StrategyDriven

Business Planning and Execution Series...

Decision-Making

Evaluating Decision Options

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Evaluating Decision Options

Credibility of the organization's mission and values depends largely on management decisions that exemplify them. Maintaining credibility includes strong reinforcement of mission goals and organizational values when decisions are made that affect cost, production, and/or schedule.

Consistency between leadership's decisions and the organization's mission and values is vital in light of today's growing production pressures. Whereas personnel attitudes and actions reflect those of their supervisors, all executives and managers must continuously reinforce their commitment to the organization's mission and values, particularly through their decisions. It is only when personnel perceive management's commitment as unwavering that their day-to-day decisions and activities will align with the organization's overarching objectives.

options and tradeoffs...

Decision-making often involves trade-offs. Risk aversion suggests that all things being equal, decision-makers will select the option having the lowest risk. But because all things are never quite equal, decision-makers concede items they deem to be of lesser value to items they believe hold greater value with risk being one of the commodities considered.

Decisions involve a choice between two or more complex options. This complexity is a result of the multiple characteristics that define each option and will impact the probability of achieving a desired outcome. In making a selection, the decision-maker is attempting to choose the mix of characteristics that will most optimally achieve the desired result.

Step 1: Evaluation of Value-Adding Characteristics

Performing this step requires that the decision-maker or decision-making team first identify the critical value-adding option characteristics necessary for achieving a desired outcome. These characteristics can be categorized as:

Required: critical characteristic with a required minimum satisfaction point threshold below which an unacceptable outcome will result. Note that all decision options possess at least four required characteristics: risk, cost, ethic, and total value.

Important: non-critical characteristics that add to the option's overall value

Nice-to-Have: non-critical characteristics contributing only nominal value

The principle of diminishing marginal returns helps illustrate the process by which each option characteristic is evaluated. In the decision case, as the intensity of a characteristic is increased: 1) the level of need satisfaction will increase at an increasing rate, then 2) at the point of need fulfillment will increase at a decreasing rate, until 3) at the point of need saturation any addition to the characteristic's intensity is excessive and total value contribution declines. (See Figure 1 next page)

In using this model, it is important for a decision-maker to identify the need satisfaction threshold for each option characteristic. Once this is done, the characteristics of each option are evaluated for their value contribution in preparation for value aggregation and option selection.

Once a decision's requirements, important value-adding, and nice-to-have characteristics are defined and various options possessing these qualities evaluated, the total value of each alternative must be assessed in order to enable option selection that will most effectively achieve the desired results.

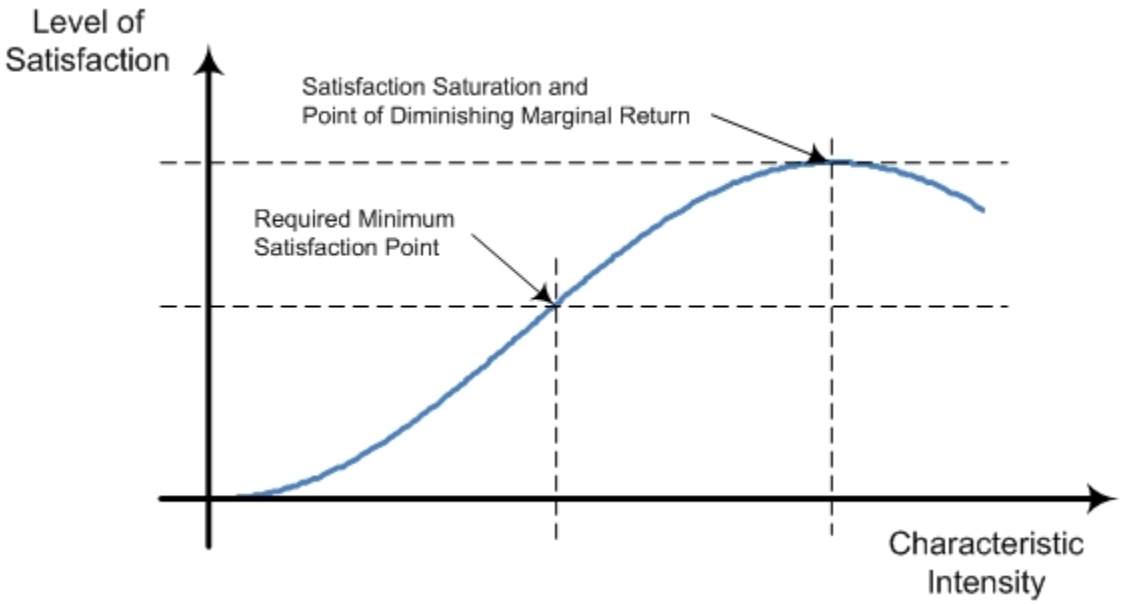

Figure 1: *Decision Characteristic Evaluation Curve*

Step 2: Option Value Aggregation

Aggregating each option's characteristic values is the next step in identifying the most optimal opportunity or problem solution. Because not all of an option's characteristics are required or even important, the characteristics must be prioritized in order to be aggregated. Each characteristic should be assigned to one of the following three priority categories from Step 1:

Required: critical characteristic with a required minimum satisfaction point threshold below which an unacceptable outcome will result. Figure 2 shows a condition point below which an unacceptable outcome would be realized. All characteristics associated with this point should be designated as required and have a corresponding Required Minimum Satisfaction Point above which the unacceptable outcome will be avoided. (See Figure 1 above) Note that all decision options possess at least four required characteristics: risk, cost, ethic, and total value.

Important: non-critical characteristics that add to the option's overall value. Typically, the aggregate of value added by an option's several important characteristics must exceed a minimum investment return threshold for the option to be considered.

Nice-to-Have: non-critical characteristics contributing only nominal value. The benefit of nice-to-have characteristics is that they help decision-makers choose between options of otherwise similar value.

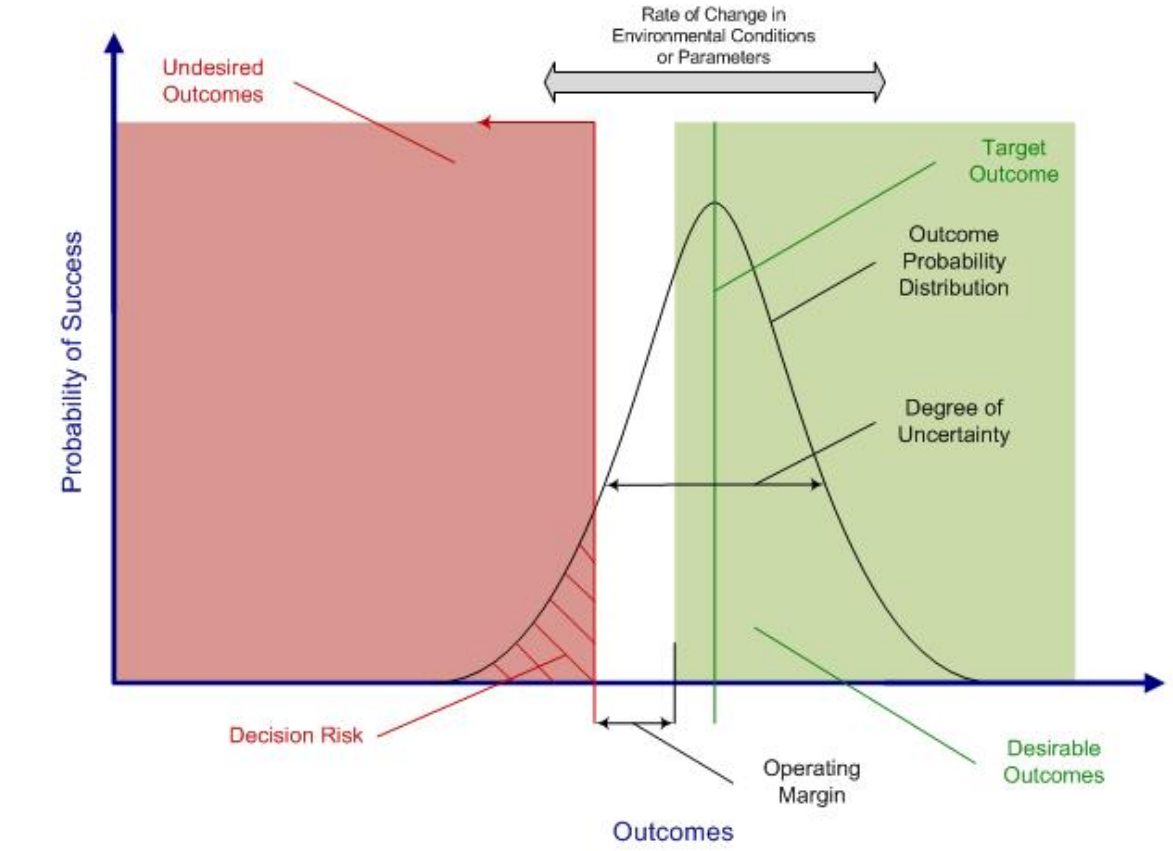

Figure 2: *Decision-Making Base Model - Hurdle Decisions*

For decisions where a single solution is to be pursued, eliminate all options not meeting the needed Required Minimum Satisfaction Point threshold. For all other decisions, a portfolio of options is used to satisfy the necessary minimum requirements and so no options are eliminated at this time.

Important option characteristics are rank ordered according to the value contribution offered. This ranking suggests a weighting to be given some characteristics over others. Recognize that depending on the characteristic, value is either calculated or perceived. Therefore, the preference scheme tends to be both objective and subjective; varying based on the individual or team making the decision.

Combining the weighted value of the required and important characteristics provides the overall value of the option. Nice-to-Have characteristics meeting the Required Minimum Satisfaction Point threshold are listed with their respective options for added consideration in cases where competing options have similar value. It is at this point that the decision-maker or team will select the option(s) to pursue.

Alternative selection is the point in the decision-making process where art meets science and academic knowledge meets hands on experience. There is often no one perfect solution or one best solution. Rather, there will exist several alternatives within the acceptable value range from which the decision-maker will ultimately have to choose one option.

Additional Insight...

Complex opportunities and problems often demand multi-facetted solutions. Processing the multi-dimensional options in order to arrive at a final solution will challenge even the most experienced decision-maker. Documenting each option and its associated required, important, and nice-to-have characteristic values aids in the evaluation and selection process as well as providing a record from which to communicate the decision, evaluate its implementation progress, and assess its ultimate outcomes for lessons learned.

Step 3: Alternative Selection

As described earlier, there will always exist a total value threshold below which an organization will not pursue an available course of action. Having identified the total value of each option in step two, the decision-maker or decision-making team can now eliminate those options not meeting the defined minimum value threshold.

The Obvious Option Selection

Under fortunate circumstances, one option or portfolio of options will stand out as having significantly more value than the other available alternatives. This option is immediately recognized and selected by the assigned decision-maker. Care should be taken here to ensure the appropriateness of the value of assumptions made regarding this option so that a decision is not made reflective of what is desired versus what is most optimal.

The Competitive Option Selection

In other instances, several options or option portfolios will present decision-makers with similar value offerings; making alternative selection more difficult. Nice to have characteristics can often be used in these cases to help decide between the various acceptable alternatives. If the decision alternative is still not apparent, consider the following subjective qualities in order to facilitate the final option or portfolio selection:

- degree of alignment with the organization's core values
- potential impact on the organization's culture
- precedent sent for future decisions, including decisions made at lower levels within the organization

- unspoken messages that the decision will send to employees, customers, shareholders, and other key stakeholders
- how the decision would read on the front page of a large syndicated newspaper or headline on the evening news

The Lesser of Two Evils Selection

Decision-making is seldom easy. When one option offers superior benefits above the satisfaction threshold, including a margin for error, the choice is much easier. In some instances, however, the decision between options will be made not because any alternative has met the satisfaction threshold of the decision-maker but rather as the selection of the option offering the highest value potential while still not meeting the minimum satisfaction threshold or the *Lesser of Two Evils*. When a *Lesser of Two Evils* decision must be made, the decision-maker should follow the guidelines specified in The Obvious Option Selection and The Competitive Option Selection discussions above.

Additional Insight...

It is important to understand the option evaluation and selection process in order to understand why decisions are made particularly in cases when the option selection reasoning is not obvious. Here, hidden drivers often comprise at least some undocumented or unspoken important option characteristics. A more detailed discussion regarding hidden drivers can be found in the StrategyDriven articles:

1. **Strategic Analysis Best Practice 3 - Identify the Hidden Drivers**
2. **Strategic Analysis Best Practice 3 - Identify the Hidden Drivers (Continued)**

Additionally, the risk assumed with not communicating a decision or the selection reasoning to the workforce is significant. People tend to fill information avoids with their own assumptions based on personal knowledge, experience, and beliefs. These assumptions may or may not be accurate and at times will result in undesired employee action.

Summary

Decision-making is a complex process that when done well enhances both strategic planning and tactical business execution. It involves consideration of numerous factors including risk, finance, and culture. Finding the optimal solution often involves a challenging process of evaluation and give-and-take; sometimes resulting in the implementation of a *Lesser of Two Evils* option.

About the Author

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Nathan A. Ives is a highly successful manager with over sixteen years of energy industry and consulting experience. As Manager, Strategy & Operations at Deloitte Consulting LLP, he serves as a trusted advisor to executives and senior managers at Fortune 500, government, and large regional utilities; helping them define organizational needs and develop and manage the complex, mission critical projects needed to improve operational effectiveness and lower costs. In this role, he leads teams of experienced utility professionals in the design and implementation of integrated fleet asset management processes including strategic asset and resource planning, online and outage work management, engineering change and configuration management, document and records management, and corrective action programs.

Prior to joining Deloitte, Mr. Ives held several influential nuclear industry positions at the Institute of Nuclear Power Operations. During his tenure, he led the nuclear industry's effort to redefine performance standards in the areas of organizational alignment, managerial decision-making, plant operations, and risk management; authoring or significantly contributing to several publications against which nuclear power plant performance is evaluated including:

- *Performance Objectives and Criteria*, INPO, 2005 - Publication documenting the standards for corporate and station performance in the operation and maintenance of nuclear electric generating plants. Principle author of the operational risk management, risk informed managerial decision-making, organizational alignment, and operator performance objectives.
- *Principles for Effective Operational Decision-Making*, INPO, 2001 - Contributing author on an industry-wide team that developed a principles-based document on risk informed managerial decision-making; published in six languages and serving as the performance model at nuclear power plants worldwide.
- *Guidelines for the Conduct of Operations at Nuclear Power Stations*, INPO, 2001 - Document establishing the operational performance standards, based on industry leading practices, for nuclear electric generating stations. Principle author of the Leadership and Accountability, Safety Culture portion of this document.
- *Operational Safety and Decision-Making in Changing Times*, INPO, 2000 - Author of this article highlighting the impact of executive and managerial actions, behaviors, and decisions on the safe, reliable operation of nuclear electric generating stations.

Later, he managed the development and execution monitoring of Institute's long-range and annual business plans, $87 million annual budget, and personnel resource and project management programs. Mr. Ives also served as that firm's Diversity Council Chairperson, leading the organization's efforts to become more diverse and inclusive of employees of all backgrounds.

Mr. Ives attended the United States Naval Academy in Annapolis, Maryland, earning a bachelor of science degree in physics. He received a master of business administration degree from Kennesaw State University and was elected to membership in the Beta Gamma Sigma and Phi Kappa Phi honor societies.

In addition to degree conferring programs, Mr. Ives has received several certifications from respected national and international organizations including:

- Diversity Management Certificate from the University of Houston's International Institute of Diversity & Cross-Cultural Management Business School (2007 - present)
- Project Management Professional (PMP) certification from the Project Management Institute (2005 - present)
- Instructor and Facilitator Certifications from the National Academy for Nuclear Training (2003 - present)
- Certified Management Consultant (CMC) certification from the Institute of Management Consultants (2004 - 2007)

Mr. Ives served on the Nuclear Energy Institute's New Nuclear Plant Executive Taskforce and the Graduate Student Advisory Board at Kennesaw State University's Coles College of Business. He is a member of the Project Management Institute and the American Management Association.

Mr. Ives received national recognition for business planning including the AT&T Best Use of the Internet award in 2003.

questions...

For questions regarding this topic, please contact Mr. Ives at:

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Got Feedback?

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