## **COMPETITIVE PROFILE MATRIX: A THEORETICAL REVIEW**

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### Abstract

A Competitive Profile Matrix (CPM) is an analytical tool that provides necessary information of competitive advantage based on critical success factors and serves as the basis for an organization's strategy. This paper provides for understanding the basic concepts of CPM and its usability in strategy formulation. The study finds that although CPM helps decision makers in some points of strategy formulation, it does not depict a clear picture of the competitive situation because of its subjective selection and assessment of critical success factors and the lack of robustness in calculation in terms of assigning weights and ranks. However, the usability of CPM can be improved by integrating some other sophisticated tools, for example, Internal Factor Evaluation Matrix (IFEM), External Factor Evaluation Matrix (EFEM), Analytic Hierarchy Process (AHP), and ELECTRE III. This integration will ensure more robust calculation of the weights and rank assigned to each critical success factor upon which CPM is built and lead to successful strategy formulation.

Keywords: CPM, IFEM. EFEM, AHP, ELECTREIII

## **INTRODUCTION**

The 21<sup>st</sup> century's business world is in a state of flux as the waves of globalization, technological advancement, deregulation, and many others forces are shaping the nature of doing business. Attaining sustainable competitive advantage has become critical for every business organization. Diagnosing the outside forces remains one of the vital tasks for every organization for their very survival. Organizations need to pay enough attention to strategy formulation, strategy choice, and strategy implementation (Burnes, 2009). And 'Strategic management is all about gaining and maintaining competitive advantage' (David, 2011). Development of organizational success depends on effective use of resources and capabilities to tap the

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opportunities which lie in the external environment. Moreover, Industry analysis provides firms with vital information regarding the forces, its structure, and its composition (Porter, 1980).

Along with external environment analysis and industry analysis, firms need to undertake competitor analysis which is based on predicting competitors' actions, responses, and intentions (Hitt, 2011). Competitor analysis is undertaken mostly at the businessunit level and competitions are mostly oligopolistic in nature since under perfect competition there would be no rationale for doing so (FitzRoy, Hulbert, & Ghobadian, 2011). The competitors' objectives, resources, past records of performances, current offerings, and the like, need to be collected and profiled in an usable fashion (Lynch, 2006).

In order to gauge competitiveness, organizations use a number of models and tools of which the competitive profile matrix (CPM) is one of the most popular among the practitioners. This tool gives "a powerful visual catch-point by providing necessary information of competitive advantage and serves as the basis for organization's strategy" (Bygrave & Zacharakis, 2011, p.243).. Strategic competitiveness is achieved when firms successfully formulate and implement value creating strategies (Hitt, Ireland & Hoskisson, 2011).

Although, practitioners are constantly using CPM to compare their performances with their rivals, surprisingly, a lack of enthusiasm has been observed in this quite fuzzy but vital strategic area in the world of academia. Though a vast amount of data regarding CPM are available in the

websites of different companies, limited academic research has been found in this field. Academics, generally, are found most interested in writings in the field of strategic management with particular attention on the most popular and widely practiced tools such as PESTEL (Political, Economic, Social, Technological, Environmental and Legal) for external environmental analysis, Porter's Five forces models for analyzing industry attractiveness, SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis for understanding market segment and critical success factors, and Ansoff's Product-Market expansion grid etc. Few writers, for example, David (2011), Bygrave & Zacharakis,( 2011), Gorener (2012), Borajee and Yakchali (2011), Cheng and Huang (2005), Hadighi and Mahdavi (2011), Capps and Glissmeyer (2012) have attempted to discuss CPM in their academic writings. Despite the unavailability of secondary literature, an attempt has been made to understand the basic theory and concept of CPM and its usability in strategy formulation. Therefore, the research question is "In what ways can CPM help a firm to improve its competitive position and strategy formulation?

The paper has been organized into the following sections: section 1 is the introduction, section 2 discusses the objectives of the study, section 3 describes the methodology, section 4 explains the concepts of Competitive Profile Matrix or CPM, section 5 highlights the ways to improve the usability of CPM, sections 6 and 7 discuss the importance of understanding strategic capabilities and converging industries, while section 8 provides some recommendations and conclusions and enumerates the limitations of the study.

### **OBJECTIVES OF THE STUDY**

The prime objective of this study is to illustrate the concept of competitive profile matrix (CPM) and its applicability in strategy formulation. In this connection, the paper aims:

- 1. To define CPM and its basic feature.
- 2. To understand relative strengths and weaknesses of CPM in strategy formulation.
- 3. To reveal the ways to improve its usability.
- 4. To provide some implications of its usage in strategy formulation.

#### **METHODOLOGY OF THE STUDY**

The paper is basically a desk study based on existing literature. To conduct this research, the authors first selected some keywords, such as, Competitive Profile Matrix, and SWOT analysis. These keywords were used to search databases like Emerald, JSTOR, Willy, and Sage Journals Online. Search engine Scholar Google was used to find out relevant literature from other sources. Articles were sorted out based on their names, keywords, and abstracts. The authors further searched the same keywords in the indices of scholarly books of Strategic Management.

#### **Competitive Profile Matrix (CPM)**

A competitive profile matrix (CPM) allows the firm's owners to evaluate their firms against their key rivals by using critical success factors (Zimmerer, Scarborough, & Wilson, 2008). According to David (2011,) "A CPM identifies a firm's major competitors and it's particular strengths and weaknesses in relation to a sample firm's strategic position"(p. 81). The above definitions of CPM signify two important tasks: firstly, the identification of competitors as well as their strengths and weaknesses, and secondly, the identification of key or critical success factors. This tool helps the managers to identify the strongest competitors and important factors on a single page as well as the areas they need to improve (Ozyasar, n.d.). So, identifying major competitors is one of the key tasks for managers who are interested in scanning the competitive landscape and developing either offensive or defensive strategies to remain competitive in the market (Bergen & Peteraf, 2002). However, in many markets, there may be more than one competitor. It is, however, often impossible to put them all in a single basket and in that case typical competitors are selected for comparison (Lynch, 2006). Bergen and Peteraf (2002) have suggested how to identify and then classify the competitors based on similarity of resource endowment, i.e. factors necessary for the business, and the similarity of market they serve. They have also urged managers to look beyond their direct or close competitors and pay equal attention to their indirect or distant competitors who might serve the same needs in the market. Though it is difficult for the company to collect necessary information about their competitors, Bygrave and Zacharakis, (2011) suggest using the firm's network mainly consisting of the actual and potential customers the firm hopes to sell to and various libraries, databases, trade shows, etc. which may help the firms in collecting competitor's information.

# CPM and Critical Success Factors (CSFs)

The CPM uses critical success factors (CSFs) which allow a firm to compare itself to those of other competitors in a particular industry (Capps & Glissmeyer, 2012). The critical success factors are those factors that are either viewed by the customers as valuable or which provide the firms a significant advantage in terms of cost and these factors vary from industry to industry or even in some cases within an industry, for example, in the retailing industry, supermarkets differ from convenience stores and from corner shops (Johnson, Whittington & Scholes, 2011).

Three important steps are to be followed while developing a CPM using these critical factors. Firms must attach weight to each individual CSF reflecting their relative importance which must be summed up to 1.00, rank each one based on the relative strengths and weaknesses of the company as well as its competitors by assigning 1 to major weakness and 4 to major strengths, and finally get the weighted scores by multiplying the weight for each factor with its corresponding ranking (Zimmerer et al., 2008). But if there is no weight column in the analysis, each factor is assumed to be equally important. Having a weight column enables the analysts to assign higher or lower numbers to capture the perceived and/or actual levels of importance (David, 2011). A simple hypothetical example of CPM is shown below:

The above CPM shows that firm A scores the highest at 3.60 and its nearest rival is competitor Y (3.12). Firm A needs to improve in the area of cost control because its nearest rival has superseded it in terms of that individual weighted score. Once the information is obtained, it drives

CSFs	Weight	Firm A		Competi tor X		Competitor Y	
Quality	0.24	4	0.96	2	0.48	2	0.48
Customer retention	0.20	3	0.60	3	0.60	3	0.60
Location	0.16	4	0.64	3	0.48	4	0.64
Perception of value	0.20	4	0.80	2	0.40	3	0.60
Cost control	0.20	3	0.60	1	0.20	4	0.80
Total	1.00		3.60		2.16		3.12

Table: A sample of Competitive Profile Matrix Using Critical Success Factors.

[*Notes*: The rating values are as follows: 1= major weakness, 2= minor weakness, 3= minor strength and 4= major strength. Only five critical factors have been included for simplicity although these are actually too few. Here, competitor X is the weakest (2.16).]

the firm toward complex and deep strategic thinking in different levels and areas (Pettinger, 2004) and an interpretation of the numerical results showing relative strengths and weaknesses may help a company to develop strategies and build a more competitive atmosphere in the targeted market (Zimmerer et al., 2008). However, arriving at a single number does not necessarily mean gaining a competitive advantage unless a robust and meaningful integration and review of the information is undertaken (David, 2011).

Even when it depicts the performance gap among the companies or competitors, it does not necessarily explain how one can achieve better performance (Campbell, Stonehouse, & Houston, 2001). Thus, David (2011) suggests that analysts focus more on how and why particular factors reap benefit for the company instead of robotically running after weights and ranks.

## Weaknesses of CPM

Although CPM depicts a firm's present strengths and weaknesses in a simplistic way, additionally, a number of limitations possibly lessen the interest of using CPM as a strategic tool. One of the most powerful reasons is that the factor's scores are measured subjectively and non-uniformity can happen when answering the same question because of the subjective evaluations of the decision-makers without a consistency test (Cheng & Huang, 2005). And the factors are not grouped into opportunities and threats as they are in External Factor Evaluation (EFE) or SWOT analysis (David, 2011). In addition, Wong (2005) has advised managers not to

select unsuitable or irrelevant factors that might hamper the success of the desired outcome.

## Ways to Improve the Usability of CPM

A simple CPM suffers from a lack of robustness in calculating different factor's scores for which its practices remain questionable to some extent. However, some writers such as Hadighi and Mahdavi (2011), Capps and Glissmeyer (2012), Gorener (2012), Borajee and Yakchali (2011) and Cheng and Huang (2005) recommend some measures to improve the usability of CPM. Some of them are discussed below.

## Internal Factor Evaluation Matrix (IFEM) and External Factor Evaluation Matrix (EFEM)

Hadighi and Mahdavi (2011) recommend that the usability of CPM can be improved by integrating an Internal Factor Evaluation Matrix (IFEM), for example, cost, quality, customer retention, etc. and an External Factor Evaluation Matrix (EFEM), for example, competitor's move, economy, etc. into a CPM analysis so that businesses can easily identify the benefits and losses accrued to it. Moreover, they argue that the whole analysis should be based on a quantitative methodology instead of qualitative one which is usually used in a traditional SWOT analysis. Capps and Glissmeyer (2012) also suggest incorporating both an IFE and an EFE into a CPM separately which will be more helpful in formulating a strategy and acting on it. The internal as well as external factors may enhance the power of analyzing the competitive environment more accurately because of the quantitative aspects of the analysis. But at the same time, it raises the question of whether quantitative analysis alone is sufficient to conceptualize the competitive environment wherein uncertainty plays a critical role making the whole scenario somewhat unpredictable.

# AHP (Analytic Hierarchy Process) and ELECTREIII

Furthermore, a number of sophisticated mathematical models have also been bought into play to improve the performance and usability of CPM. Gorener (2012), Borajee and Yakchali (2011), Cheng and Huang (2005) have recommended the integration of the AHP (Analytic Hierarchy Process) and ELECTREIII into a CPM analysis to improve its usability. While AHP is used to give scores to the factors which is a function of a consistency test and for which weights can be obtained accurately (Cheng & Huang, 2005), ELECTREIII is employed to determine the priority of the alternatives (Borajee & Yakchali, 2011). Again, Pal and Torstensson (2011) have suggested the use of Three-Dimensional Concurrent Engineering (3-DCE) to synthesize and identify critical success factors so that it will render better operational performance thereby enabling managers to understand the key areas in which to invest and how to invest their time and resources.

However, a different view is also found in this regard. Some argue that exclusive dependence on mathematical models can make the strategy more mechanistic and inflexible and hence a more humanistic approach should be brought into light (Burnes, 2009).

# Importance of understanding Strategic Capabilities

The use of conventional matrices provides valuable insights beyond financial analysis (Capps & Glissmeyer, 2012). But environmental perturbations simply leave organizations in a hazy state. In most industries, competitors are often the victims of hyper-competition since they interact constantly with competitive moves such as a price cut or design imitation, thereby making the cycle of competition very fast and aggressive (Johnson et al., 2011). Increasing turbulence in the external environment compels the firms to do an external audit and formulate strategy accordingly (David, 2011). The Resource-Based theory puts more emphasis on a firm's resources which does not necessarily mean the resources also available to the competitors but the extraordinary resources available only to that specific firm, such as brand name that deliver sustainable competitive advantage (Lynch, 2006). Firms, therefore, need not only threshold capabilities in terms of resources and competencies to tap opportunities but also need to cultivate dynamic capabilities to cope with the changes thereby creating competitive advantages (Johnson et al., 2011). Feurer & Chaharbaghi (1996) opine that companies who have dynamic capabilities achieve superior performances in any competitive environment. In addition, it is suggested that since an organization's strengths and weaknesses both reside in core competencies which is related to a firm's major business and cannot be changed fundamentally, managers must be well-concerned about any strategic move in any new context and constantly search for new competencies because more often the existing ones simply become irrelevant (Wong, 2005).

Thus, any attempt at transformation requires a careful understanding of the critical factors that shape managers perceptions and beliefs concerning such a radical managerial approach (Kamhawi, 2008). Since identifying competitors is a key function in strategy formulation, rather than viewing those competitors in isolation it is proposed that firms think of them in terms of different strategic groups which will help catch a good snapshot for the organization (Johnson et al., 2011). Therefore, understanding strategic capabilities is of great importance in designing and developing a useful CPM.

## The Importance of Analyzing Converging Industries in the development of CPM

Some contemporary scholars argue that traditional industry and competitor analysis does not include 'converging industries' and 'complementary organizations' whereas they both have a huge impact on strategy formulation. For example, technological change has brought convergence between the telephone and photographic industries particularly when mobile phones (such as Nokia, Samsung) have come up with cameras and video settings that actually caused many photographic companies to fizzle out and since Samsung uses Google's (a strategic partner of Samsung) android software, that make Google a 'complementor' as well as a competitor because of Google Nexus mobile phone series (Johnson et at., 2011).

Again, some specific innovations that are truly a result of a juxtaposition of what were previously referred to as 'different industries' (FitzRoy et al., 2011). Likewise, Capps and Glissmeyer (2012) argue that managers should do more homework regarding the application of CPM and the selection of critical success factors and then should try to integrate the information for robust analysis of competitiveness for strategy formulation.

Therefore, in developing an effective and usable CPM, managers should be careful about not only the close competitors, but also the competitors from converging industries as they also try to capture the same market share. Such analysis will definitely provide useful insights that enable the decision makers to design and implement correct strategies for achieving the desired goals.

## **Implication and Conclusion**

The above discussion raises one fundamental question regarding the uses of CPM as a strategic tool. Does CPM alone reveal or answer all the basic issues relating to competitor analysis? Or is it enough to employ this tool for strategy formulation? The selfish business world does not give a second chance to the firm committing even a single mistake. Only careful investigation of every single factor may ensure the success for the company. Since, 'strategies are potential actions that require topmanagement decisions and larger amount of organizational resources' (David, 2011, p.13), organizations should seek for sustainable competitive advantage to remain competitive in the ever changing marketplace.

In such a situation, firms should pay close attention to critical success factors and use those factors with much care to identify the gaps in the value creation and tap the opportunity to outperform their rivals from a competitive scenario aspect. Once the firms are able to identify those factors and put this information into developing a CPM, they can easily find the gaps in the market in terms of value creation and act quickly to close them. However, the simplistic nature of CPM often fails to better estimate the potentiality which lies in the environment. Therefore, firms are suggested to employ improved and more sophisticated CPM models by integrating other models such as EFE and IFE into the CPM to gain better insights for analyzing their strengths and weaknesses against their competitors. In addition, managers must be careful about the sole reliance on the quantitative aspects of the analysis and need to keep an eye on the qualitative aspects of the analysis as well.

Many scholars have suggested using mathematical models such as AHP (Analytic Hierarchy Process), ELECTRE III (ELimination and Choice Expressing REality), etc. to improve the usability of CPM. In that case, it is highly recommended that these tools be applied with great care so that they can blend their robustness well along with a human approach.

Moreover, instead of comparing themselves only with close rivals, firms are suggested to keep an eye on distant players to check their strategic moves intended to get attention from the same customers. This competitive analysis will enable the decision-makers to use relevant and vital information in strategy formulation that ultimately leads to future success.

Therefore, CPM could be used as an important strategic tool which serves the information for competitive advantage and may be used as a strong basis for strategy formulation only if the above mentioned recommendations are taken into consideration.

### Limitation and Future implication

The main limitation of this paper is that it is basically a theoretical paper not an empirical one. The author was only interested to look at the concept of CPM, its strengths and weaknesses and some related issues. The lack of academic papers regarding CPM also limits its scope of analysis and relevant findings. Future research will definitely shed the light upon the empirical study on different organizational perspectives and their intension to apply CPM in strategy formulation which until now has received less attention than other approaches from academic scholars.

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