The Care and Framing of
Strategic Innovation Challenges

Arthur B. VanGundy, Ph.D. ("Andy")
avangundy@cox.net
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Ideas in Search of Problems

Are ideas a dime a dozen as the expression says? Probably not. That's too easy and somewhat of a cop out. It is relatively easy to get ideas, but probably more difficult to get "good" ideas—those with the greatest probability of solving problems.

However, the very best ideas to the most poorly-defined problem might as well not even exist. Anyone can have an exciting brainstorming session with hundreds of ideas. Frequently neglected, however, is devoting as much time and attention to clearly defining a challenge as is given to idea generation. As famed photographer Ansel Adams, said, "There is nothing worse than a sharp image of a fuzzy concept."

Most of us tend to be more solution-minded than problem-minded. Although lip service may be given about the need to "define the problem," relatively few people do it well. This paper will address how to focus on framing challenges, especially as they might apply to strategic innovation.

Horse and Cart Innovation

The description above represents a "horse before the cart" approach to idea generation. Some organizations also may use such an approach to innovation initiatives. For instance, corporate managers often frame challenges based mostly on strategic outcome objectives (e.g., profitability, market share) along with some secondary goals such as generating new products and enhancing marketing and branding. Of course, many other objectives also need to be considered from a strategic perspective.

The route to achieving any of these objectives is NOT just generating ideas. Instead, tactical maps first must be constructed to lay out the strategic terrain for all objectives. The old saying still holds true: "If you don't know where you want to go, any road will take you there." It also is true that even if you think you know where you want to go (an often costly, untested assumption), you must create a map of goals to achieve along the way.

These maps are based on the premise that the objectives are stated clearly, known, and understood—three, often erroneous assumptions. As Douglas Adams aptly put it, "The hardest assumption to challenge is the one you don't even know you're making."

Most organizations do a good job of collecting research on how and where to innovate. However, Doblin, Inc. estimates that only about 4.5% of innovation initiatives succeed! (*Business Week*, August 1, 2005, p. 72). One reason might be due to poorly framed innovation challenges. Unfortunately, there still are few resources on how to frame challenges for ideation.

Framing Challenges

Even if you are not concerned with strategic innovation, the need still exists to frame challenges for productive idea generation. Innovation challenges at any organizational level should be relatively open-ended and target an explicit objective such as increasing product sales.

A common way to state challenges is to start with the phrase, "How might we...?" This provides a prompt for open-ended idea generation. For instance, consider an objective of generating ideas for new floor-care products. It first is necessary to "de-construct" the challenge into its parts, simply by asking basic questions:

- "What is involved in cleaning floors?"
- "What do people dislike about it?"
- "How often should floors be cleaned?"
- "In what ways are current floor-care products ineffective?"

The answers to these and similar questions then can be used as triggers for specific challenge statements. For instance, answers to the above questions might lead to challenges such as:

"How might we:

- make it easier to dispense floor cleaning products?"
- reduce the amount of effort involved in scrubbing a floor?"
- make floor cleaning more convenient?"
- reduce the frequency with which floors need to be cleaned?"
- Increase the sanitizing effect of floor cleaning?"

Strategic Framing

When doing strategic framing, the same basic principles described in the previous section still apply. Organizations are guided by strategic visions and planning processes. When they decide to innovate, they create strategic innovation frames to guide the innovation process. A primary obstacle is how to state innovation challenges and link together objectives so they will produce strategic results.

Many innovation initiatives may fail because all of the secondary objectives were not detailed and linked together appropriately. To illustrate the potential relationships among such objectives, consider aerospace giant Boeing Co.'s challenges described in *Business Week* (July 18, 2005, p. 44):

- Restoring the company's tarnished image
- Increasing revenue
- Squeezing more profit out of existing businesses
- Improving a toxic corporate culture
- Reducing bureaucracy
- Encouraging innovation
- Increasing financial growth

Each of these could function as corporate objectives. The question is, however: "How should these objectives be framed and linked together in the most productive way?" Consider the conceptual map in Figure 1 below.

The relationships in the figure are hypothetical, but conceivably could apply to the Boeing case. Working from the top down, profitability is the primary objective. Increased revenue and financial growth are secondary (i.e., subordinate) financial objectives. Thus, the direct route to profitability is increased revenue and financial growth. At the third level, re-branding the corporate image might be secondary to the previous objectives, but superior to reducing bureaucracy, encouraging innovation, and improving the culture. For instance, encouraging innovation would help support rebranding.

These relationships illustrate that strategies are complex, interrelated decisions (Quinn, 1980). Most objectives are nested within hierarchies of other, related objectives. And, multiple goals typically must be achieved to accomplish one primary goal (Richards, 1986).

As shown in Figure 1, there may be clusters of objectives linked together by commonalities. These clusters can exist at the same or different levels. And, they might be linked with other clusters within a hierarchical level or between levels. Moreover, not all objectives in a cluster may be linked across levels. For instance, Figure 1 shows encouraging innovation at the fourth level linked with financial growth rate at the second level. How these

objectives are linked may depend on a variety of factors, especially the competitive environment within different industries (Day, DeSarbo, and Oliva, 1987).
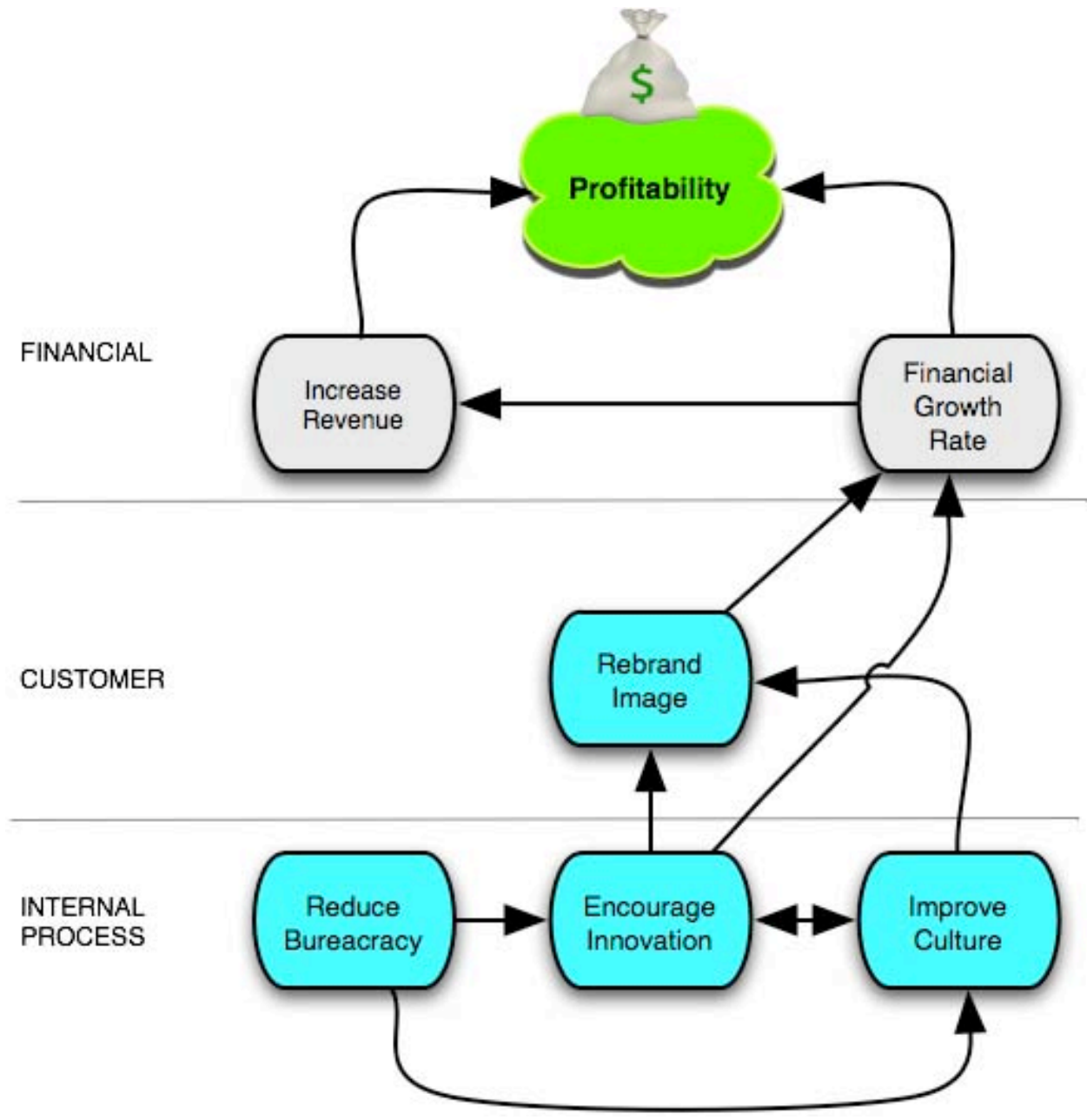

Figure 1 Hypothetical Framework of Boeing Strategic Objectives

Strategy Maps

Visual diagrams of strategic goals and objectives have been around for a while, especially from the perspective of cognitive mapping. For instance, most cognitive strategy maps draw on Kelly's (1955) personal construct theory. It postulates that we understand our environments by organizing concepts that are relevant to a specific environment. Eden, Jones, and Sims (1979) used this theory as the starting point for generating causation decision maps. In their seminal research, Hodgkinson and Johnson (1987) interviewed senior managers in the grocery story industry and observed that they tended to create hierarchies of their competitive environments based on degrees of abstraction. (For an excellent, comprehensive review of strategy mapping, see Huff, 1990.)

To some extent, Figure 1 parallels the more encompassing and elaborated strategy mapping process used with the balanced scorecard (BSC) approach of Kaplan and Norton (2001, 2004). They maintain that traditional strategic planning is based too much on historical financial data and not enough on the intangibles present in corporations. To increase performance, organizations first should create a strategy map consisting of four, value-creating processes or perspectives: (1) Financial, (2) Customer, (3) Internal Processes, and (4) Learning/Growth.

These maps then are used to translate an organization's vision and mission statements into effective performance. Basic strategy maps can involve 30 or more components, all of which must be aligned with each other and monitored over time.

The hypothetical Boeing objectives shown in Figure 1 correspond roughly with the top three BSC perspectives. Thus, "Profitability," "Increase Revenue," and "Financial Growth" represent financial perspectives involving long-term shareholder value. (These also might be labeled as "high-level, super-ordinate," objectives.) Next is the Customer perspective of rebranding the corporate image. This would be subordinate to the financial perspective because it could help increase the financial growth rate. Finally, "Reduce Bureaucracy," "Encourage Innovation," and "Improve Culture" all reside at the Internal Process perspective. Although these three objectives obviously are quite ambitious, they still are attainable (or, at the least, worthy of attention).

Learning and Growth, the lowest level BSC perspective, is not represented in this conceptualization because it is hypothetical and limited just to the topics in the article. Other objectives also are not represented that should be in a comprehensive strategy, although that is not the goal of this paper.
This paper is not intended to represent all facets of strategic planning. Instead, its focus is more on clusters of challenges that organizations

perceive as salient at a specific point in time. Most of the focus here is on the Internal Processes perspective. That is, framing that is need-driven at a particular time and not necessarily framed in the context of more encompassing variables. Moreover, this paper is oriented toward how to state (or frame) individual challenges and then link them together as frameworks to guide portions of a strategic innovation initiative.

As appealing as the BSC approach may be, there might be situations in which it is not as useful. For instance, it may be deemed too expensive for some organizations, too complicated, or just plain overwhelming (Ashkenas, 2004). It also may conflict with idiosyncratic organizational barriers such as turf protection, competition for scarce resources, and resistance to broad-scale change.

Weaknesses, in addition to the above, include assumptions about rationality (shared by most such behavioral/cognitive approaches) and the lack of "integration opportunities" within the internal processes perspective—e.g., links between product development and operations management and customer management (Wood, 2005). Along these lines, Marr, Schiuma and Neely (2005) argue convincingly for adoption of "value creation maps" that incorporate interdependencies between both tangible and intangible assets. In spite of any shortcomings, BSC and strategy maps remain useful tools for strategic planning, system-wide change, and performance management enhancement.

Evaluating Innovation Challenges

All of the challenge statements used so far are based on the assumption that they are well-framed. In "real life," however, that often is not the case. Well-framed challenges must satisfy various criteria before even considering how to link them together or determine their priority.

Evaluation criteria typically can be classified as general or specific. General criteria apply to most decisions and typically involve resources such as time, people, and money. Specific criteria pertain directly to the nature of the alternatives available. Based on research and experience (especially with the Global Innovation Challenge—http://www.innovationchallenge.com), I believe the seven most important criteria required to evaluate and select innovation challenges are:

1. Begins with the phrase, "How might we…?"
2. Singularity of objectives?
3. Absence of evaluative criteria?
4. Absence of solutions?
5. Appropriate level of abstraction?
6. Appropriate use of positioning elements?

7. Clear and unambiguous?

1. *Begin with the phrase, "How might we...?"* Posing challenges as open-ended questions helps insure they can be used to generate specific ideas for specific challenges. Otherwise, the challenge might be better directed in another direction.

2. *Singularity of objectives.* This means that there should be a focus on only one objective in each challenge. Consider this example from a major produce distributor: "How might we differentiate ourselves from our competition and radically increase consumption of our produce?" Better wording might be:

   • "How might we differentiate ourselves from our competition?"
   • "How might we increase consumption of our produce?"

   The priority then might be on differentiation since that might help increase consumption.

3. *Absence of evaluative criteria.* Perhaps the most common mistake in framing innovation challenges is including evaluation criteria. The human mind has trouble generating ideas while simultaneously trying to determine if they would satisfy all possible criteria. A focus on judgment during ideation also can limit creativity. Even ideas viewed initially as "bad ideas" might be real winners when modified, combined, or used simply to trigger new ideas. Use criteria later, after you have generated all possible ideas.

4. *An absence of solutions.* It may appear paradoxical, but there can be a fine line between challenges and solutions. One reason is that challenge objectives and solutions often are confused by including them in a single challenge statement. For example, consider this from a restaurant chain: "How might we increase the number of diners in our restaurants by creating a more healthy menu?" The primary objective seems to be to increase the number of diners. "Creating a healthier menu" is one potential solution for achieving that objective. The challenge might be re-framed as, "How might we make our menu healthier?" So, the solution becomes a challenge based on the assumption that a healthier menu will increase the number of customers.

5. *Appropriate level of abstraction.* This can be a difficult criterion to apply. In general, the broader and more abstract a challenge, the better. Broad challenges encompass a greater number and diversity of potential secondary challenges. For instance, in the example used regarding an absence of solutions (Criterion #4), a healthy menu could be used as a secondary challenge to increase the number of customers.

6. *Appropriate use of positioning elements.* Positioning elements are criteria that help frame the scope of the primary challenge. They should not be emphasized as the primary focus, be overly specific, or be included as part of the challenge statement. Instead, positioning criteria should be more general and listed below the challenge. For instance, in the restaurant example, it could be stated (after the challenge) that ideas for increasing restaurant customers should, in some way, emphasize health. Or, positioning criteria can be used to indicate what ideas are not wanted.

7. *Clear and unambiguous.* If the previous six criteria have been addressed adequately, the challenge should be relatively clear and unambiguous. This criterion serves as a final check prior to ideation. Review the challenge to be sure that all of the previous criteria have been considered and that there is a clean, simple, and straight-forward challenge capable of generating ideas.

Relatively Simple Challenge Framing

To illustrate how to apply these criteria, here is an actual, relatively simple, presented challenge from a consumer products company:

> *"How can the Big Bucks Company develop brand awareness for its new XYZ brand of products with little marketing or PR funds?"*

A quick scan of the seven criteria discussed above suggests that this challenge contains two criteria ("little marketing or PR funds") that should be removed and used as positioning elements or reserved for later use as evaluation criteria. After presenting this option to the client, they decided to frame the challenge as:

> *"How might Big Bucks Company improve the brand awareness of its XYZ line of consumer products?*
>
> Solutions ideally would not involve significant marketing or PR funds."

Moderately Complex Challenge Framing

Consider this moderately complex challenge from an international hotel and resort chain, with the pseudonym, "BedsRUs:"

> *"With a diverse and creative workforce, what strategies can BedsRUs implement to deliver a new level of service to guests? We want to provide ideas that can be implemented that would also make the Beds R Us brand more distinctive and thus create a closer and more emotional connection with travelers."*

Rather than using this presented challenge as is, let's see how we might de-construct it for more effective ideation. The first task is to create a single objective using the "How might we...?" format. In this case, "a new level" is ambiguous, so the challenge might be reframed as: "How might we improve customer service?"

"Ability to implement," mentioned in the presented challenge, might be reserved as a criterion. Brand distinctiveness could be used either as a criterion or as another challenge objective. And "a closer and more emotional connection with travelers" might be posed as the following challenge: "How might BedsRUs create a more emotional connection with travelers?" (This was the challenge the client selected.) One potential concept map for BedsRUs is shown below in Figure 2.
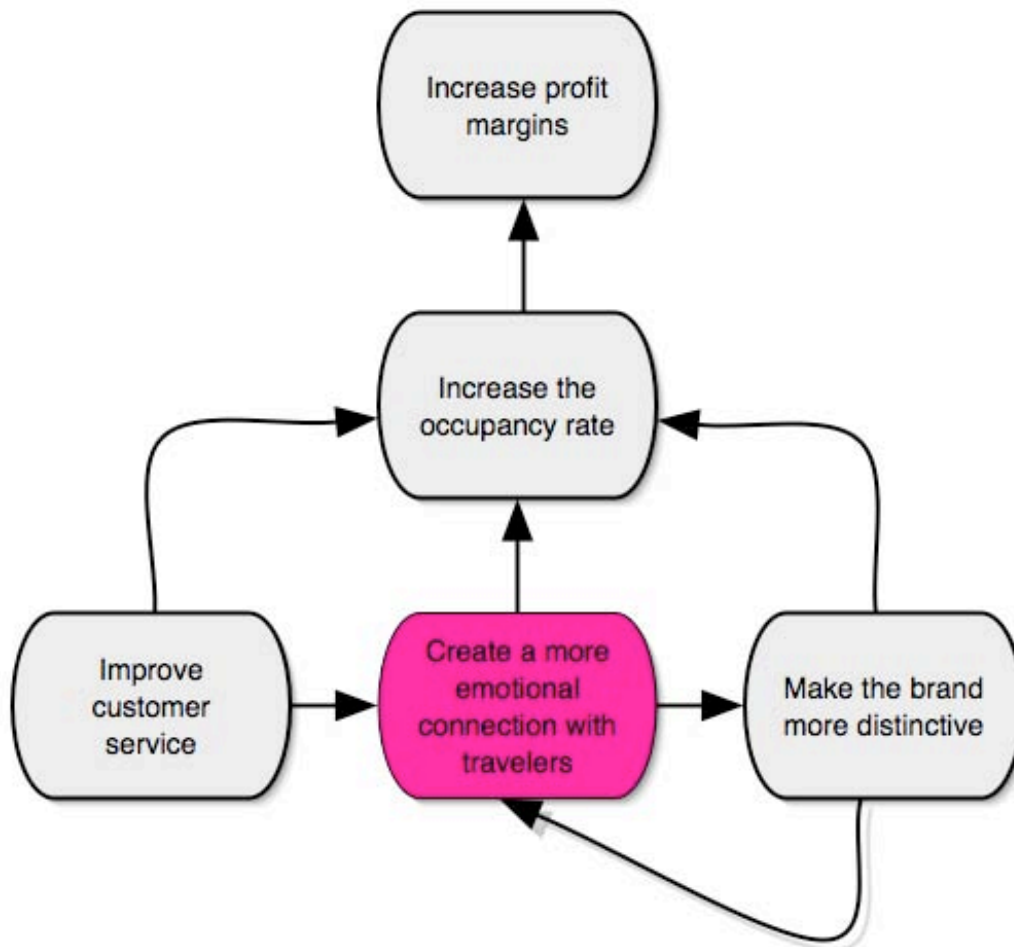

Figure 2 Concept Map of Strategic Objectives for "BedsRUs"

This diagram incorporates all of the elements of the presented challenge. As displayed, the goal of improving customer service directly affects creating a

more emotional connection with travelers. The emotional connection is critical to making the brand more distinctive which, in turn, directly impacts the occupancy rate. Customer service also affects the occupancy rate directly as do an emotional connection and making the brand more distinctive.

Complex Challenge Framing

Some presented challenges are quite complex, reflecting in-depth research and input from a variety of stakeholders. For instance, consider this presented challenge from an international mailing service organization ("MailIsUs"):

"The objective for this challenge is to develop a new product/service/ process or an enhancement to an existing product/service process that will result in increased revenue for MailIsUs. This can be accomplished by:

- *developing a new product/service/process for current customers*
- *enhancing an existing product/service/process for current customers*
- *developing a new product/service/process for new customers*
- *enhancing an existing product/service/process for new customers*
- *and/or developing new marketing/partnership opportunities."*

Whew! That's a lot to take in and especially way too much for any productive ideation in one bite. This challenge definitely needs to be de-constructed and sorted out.

The primary objective seems to be increasing revenue (the core challenge, although a case might be better made for profitability). The remaining information only serves to increase complexity by suggesting a focus on all the possible combinations present (e.g., develop a new product for new customers, enhance an existing product for new customers, or develop a new service for existing customers, ad naseum).

Evaluating these possibilities against the decision criteria suggests that the only criteria satisfied within these challenges are an absence of evaluation criteria and solutions. There also are too many variables to process while simultaneously generating ideas. More importantly, specific objectives other than increasing revenue or profitability need to be identified.

To identify these objectives, I reviewed multiple documents from the client involving strategic issues such as the competition, markets, strengths and weaknesses, and trends. Based on this research, I then "harvested" 21 potential challenges that key stakeholders narrowed down to nine. (The

process for doing this is known as a "Challenge Bank" or "C-Bank" and is described later in Figure 6.)

The task then was to decide which challenges would be secondary to others. That is, which should be accomplished first to achieve the primary objective of increasing revenue? It also was important to decide how the different objectives might be interdependent—i.e., linked in ways so that achieving one will help achieve another. Potential relationships for this client's challenges are depicted in the concept map shown in Figure 3.

For instance, Figure 3 indicates that two primary challenges secondary to increasing revenue are increasing access and awareness of their products and services. These challenges, in turn, are likely to be impacted by the challenges indicated in the figure. For example, increasing awareness should increase delivery volume that, in turn, should increase revenue directly. And, facilitating online commerce should increase access so that revenue increases.

In the end, the client chose to focus on both increasing access and awareness. Of course, this does not mean that the other challenges would be abandoned. All of them could be used to facilitate these dual objectives that, in turn, should increase revenue (with the implicit assumption that profitability also would result).
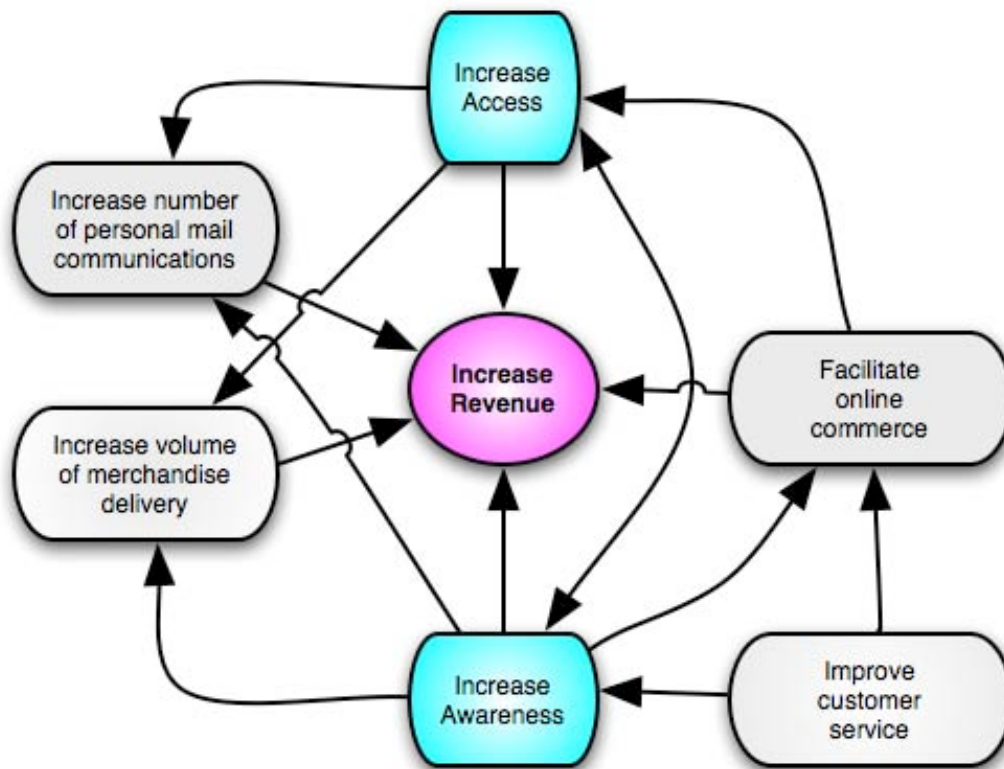

Figure 3 Conceptual Map for "MailIsUs"

Strategic Question Banks

Willy Sutton, a notorious bank robber in the 1930s, supposedly was asked once why he robs banks. His answer was simple and to the point: "Because that's where the money is!" Strategic question banks ("Q-Banks") are used because asking questions is where the answers are! Simple as that.

Question banks are a logical choice to use during strategic framing because lists of questions and responses contain the answers needed to focus on overcoming organizational challenges. Innovative ideas then can be taken from the responses.

At the outset of strategic planning, organizations are in different perceptual "locations." That is, organizational stakeholders may differ in their perceptions regarding the organization's strategic positioning. A Q-Bank is a broad process that can help an organization take a hard look at itself and increase understanding about what it does and does not do, as well as what it should do. The outcome will be a sense of potential strategic directions to pursue.

Q-Banks are useful if an organization is trying to find its direction, wants to affirm its current strategic plan, lacks consensus about strategy among key stakeholders, or wants to chart a new course. A Q-Bank is not, however, a substitute for conventional strategic planning. Many organizations already have collected the information needed, but still could benefit by involving key stakeholders or in just updating old information. Planning is a process, not an end result.

A typical Q-bank is implemented by sending out a list of generic questions to key stakeholders—usually around 10 – 30 people. This can be done via email and involve one or two rounds. An abbreviated list of sample questions follows (VanGundy, 2000):

Our Company

> What does our company do?
> What do we want to do in the future?
> Where are we positioned in the minds of our customers?

Our Brand

> What values are associated with our brands?
> How consistently do we transmit these values?
> What is our brand awareness?

Our Customers

>   Who are our customers?
>   Who would we like to have as customers?

Our Markets

>   What markets are we in?
>   What markets would we like to penetrate?

Our Products

>   What products do we have that are successful? Do we know why?
>   What products do we have that are not successful? Do we know why?

Our Competitive Set

>   What do we like about our competition?
>   What are they doing right?
>   What are they doing that's not working?

Q-Bank responses eventually are used as the basis for generating potential innovation challenge questions. The basic Q-Bank process is shown in Figure 4 below. As shown in the figure, a preliminary list of questions is generated and sent to stakeholders for their feedback and any new questions they might want to add. The data are analyzed and summarized by organizing the responses into affinity groups involving such topics as: customer service, marketing, branding, or sales. These data are sent to the stakeholders again or are used to generate a list of final challenge questions for client approval. The final list typically is narrowed down to one or more challenges to use for ideation.

To practice using a Q-Bank, you can conduct your own, even if it involves a relatively small number of people. It also doesn't have to be system-wide; instead you could practice with six or seven people from one department. You also could use the questions listed previously and add some of your own.

Here are some sample responses from a large financial services organization to Q-Bank questions such as those described above (the responses have been modified and presented below in italics):

1. Where are we positioned in the minds of our customers? *Not really at all. Many of our customers do not deal directly with us.*

2. What is our brand awareness? *We have no brand awareness.*

3. When don't our customers like us? *Industry-traditional complaints such as high fees.*

4. What is the competition doing that's not working? *Conducting price wars.*

5. What values are associated with our brands? *Customer service is excellent and our customers believe they receive good value from our products.*

6. How do our customers benefit from our products or services? *A primary benefit is 24-hour access to our resources and services.*
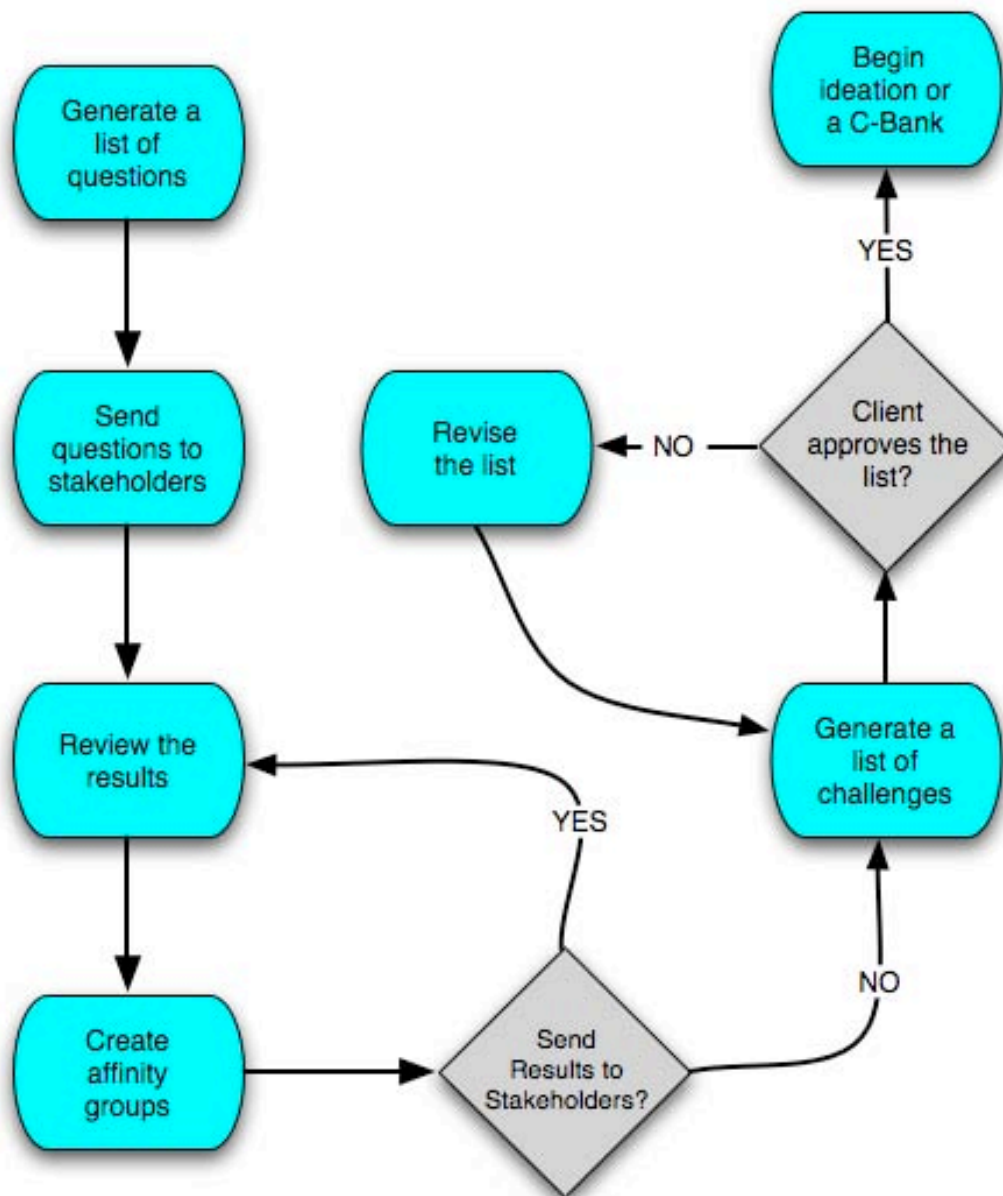

Figure 4 The Basic Q-Bank Process

The answers to all of the questions can be reviewed and then converted into challenge statements. A Challenge Bank ("C-Bank") next could be conducted using these challenges as the initial input. For instance, the responses above might suggest such questions as:

How might we:

- increase our brand awareness? (#1 & #2)
- increase the transparency of our fee structure? (#3)
- reduce our fees? (#3)
- avoid entering price wars with our competition? (#4)
- improve our customer service? (#5)
- increase access to our services? (#6)

If more clarity is needed, a concept map—such as the one in Figure 5 below—also could be developed depicting how these objectives might be interrelated. Otherwise, such maps could be created after finishing a C-Bank.
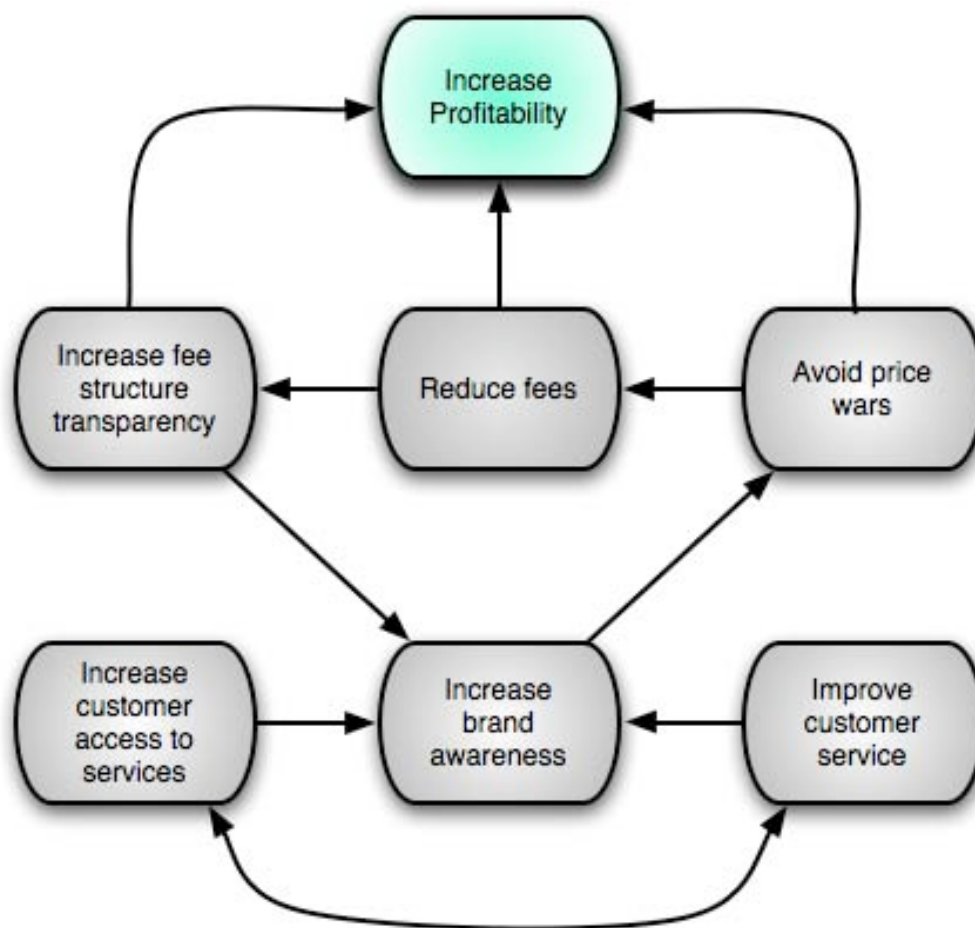
Figure 5 Conceptual Map for Financial Services Company

STRATEGIC CHALLENGE BANKS ("C-BANKS")

In contrast to Q-Banks, Challenge Banks ("C-Banks") assume that an organization already has the information gleaned from Q-Banks (or their equivalent) and can proceed directly to generating a list of potential strategic challenges. A typical C-Bank process flow chart is shown below in Figure 6. As shown, the process for C-Banks is essentially the same as for Q-Banks. The difference is that Q-Banks *may* end with a short list of challenges (Q-Banks also could end with just with a list of responses to the general questions.) C-Banks, in contrast are designed to end with a comprehensive list of innovation challenges.
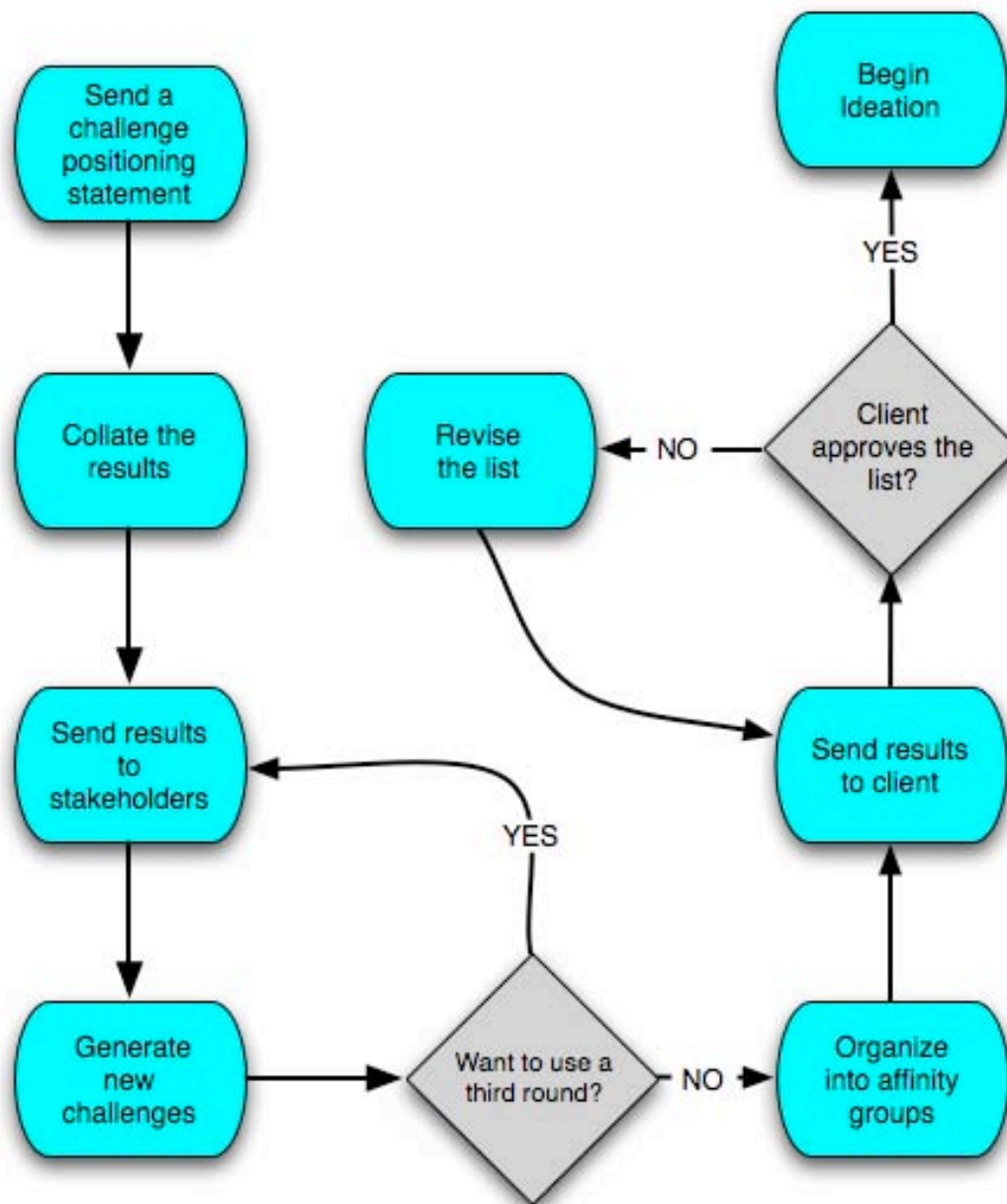

Figure 6 The Basic C-Bank Process

C-Banks can begin in one of two ways. First, a positioning statement is presented to a group of stakeholders who are asked to use it to generate challenge statements and return them to a coordinator (Round #1). For instance, a manager might request challenges based on the following script:

> *"As you know, we currently face competitive threats from emerging markets such as Brazil, Russia, India, and China. As we transition from a technology product to a service-based business model, what challenges should we address? For your responses, please put them in the form of, 'How might we…?' For example, 'How might we improve human resources functions in emergent countries?' Please email your responses to me no later than the end of the week. I then will collate everything and send you the results to stimulate additional challenges. Thanks for your help with this vital project."*

Figure 6 shows this version of a C-Bank. Once the stakeholders have a chance to generate additional challenges after inspecting the previous ones (Round #2), you might return the responses for a third round. The option also exists, of course, to conduct only one round without returning the results. Or, you could do only two rounds, organize those results into affinity groups, and send them to the client for approval and eventual ideation.

The second way to do a C-Bank is to use the results from a Q-Bank and generate a preliminary list of innovation challenges. You then could do one or more rounds, each time organizing the results into affinity groups. Once the client approves the final challenge(s) ideation can begin.

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