

Strategic Planning and Implementation

There is no question about the importance of decision making and prioritization in strategy development, and its impact cannot be underestimated. One goal of strategy is to drive change. Change has always been difficult and organizational inertia is a formidable opponent. Whether proactive or reactive, the ability to rapidly coordinate and redirect resources to advance a response to emerging threats and opportunities is critical to creating competitive advantage and realizing strategy.

It's not the strongest of a species that survives, nor the most intelligent, but rather the one most responsive to change.

CHARLES DARWIN

Strategy is about making choices, trade-offs; it's about deliberately choosing to be different.

MICHAEL PORTER

When strategic planning creates an impetus for change, leaders are faced with the challenge of breaking existing mental models and busting organizational silos while simultaneously harvesting the knowledge imbedded in decentralized or shifting power structures. Achieving this in a collaborative and transparent way is vital to good decision making and achieving breakthrough results. Failure to do so is a formula for strategic disaster.

We will discuss the application of Collaborative Decision Making (CDM) as a means of bringing together the knowledge of the diverse stakeholders often involved in strategic analysis to shape the strategic thrust of the organization. We will discuss how CDM can increase the levels of collaboration and transparency with which an organization gains the insights necessary to establish its direction or conquer new or uncharted territories to create and sustain competitive advantage.

The Role of Decisions in Strategy Development

Ultimately, all actions taken by an organization are the byproduct of decisions made by groups or individuals within the enterprise. Simply put, no decisions, no real action. Make no mistake; there can be plenty of *activity*, which may however be completely devoid of strategic direction and therefore potentially run counter to the organization's goals. Given the high level of activity in most organizations it is very important to consider if the decisions being taken, whether made proactively or reactively, are in fact being guided by a deliberate strategy. In the absence of a well articulated, broadly communicated and aligned strategy that is based in careful analysis of the internal and external environments, individuals and groups within organizations can be left to act in their local self interests without objectives and goals to guide their decisions. On the downside, this can lead to the misdirection or underutilization of scarce resources needed to achieve the strategic goals of the organization. But this can be turned around. If well coordinated and integrated into the process these insights can be the source of information that can create new opportunity and spur disruptive innovation. The ability to bring together these insights, make decisions about them and convert them into opportunities is a key goal of the planning process. What we will discuss is how CDM can bring together critical information to making those decisions that establish priorities and align efforts to achieve the overall objectives of the organization.

A Strategic Analysis Framework

Below we will introduce a case example that applies a framework for discussing strategy that consists of four key components (Figure 1). Using this approach we will show how strategy can act as the bridge between goals and capabilities with the opportunity and environment. The four key components of our strategic analysis framework are:

- 1) Understanding opportunities in the context of the external and competitive environment
- 2) Assessing and prioritizing strategic opportunities aligned with internal goals and objectives
- 3) Assessing capabilities and resources needed to succeed in the chosen arenas
- 4) Defining a plan of attack



Figure 1

The CDM approach to strategic analysis follows a structured format. Let's briefly review the main aspects of the process.

- 1) **Develop a hierarchy or tree of criteria**- in clusters from high level categories at the top level to more specific sub-criteria, down to ratings and measures that will be used to differentiate the strategic value of options.
- 2) **Compare criteria** to each other using a pairwise approach to establish their relative priorities for use in assessing options.
- 3) **Rate the options against quantitative or qualitative scales** that are derived to describe each criterion, and measure how well options reflect the priorities expressed in the criterion.
- 4) **Optimize the allocation of resources** among the options by way of cost/benefit analysis and performing sensitivity analysis to determine the robustness and drivers of decision outcomes.

Determining Strategic Priorities in a Health Care Products Company

Decision Lens worked with a major health care products company to determine strategic priorities in one of their major business areas. We will discuss the framework of this analysis, scrubbing the names and financial values of the actual analysis to protect sensitive information while maintaining the dynamics of the exercise.

Decision Lens worked with the strategic planning team to apply the GE-McKinsey matrix framework for assessing Market/Industry Attractiveness against Business Competitive Strength of their key business units (Figure 2).

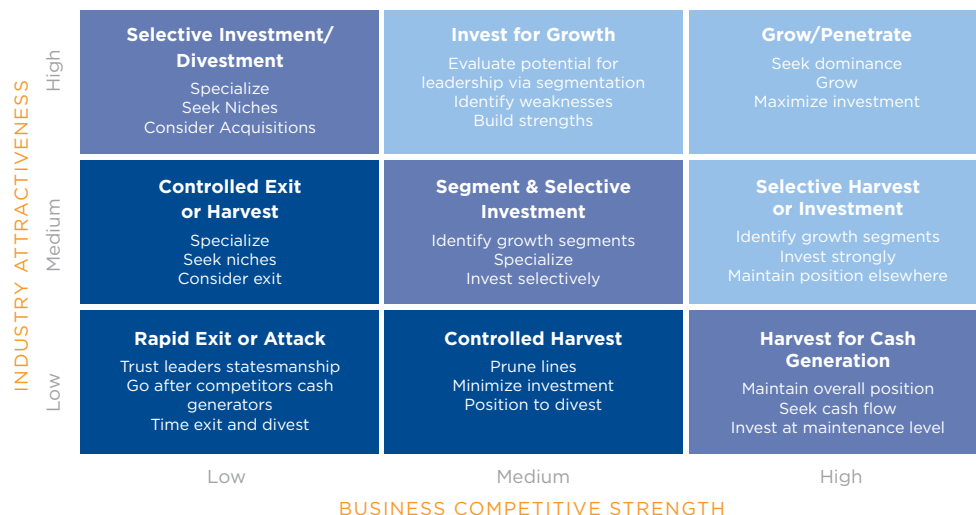


Figure 2

The team established sub criteria that were used to describe the factors of Market Attractiveness (MA) and the Business Competitive Strength (BCS) dimensions of the matrix (Figure 3).

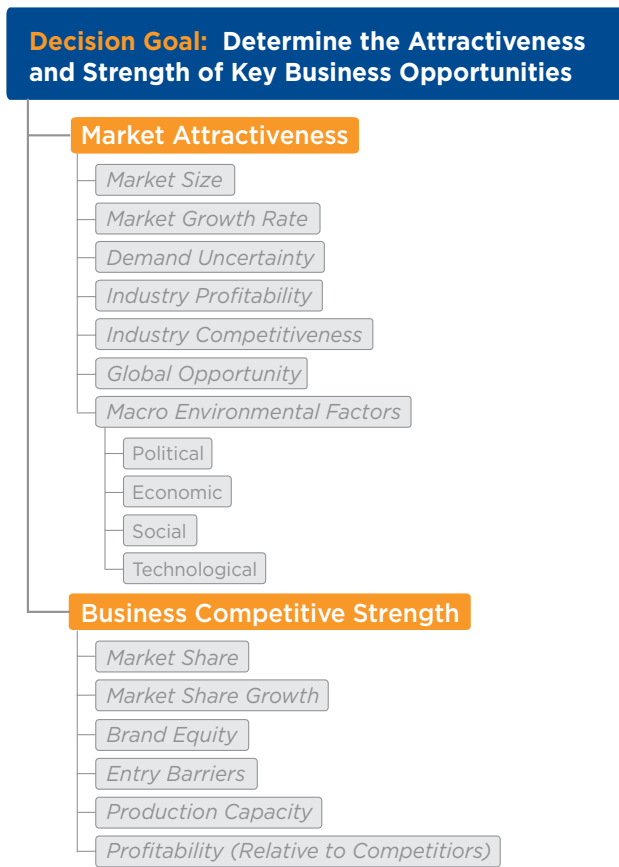
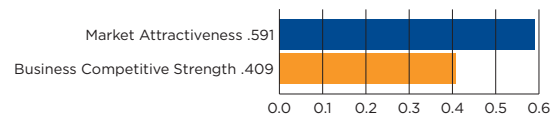


Figure 3

The team determined that it was important to start by assessing where the business units were strategically positioned with respect to the attractiveness of the markets and the ability to compete. Often, strategic planning processes will too quickly go to the level of individual project merits where many things look attractive and begin “horse-trading”, without an analysis of the factors that determine the strategic fit, relevance or priority of the different business units, product lines or platforms for growth. This can result in a project driven opportunistic approach to the strategy that can be difficult to reverse or course correct as investments are made and infrastructures are built to support the projects that may prove to be future barriers to moving to strategically important focus areas.

Software Enabled Facilitation of the CDM Process for Strategic Analysis

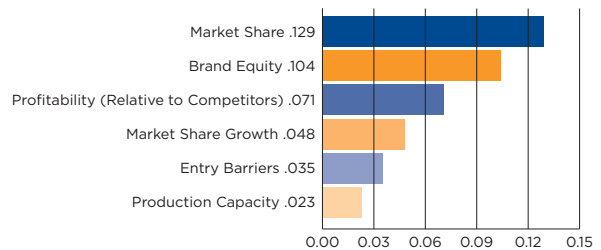
Decision Lens, is an Arlington, Virginia based commercial software company that provides a CDM based collaborative prioritization and resource allocation solution that helps organizations make better choices across their portfolio of strategic options. Applying the pairwise comparison process to the criteria shown in Figure 3 Decision Lens was able to facilitate this organization’s planning team to establish the relative priority of the Market Attractiveness and Business Unit Strength criterion.



Market Attractiveness/Business Competitive Strength Weighting



Weighted Market Attractiveness Criteria



Weighted Business Competitive Strength Criteria

Benefits of Pairwise Comparison

Let’s look briefly and in more detail at the process of using pairwise comparisons to determine the priorities of the criteria and sub-criteria. The CDM process is designed specifically to draw out and aggregate the independent expertise, experience and stakeholder positions from a group of decision makers to increase the shared understanding of the group. Since this is a software enabled approach the participants can be widely decentralized experts from different functions or

geographies. This process helps focus the discussion on areas where there may be differences of opinion or where asymmetric information may exist to better inform decision makers of each other's positions.

Using the pairwise approach, participants to the analysis were asked a series of questions like the following;

"With respect to the goal of assessing the Market Attractiveness of an SBU, which is the more important factor, the Size, or the Growth Rate of an SBU's target market? and how much more important?"

After everyone has submitted their judgments, the judgments are revealed on a single screen. This is illustrated in Figure 4.

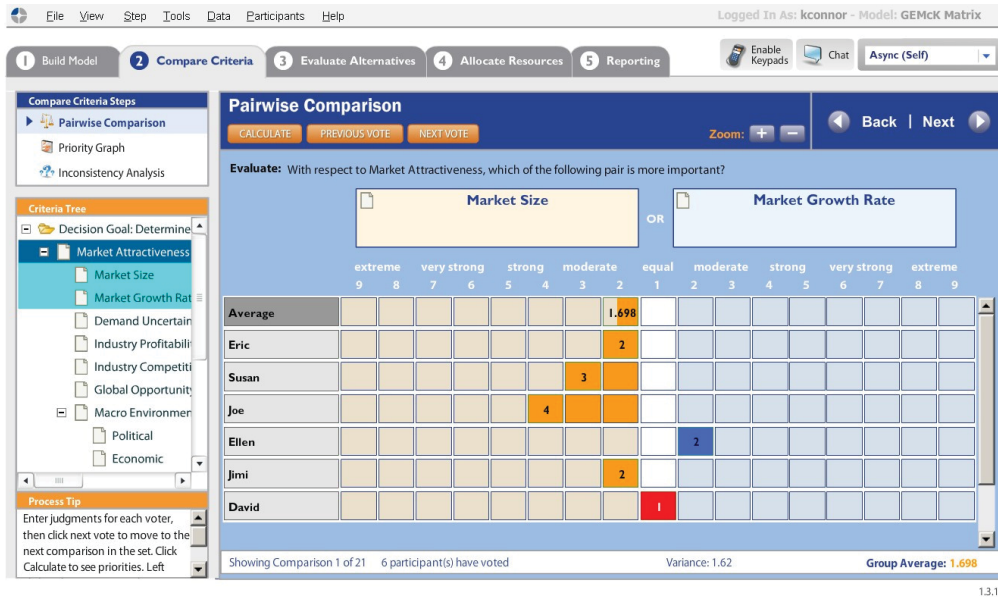


Figure 4: Pairwise comparison of Market Attractiveness criteria

As we can see, David believed that these criteria were equally important to the attractiveness of a market. Notice that Joe said the Market Size was strongly more important than the growth rate while Ellen said growth rate was moderately more important than size to identifying attractive markets. Who is right? These individuals are neither right nor wrong, and it is not essential that the group agree or reach complete consensus. What is important is that there is a mechanism for making their collective judgments transparent, and for fair process to allow each voice and perspective to be shared and heard to inform the group and enable forward progress.

In the process a facilitator asks,

"Joe?, Ellen?, you are at the opposite extents on this judgment. Would you like to share with the group what formed your positions?"

After the ensuing discussion, the participants were then asked (but not required) if they would like to change

their judgment based on anything they learned from the discussion. This process can be undertaken real time or virtually until the criteria at each level in the hierarchy are compared by each member of the group.

Inconsistency and Alignment Analysis

There are very powerful benefits to converting and aggregating the strength of the individual's preferences to quantifiable and explicit judgments. The mathematical algorithm used to determine the priorities is able to monitor the consistency of each member of the group, and that of the overall group's judgment. By consistency, we are referring to the logical consistency of preferences. For instance, if a member of our group were to say; Market Size is more important than Profitability, Profitability is more important than Competitive Environment, and then say Competitive Environment were more important than Market Size, this would be inconsistent. Logically, Market Size would need to domi-

nate Competitive Environment given the previous judgments. This type of inconsistency is typically seen when either the definitions of the criteria are not clear, or when too many criteria are being applied and confounding participant's logic. Inconsistency values smaller than 10% (0.10) indicate group consistency. If the number exceeds that level (>0.10), the software application provides insight into those judgments creating inconsistency and can demonstrate the impact on the overall priority of the criteria.

Another important measure derived from the judgment exercise is Alignment. If all members of the group were to choose the same strength of preference, on the same side of each pairwise comparison, the group would be

100% aligned, as they diverge from this position toward increasing levels of opposition, this statistic measures the extent to which the deviation is occurring and signals potential issues within the group.

When these two measures are combined, it provides a powerful insight into the dynamics within the group of decision makers (Figure 5). These statistics enabled facilitators to see that the group was consistent but not aligned to the priorities, signaling factions within the group. The ability to see this, and then diagnose the sources of the issue, enabled a focused discourse so the group could agree to disagree and move forward, which is in itself a form of alignment.

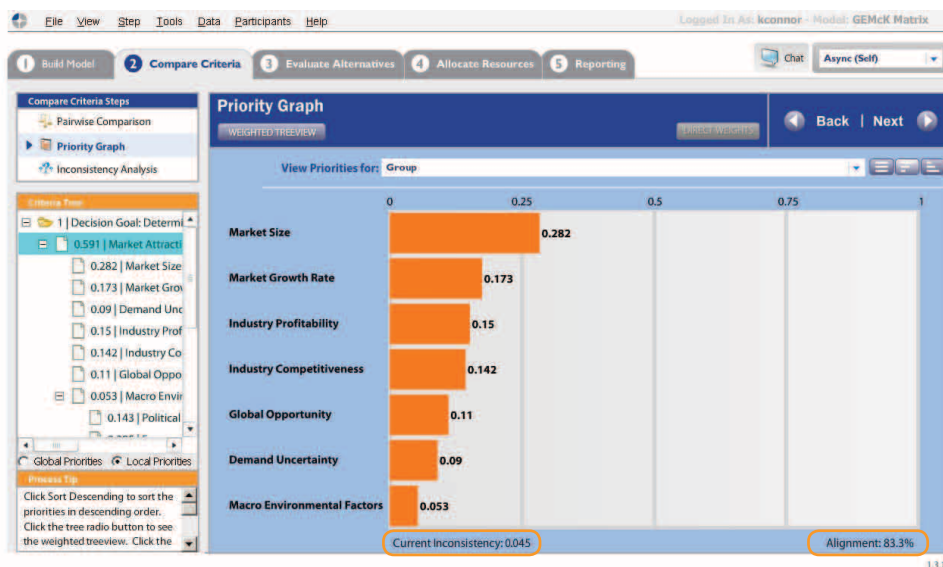


Figure 5: Group priorities for Market Attractiveness criteria with Inconsistency and Alignment measures

Rating Strategic Business Units

When using the CDM approach, rating scales are derived to define measures of how well matched the options are to the priorities expressed in the criteria. This is more than establishing the typical Likert scales often used in multi-attribute approaches where “more is better”. Decision makers may either compare levels of a rating scale to each other to determine the relative differences between them as done with the pairwise process,

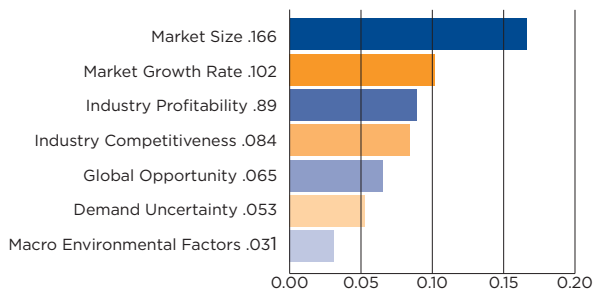
or directly assign values that indicate how much each rating level should contribute to the score for each criterion. An example of a criterion developed in this strategic analysis is shown with the criterion for production capacity (Figure 6). This is a nonlinear scale where “Sufficient” capacity contributes more to the score than “Excess” capacity, because excess capacity carries a profitability concerns related to underutilized production assets and the associated factory overhead costs.

| RATING | DEFINITION | WEIGHT |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Constrained | Capacity is constrained from currently known internal and external supply networks to support production and reach profitable volumes. Significant capital investment or supplemental outsourced volumes required to meet needs. | 15% (.15) |
| Marginal | Capacity is possible from currently known internal and external supply networks to support production cost and access at some risk at required volumes. Some limited capital investment or supplemental outsourced volumes required to meet needs. | 35% (.35) |
| Sufficient | Capacity is available from currently known internal and external supply networks to support production and reach profitable volumes. Minimal capital investment or supplemental outsourced volumes required to meet needs. | 100% (1.0) |
| Excess | Capacity is in excess from currently known internal and external supply networks to support production; overhead costs may be prohibitive to profitability. Supply rationalization may be required to increase or maintain profitability. | 85% (.85) |

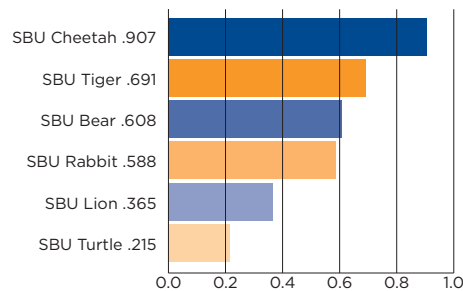
Figure 6: Sample definitions and weighting for Production Capacity criteria

Once these rating scales were established for each criterion, stakeholders were asked to rate the SBU's against each criteria. The software then takes the scores of these ratings and multiplies them by the criteria weights and sums them across all criteria to determine the score for each SBU. These scores provide a measure of the value of each SBU based on the prioritized criteria making up the Market Attractiveness and Business Competitive Strength assessments for the organization.

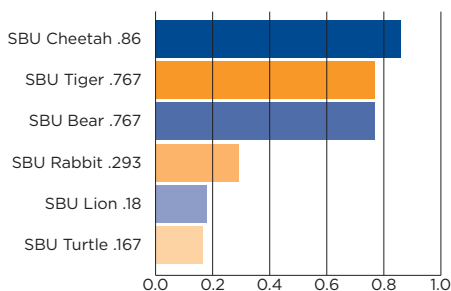
Completion of these rating discussions and the capturing of judgments along the way created the data to form an aggregated view of the group's opinion of the various SBU's. Using the software to conduct sensitivity analysis allowed decision makers to quickly see the drivers and the stability of the priorities. Applying this technique to the Market Attractiveness dimension they were able to quickly see beyond the immediate rank attractiveness that:



Market Attractiveness criteria weights

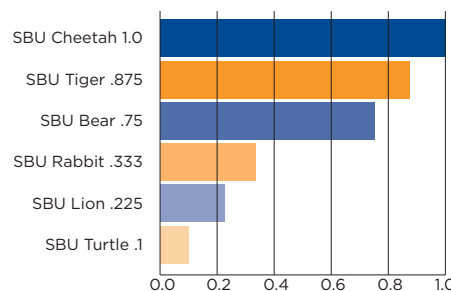


Overall Market Attractiveness Priorities



SBU's Cheetah, Tiger and Bear were determined to be the largest markets

Market Size sensitivity analysis

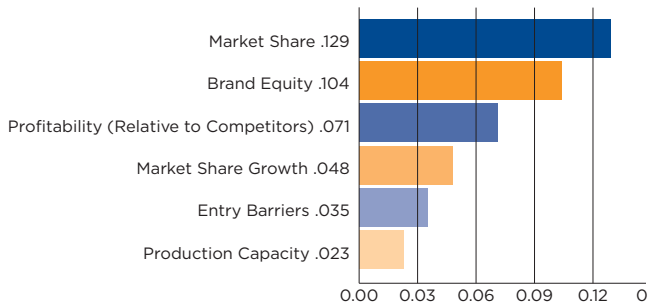


SBU's Tiger, Cheetah and Rabbit were the fastest growing markets

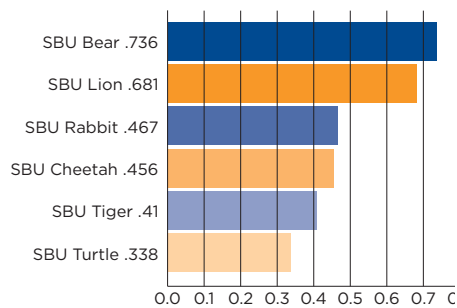
Market Growth Rate sensitivity analysis

Figure 7

Similar observations and conclusions were drawn from the sensitivity analysis on the components of the Business Unit Strength dimension (Figure 7). Using this approach, managers and the strategic planning team members were able to easily gain insight into the contribution of each criterion to the overall score for a SBU, and quickly identify the drivers on each axis that influenced the overall priority rating.



Business Competitive Strength criteria weights



Overall Business Competitive Strength Priorities

The software brings the two dimensions together under this framework and totals the assessments of the group to establish the overall priorities among the SBU's (Figure 8).

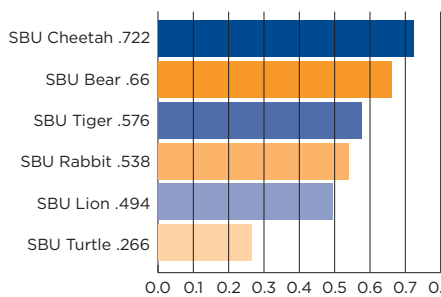


Figure 8: Combined Business Unit Priorities

Having determined the relative weights of the criteria and rated each SBU against those criteria rating scales, the team was now able to run optimization scenarios to gain insight into the trade-offs among the various investment opportunities given the spending requests and budget constraints.

Optimization and Resource Allocation

Table 1 illustrates the business unit investment requests (\$27.5MM) and total available budget (\$19.8MM).

Budget \$19,800,000.00

| PROJECT | BASE YEAR REQUEST |
|-------------|-------------------|
| SBU Lion | \$ 3,500,000.00 |
| SBU Tiger | \$ 6,000,000.00 |
| SBU Rabbit | \$ 2,700,000.00 |
| SBU Bear | \$ 1,000,000.00 |
| SBU Turtle | \$ 4,300,000.00 |
| SBU Cheetah | \$10,000,000.00 |

Table 1: Base year Business Unit funding requests

Using the Decision Lens software optimizer, the team was able to allocate resources across this portfolio of business units and see how these funding recommendations plus investment strategy recommendations provided by the framework could be combined to determine a strategic direction.

Table 2 illustrates the funding results for each SBU in the optimization process. Three scenarios were undertaken to support the analysis.

- 1) Optimization against standard weights (Base) as determined by the pairwise comparison process.
- 2) Optimization against a sensitivity giving full weight to the Market Attractiveness (MA) dimension.
- 3) Optimization against a sensitivity giving full weight to the Business Competitive Strength (BCS) dimension.

| PROJECT | BASE YEAR REQUEST | Scenario 1 (Base) | Scenario 2 (MA) | Scenario 3 (BSC) |
|-------------|-------------------|-------------------|-----------------|------------------|
| SBU Lion | \$ 3,500,000.00 | 100% | 42% | 100% |
| SBU Tiger | \$ 6,000,000.00 | 68% | 100% | 0% |
| SBU Rabbit | \$ 2,700,000.00 | 100% | 100% | 100% |
| SBU Bear | \$ 1,000,000.00 | 100% | 100% | 100% |
| SBU Turtle | \$ 4,300,000.00 | 0% | 0% | 100% |
| SBU Cheetah | \$10,000,000.00 | 85% | 86% | 82% |

Table 2: Funding optimization scenarios

These results were then plotted in the Market Attractiveness versus Business Competitive Strength matrix, to gain more insights.

Based on their scores SBU Cheetah was plotted in the *Invest for Growth* box of the matrix, and SBU Tiger straddled the *Invest for Growth* box with the *Segment and Selectively Invest* box. Consulting firm AT Kearney has developed a set of guidelines for strategic investment strategies to be considered in the various segments of the strategy matrix. The actual investment strategies are given in the graphic in Figure 2.

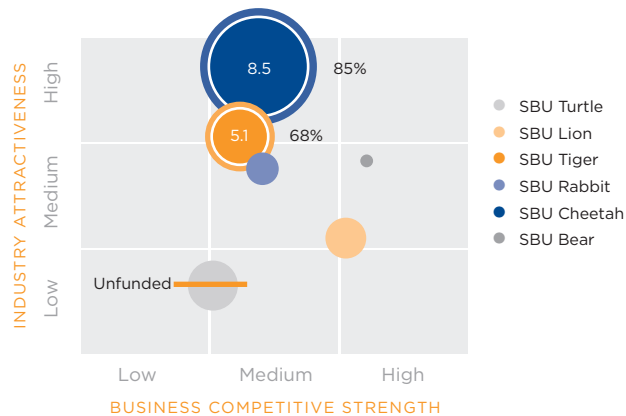


Figure 9: Scenario plot on GE-McKinsey Matrix

The resource allocation determined using the Decision Lens optimization gave partial funding to SBU Cheetah (85% of requested investment) and Tiger (68% of requested investment) given their cost/benefit. The ATK recommendations for the *Invest for Growth* box are to build strengths and identifying opportunities for leadership via segmentation, and the constrained funding recommendation from the optimization drove the team toward a focus on key segments to increase efficiency. With regard to SBU Rabbit, the ATK recommendations in this box suggest specializing in identified growth segments and investing behind those opportunities. The partial funding outcome for this SBU again drove the team toward exploring scenarios that would limit activities to those key growth segments within the SBU’s market.

Looking at the optimization results, and sensitivity analysis, SBU Tiger was completely unfunded in the Business Competitive Strength scenario. Looking back at the sensitivity results for the BCS dimension, the team saw that Market Share, Profitability and Brand Equity were the criteria limiting the overall competitive strength of this SBU. These insights helped the team formulate strategic objectives to guide a focus on marketing activities related to increasing brand equity and driving market share, with an operations focus on

increasing profitability. Profitability was volume driven and linked with the market share focus. While the base-line scenario recommended continued investment in this option, the sensitivity analysis revealed key insights that were valuable to determining specific strategic objectives within the SBU’s as the organization worked to maximize value and increase competitiveness.

We also see from the bubble plot, that SBU Turtle was unfunded in the base scenario due to drivers in the Market Attractiveness criteria that place it between the Rapid Exit or Attack and the Controlled Harvest segments of the matrix. In both of these segments, the ATK guidelines suggest pruning product lines, minimizing investment and positioning for divestiture. Since this kind of divestiture decision can rarely be made in one action, the team undertook additional optimization scenarios where minimum levels of funding were proposed for this SBU to allow planning of the divestiture if this were determined to be the best longer term course of action. This scenario helped inform the team what would be given up by delaying or avoiding the divestiture recommendation.

The technique of applying a “Hard Minimum” funding constraint to the Turtle SBU to keep it alive, and create a rule that requires the optimizer to give that fixed level of funding to the investment. A \$1.2MM investment was the amount needed just to continue meeting existing commitments of the business. The results of this scenario are shown in Table 3. This optimization scenario funded the Turtle SBU at the expense of the Rabbit SBU. This caused the team to explore further constraint and focus within the Rabbit SBU behind identified growth segments with further limiting of investments outside very specific areas that were identified in the scenarios above. Additional scenarios were run to assess the best course of action and balance these difficult trade-off decisions. The benefit of the process was that it was clear what the impact would be of not making or deferring the difficult choice to exit a faltering business.

| PROJECT | BASE YEAR REQUEST | Scenario 1 (Base) | Scenario 4 (Turtle Divestiture) |
|-------------|-------------------|-------------------|---------------------------------|
| SBU Lion | \$ 3,500,000.00 | 100% | 100% |
| SBU Tiger | \$ 6,000,000.00 | 68% | 48% |
| SBU Rabbit | \$ 2,700,000.00 | 100% | 100% |
| SBU Bear | \$ 1,000,000.00 | 100% | 100% |
| SBU Turtle | \$ 4,300,000.00 | 0% | 28% |
| SBU Cheetah | \$10,000,000.00 | 85% | 85% |

Table 3: Minimum funding scenario for Turtle SBU

Because the Market Attractiveness dimension includes the Market Growth Rate criterion, and the Business Competitive Strength dimension includes the Market Share Growth criterion, and the team has already collected the inputs necessary to populate and plot the Boston Consulting Group’s portfolio strategy matrix (Figure 10). By including these criteria in the GE-McKinsey Matrix, the BCG analysis becomes essentially an additional sensitivity analysis.

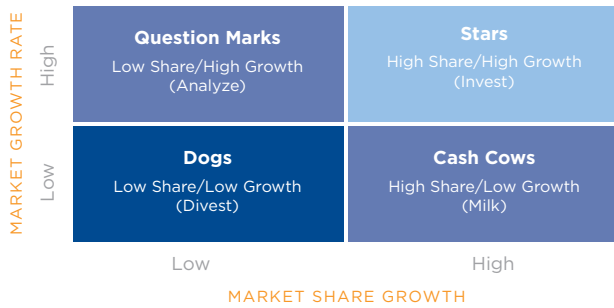
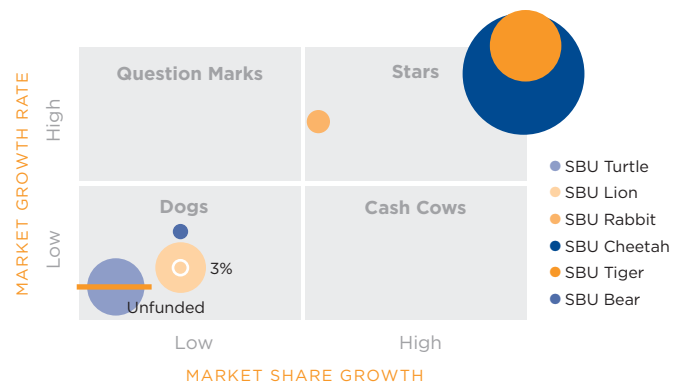


Figure 10: Boston Consulting Group Growth/Share Matrix

This analysis framework was revealing for the team as it indicated that this business is faced with a challenge of having dogs and stars, and is at risk for limited cash generation to support investment in significant growth opportunities (Figure 10). Since it is impractical to con-

sider divesting all the established core businesses that are market share challenged, the optimization along this sensitivity helped identify the need for driving market share and enhanced profitability in some of these businesses. The analysis also highlighted that the Bear SBU is the most attractive candidate. Yet the Bear SBU was also asking for the least investment. The Turtle SBU was unfunded and the Lion SBU was constrained to 3% of the request in the optimization scenario (Table 4). This suggested a need to create an objective to generate and prioritize more new ideas in the Bear SBU to increase the rate of market share growth and move this SBU toward the Cash Cow category.



Growth/Share Matrix optimization

| PROJECT | BASE YEAR REQUEST | Scenario 1 (Base) | Scenario 2 (MA) | Scenario 3 (BSC) | Scenario 4 (Turtle Divestiture) | Scenario 5 (BCG Matrix) |
|-------------|-------------------|-------------------|-----------------|------------------|---------------------------------|-------------------------|
| SBU Lion | \$ 3,500,000.00 | 100% | 42% | 100% | 100% | 3% |
| SBU Tiger | \$ 6,000,000.00 | 68% | 100% | 0% | 48% | 100% |
| SBU Rabbit | \$ 2,700,000.00 | 100% | 100% | 100% | 100% | 100% |
| SBU Bear | \$ 1,000,000.00 | 100% | 100% | 100% | 100% | 100% |
| SBU Turtle | \$ 4,300,000.00 | 0% | 0% | 100% | 28% | 0% |
| SBU Cheetah | \$10,000,000.00 | 85% | 86% | 82% | 85% | 100% |

Table 4: Summary of investment optimization scenarios

Conclusions

We have shown with this analysis that CDM is a means of creating a meaningful and representative set of criteria, which can be weighted to the specific strategic environment when applying an analysis framework like the GE-McKinsey, Market Attractiveness versus Business Competitive Strength matrix to strengthen these analyses.

We have also shown how the resource optimization scenarios using this approach can give greater insights into the high level considerations outlined in the various segments of the strategic matrix to guide the process of probing and establishing actionable insights.

Additionally, using sensitivity analysis helps teams quickly understand the key drivers of priorities and can help to draw out strategic objectives within a given SBU. By highlighting major trade-offs, this approach can prioritize and focus the use of allocated resources to mitigate weaknesses, build strengths, focus efforts, and advance the preparation of future portfolio moves.

Lastly, sensitivity analysis has been shown to create a variety of views into the strategic situation. By flexing to these various views, the different sensitivity analyses and optimizations we can draw from give richer insights to guide and shape specific objectives and courses of action.

Rounding out the Strategic Framework

In our introduction we highlighted two additional elements of the strategic framework in addition to the internal/external environmental assessment and objective setting components. These were the capability assessment, and implementation phases. We will cover these in more detail in a future whitepaper, but want to touch briefly here on their role in the analysis for completeness of the framework.

Three key criteria that have been used for determining core competencies from among a set of organizational capabilities are the following:

- 1) Provides access to a wide variety of markets
- 2) Contributes significantly to the end-product benefits
- 3) Are difficult for competitors to copy

Having established which Business Units will be priorities for the organization, and gaining insights into their internal and external strengths and weaknesses through sensitivity, the organization can then use this knowledge to establish the appropriate weights of the three factors above, and devise and prioritize specific sub-criteria that define success factors in the prioritized business

units. Quantitative or qualitative rating scales can then be attached to the criteria to describe the attributes that characterize these critical skills and capabilities.

Then a list of capabilities can be generated that are required to achieve the desired results in these markets. Once the list is generated it can then be scored against the criteria rating scales to create a rank list of those capabilities that are widely applicable, contribute to end user/product benefits, and are unique differentiators to competitor's abilities. Creating this ranking can help organizations plan organizational improvement efforts to hire skills that strengthen core competencies and leverage or outsource those that lower priority capabilities that are more commoditized or overly specialized for a small market segment.

Lastly, with regard to implementation, we can create criteria specific to the goals and objectives of each business unit, determine their relative priority, and align project choices within the SBU to these directions using the CDM approach. This essentially follows the same process outlined in this paper for determining the business unit priorities, but the analysis is moved down in scale in the organization to the level of Business Units and Projects, Rather than Environment and Business Units. (Figure 11)

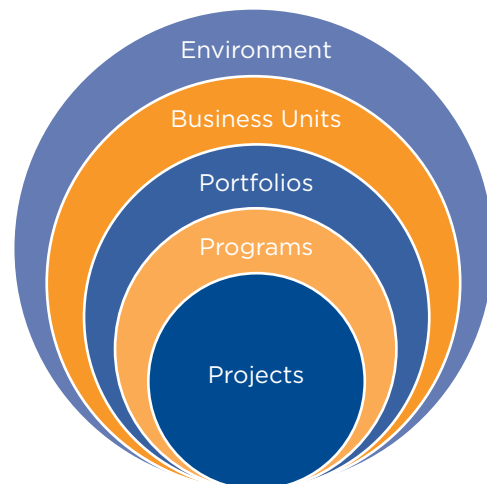


Figure 11: *Scale of strategic assessment*

Many of the concepts and techniques for using CDM to complete the analyses in this portion of the framework are covered in the Decision Lens whitepapers "Open Innovation and Product Portfolio Management", and "Resource Allocation Using the Decision Lens Suite".