What is the Key to Effective SWOT Analysis, Including AQCD Factors

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Introduction

Thousands of organizations and companies annually perform analyses of their strengths, weaknesses, opportunities, and threats (SWOT), but most of those entities embed an excessive amount of vagueness in the process. Vagueness is disastrous in strategic planning (George & MacMillan, 1985; Love, Priem, & Lumpkin, 2002), thus providing the impetus for this paper. Underlying external and internal factors that comprise SWOT analysis need to be specific in order to provide an adequate foundation for the generation of strategies (David, David, & David, 2017). The need for specificity is where actionable, quantitative, comparative, and divisional (AQCD) criteria come into play. SWOT analysis is arguably the most widely used strategic planning tool in the world, and AQCD factors are mandatory for its success.

The key to effective SWOT analysis is the inclusion of external and internal factors that meet AQCD criteria. Specifically, each external and internal factor included in a SWOT analysis needs to be stated in AQCD terms to minimize misinterpretation and to pave the way for the generation of strategies that are sufficiently specific, enabling the assignment of costs to those actions. The need for specificity is too commonly neglected, both in

strategic planning and in performing case analysis in strategic management classroom settings.

The AQCD Test

When identifying and prioritizing key external and internal factors in strategic planning, all SWOT factors need to meet AQCD criteria to the extent doing so is possible. The purpose of external and internal assessments is to develop a finite list of opportunities that could benefit a firm, threats that should be avoided or mitigated, strengths that need to be capitalized on, and weaknesses that need to be improved on (Capps III & Glissmeyer, 2012). As the term finite suggests, the external and internal assessments are not aimed at developing an exhaustive list of every possible factor that could influence the business. Thus, each SWOT factor should be specific and useful, which the AQCD test aims to ensure. Normally, 10 opportunities, 10 threats, 10 strengths, and 10 weaknesses comprise the foundational information in a SWOT analysis (Freedman & Van Ham, 1982; Kearns, 1992).

Actionable

In a SWOT analysis, the term actionable refers to the need for each external and internal factor to be meaningful and helpful in ultimately deciding what actions or strategies a firm should consider pursuing. When actionable, firms are able to respond either offensively or defensively to the factors by formulating strategies that capitalize on external opportunities, minimize the impact of potential threats, take advantage of strengths, and/or improve on weaknesses. Actionable factors should be specific and within the control of management (Coman & Ronen, 2009). Thus, to include a factor such as "the firm's current ratio is 2.25" is not actionable because it gives no insight on what to do about the issue.

Quantitative

The importance of quantitative strategic planning has long been advocated in management literature (e.g., David, 1986; Tavana & Banerjee, 1995). In a SWOT analysis, the term quantitative refers to the need for each external and internal factor to include percentages, ratios, dollars, and numbers to the extent possible. Quantification is essential so strategists can assess the magnitude of opportunities and threats and take appropriate actions. For example, rather than saying "marketing is moving rapidly to the Internet," strategists need to conduct research and find, for example, that "spending on online advertisements globally is rising 18% annually and represents about 44% of total advertising spending in the United States." Strategies should be formulated and implemented based on specific factual information to the extent possible because of the high stakes associated with strategic planning.

Comparative

In a SWOT analysis, the term comparative refers to the need for external and internal factors to reveal changes over time. It is difficult to put any fact or number in perspective without another comparative fact or number to reveal the change over time or versus a rival firm or industry average. Thus, factors to be included in a SWOT analysis ideally should be couched in comparative terms, so the strategist or user can more effectively use the information in the matching process to generate feasible alternative strategies. For example, comparative factors can help to identify distinctive competencies (Kumar, Massie, & Dumonceaux, 2006) or reveal the most appropriate locations to source and market products (Kogut, 1986). Vagueness is harmful in factor generation, particularly considering that millions, or even billions, of dollars could ultimately

hinge on the strategic decisions that the factors help propagate.

Divisional

In a SWOT analysis, the term divisional relates to the firm's products and/or regions. Contrary to the consolidation of factors, divisional factors allow inferences to be drawn regarding what products and regions are doing well or doing poorly. This distinction is especially important because more and more firms are shifting strategic management responsibilities from the corporate level to the divisional level (Grant, 2003). Arguably the most important strategic decision that faces companies and organizations annually is how best to allocate resources across its segments (divisions), regions, or products. Therefore, to the extent possible, couching external and internal factors in divisional terms, rather than whole firm terms, is helpful and essential in deciding how to allocate scarce resources across divisions/segments.

External Assessment

External opportunities and external threats refer to economic, social, cultural, demographic, environmental, political, legal, governmental, technological, and competitive trends and events that could significantly benefit or harm an organization in the future. Opportunities and threats are largely beyond the control of a single organization, thus the use of the word external (Perrnwanichagun, Kaenmanee, & Naipinit, 2015). External trends and events—such as increasing security concerns surrounding big data, changing consumer demand surrounding authenticity and personalization, and people in developing countries learning about online services—significantly affect products, services, markets, and organizations worldwide. External trends and events are creating a different type of consumer and consequently a need for different types of products, services, and strategies. A competitor's strength could be a threat, or a rival firm's weakness could be an opportunity. A basic tenet of strategic management is that firms need to formulate strategies to take advantage of external opportunities and avoid or reduce the impact of external threats. For this reason, identifying, monitoring, and evaluating external opportunities and threats are essential for success (Porter, 1980).

When performing an external assessment, managers should first engage in an engineering hunt for facts

Table 1. Questions to Ask to Determine Quality of an External Factor

	Ask if the factor is				
	Actionable	Quantitative	Comparative	Divisional	
High quality external factor:					
Online retail grocery shopping	Yes	Yes	Yes	Yes	
grew from 12% to 16% in 2018					
Low quality external factor:					
Consumers' average disposable	No	No	No	No	
income increased greatly in 2018			1		

to make sure as many factors as possible pass the AQCD test. In addition to being stated in actionable, quantitative, comparative, and divisional terms, managers must also make sure that external factors are indeed external (not internal) and make sure that external factors, particularly opportunities, are stated as external trends, events, or facts, rather than being stated as strategies the firm could pursue. Lastly, factors selected for inclusion in an external assessment should be mission-driven. It is important that external factors relate closely to the firm in helping to achieve its mission (opportunities) or hindering its mission (threats).

Regarding AQCD criteria, high quality factors are crucial in an external assessment for a firm. A high quality factor will meet three or four of the AQCD criteria; a low quality factor will meet two or fewer of the AQCD criteria. High quality and low quality external factors for Walmart are given in Table 1 to further exemplify this important AQCD concept.

Internal Assessment

Achieving sustainable competitive advantage requires more than the evaluation of environmental opportunities and threats (Barney, 1995). In addition, firms should conduct an internal assessment. Internal strengths and internal weaknesses are an organization's controllable activities that are performed especially well or poorly (Barney, 1991). They arise within the activities of management, marketing, finance/accounting, production, and information systems of a business. Identifying and evaluating organizational strengths and weaknesses in the functional areas of a business is an essential strategic-management activity. Organizations strive to pursue strategies that capitalize on internal strengths and improve internal weaknesses (Hittmár & Jankal, 2015).

Strengths and weaknesses should be determined relative to competitors (Sirmon et al., 2010).

Relative deficiency or superiority is important information. Additionally, strengths and weaknesses can be determined by elements of being rather than performance. For example, a strength may involve ownership of natural resources or a historic reputation for quality. Strengths and weaknesses may be determined relative to a firm's own objectives. For instance, high levels of inventory turnover may not be a strength for a firm that seeks never to stock out. Both strengths and weaknesses should be stated as specifically as possible using numbers, percentages, dollars, and ratios, as well as comparisons over time to rival firms. Specificity is important because strategies will be formulated and resources allocated based on this information. The more specific the underlying internal factors, the more effectively resources will be allocated. Determining the numbers takes more time, but firm survival is often at stake, so striving to meet the AQCD test is essential.

Internal factors can be determined in a number of ways, including computing ratios, measuring performance, and comparing to past periods and industry averages. Various types of surveys also can be developed and administered to examine internal factors, such as employee morale, production efficiency, advertising effectiveness, and customer loyalty. It is important to state factors in divisional terms to the extent possible. For example, for a company such as Walmart, saying, "Sam Club's revenues grew 11% in the recent quarter," is far better than saying "Walmart's revenues grew 6% in the recent quarter." Being divisional enables strategies to be more effectively formulated and targeted. This is important because all firms must allocate resources across divisions (segments) of the firm (that is, by product, region, customer, etc.), such as Walmart's Sam's Club compared with Walmart Supercenters, Walmart Mexico, or Walmart Europe.

In addition to passing the AQCD test described

Table 2. Questions to Ask to Determine Quality of an Internal Factor

	Ask if the factor is				
	Actionable	Quantitative	Comparative	Divisional	
High quality external factor:					
Exxon's natural gas segment sales	Yes	Yes	Yes	Yes	
grew 14% in 2018					
Low quality external factor:					
Exxon's price earnings ratio in	No	Yes	No	No	
2018 was 14.4					

above, managers should ensure that internal factors are indeed internal (not external). Like the external assessment, factors selected for inclusion in the internal assessment should also be mission-driven. Internal factors should either relate closely to helping the firm achieve its mission (strengths) or hindering its mission (weaknesses). Analogous to performing an external assessment, a high quality internal factor will meet three or four of the AQCD criteria; a low quality factor will meet two or fewer of the AQCD criteria. Managers should engage in an engineering hunt for facts as needed. Vagueness in stating factors must be avoided because vagueness gives little guidance in assigning weights or ratings often used in developing strategic planning matrices, such as an internal factor evaluation (IFE) matrix. High quality and low quality (hypothetical) internal factors for ExxonMobil Corporation are given in Table 2 to further exemplify this important concept.

SWOT Analysis

SWOT analysis is a valuable strategic management tool (Fleming, 1998) that incorporates both internal and external factors (Futagami & Helms, 2017). More specifically, it is a tool that helps managers develop four types of strategies based on combinations of those four factors: SO (strengths-opportunities) strategies, WO (weaknesses-opportunities) strategies, ST (strengths-threats) strategies, and WT (weaknessesthreats) strategies. SWOT analysis involves matching key external and internal factors to generate feasible strategies (e.g., Reihanian et al., 2012). Note in Table 3 that the resultant strategies SO1, WO1, ST1, and WT1 are derived from matching external with internal factors. Pairing external factors together (opportunities and threats) would be meaningless because firms cannot control them; pairing internal factors together (strengths and weaknesses) would fail to effectively guide strategy generation in the absence

of external stimuli (Koo et al., 2011). Thus, matching external with internal factors provides the basis for formulating effective strategies that most benefit the firm (Choo, 1999; Jogaratnam & Law, 2006). The underlying factors need to meet the AQCD criteria in order for SWOT to most appropriately fulfill its role as the foremost strategic planning tool globally.

SWOT Strategies

SO strategies use a firm's internal strengths to take advantage of external opportunities (Chan, 2011). All managers would like their organization to be in a position where internal strengths can be used to take advantage of external trends and events. Organizations generally will pursue WO, ST, or WT strategies to more effectively position themselves into situations where they can apply SO strategies. But to ultimately get into a position to rely mostly on SO strategies, factors need to meet AQCD criteria to provide the best foundation for embedding specificity within the alternative strategies themselves.

WO strategies aim to reduce internal weaknesses by taking advantage of external opportunities (Wickramansinghe & Takano, 2009). Sometimes key external opportunities exist but a firm has internal weaknesses that prevent it from exploiting those opportunities. For example, for an auto parts manufacturer, the rising demand for electric cars (external opportunity), coupled with the firm having limited batteries to offer (internal weakness), suggests that the firm should develop and produce a new line of batteries. Factors that meet AQCD criteria can enable firms to ultimately overcome weaknesses with well-designed strategies.

ST strategies use a firm's strengths to avoid or reduce the impact of external threats (Chan, 2011). An example ST strategy could be when a firm uses its excellent legal department (a strength) to collect millions of dollars in damages from rival firms that

Table 3. Matching Key External and Internal Factors to Formulate Strategies

Key internal factor	Key external factor	Resultant strategy
S1: Demand for Dunkin Donuts up 6 percent annually (internal strength)	+ O1: Desire for healthy products up 8 percent annually (external opportunity)	= SO1: Dunkin Donuts eliminated all artificial dyes and colors in its donuts in 2018
W1: Insufficient production capacity by 1 million units annually (internal weakness)	+ O2: Exit of two major foreign competitors from the area (external opportunity)	= WO1: Purchase competitors' production facilities
S2: R&D has developed four new products in twelve months (internal strength)	+ T1: Sugary drink consumption is declining 5 percent annually (external threat)	= ST1: Spend \$1 million to promote healthiness of four new products
W2: Poor employee morale (internal weakness)	+ T2: Healthcare costs rose 7 percent last year (external threat)	= WT1: Implement a new corporate wellness program

infringe on its patents (a threat). Rival firms that copy ideas, innovations, and patented products are a threat to many industries. When an organization faces major threats, it will seek to avoid them while concentrating on opportunities. For example, when an organization has both the capital and human resources needed to distribute its own products (internal strengths), and distributors are unreliable, costly, or incapable of meeting the firm's needs (external threats), forward integration (gaining control of distributors) can be an attractive ST strategy. Regardless, AQCD factors are needed to determine exactly what ST strategies would entail if chosen for implementation.

WT strategies are defensive tactics directed at reducing internal weakness and avoiding external threats (Reihanian et al., 2012). An organization faced with numerous external threats and internal weaknesses may indeed be in a precarious position. In fact, such a firm may have to fight for its survival, merge, retrench, declare bankruptcy, or choose to liquidate. For example, some restaurant chains do business with suppliers that treat livestock inhumanely (internal weakness) and face growing customer awareness of the need to preserve wildlife and treat animals with respect (external threat), resulting in a WT strategy to cease using certain suppliers. As another example, when a firm has excess production capacity (internal weakness) and its basic industry is experiencing declining annual sales and profits (external threat),

related diversification can be an effective WT strategy. Numerous firms are in declining situations and, especially when this is the case, AQCD factors can enable top managers to decipher what strategies are best to reverse course for the firm.

Conclusion

This paper aims to provide guidance for alleviating the persistent problem of too much vagueness that plagues many strategic planning processes, tools, techniques, and concepts. To effectively formulate strategies that are sufficiently specific in terms of likely associated costs to implement, underlying external and internal factors need to meet AQCD criteria. Our paper reveals how to accomplish this task.

Underlying external factors that meet the AQCD test can be obtained from numerous sources, including those listed in Table 4. Too often, however, top managers of an organization or company will conduct a series of meetings and end up with nebulous factors that all participants agree are important issues. Hopefully, this paper provides guidance for all companies and organizations to conduct strategic planning more effectively, especially in regards to performing SWOT analysis.

Table 4. Excellent Resources to Obtain AQCD Factor Information

Online free resources

- a. Form 10K or Annual Report
- b. http://finance.yahoo.com
- c. www.hoovers.com
- d. http://globaledge.msu.edu/industries/
- e. www.morningstar.com
- f. www.owler.com

Online subscription resources

Mergent: www.mergentonline.com

At this website, financial statements seem to be more complete than at other sites. You can also search for companies with the same SIC or NAICS code and then create a comparison financial ratio report. A number of different ratios can be used as comparison criteria to create a tailored report that can then be exported into a Microsoft Excel format. Alternatively, use the Competitors Tab in Mergent to build a list of companies and compare their ratios. College libraries often subscribe to this service.

Factiva: http://new.dowjones.com/products/factiva/

At this website, first use the Companies & Markets tab to search for a company. Next, click "Reports" and choose the "Ratio Comparison Report" to get a company's ratios compared to industry averages. College libraries often subscribe to this service.

S&P NetAdvantage: http://www.standardandpoors.com/products-services/industry surveys/en/us

This website provides company and industry ratios and information in two sections of the database: (1) the Compustat Excel Analytics section of a particular company's information page and (2) the S&P Industry Surveys.

Hardcopy reference books for financial ratios found in many libraries

Robert Morris Associate's *Annual Statement Studies*: An excellent source of financial ratio information.

Dun & Bradstreet's *Industry Norms & Key Business Ratios*: An excellent source of financial ratio information.

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