantial change in BSC thinking occurred during the late 1990s that affected how BSCs are described by various authors. Where alternative definitions appeared, the authors usually suggested changes to the number and or the naming of the perspectives (e.g., [4], [5] & [9]).

Kaplan and Norton [11] were also mindful about the needed concept in business so they published a systematic guide for linking the Balanced Scorecard to strategy and offered a clearer definition on BSC. They defined BSC as a strategic implementation tool that helps translate an organisation's mission and strategy into a comprehensive set of performance measures and provides the framework for strategic measurement and management. They [11] & [12] remedied BSC's early key weakness of measures selection by suggesting there should be a direct mapping between each of the several "strategic objectives" attached to each perspective and one or more performance measures. In addition to recent new features such as destination statement, the BSC approach has been strengthened by enabling "strategic mapping" to link "activity" with "outcome" perspectives. Kaplan and Norton (2004) formally named this approach as strategy map, and have proposed it as a strategic management tool. However, strategic management is a mature and well-researched discipline. Without theoretical support, the strategy map approach is weak in theorising the phenomena and outcomes. Applying mainstream strategic management theory would significantly enhance the strategy map method's reliability and applicability.

Wernerfelt [23] posits RBV as a model of organisational performance that focuses on resources and capabilities
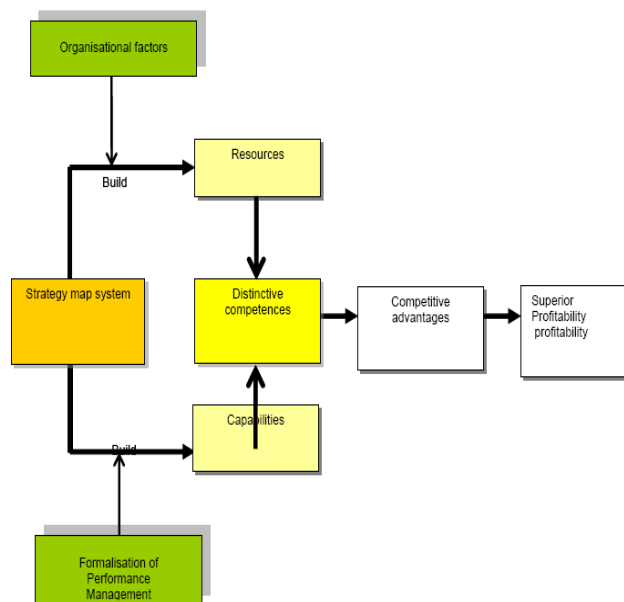
controlled by an organisation as sources of competitive advantage. Resources in RBV are defined as the tangible and intangible assets that an organisation controls, which it can use to conceive of and implement its strategies [1]. Hence, little, if any, competitive advantage can be created by intangible assets alone in the BSC approach. Furthermore, the strategy map approach attempts to illustrate the cause-and-effect relationship of performance drivers and outcome measures. Norreklit [19] argues that such relationship is logical rather than causal. This is because the act of mapping performance drivers and outcomes cannot fully explain the socially and operationally complex nature of the value creation process. Kaplan and Norton's work [14] also appears to have ignored or not given adequate attention to the contingency effects on their strategy map and Balanced Scorecard approaches. The basic principle of the contingency theory is that a firm's performance is influenced considerably by the extent to which structure and managerial behaviour 'fit' with the degrees of complexity and uncertainty which are displayed in contingent factors such as technology, market position, product diversity and competences of employees

## II. THE CONCEPTUAL MODEL AND PROPOSITIONS

We have developed eight propositions to address the two main weaknesses of Kaplan and Norton's strategy map system: the lack of a theoretical framework and a contingency perspective.

Figure 1 A Strategy Map Articulated Competence Building Model:

### A. Contingency Approach

Proposition 1a the strategy map approach as a strategic management system helps identify important tangible resources of the company and enables them to create better value by combining it with intangible assets and capabilities of the company.

Proposition 1b  The strategy map approach as a strategic management system helps identify important intangible resources of the company and enables them to create better value by combining it  with tangible assets and capabilities of the company.

Proposition 1c the strategy map approach as a strategic management system helps identify important capabilities of the company and enables them to create better value by combining it with resources of the company.
The strategy map approach as a strategic management system helps the company identify and combine (a) tangible, (b) intangible resources and (c) capabilities to create distinctive competence.

Proposition 1d    the resource-based view's VRIO framework is an effective management tool to assess the sustainability of a distinctive competence identified.

The Continue actors

Joan Woodward laid the groundwork for contingency theory in the UK during the 1950s. The basic tenet of contingency theory is that a firm's performance is considerably influenced by the extent to which its structure and managerial behaviour 'fit' with key features of its environment. Contingency theory has had an important influence on organisational, strategic and other management-related research (e.g., Carroll [6]; Lawrence and Lorsch [16] and Miles and Snow [17]. From RBV perspective, organisational structure encompasses the configuration of tangible and intangible resources and their effective coordination in achieving organisational goals [10].

As previously discussed, the synthesis of the resources and capabilities that generates the distinctive competence is a very complex process, and is best explained and understood through a contingency approach.  This study has identified three key contingency factors on the primary hypothesised relationship – the strategy map approach as a strategic management system and the creation of distinctive competence.  The three factors include: the organisational factors as well as the formalisation of performance management. Organisational factors related to *departmental power* and *customer-oriented* strategy.  *Formalisation* of performance management means to what extent the individual and team performance are regularly measured, the availability of clear defined performance measures, and how systematic is the reward scheme designed to tie with the performance outcomes.  These contingency factors shall be examined, primarily via interviews with managers, how they could affect the strength of the driving force in shaping the competence building process.

Departmental power is the capacity to influence vested in a department by senior management as perceived by other departments in the firm. Blau and Alba [3] found that departmental membership had a more important source of influence than individual sources of power. Therefore, it is proposed that:

Proposition 2a Departments with high power can have a critical influence on the development of the strategy map

approach and hence competence building.

Desponded, Farley and Webster [7] argue that customer orientation embodies organisational values and beliefs that put the customer at the centre of the organisation's thinking, and therefore of the development and implementation of strategy. Kohli and Jaworski [15] found that customer-oriented companies tend to have three common practices: company-wide efforts to collect customer/market information; dissemination of that information amongst organisational functions; and a systematic organisation response to such information. A customer-intimate company builds bonds with its customers, therefore, it is proposed in the study that:

Proposition 2b When executives of the company are committed to a customer-oriented strategy they will be more likely to support the development of the strategy map approach.

The formalization of the performance management means the formalisation of the measure ("what" will be measured) and the measuring ("how" will be measured, the processes that produce the measures and "how" the subject will be measure). Formalisation of performance management is a vital factor for organisations in achieving performance management goals [8], [18], [20] & [24]. Given the interlinked relationship between the strategy map and performance management, thus it is proposed:

Proposition 2c The higher the degree of formalisation of performance management in the company the higher the chance of success in adopting the strategy map approach in it.

## III.    METHOD

This research took a case study approach. The data collection process was designed and implemented in accordance with the suggestions proposed by Stake [21] and Yin [22]. Data were collected from three main sources: interviews, observations and company documents. Following the BSC literature (e.g., [2]; [13] that suggests top management's support is a vital factor for launching BSC, we interviewed all 10 top management executives to assess, among other consulting and research issues, their readiness in introducing BSC approach in their department or business unit. All interviews were based on a semi-structured questionnaire. In order to secure a more precise response, many guided questions required the subject to choose an answer from a five-point scale: 1 Mostly Disagree; 2 Disagree; 3 Marginally Agree; 4 Agree; and 5 Mostly Agree. Notes were taken as the interviewees had reservations about tape-recording. We sought to triangulate the data by cross-checking the views of the interviewees with concerned parties whenever possible and company documents such as minutes of meeting. The data were transcribed thematically and tested against the propositions.

## IV.    FINDINGS

The strategy mapping process in the case organisation lasted for more than six months during which time the behaviours and attitudes of the key respondents changed as

they interacted with other executives and the researchers. A summary of the responses to each of the propositions is presented below.

| Propositions | Results | Conclusion |
|---|---|---|
| P1: *The BSC approach as a strategic management system is an effective management tool to help the company to redefine and translate its strategies.* | 6 agree 4 marginally agree | P1 Strongly Supported |
| P2a, b & c: *The BSC approach as a strategic management system helps the company identify and combine (a) tangible, (b) intangible resources and (c) capabilities to create value.* | 3 agree 5 marginally agree 2 disagreed | P2a, b & c Supported |
| P2d: *The resource-based view's VRIO framework is an effective management tool to assess the sustainability of a distinctive competence identified.* ~ on Production Department: | 6 agree; 4 marginally agree | P2b Supported |
| ~ on R&D | 1 most disagree; 8 disagree | |
| ~ on Marketing & Sales | 2 disagree; 4 marginal agree | |
| P3a: *A department with high power can have critical influence on the development of the BSC approach and hence competence building.* | 1 disagree; 3 marginally agree 6 agree | P3a Supported |
| P3b: *When executives of the company are committed to a customer-oriented strategy they will be more likely to support the development of BSC approach.* | 1 marginally agree 1 most agree 8 agree | P3b Strongly Supported |
| P3c: *The higher the degree of formalisation of performance management in the company the higher the chance of success in adopting the BSC approach in it.* | 1 disagree 4 agree 5 marginally agree | P3c Supported |

## V. CONCLUSION

While the results of model testing positively support all propositions, it would be misleading to infer that the implementation of the strategy map approach in the organisation would be equally supported by all the executives. In fact, as spotted in the data analysis, many managers were keen to scramble for individual or group interests at the expense of the organisation. These 'deadly sins' for the organisation have to be eradicated if top management wants to obtain any positive result from implementing the strategy map approach. This study aims to improve theorizing on the popular BSC strategy map approach which is currently under-theorized. With the strategy map's four-perspective approach, executives were able to translate strategy into action and resolve the most important objective of the case project. Our model also addressed another major deficiency of the BSC strategy map approach which is the importance of having a contingency perspective. According to the managers interviewed, the results of the study did clearly indicate that the contingency factors of department power, customer-oriented strategy and formalisation of performance management all have significant moderating effects on the effectiveness of developing the strategy map approach in the organisation. We were able to appreciate many contextual factors expressed by the key informants that could make or break the entire strategy map development project.

## VI. CONTRIBUTIONS

This study has made the following theoretical and practical contributions. In terms of a theoretical contribution, armed with resource based view, this study demonstrated the effectiveness of the strategic map in articulating competence building, which is one of the most vital areas of the RBV yet its building process has largely remained ambiguous. The conceptual model built in this study is valuable in shedding light on competence building. Moreover, the contingency approach, which is an important element to enhance the reliability of the model testing but frequently ignored, initiated a more reliable perspective to comprehend the competence building process. As for the managerial contribution, distinctive competence has been a buzz word in the business community for some time now. Given the little research has been done on competence building, even though practitioners believe distinctive competence is instrumental in building competitive advantage for an organisation, few can articulate its building process. This study helps managers to understand how a competence can be created and sustained.

## VII. LIMITATIONS

This study has two main limitations. Firstly, it is based on a single case. Although it was a carefully planned empirical inquiry that investigates a specific phenomenon within its real-life context, its generalizability is limited. However, we expect such generalizability to be across theoretical propositions rather than across populations. Secondly, case study research is more commonly used for generating propositions/hypotheses, while other research methods such as surveys and experiments are more suitable for hypotheses testing. This study has initiated a set of new propositions for development and testing. The in-depth interviews collected measurable responses, however one may still query whether respondents, as they were all identifiable, would give their true views to the investigator. An attempt has been made to address this concern by the investigators' close observations of the respondents' actual behaviour and actions after the interviews to reconcile their responses and monitor any possible changes as they interacted more with the investigators and learnt more about the strategy map method.

## VIII. FUTURE RESEARCH

There are a number of opportunities for further research.

Theorising about the strategy map approach with RBV theory was initiated in this study. The relationship between them can be further examined by a large-scale survey study. Prior to testing the model, its constructs and scales have to be carefully examined for validity and reliability.

R. Employing a rigorous survey method should ensure that the data collected have greater generalizability in a wider variety of settings. Second, the scope of this project was confined to the *development* stage of strategy map in one organisation. A natural extension would be to study how the strategy map can actually be *implemented* in an organisation with special reference to whether the three contingency factors can really moderate the success of strategy map application. Finally, other related research could be conducted about how the articulation of resources and capabilities alongside the resource-based view could help to build distinctive competence and ultimately gain superior profitability, as the model predicts.

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