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Meta-SWOT: introducing a new strategic planning tool

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Introduction

SWOT analysis is widely taught and seemingly intuitive, but it has come under serious criticism on theoretical grounds. Critics maintain that it relies on subjective intuitions, is unsystematic, eschews quantification, and lacks predictive power. Its use as a stand-alone tool instead of a model for situational analysis as part of a more comprehensive toolset for strategy development has also been criticized (Fehring, 2007). In a comparative evaluation of 24 techniques used for strategic analysis, SWOT does not rank highly (Fleisher and Bensoussan, 2002). Not surprisingly, there is evidence that managers make little use of it as a planning tool in business practice. A survey of more than 100 managers reveals significant distrust of the method (Finnegan, 2010). According to a study based on 212 interviews with executives of *Fortune* 1000 companies, SWOT analysis actually harms performance (Menon *et al.*, 1999). Some scholars deny that SWOT analysis serves any useful purpose at all (Hill and Westbrook, 1997; Armstrong, 1984). Another study regards the process as so flawed that it required a “product recall” (Hill and Westbrook, 1997).

Yet the basic intuition behind SWOT analysis appears to be sound. It assumes that successful strategies are based on a good fit between internal resources and external possibilities. Distinctive capabilities and competencies of organizations must “hook onto” factors in the political, economic, social, technological, and regulatory environments that require and support such competencies. There is much evidence that a strong fit between context and resources positively impacts performance (Drazin and Van de Ven, 1985; Lukas *et al.*, 2001; Venkatraman and Prescott, 1990; Zajac *et al.*, 2000; Garlachs, 2011). Reactions by strategic planning experts to the limitations of SWOT analysis have therefore been of two types: some simply ignore it as a useful tool in favor of other approaches whereas others have attempted to make it more “rigid” and increase its validity and usefulness for organizational purposes.

This paper takes the second approach and seeks to develop the basic model of SWOT into a decision-support tool. The criterion of strategic fit will be preserved but embedded into a new model of planning. What must be discarded is the rigid classification of external factors into opportunities or threats and of internal factors into strengths or weaknesses, in favor of decisions on a scale. The new approach still requires judgments, but these no longer have to be made in a categorical sense, for example by classifying a factor as either a weakness or a strength. Rather, such judgments allow for gradations and comparative evaluation. What must also be improved is the unsystematic, *ad hoc* generation of factors considered in strategy formulation. An ordered process is necessary, and it shall be driven by a seminal idea: available resources in an organization determine suitable markets more often than given conditions in the business environment allow for the creation of successful strategies to capture them. This is a key insight of the resource-based view of the firm. The new method of planning thus relies on a more structured approach, facilitates analysis with competitors, and guides decision-makers in a seamless process of data elicitation to a list of prioritized

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strategic objectives that are consistent with the mission of the organization. It is implemented in a tool that has been named meta-SWOT[1].

Meta-SWOT: the theoretical rationale

Approaches to strategic planning can be classified into outside-in and inside-out models, depending on whether the resources and capabilities of an organization or its micro- and macro-environments are considered the levers from which to start. For decades, the industrial organization model that economists developed in the 1930s dominated thinking about strategy. It assumed that economic structure (or the factors that define the competitiveness of the market) determines the conduct of firms, which in turn determines the performance of an industry (or its success in generating profits and growth). Strategy formulation was outside-in, basically as a process of adaptation to opportunities in the environment. However, much research, including new thinking in economics, together with the business experience of the last several decades, has raised the question of whether internal factors must always adapt to external ones. Must decision-makers really take a specific business environment as given and devise strategies to capture perceived opportunities in order to be successful? Many relevant studies can be summarized by saying that market-share objectives harmed profits and put the survival of firms at risk (Armstrong and Collopy, 1996; Armstrong and Green, 2007). On the contrary, business history shows that some of the most successful companies – one need only think of the Hudson’s Bay Company, Red Bull, or Google – have not merely adapted to a given context but have instead created markets and shaped their competitive environments. Based on this insight, the resource-based view (RBV) assumes that successful organizations are driven by their distinctive capabilities and competencies, and that a firm’s resources are therefore more critical to the determination of strategic action than is its external environment. This approach takes an inside-out view of strategy. After all, the situation of an organization is better known to planners, and internal data are usually more readily available: “the RBV is an inside-out perspective on organizations that seeks to identify the characteristics of firms with superior performance” (Rouse and Daellenbach, 2002, p. 966). The guiding idea is “build on your strengths” rather than “catch a star – if you can”, for by the time organizations have tooled up for the catch, the star may already have fallen. SWOT analysis only matches current strengths and weaknesses with current opportunities and threats, which may have worked decades ago but no longer fulfills the needs of a much more dynamic and volatile business climate.

The RBV understands each firm as a unique bundle of resources typically in three categories: tangible assets, intangible assets, and capabilities (Galbreath and Galvin, 2004). Tangible assets (e.g. financial and physical) and intangible assets are resources that a firm has (e.g. intellectual property, organizational assets, reputation), and capabilities are what a firm can do (e.g. its know-how). Resources and capabilities thus are different constructs (Amit and Schoemaker, 1993). Resources are tradable and non-specific to the firm whereas capabilities are firm-specific (because they reside in people) and are used to engage the resources within the firm. For our purposes, strict distinctions between resources and capabilities are not necessary (Conner, 1991; Barney, 1991). Neither do we need to distinguish “strategic” resources from others, since most resources are in fact easily imitable or tradable. It is understood that some capabilities are of a more complex nature and are created by combining less complex resources and capabilities. In the RBV, these

resources and capabilities are the key determinants of competitive advantage, and strategic planning must start with them.

One challenge of course remains: how can a firm identify which of these resources and capabilities are capable of creating a sustainable competitive advantage? Barney (1991) sets forth four criteria for resolving this question. In order for a resource or capability to be strategically beneficial it must be valuable, rare, inimitable, and non-substitutable. Similarly, Prahalad and Hamel argue that in order to determine whether a capability constitutes a core competence – a basis for a firm’s competitive advantage – the capability must grant the firm “potential access to a wide variety of markets” and must significantly enhance the benefits of the final product or service as perceived by customers (Prahalad and Hamel, 1990, p. 83). These two criteria together define if a resource or capability is “valuable”. The other tests are that a resource or capability must be rare relative to demand for it, difficult for competitors to imitate, and (as a special case of inimitability) not be substitutable by another resource or capability that competitors might develop. Firms must also be able to capture these advantages in order to be successful.

Four criteria then define the potential of resources and capabilities for creating successful strategy. Within the RBV, they are known as the VRIO conditions (Barney, 1991):

- *V (value)*. Does the resource or capability enable a firm to exploit an environmental opportunity and/or neutralize an environmental threat?
- *R (rare)*. Is this resource or capability currently controlled by only a small number of competing firms?
- *I (inimitable)*. Do firms without this resource or capability face a cost disadvantage in obtaining or developing it?
- *O (organization)*. Are a firm’s policies and procedures organized to support the exploitation of its valuable, rare, and costly-to-imitate resources and capabilities?

In this perspective, an organization must turn to its internal resources and capabilities to guide its strategy process if it hopes to successfully navigate an increasingly turbulent external environment. Scanning of the external environment then always takes place against the background of existing internal factors. Yet conditions in the business environment still determine which resources and capabilities can be leveraged to capture opportunities or alleviate threats:

Nothing is a strength or a weakness except vis-à-vis the competition (Mooradian et al., 2012, p. 224; italics in the original).

In other words, strategists cannot judge the relative merit or strategic value of a particular internally controlled resource or capability in isolation from their assessment of the external environment, for every internal factor either supports or does not support a potential in the environment by allowing for it to be captured. But planning must start with what an organization has and can do, not with a random search for opportunities in the business environment. The VRIO criteria then prioritize these resources and capabilities with a view to capturing the right external factors in formulating dynamic strategies (Warren, 2008, pp. 89ff.). In this sense, the proposed approach to strategic planning is really an inside-out-inside model. Successful planning, after all, is not a linear but an iterative process.

However, not all resources and capabilities that can be successfully leveraged must already exist; organizational development allows for the extension of existing factors or the creation

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of new ones. The RBV suggests a possible trade-off between investing in existing core competencies and investing in capabilities that could become core competencies in the future. It has been described as the “sustainability-attainability dilemma” (Miller, 2003). A resource or capability that meets the VRIO criteria will be sustainable by the firm that currently possesses the resource, but it will also be hard, if not impossible, to attain others. Therefore practitioners are left with a problem: if inimitability is the key to achieving a competitive advantage, how can their firm act to create such advantage with resources and capabilities it does not already have? The answer may lie in a firm’s ability to build on its asymmetries. These are processes, skills, and assets that are unique to the firm, non-substitutable, and inimitable; competitors cannot copy these asymmetries at a cost that will allow them to earn economic rents. The one criterion that is thereby relaxed is “valuable.” Firms are able to “reconceptualize” these asymmetries by creating organizational processes and designs that can realize the untapped value in them, and in doing so are able to match them to market opportunities. This discovery is important because it adds a crucial innovative quality to the RBV. Meta-SWOT assists decision makers in discovering these asymmetries and in recognizing how they may become valuable to the organization in the future.

Resources and capabilities are then evaluated according to the VRIO framework on rarity, inimitability, and organization. The “valuable” criterion is not assessed in the process until the resource in question is matched to the external environment. This is because by definition the “value” of a resource resides in its ability to exploit opportunities or neutralize threats in the external environment, and it thus operationalizes the idea of strategic fit (Barney, 1991).

Relevant factors in the business environment are then identified independently of the internal analysis. Political, economic, socio-cultural, technological, ecological, and legal (PESTEL) factors need to be considered (Carpenter and Sanders, 2007, p. 91). They are judged according to their expected impact, the probability that these trends will increase, and the perceived urgency for the organization to address them. This assessment now allows for judgments about strategic fit, i.e. about how well resources and capabilities support opportunities or alleviate threats in the environment. No classification into opportunities and threats is undertaken, in order to avoid the circularity of reasoning that is typical of SWOT analysis, which often categorizes as opportunities those environmental forces which match an internal strength. Since strategy needs to address both opportunities and threats, only the ability of given resources and capabilities to deal with either is deemed relevant.

Lastly, the idea of strategic fit is also operationalized by judging the degree to which resources and capabilities support organizational objectives. These judgments then automatically generate a list of pairs between resources or capabilities and environmental factors that are closest and of overriding importance. The most serious limitation of the model is of course that combinations between an internal and an external factor may be generated by accident but not have any real bearing on each other. The judgment of decision-makers is indispensable here, but it comes in only at the end of a the structured process. Factor combinations can be dropped from the list and other factor pairs rearranged according to perceived priority. The outcome is a prioritized list of strategic priorities that depends on all the previous assessments. According to the logic of RBV, the strength of resources or capabilities, and their strategic fit with environmental factors, is prioritized over the strength of these factors alone. This appears to be a crucial advantage over SWOT analysis.

Meta-SWOT: the method and tool

General

According to experts, the quality standards for strategic planning techniques can be summarized in the acronym "FAROUT". They must be future-oriented, accurate, resource-efficient, objective, useful, and timely (Fleisher and Bensoussan, 2002). These criteria informed the method used in developing Meta-SWOT, which is implemented in an Excel workbook consisting of a title sheet and seven interconnected worksheets. Its purpose is to guide decision-makers in a seamless process from an initial phase of brain-storming to the generation of a ranked list of strategic priorities. The tool allows for unlimited revisions of inputs, as decision-makers change their assessment in the course of a planning exercise. The method can easily be replicated on spreadsheets[2].

All questions are asked about the organization for which a strategy is to be developed rather than about its competitors. Assessment of internal and external factors by way of multifactor scoring is a standard procedure in strategy formulation. With the exception of the question about priority levels of organizational goals, all questions are asked on a five-point scale, which appears to allow for sufficient (or even maximum) reliability (Dawes, 2008). The order of items is not of relevance (with the exception of the final prioritized strategy recommendation). The process is presented in a flow diagram (Figure 1). The case under analysis is a small specialty foods and kitchenware retailer.

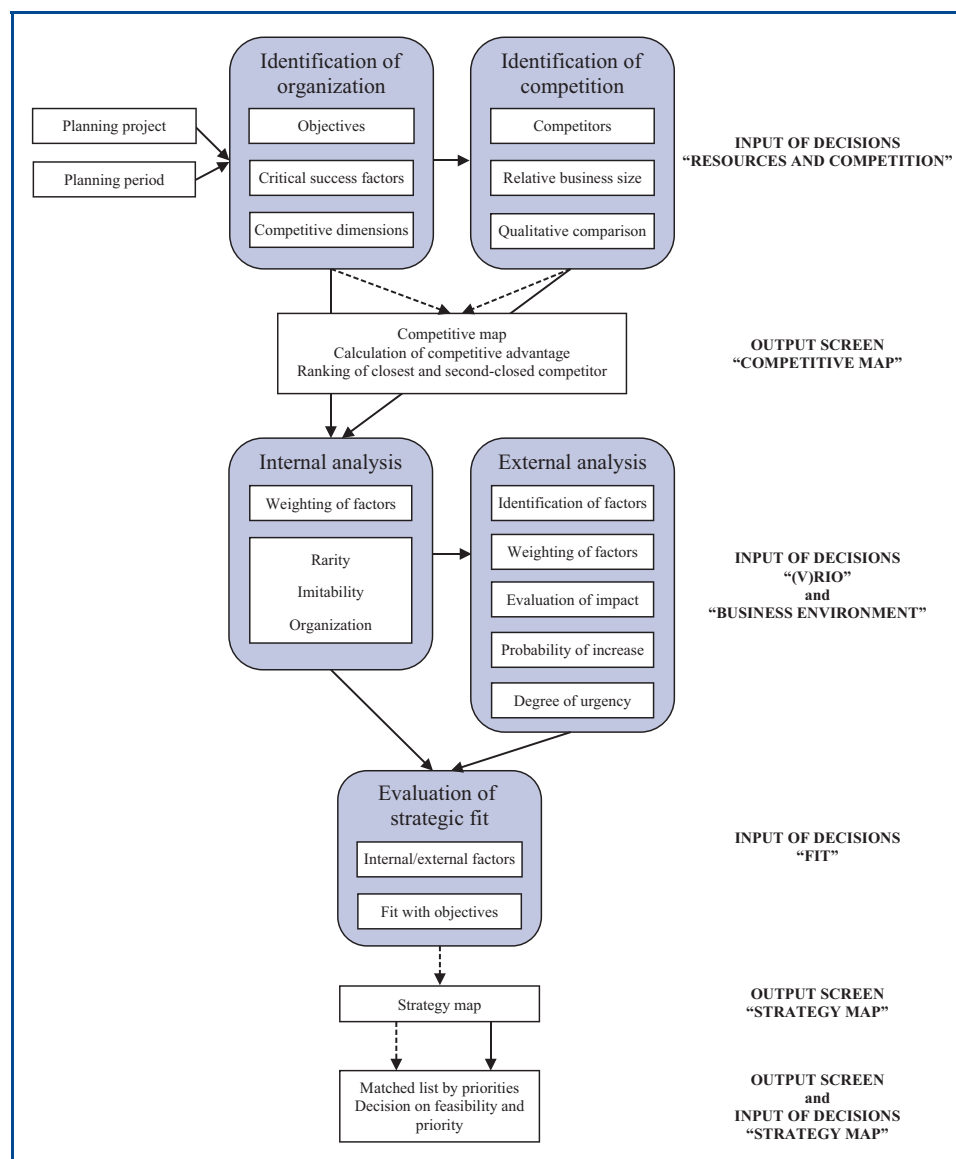
Worksheets

Worksheet resources and competition collects classification data relating to the planning project and the planning horizon, and to overall organizational objectives, which can be weighted by their degrees of priority. It is assumed that organizational objectives are given or defined in the context of a strategic planning exercise. Critical success factors must then be identified that describe which resources and capabilities are required for success in the respective industry, and their relative importance is determined on a percentage weighting scale. In order to generate a map, the list of internal factors must be reduced by first identifying two overriding dimensions on which companies in that particular industry compete and by then deciding to which of them individual resources and capabilities relate. Next, a list of competitors is generated, and the estimated sales volume of the organization in comparison with competitors (or their respective divisions) must be indicated. The perceived performance of the organization against each competitor on all resources and capabilities must be estimated on a five-point scale. Differently from SWOT analysis, internal factors are thus not generated from the mere imaginative capacity of decision-makers, but the firm is evaluated according to how well it matches what the competitive environment requires for success. Evaluation by soliciting judgments is not done for the firm in isolation but always with respect to its competitors, which again relates resources and capabilities to the competitive environment.

These decisions generate a table on worksheet competitive map which calculates the competitive advantage of all competitors, both in absolute values and normalized to the mean of competitors, which is defined as the sum of scores achieved on the two competitive dimensions. The absolute and normalized rank order by competitive advantage is calculated, and a macro reveals the closest and second-closest competitor for the organization depending on the minimization of distance in Euclidean space. A map allows for a visualization of the competitive field as defined by the previous data input. It may be understood as a positioning map reflecting the perceptions of decision-makers (Figure 2).

“ In a comparative evaluation of 24 techniques used for strategic analysis, SWOT does not rank highly. ”

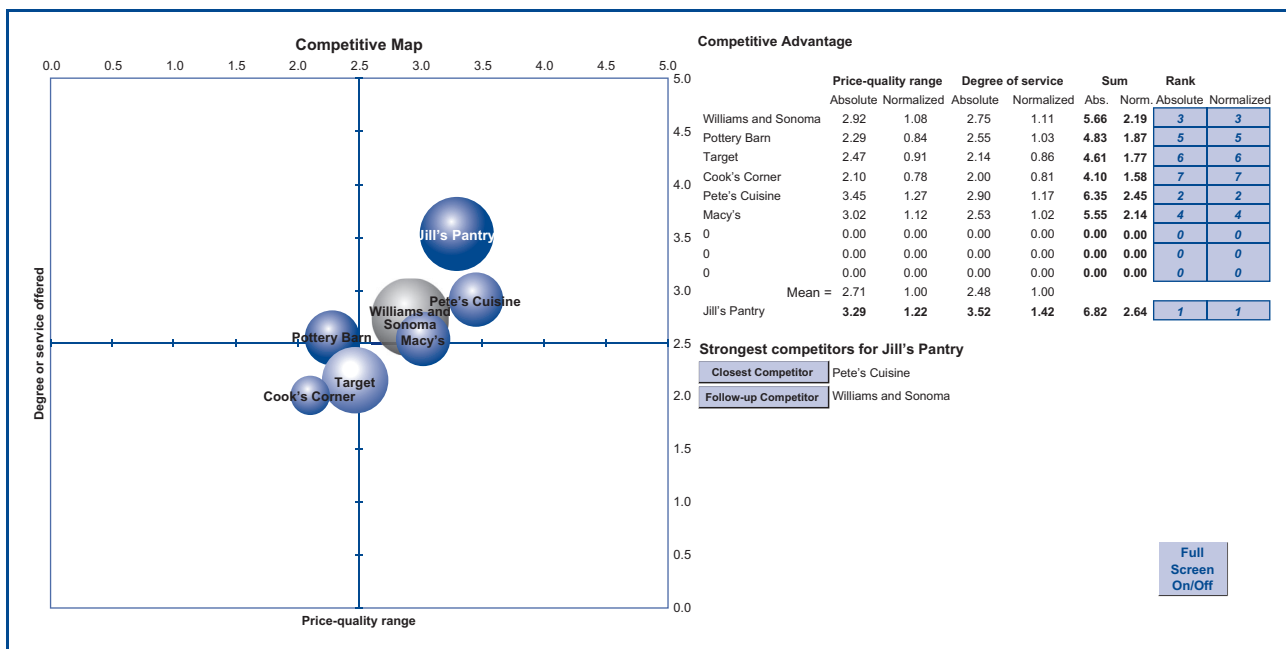
Figure 1 Flow diagram of meta-SWOT



The worksheet (V)RIO serves to collect data about the evaluation of resources and capabilities of the organization according to the VRIO framework (by leaving "value" to a future step). Answers about degrees of agreement are elicited to the following statements:

1. Rarity:
 - (R1) Our competitors cannot do this.
 - (R2) Our competitors do not have this.
 - (R3) Our competitors cannot acquire this.
2. Imitability:
 - (I1) Our competitors cannot copy this.
 - (I2) Our competitors cannot easily develop this.
3. Organization:
 - (O1) We benefit from this factor through our re-orting structure.

Figure 2 Screen shot of competitive map



- (O2) We benefit from this factor through our budgeting process.
- (O3) We benefit from this factor through our compensation policy.

For some planning purposes, the three organizational items may appear of little relevance, or answers cannot be given. Choice of the "neutral" option prevents these items from influencing the aggregate average scores. Items carry equal weight, and the interval level of measurement is assumed.

The worksheet business environment elicits an identification of relevant PESTEL factors and an estimate of their relative importance. Both the statics and dynamics of the environment are assessed by deciding on the likely impact of external factors on the success of the organization (as operationalized by organizational objectives) and on the probability that these factors will increase in importance over the planning period. The degree of urgency of addressing the respective factors is assessed independently in order to avoid strong assumptions about consistency in judgments. The question about urgency introduces a time scale into the measurement exercise and facilitates the generation of prioritized strategic action steps.

The worksheet FIT asks decision-makers to decide, for each resource and capability, to which degree it relates to the important factors in the external environment. If an internal factor has no obvious bearing on an external factor, "very weakly" should be chosen. Fit is measured by the number of internal factors and how strongly they collectively match external factors. The average aggregate score represents the "value" of resources and capabilities in the VRIO model. The use of a continuous scale is expected to mitigate the problem of uncertainty in the categorization of factors into strengths or weaknesses. Lastly, the fit of resources and capabilities with organizational objectives is assessed by the degree of perceived match. It expresses the intuition that a resource may strongly correspond to an environmental factor without being very relevant for the organization.

Based on these decisions, a chart is automatically displayed on the worksheet strategy map that depicts the previous assessment and visualizes the subsequent generation of action steps. Resources and capabilities (blue bubbles) are located towards the right of the chart if they are relatively rare and inimitable and enjoy organizational fitness. They are positioned towards the upper end if they are characterized by a high degree of strategic fit; the bubble

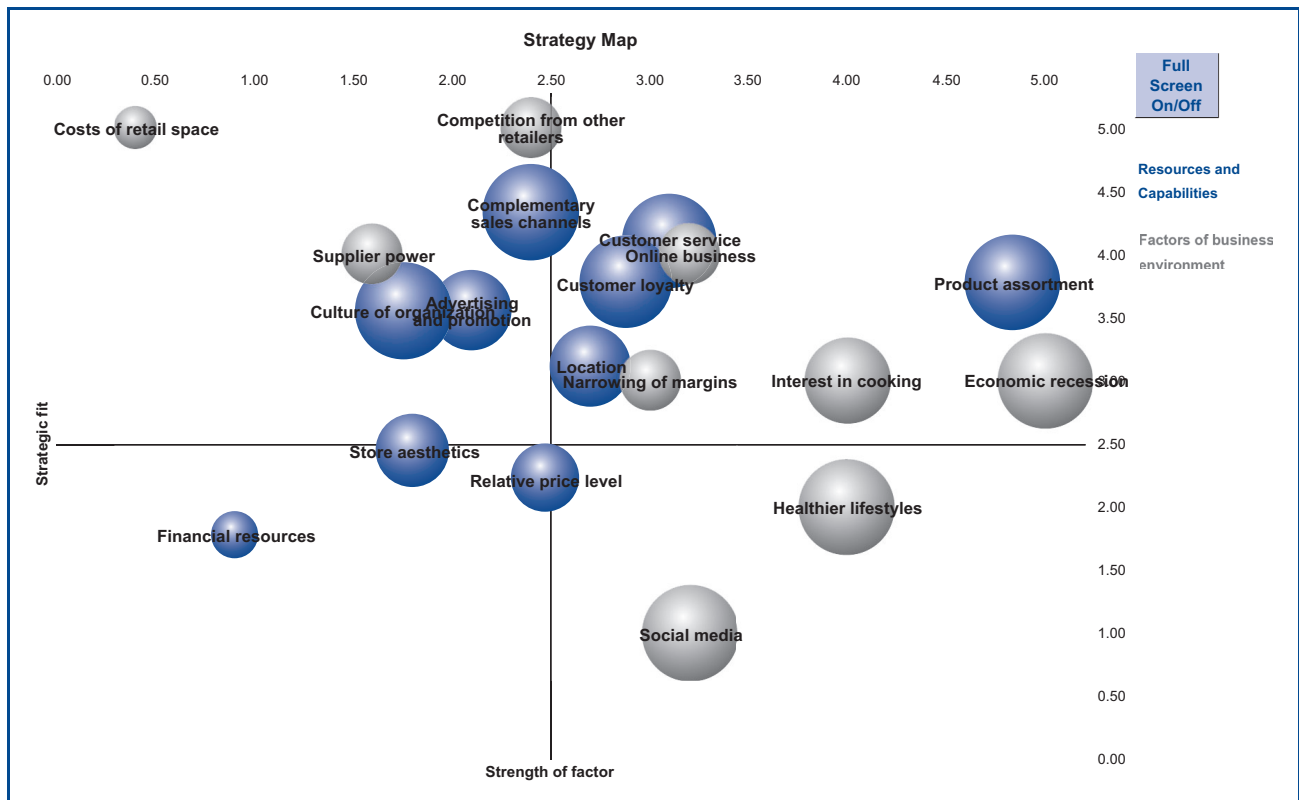
size expresses the degree of fit with objectives. The relevant factors of the business environment are plotted on the same chart, horizontal positions expressing perceived strength of impact, vertical positions expected increase, and sizes of bubbles express degrees or urgency. For both sets of data, locations in the upper-right quadrant indicate high ratings on both dimensions, and locations towards the right or the upper edge of the chart high ratings on at least one dimension of measurement. The third is the relative bubble size (Figure 3).

On the worksheet strategy development, pairs of internal and external factors are automatically generated based on three criteria: minimization of distance between the two types of factors, location maximally to the right and the upper edge, and bubble sizes. The list is subjected to judgments by decision-makers as to which combinations have a true bearing on each other such that an internal factor supports an external one. Irrelevant pairs can be dropped, and for perceived matches, three degrees of priority can be expressed. The list is then reordered to formulate the outcome of the planning exercise – a prioritized strategy.

And so what?

The deficiencies of SWOT analysis have prompted some to improve it and others to discard it as a method for crafting strategy. Managers tend to attribute to it only a modest usefulness for actual planning exercises but still regard it as a valuable tool for structuring thought (Finnegan, 2010). Meta-SWOT therefore seeks to reinvent SWOT analysis in a substantially altered form by retaining its basic approach. The new method removes many of the shortcomings of SWOT by being more future-oriented, accurate, resource-centered, objective, useful, and timely. No longer are all factors of equal weight, since quantification at the ordinal level is possible. This allows for differentiation between factors according to their importance. The tool still relies on subjective judgment, and to some extent this will remain

Figure 3 Worksheet strategy map



Keywords:
Strategic planning,
SWOT analysis,
VRIO model,
Resource-based view,
Strategic fit,
Spreadsheets

indispensable in strategic planning. However, comparative assessment could be converted to metric measurement wherever data are available. Maybe most importantly, ideas derived from the RBV of the firm make meta-SWOT more guided by the resources and capabilities of organizations than simply by market opportunities, without eschewing the importance of finding a good match between internal and external factors. Strategy-making is understood as a matching process driven by what an organization controls and is good at rather than by often unattainable opportunities in the business environment. Steps in a strategic action plan are prioritized by their degree of urgency or timeliness. By guiding the process of strategy formulation in a systematic and iterative fashion rather than jumping to conclusions, Meta-SWOT is a more reliable aid for decision-making than most of the alternatives proposed in the literature.

Notes

1. The Greek preposition meta has three basic meanings that express what the new method intends to accomplish. Meta means "after" in the temporal or spatial sense, "(together) with", and in composites it signifies change (as in "metabolism" or "metaphor"). Meta-SWOT wants to change and amend SWOT analysis and in this sense replace it.
2. A copy of the Excel file can be requested from the corresponding author: ravi.agarwal@snc.edu

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