

What Is Outcome-driven Innovation?

by Anthony W. Ulwick

June 23, 2007



With new theory, frameworks, and practices, innovation has been transformed from an unstructured, hit-or-miss process into a predictable, rules-based discipline.

Profound yet practical, the outcome-driven innovation methodology shatters outdated thinking and is setting a new global standard for innovation.

*Anthony W. Ulwick is the founder and CEO of Strategyn, an innovation management consultancy firm based in Aspen, Colorado. He is the author of *What Customers Want* (McGraw-Hill, 2005) and “Turn Customer Input into Innovation” (Harvard Business Review, January 2002). He can be contacted at ulwick@strategyn.com.*

Innovation is the key to company growth, yet as a business process, it is poorly understood, its execution is highly inefficient, and its output is unpredictable. Why? Dozens of plausible explanations have been published over the years by practitioners and academics alike, but when it comes right down to it, the innovation process and the development and marketing activities that support it are broken for two very fundamental reasons – there is no universal agreement on precisely what the inputs into the innovation process should be or how they should be used to make marketing or research and development decisions. It's that simple.

Let's take a step back. Innovation is the process of devising solutions that address unmet customer needs. To excel at this process, a company must be able to identify *all* the customer's needs, determine which are unmet, and devise solutions that address those unmet needs. This sounds simple enough, and yet companies struggle to innovate because (1) despite all the talk about customer needs, there is no agreement on what a need is; that is, there is no agreement on how, for the purposes of innovation, to describe a need's purpose, structure, content, and format. Even the most advanced companies carelessly accept many types of customer statements as inputs into the innovation process – solutions, specifications, wants, benefits, excitors, delighters, must haves, latent needs, and so on. (2) Customer inputs are accepted in a variety of formats, confounding the way they are interpreted and prioritized, and (3) there is no agreed-on method for determining the degree to which a need is unmet. Consequently, even if companies could uncover true customer needs, they would be unable to uncover hidden opportunities and prioritize which to pursue. Dozens of methods are currently being used in an attempt to reveal opportunities, but most are inherently flawed.

How pervasive are these problems? Ask yourself these questions: In any given product area of your company, is there any one person who knows all the customers' needs and which are unmet? Is there agreement between marketing, research and development, and sales as to what the customers' needs are and which are unmet? Is there even agreement across functions as to what a need is? Most managers answer those questions in the negative, which is why companies spend so much time debating which solutions they believe customers want. If companies cannot agree on what a need is and on which needs are unmet, how can they agree on which solutions best address them? How can they agree on which products and services to create and deliver to customers, or on where to invest resources? How can they agree on which positioning strategy is best or reach agreement on any market or product strategy?

It is time for companies to give the innovation process the same level of scrutiny as other business processes. It is clear that outdated paradigms must be shattered and that new standards are needed. The outcome-driven innovation methodology is the key. By sweeping away outdated thinking and reinventing the front end of innovation, the outcome-driven methodology enables companies to

transform innovation from an unstructured process into a predictable, rules-based discipline. With clear insight into what a customer need is, with methods for accurately quantifying which needs are unmet, and with new ways to devise solutions to address those unmet needs, the outcome-driven methodology gets the fundamentals of innovation right. It is being acknowledged by firms across the world as the new global standard for innovation.

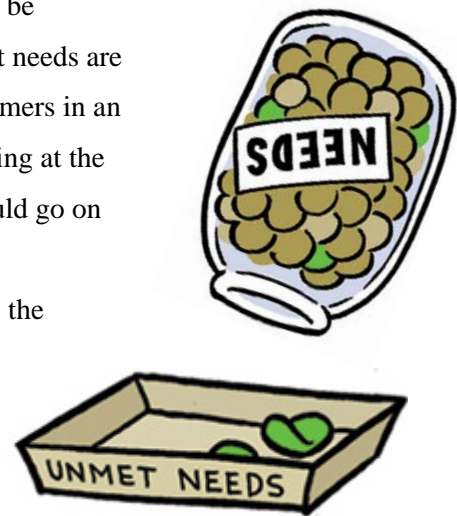
The outcome-driven innovation methodology is philosophically different from other approaches to innovation in eight distinct ways. The purpose of this article is to highlight those distinctions and clarify why organizations that are focused on formulating a winning market growth strategy should adopt the outcome-driven approach.

(1) THE INNOVATION PROCESS IS EXECUTED IN A SEQUENCE THAT ENSURES SUCCESS

To execute the innovation process effectively, a company must first identify *all* the customer's needs, then conduct research to determine which are unmet, and only then devise solutions that address those unmet needs. In other words, all unmet needs must be discovered *before* potential solutions are devised. This is the sequence in which the outcome-driven methodology is executed, and although this sounds like a logical sequence, it is in stark contrast to most innovation processes, including the widely accepted Stage-Gate process, which put the generation of ideas first.

Generating ideas first is an inefficient approach to innovation because it is only by chance that a company will devise a solution that successfully addresses a number of unmet needs. After all, how can solutions that address unmet needs be devised in a predictable manner without knowing what those unmet needs are to begin with? Brainstorming solutions and testing them with customers in an iterative fashion is common, but this practice is analogous to guessing at the answer to a simultaneous mathematical equation – the guessing could go on forever, and the equation might never be solved.

By knowing what the customer's unmet needs are up front, the guessing stops, process efficiency improves, and the process output becomes predictable. These improvements combine to bring lower costs, less risk, and high success rates to companies striving for growth through innovation.



(2) VALUE CREATION IS BASED ON A SYSTEM OF MEASUREMENT INSTINCTIVE TO CUSTOMERS

Many companies support the theory that customers buy products and services for a specific purpose: to get jobs done. By *job*, we mean the fundamental goals customers are trying to accomplish or problems they are trying to solve in a given situation. (Harvard Business School professor Clayton Christensen backs this thinking in *The Innovator's Solution*). Making the job the unit of analysis is the cornerstone of the outcome-driven innovation philosophy. From the customer's perspective, it is the job that is the stable, long-term focal point around which value creation should be centered because the job's perfect execution reflects the customer's true definition of value.

Current products and services are merely point-in-time solutions that enable customers to execute jobs. They should not be the focal point for value creation. A vinyl record, a CD, and an MP3 storage unit, for example, all help customers get the job of storing music done. Focusing on creating a better record doesn't help in the creation of the CD or the MP3 device, but focusing on improving the job of storing music supports the discovery and creation of new ways to help customers get the job done better.

Accepting the job as the sole unit of analysis has important downstream ramifications. Once accepted, companies must stop capturing requirements on products and services and instead must understand and capture requirements on the jobs those products and services are intended to perform. Figuring out how to help customers get a job done better or helping them get other jobs done becomes the goal of innovation. This is a whole new way of thinking and dictates the type of customer input that is needed to execute the innovation process.

(3) THE PURPOSE, STRUCTURE, CONTENT, AND FORMAT OF A NEED STATEMENT IS STANDARDIZED

Because customers buy products to help get jobs done, in order to improve an existing product or to create a new product, companies must be able to figure out where the customer struggles in the execution of a specific job and then devise new ways to make improvements. To accomplish this task, companies must analyze the job of interest and ascertain from customers what must be measured and controlled to ensure the job is executed with the speed, predictability, and output they desire. The metrics customers use to measure the successful execution of a job are what we call the customers' desired outcomes; they are the customers' fundamental measures of performance associated with getting a job done. So, when trying to help customers get a job done better, the goal is to uncover the customers' unmet desired

outcomes first and then to devise solutions to address them. This is where the term “outcome-driven innovation” originates.

To be a useful input into the innovation process, an outcome statement must adhere to the recommended structure, content, and format shown in Figure 1. (To obtain additional detail on this subject, see *What Customers Want*, chapter 2.) An outcome statement must at a minimum contain a direction of improvement, a unit of measure to indicate what must be measured and controlled to improve the level of satisfaction, and an object of control. Optionally, an outcome statement may contain a contextual clarifier to describe the conditions or circumstances under which the outcome needs to be achieved and examples that clarify, when needed, the object of control. The statements must also conform to a set of rules that address the use of ambiguous words (this includes the use of adjectives, adverbs, and pronouns) and ensure consistency in terminology and phraseology between statements. These rules are necessary because variations in structure, content, and format from statement to statement often introduce unwanted sources of variability that alter the importance and satisfaction ratings customers give the statements, which in turn affects the way innovation opportunities end up being prioritized.

This standard, and the theory that supports it, is the result of my team’s analysis of over ten thousand customer need statements collected for products and services covering nearly every industry. Companies that create outcome statements in accordance with this standard will obtain customer inputs that marketing and development can use to bring predictability to the process of innovation.

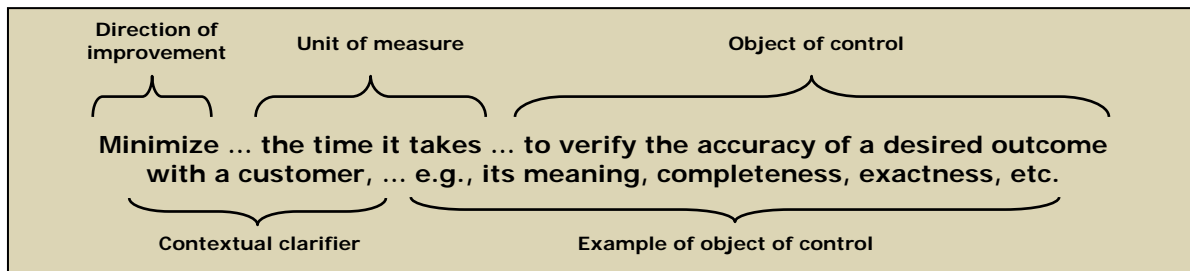


Figure 1. The Structure of a Desired Outcome Statement

(4) THE INPUTS NEEDED TO DISCOVER OPPORTUNITIES FOR NEW MARKET CREATION ARE STANDARDIZED

When a company wishes to engage in adjacent market growth or wants to discover opportunities for new market creation, it must discover which jobs customers are having trouble getting done rather than discovering which outcomes in a specific job need improvement. Finding these underserved jobs enables companies to discover new market growth opportunities. Once an underserved job is discovered and becomes a growth target for the company, the job is dissected and the customer’s unmet desired outcomes are uncovered for that job.

Figure 2 shows the recommended structure and format of a job statement, which, like the structure and format of an outcome statement, guarantee the accuracy of later prioritization (discussed below). A job statement must at a minimum contain a verb to introduce the statement and an object of the verb that defines the job to be done. Optionally, a job statement may contain a contextual clarifier to describe the conditions or circumstances under which the job needs to get done and examples, which clarify, when needed, the object of the verb. This structure ensures that the job statements are standardized and can be acted upon.

Job statements can be captured for any demographic and context. Once prioritized, they reveal opportunities for adjacent and new market growth. For example, underserved jobs for retired people over 65 may include wanting to pass on life’s lessons to their grandchildren, reconnecting with past friends, or staying abreast of anti-aging advances. After determining which jobs are underserved, a company is in a position to devise new, never-before-seen products that will dominate uncontested market space.

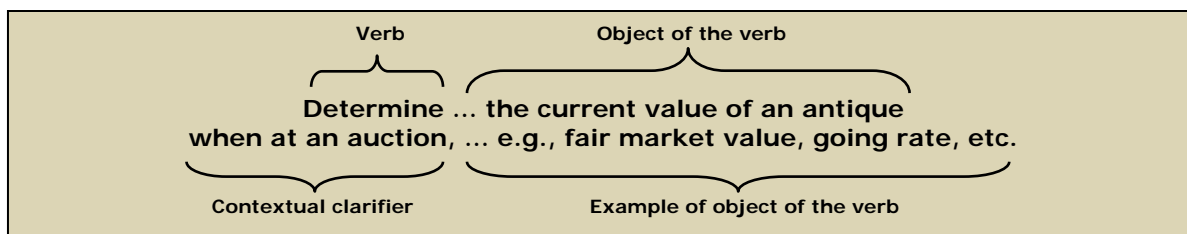


Figure 2. The Structure of a Job Statement

(5) UNMET CUSTOMER NEEDS ARE DISCOVERED AND PRIORITIZED WITH PRECISION

Which desired outcomes represent the best opportunities for core and new market growth? Which jobs represent the best opportunities for adjacent and new market creation? To answer these questions, companies must be able to figure out which outcomes or jobs are most important and least satisfied. The opportunity algorithm, shown below, is a simple mathematical formula that makes it possible for companies to do just that. Using this algorithm, which has proven effective in hundreds of applications over the past eight years, companies can uncover hidden opportunities with precision and prioritize the most promising opportunities for growth.

As part of the outcome-driven innovation philosophy, it is assumed that an opportunity for innovation exists when a job or an outcome is important and not well satisfied. The more important the job or outcome is, and the less satisfied customers are, the greater the opportunity is for value creation. Using this formula, the jobs and desired outcomes that are most important and least satisfied receive the highest priority:

$$\text{Opportunity} = \text{Importance} + \max(\text{Importance} - \text{Satisfaction}, 0)$$

The formula states that opportunity equals importance plus the difference between importance and satisfaction, where that difference is not allowed to go below zero. The importance and satisfaction ratings for each job or outcome are entered into the equation to determine the level of opportunity. (To learn more about this algorithm, see *What Customers Want*, chapter 3.)

Underserved outcomes represent opportunities for core and new market growth for a specific job, as they pinpoint what aspect of a job needs to be improved in order to get the job done better. These underserved outcomes point to where customers want to see improvements made—places where they would recognize the delivery of additional value. If circular saw users, for example, feel that minimizing the likelihood of the cut going off track is an important and unsatisfied outcome, then that outcome represents an opportunity for improvement.

Underserved jobs, on the other hand, represent opportunities for new market creation and ancillary market growth. These are jobs that customers currently cannot get done satisfactorily – although they would like to – because products or services designed to get those jobs done do not exist or are inadequate. If it were determined that people want to wake up with fresh breath after sleeping all night, then that job would represent an opportunity for a brand new market; if preventing skin dryness when shaving turns out to be an important and unsatisfied job, then customers will value a product that helps them get that job done.

By defining a customer need as a desired outcome and using the opportunity algorithm to determine which outcomes or jobs are underserved, the inputs into the innovation are clearly identified.

(6) HIDDEN SEGMENTS OF OPPORTUNITY ARE DISCOVERABLE IN EXISTING AND NEW MARKETS

When it comes to segmenting markets for the purpose of innovation, it is well accepted that companies must be able to successfully identify groups of customers that share a unique set of unmet needs. Finding these unique segments of opportunity – if they exist – can transform an entire industry, as evidenced by companies such as e-Trade and Curves. Companies must use the customer’s unmet needs as the bases around which to segment the market, but without an agreed-on definition of a need and an agreed-on method for quantifying the degree to which a need is unmet, needs-based segmentation methods will not work. This explains the volatility in traditional needs-based segmentation methods and their historical lack of success.

When, however, *need* is defined as a desired outcome and *unmet* is defined as important and unsatisfied, per the opportunity algorithm, needs-based segmentation can finally be put to practical use. To make it work, desired outcomes statements (or job statements, when focused on market identification) are used as the bases for segmentation, and the opportunity score resulting from the algorithm is used as the numerical value around which the segmentation is performed.

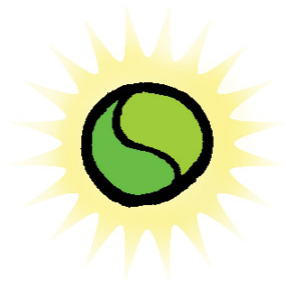
Being able to segment markets into groups of customers with different unmet needs not only enables companies to discover hidden segments of opportunity, it informs other strategic decisions as well. For example, companies are able to determine how best to enter a market as a new entrant, detect the presence of overserved segments that are ripe for disruption, determine if certain customers would pay more for advanced solutions, and decide which customers should not be targeted at all.

(7) FOCUSED IDEA GENERATION METHODS REPLACE SCATTERSHOT BRAINSTORMING TECHNIQUES

Many companies tie the success of a brainstorming session to the number of ideas that are generated. It is not uncommon to see hundreds of ideas generated in a seemingly successful session. But then reality sets in: someone must try to determine which of those ideas are worth pursuing. Searching through the clutter

of ideas can take months and will involve guesswork unless the company knows what unmet needs the customer has.

In the outcome-driven world, the approach is turned around. With customer needs already identified and prioritized, creative efforts are much more focused: they concentrate solely on devising valued and potentially breakthrough solutions to address high-priority, unmet needs. The goal of this effort is not to generate hundreds of ideas; rather, it is to devise one or two ideas that will dramatically increase the customer's level of satisfaction for each unmet need and do so for little product cost, development effort, or technical risk.



These focused idea-generation sessions can have a traditional format, in which many people work together in a room to devise and refine ideas, or a more novel format, such as a Web-based forum in which employees, customers, suppliers, and external experts submit their ideas on how to address a specific unmet need and collaborate on how to refine and improve them. The common denominator is that people are generating ideas around a specific unmet need, and a solution that addresses the need is known in advance to have great value. Knowing the unmet needs in advance of ideation renders traditional unfocused brainstorming methods obsolete. Using focused idea generation nearly always produces ideas of significant value.

(8) ALL MARKETING AND DEVELOPMENT STRATEGIES ARE ALIGNED WITH MARKET OPPORTUNITIES

In many companies, research and development, marketing, and sales independently capture requirements from customers in an attempt to get the information they need to guide their decisions and strategies. Because their reasons for obtaining these inputs may differ, and because there is no agreement on what inputs are needed to begin with, each function is likely to end up using different inputs. As a result, their strategies are likely to be misaligned, dividing the company's energies and focus. To overcome this problem, all the functions must use a single set of customer inputs—those derived from the outcome-driven innovation process.

When a company agrees that its goal is to help customers get a job done better and adopts the job as the unit of analysis, it is agreeing to using outcome statements as inputs to guide all downstream marketing and development activities. With the job as the shared focal point around which to create value and desired outcomes as the shared set of customer inputs, the strategies of all the company's functions come into alignment, and all functions are focused on the real opportunities present in the market.

In the outcome-driven organization, a single set of customer inputs drives and aligns strategies for messaging, positioning, purpose branding, and sales, along with strategies for beating the competition, pipeline prioritization, concept creation and evaluation, patent portfolio development, acquisition assessment, research and development, and other related activities. Because it aligns company thinking with the customer's value measurement system, the outcome-driven methodology has far-reaching benefits.

ADOPTING A NEW STANDARD FOR INNOVATION

The secret to success in innovation lies in a company's ability to gain agreement amongst all those responsible for innovation as to what a need is and what *unmet* means. This is a prerequisite to agreeing on what solutions best address customers' unmet needs. Adopting the outcome-driven philosophy brings resolution to these debilitating problems, as it provides an elegant, integrated system that brings predictability to innovation.

Using this system, companies are able to uncover true customer needs and to determine which are unmet, and how much so. Companies are able to focus their creativity on devising solutions that address opportunities for growth. With the data the outcome-driven methodology provides, companies can make innovation investments, and the big bets, with confidence. And the data are also used to guide many other marketing and development activities – infusing them all with information that revolutionizes and energizes their execution. The outcome-driven philosophy is the master key that unlocks the door to success in innovation.