

DEMAND CREATION

Theory & Practice

Don't Just Innovate.

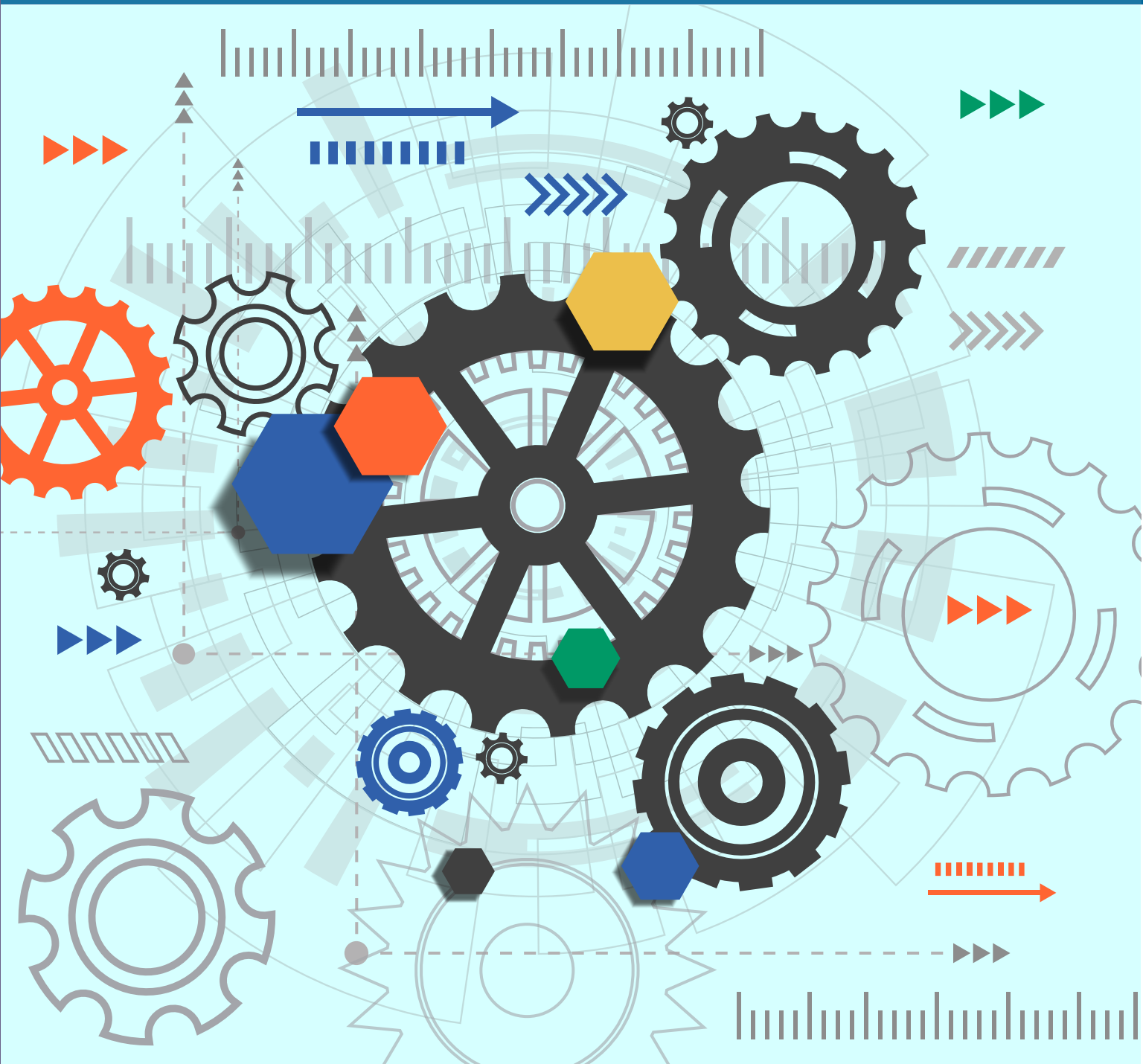
Create Customer Demand!



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SECTION 1

Origins and Progression of Jobs Theory



Chapter 1

Jobs to be Done and Customer Needs



Entrepreneurs and companies do not have trouble generating ideas for new products and services.

The problem is that a great many of those ideas do not result in viable solutions. In his book, *Winning at New Products*, Robert Cooper points out that for every seven new innovation ideas, about four of those ideas enter the product development process with only one making it to market. The innovation projects that are abandoned along the way still cost companies plenty of time and resources. But that's not the worst of it. Out of the new products and services that do launch, about 40% of those offerings do not meet revenue and profit targets ⁽¹⁾. That is, they disappoint.

The number of innovation disappointments has been consistent for the last 60 years according to several studies conducted by the Product Development Management Association (PDMA) ⁽²⁾. Not surprisingly, many studies suggest that the root cause of innovation failure is ambiguity around defining customer needs and customer value ⁽³⁻⁵⁾. According to the late Harvard Business School professor David Garvin, "Studies comparing successful and unsuccessful innovation have found that the primary discriminator was the degree to which user needs were fully understood" ⁽⁶⁾.

I argue that while customer needs and customer value are related, they are not the same thing. Yet these two concepts are very often conflated, creating ambiguities at the front-end of the innovation process. Successful innovation requires an unequivocal understanding of customer needs and customer value (a self-evident claim). With few exceptions, there are two questions that have not been clearly answered in the scholarly and practitioner literature—1) how can innovators precisely and completely define customer needs? And based on these needs—2) how can innovators define the value that customer want from solutions?

Entrepreneurs and companies struggle with innovation because they do not clearly define the "jobs" customers are trying to get done. Lacking this understanding, they cannot define all the customer needs associated with those jobs. Without a complete set of customer needs in hand, entrepreneurs and companies cannot precisely define the value customers want from solutions to get those jobs done better, faster and/or cheaper. Innovation efforts become risky because solution design is informed, to one extent or another, by inputs other than the satisfaction of customer needs (aka: speculation).

Solution providers often tout the many features and benefits of their solutions, assuming customers will value all those attributes. However, providers are not the arbiters of value. Rather, value is something perceived in the mind of customers. As such, only the customer can judge the value of a solution. For this reason, merely claiming that a solution offers a certain “benefit” does not make it valuable from a customer’s perspective. Features and benefits that do not help customers get a job done well will have little to no value to them even if those attributes are functionally superior to competing products/services. Therefore, no solution can achieve and/or maintain viability in the market if it is not aligned with the customers’ perception of value.

The aim of value innovation is to profitably satisfy the important and unmet needs of a group of customers better than competing products/services at a price those customers are willing to pay. However, ambiguity around customer needs and customer value obscures this aim. It becomes very difficult to create products and services that are more valuable than competing solutions without a precise understanding of customer needs. This is because important and unsatisfied needs represent the additional value that customers want from solutions to get a job done better. Perceived value thresholds drive customer switching behavior. A rational customer will switch from a solution-in-use to a competing solution only if the competing solution offers them the additional value they want.

Fundamentally, creating demand for new and existing products and services means pulling customers away from competing solutions, including those using no solution at all. Motivating customers to switch from a solution-in-use to a competing solution is the essence of demand creation. When entrepreneurs and companies cannot precisely define the value that customers want from their products and services, demand creation is unpredictable—that is, hit or miss. In this book, I rationalize why jobs-to-be-done is an effective approach for completely and accurately defining customer needs—*a capability which is the very foundation of demand creation*.

Ambiguity Around the Meaning of Customer Needs

So, what exactly are customer needs? If you are not sure, then you are not alone. This is a question that scholars and practitioners alike have been wrestling with for decades. Defining customer needs has been an elusive thing indeed. The following are some of the most cited

definitions from the academic and practitioner literature—

- » *Customer needs are problems to be solved. These needs, either expressed or yet-to-be articulated, provide new product development opportunities for the firm* ⁽⁷⁾.
- » *A customer need is an opportunity to deliver a benefit to a customer. This definition contains three components: a benefit that has value (the what), a customer who values the benefit (the who), and a context that creates the opportunity to deliver the benefit (the when or where)* ⁽⁸⁾.
- » *A customer need is the lack of something requisite and is independent from any particular solution developed to address it ... thus needs are of essential and logical property and are bound in the problem context* ⁽⁹⁾.
- » *A sentence that describes from the customer's vantage point the need, issue, problem that needs to be solved or solved more effectively* ⁽¹⁰⁾.
- » *Customer needs are the problems that a product or service solves and the function it performs. They describe what products let you do, not how they let you do it ... In general, needs and problems are fairly stable, they change only slowly, if at all, over time ... Customers have general problems for which they need a solution and that relate to the overall product function ... Customers also have very specific needs or aspects of the overall function that a successful product must also meet* ⁽¹¹⁾.
- » *A [customer need] is a statement of a problem as opposed to describing what the product must do. The question to ask is—“what outcome do customers desire that they cannot now achieve?”* ⁽¹²⁾.
- » *A customer need is a description, in the customer's own words, of the benefit to be fulfilled by the product or service* ⁽¹³⁾.
- » *A customer need is a state of dissatisfaction or frustration that occurs when an individual's desires outweigh the individual's actualities* ⁽¹⁴⁾.

Summarizing the aforementioned, customer needs are defined as problems to be solved, statements of problems, solution benefits, the lack of something required, and statements of dissatisfactions. Other common definitions include motivations, functional requirements, desire sets, preferences, functional goals, functional tasks, and critical to quality characteristics.

Further, it is often said that customers have both articulated and unarticulated needs.

I suggest that all these perspectives on customer needs overlap in the sense that they refer to different aspects of the same underlying concept. Combining these perspectives yields the following definition—customer needs are the solution benefits that customers seek that can solve the problems in their lives and businesses, where these needs can be articulated or unarticulated. From this broad definition, it becomes apparent that customer needs are most often defined within a solution context. The logic is as follows—customers have problems; consequently, they experience frustrations (aka: “pains”); customers seek out solutions that offer benefits that can solve those problems thereby removing or mitigating their pains.

But questions arise such as—how do we consistently define benefits? Why do customers want those benefits anyway? How do we define problems? What causes those problems? Are there other needs that are not necessarily problems? What is the best way to ensure that all customer needs are captured whether they are articulated or not? These open questions suggest that defining customer needs within a solution context is not sufficient for the purpose of innovation.

In fact, I argue that customer problems and solution benefits are not needs at all. Customer problems have to do with unsatisfactory outcomes with respect to what customers are trying to accomplish (means to ends). Benefits are the capabilities offered by a solution that can help customers obtain or achieve the outcomes they want and avoid the outcomes they do not want. Customer problems and solution benefits are certainly related to customer needs, but they do not define those needs.

Characterizing customer needs within a problem and/or solution context is not an effective approach for several reasons. First, the nature of customer problems often changes as customer circumstance changes. When this happens, the relevance and importance of existing customer needs can also change with respect to a job that customers are trying to get done. Second, solutions-in-use become less capable of satisfying customer needs to the extent that they do not sufficiently accommodate and/or resolve changing circumstance. Further, competing solutions are continually getting better, faster and cheaper which can affect customers’ expectations in terms of what it means to get a job done well. For the purpose of innovation, we want to define customer needs based on something more stable than the problems of the day and the limitations of available solutions since these are dynamic in nature.

Third, if customer needs are defined within a solution context, then innovation efforts will likely be constrained around that context. As such, the focus of innovation will be to optimize the current solution paradigm rather than exploring all possibilities pursuant to finding the best way to help customers get a job done better at the lowest cost to the provider. This leads to situations where providers incrementally innovate based on the current solution paradigm (aka: the dominant design) with little notice that the entire paradigm is about to change.

For example, the shift from a Sony Walkman to the MP3 player and the shift from the Blackberry to the iPhone. With such a shortsighted view, providers can get blindsided by “substitute offerings” that lie outside of established product/service categories. For example, physical white boards competing with dry erase wall coatings. This underscores that customers are loyal to getting jobs done well at the least cost—not solutions.

When customers are asked directly what they need or want, they often say things like, “I need to get a professional degree” or “I need to find a better way to save money” or “I want to improve my credit score” or “I need to find a faster way to place orders” or “I need to lose weight” or “I want to avoid getting the flu” or “I want to feel safe in my house” and “I need an easier way to prepare a tax return.” This reflects that customers are primarily focused on finding the best way to obtain or achieve wanted results and to avoid unwanted results. Toward those ends, customers can only evaluate solution features and benefits offered to them by providers. Since they are not professional innovators, customers are seldom aware of other solution possibilities that can satisfy their needs better and/or cheaper.

Because customer feedback is often limited to what is wrong with solutions-in-use, experienced marketing professionals have learned that asking customers directly what they need or want does not provide the inputs required for successful innovation. Instead, they elicit needs indirectly by interviewing customers to understand the underlying context (implicitly the “job”) around which those needs arise. With this understanding, all solution possibilities are considered that can efficiently generate the results that customers want at the lowest cost to the provider. In this way, providers can create and maintain highly profitable products and services that satisfy customer needs better than competing solutions at a price that customers are willing to pay.

This is why mapping customer “pains” associated with the use of particular solutions and then defining those pains as customer needs or “problems to be solved” is a poor approach

to innovation. A better approach is to first understand all customer needs pertaining to a job that customers are trying to get done and then determine which of those needs are important and not well satisfied. *With this insight, providers can systematically create new solutions and enhance existing solutions that customers will want to buy/use to get jobs done better, faster, and/or cheaper.* No speculation is required.

Ambiguity Around the Meaning of Customer Value

What exactly is customer value? More to the point, what determines the value that customers want from solutions to get jobs done better? Customer value has been a challenging concept to define for both scholars and practitioners because it is a multifaceted construct that has roots across marketing, psychology, economics, and behavioral economics. As such, customer value has different meanings depending on the context used. Like customer needs, customer value is defined in many ways. The following are the most cited definitions from the academic and practitioner literature—

- » *“Perceived value is the consumer’s overall assessment of the utility of a product based on perceptions of what is received and what is given”* ^(15, 16).
- » *“Customer value is what customers get (benefits, quality, worth, utility) from the purchase and use of a product versus what they pay (price, costs, sacrifices)”* ⁽¹⁷⁾.
- » *“The trade-off between the benefits (“what you get”) and the sacrifices (“what you give”) in a market exchange”* ⁽¹⁸⁾.
- » *“All customer-perceived consequences arising from a solution that facilitate or hinder achievement of the customer’s goals”* ⁽¹⁹⁾.
- » *“Customer value is 1) interactive; 2) relativistic: a) comparison of objects; b) differs between persons; c) situation dependent; 3) embodies preferences; 4) is attached not to the object itself but rather to the relevant consumption experience”* ⁽²⁰⁾.
- » *“Customer value is the customers’ perception of what they want to have happen (i.e., the consequences) in a specific use situation, with the help of a product or service offering, in order to accomplish a desired purpose or goal”* ⁽²¹⁾.
- » *“Six principles provide a definition of customer value – 1) solve my problem completely,*

2) don't waste my time (minimize my total cost of consumption, which is the price I pay plus my time and hassle), 3) provide exactly what I want, 4) deliver value where I want it, 5) supply value when I want it, 6) reduce the number of decisions I must make to solve my problems" ⁽²²⁾.

- » "Customer value is defined as a consumer's perception of net benefits gained in exchange for the costs incurred in obtaining the desired benefits" ⁽²³⁾.
- » "Customer value is market-perceived quality adjusted for the relative price of your product" ⁽¹⁷⁾.
- » "Customer value is a customer perceived preference for and evaluation of those products attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving the customer's goals and purposes in use situations" ⁽⁵⁾.
- » "Customer value refers to a preference judgment while the customer's values refer to the criteria by which such judgments are made" ⁽²⁴⁾.
- » "The five values influencing market choice behavior are functional value, social value, emotional value, epistemic value and conditional value" ⁽²⁵⁾.
- » "A truly marketing-minded firm tries to create value-satisfying goods and services that consumers will want to buy; management must think of itself not as producing products but as providing customer-creating value satisfactions" ⁽²⁶⁾.

The following perspectives indicate that an operationalized definition of customer value is still unsettled.

- » "In the field of business and management, conceptual confusion in customer value research has occurred primarily due to the dynamic nature of customer value; the customer value definition is highly debated and, surprisingly, often studied without an explicit definition of the concept" ⁽²⁷⁾.
- » "Without value, there is little likelihood of any market development of sustainability. Yet research into consumer value is still underdeveloped" ⁽²⁸⁾.
- » "Although perceived value has received growing attention, no clear and widely accepted definition of the concept yet exists" ⁽²⁹⁾.

- » *“Customer perceived value is an imperative that firms must pay attention to and has become a major focus of interest in marketing. Despite the interest, empirical operationalization of perceived value remains unsettled”* ⁽³⁰⁾.
- » *“Although the significance of customer value is widely recognized, the growing body of research about customer value is quite fragmented and the definition of customer value is divergent”* ⁽³¹⁾.
- » *“Current efforts to measure perceived value have shown it is difficult to quantify value; The construct of perceived value has been identified as one of the most important measure for gaining competitive edge and has been argued to be the most important indicator of repurchase intention”* ⁽³²⁾.
- » *“Although a core concept in marketing, surprisingly little is known about what value is, what its characteristics are, or how customers determine it”* ⁽³³⁾.
- » *“Only by understanding how value is achieved can goods and services be designed in such a way as to attract customers. What is less clear and of central importance, is why consumers desire the goods and services on offer and what is the nature of the value that they place on or receive from them”* ⁽³⁴⁾.

What is interesting is that none of the aforementioned definitions of customer needs and customer value make explicit a relationship between the two of these concepts. Clayton M. Christensen suggests that there is an almost invisible substrate that connects customer needs and customer value—namely the customer’s job-to-be-done. As Christensen states, “customers have jobs they want to get done and they hire products and services to help them get these jobs done well.” The operational aspects of the job-to-be-done is what marketing professionals are trying to infer from customer interviews and customer data. Christensen posits that the underlying job and related concepts explains why customers choose one particular solution over competing alternatives ^(35–37).

The Genesis of Jobs Theory

The theory of jobs-to-be-done (aka: jobs theory & jobs-to-be-done theory) provides a lens through which the causality of customer choice can be understood and therefore predicted. This is useful because providers that have foresight into customer choice are able to create

products and services that customers will want to buy and use. Further, jobs theory enables companies to identify all competing solutions from the customers' perspective. This makes it possible to differentiate or tailor solutions in a way that positions those offerings as the best value among competing alternatives. Simply put, innovation becomes predictable. Jobs theory is also useful for aligning different organizational functions around a common language of customer behavior which can increase the efficiency and effectiveness of cross-functional innovation efforts.

The theory of jobs-to-be-done was developed by the Clayton Christensen, management consultant, entrepreneur and long-time Harvard Business School professor. He and Michael Raynor first wrote about customer “jobs” in the book “The Innovator’s Solution” published in 2003 ⁽³⁸⁾. Christensen and his colleagues continued to expand and refine the theoretical underpinnings of the jobs-to-be-done approach over the years in a series of articles, books and videos. It is important to note that although jobs theory is attributed to Christensen, this attribution includes co-authors, researchers, consultants and special contributors like Bob Moesta who have all worked with Christensen over the years to shape jobs theory.

The genesis of jobs theory started some years ago when Christensen began investigating innovation efforts within companies and the extent to which those efforts were successful. His research revealed that 60% of new product innovation projects are abandoned before even making it to the market. Of the new products that are introduced, 40% of those fail to become profitable and are consequently withdrawn. Taking both of these cases into account means that roughly 75% of innovation efforts do not succeed ⁽³⁹⁾. The question that Christensen wanted to answer was simply—why?

Christensen recognized that the aim of innovation is to profitably satisfy the important and unmet needs of a group of customers better than competing solutions at a price that customers are willing to pay. Given the reality that only one in four innovation efforts actually succeed, Christensen concluded that there is something wrong with how companies define customer needs and how they segment customers for the purpose of innovation. Getting these two steps wrong throws off the aim of innovation, which explains why so many innovation efforts are doomed from the outset.

Christensen observed that the prevailing approaches for defining customer needs involve—1) asking customers directly what features and benefits they want in solutions, 2) observing

customers in various contexts to ascertain the problems they are trying to solve, 3) mapping customer activities while using a solution to identify pain points, and 4) correlating the demographic, psychographic and behavioral attributes of the customers' themselves to infer specific features and benefits that customers might value in a solution.

As Christensen saw it, the problem with these approaches is that the primary focus is on customer and solution attributes rather than why customers buy and/or use solutions. While each of these approaches can reveal insights about customer needs, those insights are often derivative and piecemeal indicators of something more fundamental at work. An apt metaphor is that of 10 blind men trying to describe an elephant, where the elephant represents customer behavior. Needs defined around the attributes of customers and solutions are ambiguous and incomplete providing inaccurate targets for the purpose of innovation.

Christensen noticed that the way companies segment customers is also problematic. The traditional approach to market segmentation is to group customers according to similar characteristics, that is, their demographic, psychographic and behavioral attributes (i.e., attribute-based segmentation). The assumption is that customers with the same or similar attributes will have similar needs. As such, they'll want the same or similar features and benefits in a solution.

However, Christensen found that customer attributes by themselves are often poor predictors of customer choice because they do not always explain why an individual chooses to buy and/or use a particular product/service versus a competing alternative. While customer attributes may correlate to some extent with customer choice, they cannot really predict those choices. In short, customer attributes alone are insufficient criteria for designing successful new products and services.

Christensen concluded that companies were missing something vital around which customer needs and segmentation criteria should be aligned, namely the causal mechanism of customer choice. If this causal mechanism were known, companies could precisely define customer needs, accurately target customers with those needs and then design solutions that profitably satisfy those needs better than competing alternatives. Innovation would become predictable rather than hit or miss. Christensen then set his intentions on building a theory that could explain the causality of customer choice ^(35, 38, 40).

After years of work and collaboration with others, Christensen puts forth the tenets (claims) of jobs theory. It should be noted that Christensen does not articulate these tenets in any single source. Rather, the following tenets are spread throughout multiple publications and recorded presentations—

- Individuals and organizations (customers) have lots of jobs they are trying to get done with the aim of making progress in their lives and business; progress can have functional, emotional and social dimensions; customers “hire” products and services (solutions) to help them get those jobs done.
- A job is always executed under a particular set of circumstances (aka: job circumstance). Therefore, a job cannot exist apart from circumstance. A job gets done well to the extent that a customer can efficiently make desired progress as expected. Customer expectations are modified by the trade-offs that customers are willing to make with respect to the capability of solutions.
- Job circumstance affects the progress customers want to make and how they want to make that progress. Given that customers hire solutions to make progress, circumstance influences the value that customers want from solutions to get jobs done well.
- A customer “struggles” (aka: moments of struggle) to get a job done when a particular solution-in-use does not sufficiently accommodate or resolve job circumstance, thereby impeding the customer from getting the job done well or getting the job done at all.
- When a customer reaches a certain threshold of struggle using a particular solution, the customer will “fire” that solution and hire a competing solution that can get the job done better, faster, and/or cheaper (aka: switch).
- Customers buy/use solutions that will enable them to get a job done well in a particular circumstance(s). Therefore, circumstance is the causal mechanism that explains, and therefore predicts, why customers choose a particular solution over competing alternatives.

Given these claims, Christensen suggests that—

- The customers’ job-to-be-done is the core or master construct that relates desired progress, job circumstance, and moments of struggle, which together explain customer

choice. Therefore, the customer job should be the primary unit of analysis (the central focus) for innovation work rather than the characteristics of customers themselves. That is, the job should be the primary criteria for customer segmentation. As such, innovators should first understand the job that customers are trying to get done and the value those customers want from solutions to get the job done well before ideating on solution features and benefits.

- Innovation efforts informed by jobs theory have will have a much higher success rate because innovators know in advance the value that customers want to get jobs done better, faster, and/or cheaper. With this foresight, innovation becomes predictable rather than hit or miss ^(36, 41).

Means-End Theory as the Forerunner of Jobs Theory

It is important to note that Christensen did not create jobs theory in a vacuum. All theories are built from other theories to one extent or another. As a consummate researcher, Christensen was well aware of the diverse scholarly work in the areas of marketing, psychology and economics relating to his research question—why do customers make the choices they do to buy/use certain products and services vis-à-vis competing alternatives? While Christensen's work was certainly informed by these areas to some extent, I argue that the core of jobs theory is built on a stream of scholarly research known as means-end chain theory (or simply means-end theory). To show that this is the case, means-end theory is first summarized. Jobs theory is then discussed and compared to means-end theory.

The origins of means-end theory dates back to the late 1970s with the seminal work of two marketing scholars—Jonathan Gutman and Thomas Reynolds. Means-end theory itself is informed by expectancy value theory (cognitive psychology) which was developed in the 1950s and 1960s in an effort to understand what motivates individuals to achieve goals. Building on expectancy value theory, Gutman and Reynolds endeavored to explain why customers choose to buy/use certain solutions over competing alternatives to achieve their goals ^(42, 43).

Initially, Gutman and Reynolds were interested in understanding how customers associate the attributes of products/services (aka: features) to the end goals they are trying to achieve via the use of those solutions. If this were known, companies could increase advertising effectiveness by highlighting these associations thereby increasing the attractiveness of their products/services. Other scholars such as Robert Woodruff and Sarah Gardial went further.

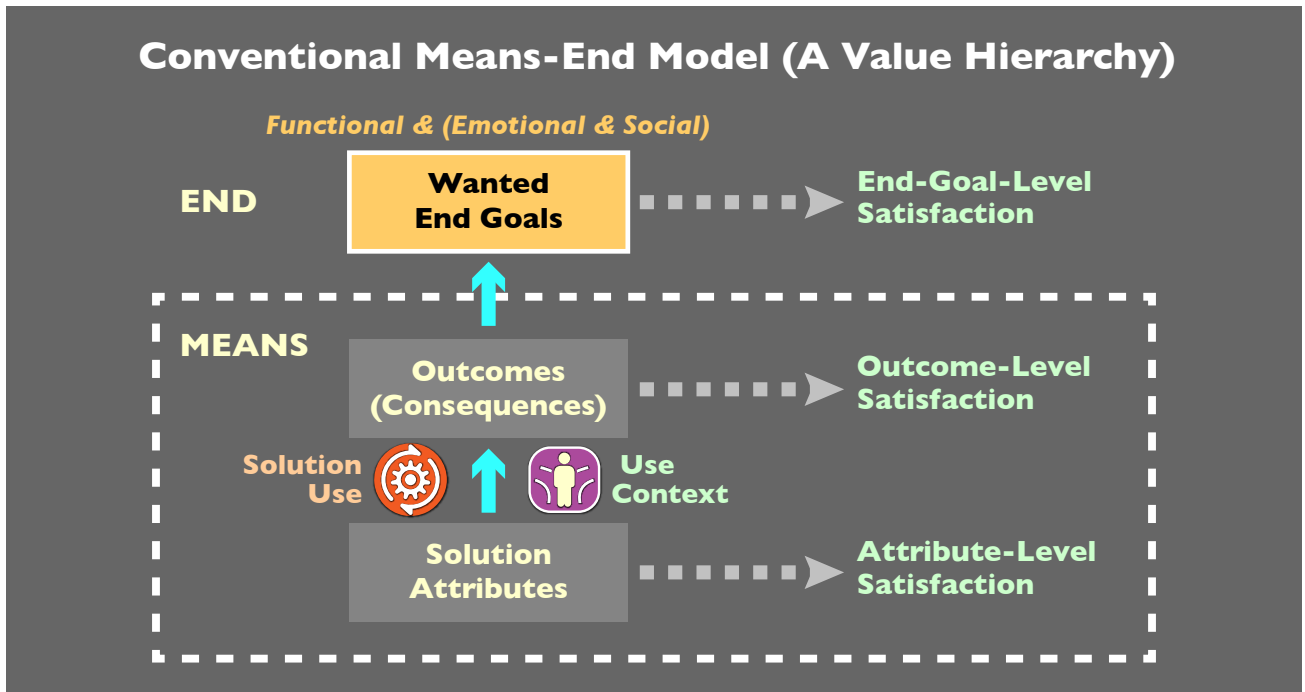
They focused on applying means-end theory to explain how customers perceive the value of solutions and the factors that drive satisfaction with respect to the use of solutions ⁽²¹⁾.

Broadly speaking, means-end theory is helpful for understanding— 1) the criteria that customers use to determine the relative value of solutions and 2) why the level of importance among those criteria differ across various use situations (aka: use context). The fundamental premise of means-end theory is that customers buy solutions for a particular use context to achieve wanted end goals or results (problem solving). Customers think about problem-solving in terms of how the immediate consequences of solution use can help them achieve their end goals. That being the case, a solution is attractive to the extent customers perceive a strong association between a solution's attributes and the end goals they are ultimately aiming to achieve ⁽⁴⁴⁾.

To put a finer point on it, consequences (or simply outcomes) are what customers immediately experience as they interact with products/services. These outcomes are relevant to customers because they are causally linked in the customer's mind to wanted end goals. Results are functional (or tangible) in nature, but results can also have psychological (emotional and social) aspects or dimensions. Further, end goals can be results that customers want to happen and results that customers want to avoid (potential hazards).

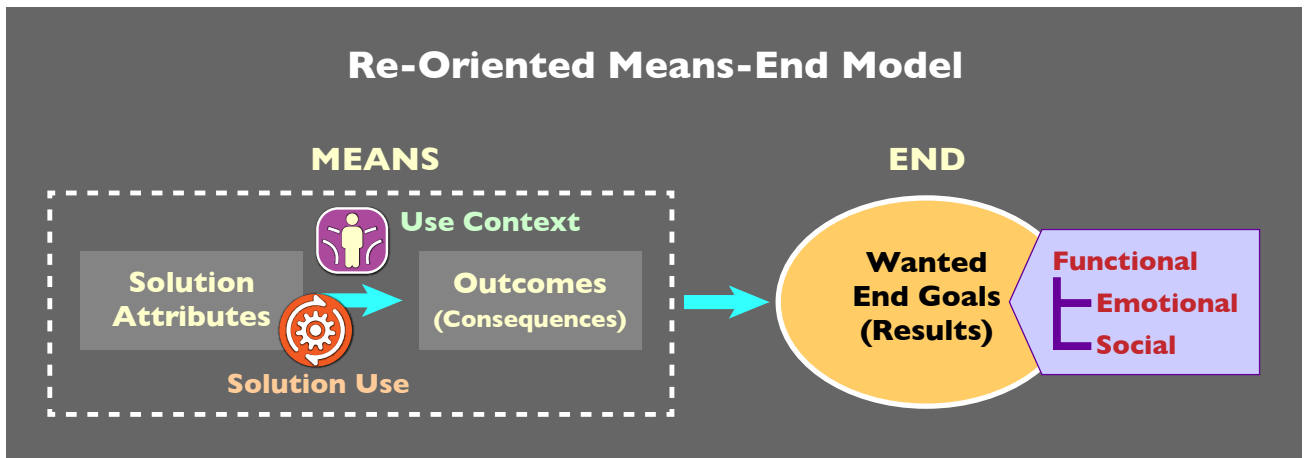
The perceived causal linkages between a solution's attributes, the immediate outcomes of solution use, the context in which a solution is used (use context), and the wanted end goals customers are aiming for comprise a hierarchical chain. The chain represents a hierarchy because the effects of solution use are at different levels of abstraction over time—a cause and effect chain. That is, customers perform actions (activities) which then cause a number of intermediate outcomes. As intermediate effects, these outcomes are more abstract or further down the timeline than the actions that produced them.

The customers' expectation is that outcomes of solution use will collectively help them achieve their wanted end goals (both wanted results and avoiding unwanted results). End goals as final effects are more abstract than the outcomes that generate them. This is called a means-end chain because customers view solutions as a means to an end. In their book "Know Your Customer," Robert Woodruff and Sarah Gardial refer to a "means-end chain" as a "value hierarchy." The conventional means-end model is depicted as Figure 1 (adapted from "Know Your Customer," p. 233).



(Figure 1)

The conventional means-end model is re-oriented into a horizontal value hierarchy for the purposes of juxtaposing it with the jobs theory model (see Figure 2). Doing so does not change the causal relationships in the conventional means-end model.

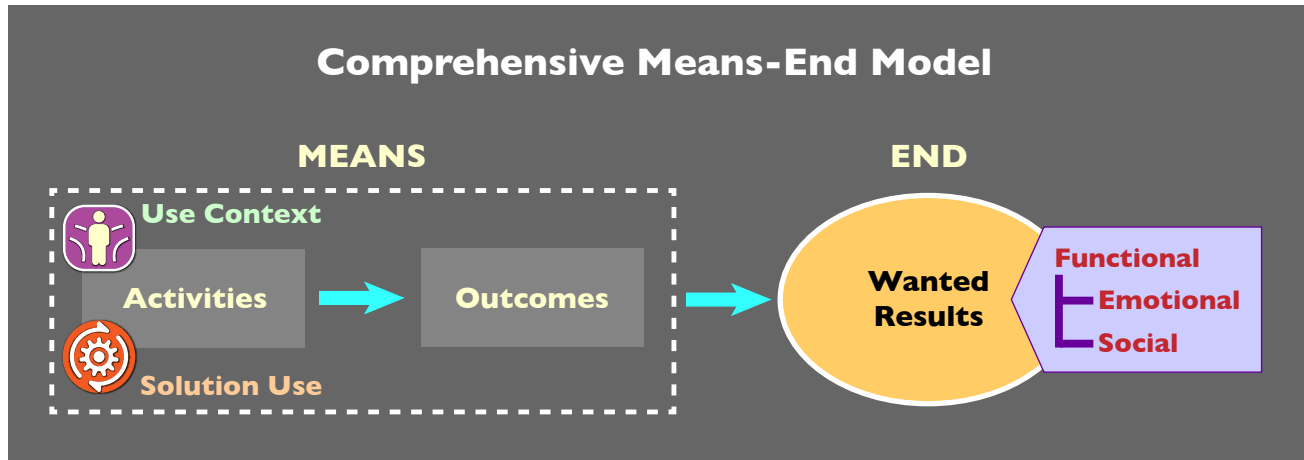


(Figure 2)

Means-end theory suggests that customers orchestrate a number of discrete activities (that is, separate and compartmentalized activities) to achieve their end goals, which characterizes purposeful behavior. These activities are implied because the use of any solution necessarily involves performing activities (by definition). When any discrete activity is performed using a particular solution, intermediate outcomes (aka: consequences) occur due to customer-solution interactions. The outcomes that customers want to happen are called desired outcomes (aka: customer expectations). The difference between actual outcomes and the expectation for those outcomes determines a customer's satisfaction with any solution.

For example, say that a particular activity takes 30 minutes to perform which is the actual outcome of performing that activity. A second activity involves an individual explaining a problem he/she is having with a particular service to a support person. However, the support person does not understand how to resolve the problem and the chat session is terminated. The intermediate outcomes of performing both activities are unsatisfactory to the individual. The individual expects to perform the first activity in well under 30 minutes. For the second activity, the individual expects that the support person will know how to resolve their problem. The difference between the desired outcomes (what is expected) and the actual outcomes results in dissatisfaction.

Because customers are performing multiple discrete activities in a means-end chain, they have one or more desired outcomes associated with performing each of those activities. Customers achieve wanted results, as expected, to the extent that the outcomes associated with using a particular solution are capable of generating those results. Re-organizing the conventional means-end chain model yields a comprehensive rendition that makes explicit the relationship between discrete activities and the outcomes that occur as those activities are performed (see Figure 3). It should be noted that this comprehensive model does not alter means-end theory since this relationship is already implied (but not shown) in the conventional mean-end model.



(Figure 3)

It now become apparent that there is a set of desired outcomes associated with any means-end chain. These desired outcomes are the criteria that customers use to judge the efficacy of solutions. As such, desired outcomes determine how satisfied customers are with the use of any solution. Stated another way, customers evaluate a solution based on how well the features of that solution can produce desired outcomes, which are causally linked to the end results that customers want. For this reason, a solution is valuable to the extent that it satisfies the desired outcomes with respect to a means-end chain.

Means-end theory suggests that the context in which a solution is used influences the perceived importance of desired outcomes. Outcomes that are more “mission critical” for generating wanted results in a particular use context are more important than outcomes that are less mission critical in that context. For this reason, customers choose solutions that are better suited for a particular usage context because those solutions will better satisfy important desired outcomes. Therefore, the perceived value of a solution can only be defined by the specific context in which customers are currently using or intend to use that solution. Further, the usage context can change affecting how well a solution can satisfy important outcomes which, in turn, affects the perceived value of that solution. Because the importance and satisfaction of desired outcomes can change over time, customer value is a dynamic concept⁽²¹⁾.

Practitioners of means-end theory use an in-depth, one-on-one interviewing method called “laddering” to elicit means-end chains. Laddering involves asking respondents a series of

“why are certain features important to you” questions regarding the use of a particular product/service. The goal of laddering is to ascertain sets of linkages between the features of a solution, the intermediate desired outcomes of using that solution and the wanted end results customers are ultimately trying to achieve. With this understanding, practitioners can surface the motivating reasons behind brand choice. Sets of linkages or ladders from all interviews are graphically represented in a tree diagram called a hierarchical value map that represents how customers think about a particular product/service category ⁽⁴²⁾.

Even though means-end theory has been around since the late 1970s and continued to develop in the 1980s, its adoption among innovators has been very low for several reasons—

- Means-end theory was initially developed to inform effective advertising strategies and was therefore not understood as a tool for innovation.
- The application of means-end theory involves a lot of effort around data collection, coding and analysis using a number of sophisticated methods and tools requiring an advanced knowledge of statistics.
- Much of means-end theory research is either proprietary or is published in academic journals which has restricted public access to this body of knowledge.

The Jobs Theory Model

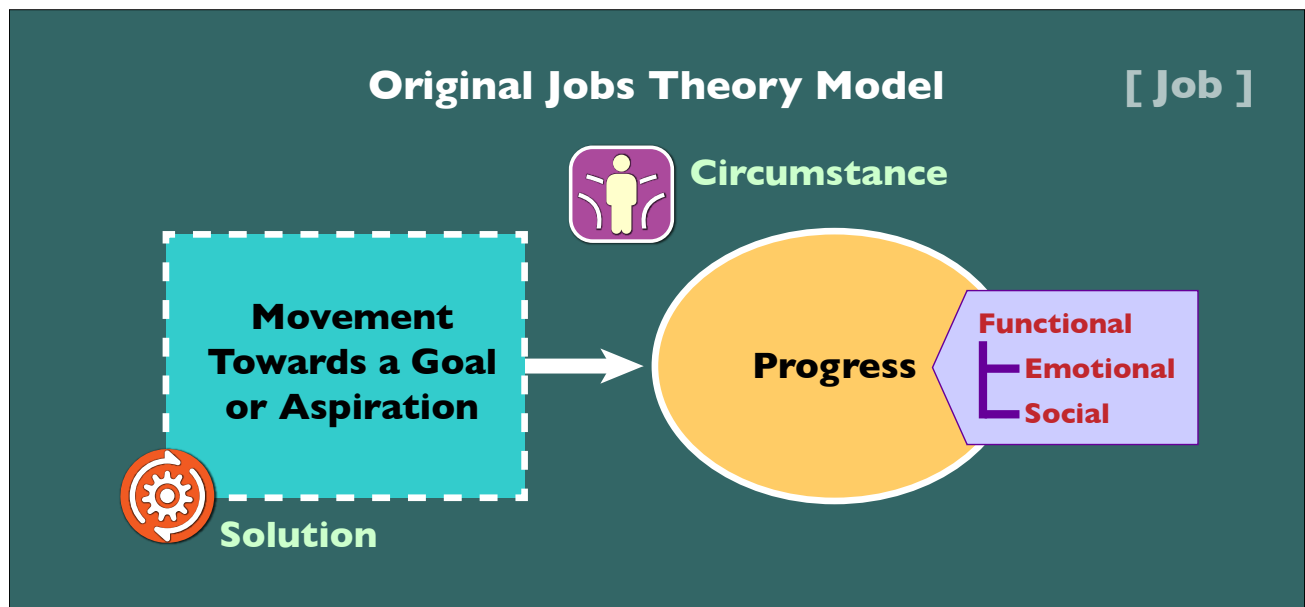
In the book “Competing Against Luck” published in 2016, Christensen defines a customer “job” as the “progress that an individual is trying to make in a particular circumstance,” where progress is “the movement toward a goal or aspiration.” Since customers “hire” products and services (solutions) to help them get jobs done, solutions facilitate the movement towards progress. Even though a job is always functional in nature, there are often emotional and social dimensions associated with the progress customers want to make which is why jobs are “complex and multi-layered.” In some cases, emotional and social dimensions can have a higher priority than functional aspects of progress. Further, “jobs to be done are ongoing and recurring. They’re seldom discrete events.”

According to Christensen, circumstance is intrinsic to the definition of a job which is why “a job can only be defined—and a successful solution created—relative to the specific context

in which it arises.” Broadly speaking, job circumstance can be characterized as the totality of contextual factors associated with or emerging from a situation and/or condition that affects the kind of progress customers want to make and how they want to make that progress. As Christensen states, “the nature of progress desired will always be strongly influenced by the circumstance” ⁽³⁶⁾.

To put a finer point on it, an undesirable situation or condition can motivate a customer to transition that current state to a desired future state, which is the progress the customer wants to make. Conversely, a customer may wish to avoid an undesirable situation or condition—a potential hazard which can have functional, emotional and/or social dimensions. Christensen calls these “negative jobs” because customers are trying to get these jobs done expressly to avoid undesired or negative results. Therefore, a current situation, condition and/or the perception of a potential hazard causes a customer to want to make a certain kind of progress.

With these constructs defined and their relationships made explicit, the original jobs theory model suggested by Christensen is depicted as Figure 4.



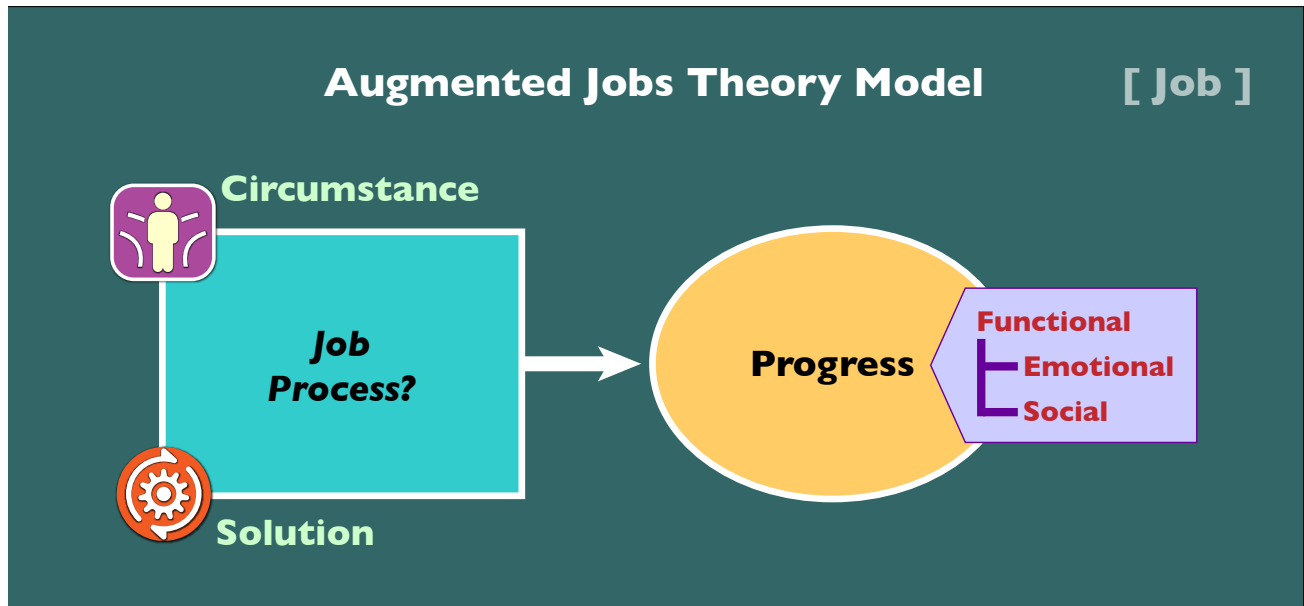
(Figure 4)

Christensen goes on to posit that “a job is always a process to make progress,” which implies customers must execute a job process in order to make progress. This is also suggested

in the definition of progress, which is the “movement toward a goal or aspiration.” The word “movement” in this definition implies process. Although Christensen does not explicitly define job process, there is substantial evidence in his writings and presentations to represent job process as an implied construct in the jobs theory model. For instance, Christensen states that companies must “... shape their offerings around the experiences ... that help [customers] surmount any roadblocks that get in the way of making progress.” Since an “experience” is the perceptual quality of executing a process via solutions for the purpose of making progress, this implies a relationship between job process and desired progress.

Since a customer job is the “progress that an individual is trying to make in a particular circumstance” and “a job is always a process to make progress,” then circumstance has an effect on job process execution. Because customers have limited resources to work with and virtually unlimited jobs they want to get done well (that is, unlimited needs they want to satisfy), customers always want to minimize the time, effort and resources required to make process. In other words, customers want to execute any job process as efficiently as possible. That being the case, circumstance not only affects the kind of progress customers want to make but also how they want to make that progress. In short, getting a job done well means executing a job process as efficiently as possible to make expected progress ⁽³⁶⁾.

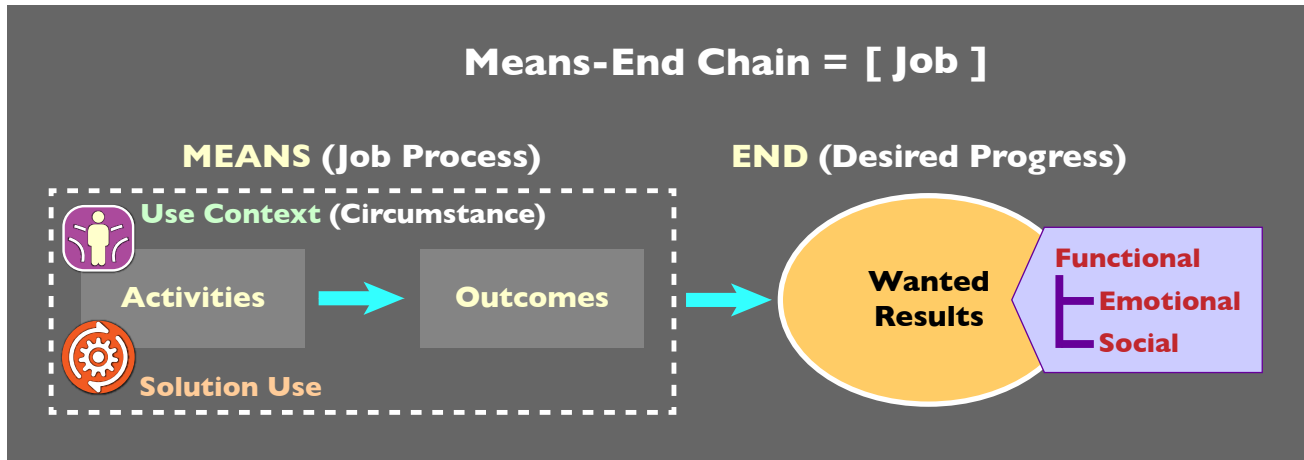
Replacing the “movement towards a goal or aspiration” with the job process construct yields an augmented jobs theory model depicted as Figure 5. Since circumstance has an effect on job process execution, and by extension the progress customers expect to make, circumstance is associated with the job process construct in the augmented model. But it is worth repeating that circumstance also influences the kind of progress that customers want to make (a jobs theory tenet). However, since the intention is to transition the augmented job theory model to a job execution framework, the focus of the model is exclusively on the influence of circumstance on job process.



(Figure 5)

It should be noted that this augmentation does not fundamentally change the original jobs theory model since the job process construct and its relationship with progress is already implied in that model. The difference is that the job process construct is now formally recognized in the augmented model. However, the augmented jobs theory model is incomplete because the job process construct is not operationalized. If job process construct were operationalized, then Christensen's jobs theory model could transition to an applied jobs job done framework. Such a framework would make it easier to understand and apply jobs theory.

As previously discussed, I argue that the foundation of jobs theory is built on means-end theory. To show this, the comprehensive means-end model and the augmented jobs theory model are juxtaposed. To make a clear comparison, the means-end model is shown with its constructs translated into their jobs theory equivalents (see Figure 6). In this comparison model, an entire "means-end chain" can be defined as a "job." The "means" can be defined as "job process"; the "ends" sought by customers can be defined as "desired progress"; and "use context" can be defined as "circumstance." Both the comprehensive means-end model and the augmented jobs theory model suggest that solutions enable customers to perform the activities required to achieve wanted results. With this comparison, it is apparent that the jobs theory model and the means-end model are well aligned.



(Figure 6)

To be clear, Christensen does not mention means-end theory in any of his writings and presentations. Therefore, it cannot be known with certainty that Christensen was aware of this body of work. However, it is very likely that Christensen was aware of means-end theory since this stream of research is highly relevant to the question he was trying to answer—Why do customers make the choices they do to buy/use certain products and services vis-à-vis competing alternatives? Regardless of whether Christensen was aware of means-end theory or not, the alignment of the two models is self-evident. *Therefore, I conclude that means-end theory is the forerunner of jobs theory.* Since means-end itself is built on value expectancy theory, this means that jobs theory represents the continuation of a stream of scholarly research dating back to the 1950's.

By the late 1990's, research and practitioner activity around means-end theory went mostly dormant and remained so until Christensen introduced jobs theory in 2003. Although it is not apparent to most that the core of jobs theory is means-end theory redux, it is important to recognize previous theoretical contributions. For one, a good understanding of means-end theory can provide a nuanced understanding of jobs theory. That said, Christensen's contribution to this rich stream of research is significant. He creates a new theory of customer choice built on means-end theory and wraps an intuitive language around the theory that substitutes for less intuitive (formal) constructs. He relates all the constructs around the job-to-be-done in such a way as to tell the story of what customers are trying to do as they use solutions.

Further, Christensen expands the role of circumstance in customer choice. Circumstance not only affects how customers want to get a job done (i.e., job process execution), but also the kind of progress they want to make (wanted results). In means-end theory, the role of use context (aka: circumstance) is restricted to specific customer-product interactions. Christensen also incorporates switch forces into jobs theory which is not addressed in means-end theory. Lastly, Christensen popularizes jobs theory with his famous milkshake marketing story which is a part of nearly all his writings and presentations. At some point, jobs theory starts to gain traction among mainstream innovators. Today, most innovators understand the basic premises behind jobs theory, and many are applying jobs theory in their work. We can thank Christensen for carrying the torch forward on this rich body of work, which has been evolving over the last 5 decades

However, it is rather curious that Christensen chose to leave the job process concept non explicit in the jobs theory model. He could have incorporated this aspect of means-end theory to define the job process construct. Instead, he puts the focus on creating job stories that surface how customers are struggling to get a job done well (per expectation). Once struggles are identified, the focus shifts to understanding the circumstance causing those struggles. With this understanding, solutions can be created that accommodate and resolve the circumstance associated with a particular job. Customers will want to hire these kinds of products and services because those solutions can get jobs done better than competing alternatives.

That said, job stories that are not connected to an explicit job process can get a bit amorphous, among other things. Christensen may have taken this direction to keep jobs theory conceptually simple and easy to apply. However, I suggest that the lack of structure around the job process construct has impeded its widespread use—ironically. Going forward, I will discuss the advantages of operationalizing the job process construct to quickly and precisely identify customer needs and the value that customers want to get jobs done better, faster, and cheaper.

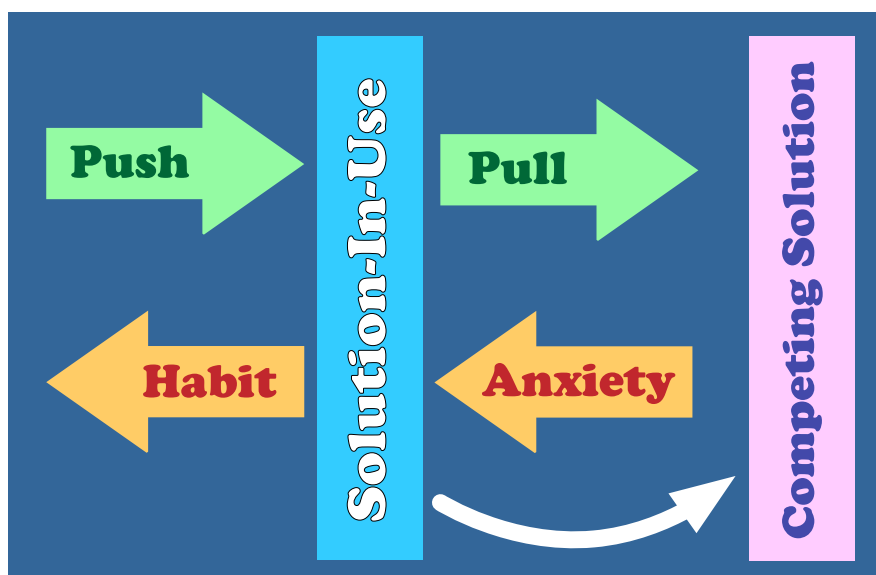
The Forces of Progress

All too often it is assumed that because a new product or service offers a significant improvement over competing solutions that customers will recognize the difference and make the switch. But once a new solution is launched, providers are often surprised when customers do not switch as expected, despite being offered a seemingly superior solution. Bob Moesta and Chris Spiek introduced a conceptual model circa 2012 called the Forces of Progress,

which offers insight into customer switching behavior ⁽⁴⁵⁾. In the book “Competing Against Luck,” Clayton Christensen positions the Forces of Progress as an extension of jobs theory to help explain the dynamics involved when customers hire and fire solutions.

The Forces of Progress is an adaptation of the force field model developed by the late Kurt Lewin, a social psychologist who studied how individuals and organizations change in response to their environment. Lewin’s model suggests that there are two opposing forces that are always in play when trying to change a current situation to a desired future state. First, there are forces pushing for change, which are called driving forces. Second, there are forces resisting change, which are called restraining forces. When the driving forces become stronger than restraining forces, change will happen. Else the equilibrium of the current situation will be maintained ⁽⁴⁶⁾.

The Forces of Progress is the application of Lewin’s model in the context of customer switching behavior. Here the focus is not on situational change, per se, but rather on the dynamics involved when customers fire a solution-in-use and hire a competing solution that can get a job done better. Specifically, there are two driving forces and two restraining forces that surround customer choice like an invisible force field. The Forces of Progress model suggests that it is ultimately the dominant force, either driving or restraining, that determines whether a customer is motivated to switch to a competing solution (see Figure 7).



(Figure 7)

There are two driving forces working for a switch. The first driving force has to do with the moments of struggle relating to a solution-in-use which cause customers to push away or reject that solution. The greater this push force the more motivated customers are to fire a solution-in-use. The second driving force has to do with the attractiveness of a competing solution. The extent to which a competing solution is better than the solution-in-use (in a customer's mind) exerts an attraction or pull force on customers. The greater the pull of a competing solution, the more motivated customers are to hire that solution. Although solution pull is a driving force, it is positioned on the right side to indicate that it is an attraction force rather than a repulsion force. To be clear, both push and pull are driving forces.

The Forces of Progress model suggests that to acquire customers for a new or existing offering, those customers must be pulled away from competing solutions-in-use. Simply put, customers must switch to that offering. It should be noted that the premise of switch assumes that competing solutions are exclusive in nature (aka: exclusive solutions), meaning that only one of those solutions is needed to get a particular job every time that job arises. For exclusive solutions, a switch will only happen if there is enough push away from a solution-in-use and enough pull towards a competing solution. Therefore, enough push without enough pull does not create demand. Conversely, enough pull without enough push does not create demand either. Customer demand is created only when there is enough push and enough pull forces at work.

There are two restraining forces working against a switch. The first restraining force is the anxiety associated with adopting a new solution. Concerns arise such as, "Will the solution work as promised?" and "Can I trust the company selling the solution?" and "Will the new solution cause potential problems or hazards down the road?" The greater the anxieties surrounding the adoption of a new solution, the greater the resistance will be to switch to that solution.

Psychologists Daniel Kahneman and Amos Tversky studied individuals who are faced with a choice that involves giving something up in order to get a potential gain from making a new choice (Prospect Theory). They found that individuals weight the loss of what is in hand twice as much as a potential gain ⁽⁴⁷⁾. Applying this to the Forces of Progress, customers can be strongly biased when it comes to firing a current solution and hiring a new solution, even if the new solution can get a job done significantly better. Therefore, solutions-in-use become sticky to the extent that customers have anxiety about switching to a competing solution.

A second restraining force is a well-established habit which involves familiar routines associated with a solution-in-use. It has been widely studied that individuals are remarkably resistant to changing their habits. The stronger the habit of using a particular solution, the greater the resistance to switching to a new solution. Stated another way, a solution-in-use gets stickier to the extent that a competing solution requires a change in established routines to get a job done. Although habit is a restraining force, it is positioned on the left side to indicate that customers resist changing established routines that take little to no effort to maintain. As such, a superior competing solution that requires significant change in habit can reduce the perceived value of that solution. Therefore, when a competing solution requires some change in established routines, more pull force may be required to overcome the stickiness of habit.

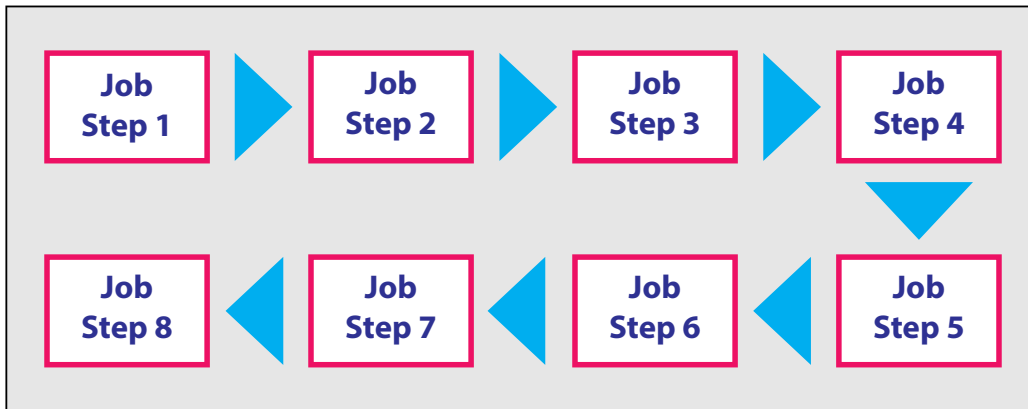
To recap, the two driving forces of push and pull work for a switch. The two restraining forces of habit and anxiety work against a switch. If the driving forces become dominant, customers will fire a solution-in-use and hire a competing solution. If the restraining forces remain dominant, then customers will continue to hire the solution-in-use, rejecting competing solutions. Looking at customer switching behavior through the lens of the Forces of Progress explains how a seemingly superior solution can fail to motivate a switch.

Ulwick's Job Process Framework

In January of 2002, a landmark article entitled “Turn Customer Input into Innovation” by Anthony W. Ulwick appeared in the Harvard Business Review. In this article, Ulwick describes an outcome-based methodology that involves deconstructing the activities associated with using a particular product or service. He suggests that customers perform these job activities expressly to accomplish logical objectives, called job steps, that together represent the logical process associated with a particular job. Ulwick asserts that customers must accomplish all job steps to successfully execute a job ⁽⁴⁸⁾.

In his book “What Customers Want” published a few years later in 2005, Ulwick builds on this job process to create a comprehensive methodology he calls Outcome-Driven Innovation or ODI for short ⁽⁴⁹⁾. As such, the job process framework, and more generally jobs-to-be-done, is at the core of ODI. Although Ulwick refers to this job process by a few different names over the years, I refer to it here as the job process framework for consistency (see Figure 8).

Basic Job Process Framework

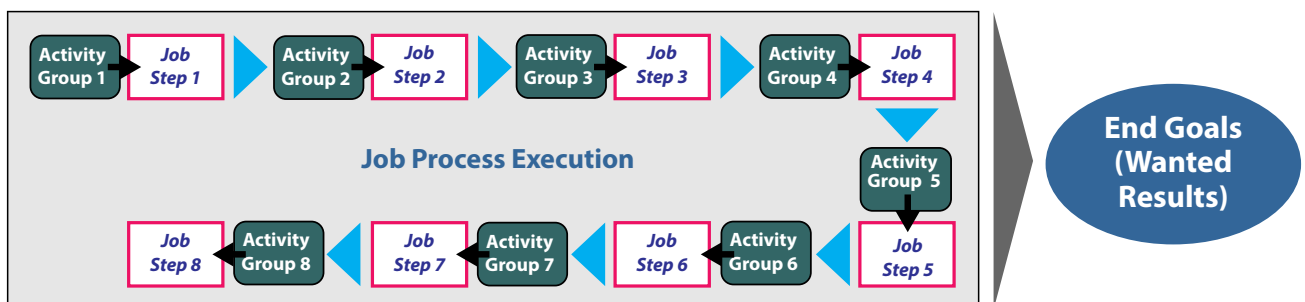


(Figure 8)

This framework implies that the activities customers perform as they try to get a job done are clustered into activity groups. A single activity group consists of one or more activities that are performed in tandem (or rapid coordinated succession) for the purpose of achieving a logical objective—that is, a job step. Think of a single job step as an end point or goal toward which a particular activity group can be logically directed. Without such a goal, an activity group would be aimless or nonsensical which is not consistent with how jobs get done.

Therefore, all the logical steps associated with executing a particular job delineates job process logic. A job process is “logical” because activity groups must be orchestrated in a way that are collectively capable of generating desired results. That being the case, the execution of any job process characterizes purposeful behavior. Together, activity groups and their corresponding job steps operationalize job process execution (see Figure 9).

Job Process Framework with Activities



(Figure 9)

For each activity group comprising a job process, customers have one or more criteria they use to gauge how efficiently the corresponding job step is accomplished via those activities. Customers also have criteria to gauge the perceived effectiveness of an activity group with respect to its contribution to generating wanted results. In Ulwick's job process framework, these criteria are called "desired outcomes" and they represent the customers' needs with respect to job execution. As Ulwick states in his book, *What Customers Want*, "Desired outcomes ... are fundamental measures of performance that are inherent to the execution of a specific job." Simply put, desired outcomes are performance criteria that determine how well a job is executed in the mind of a customer.

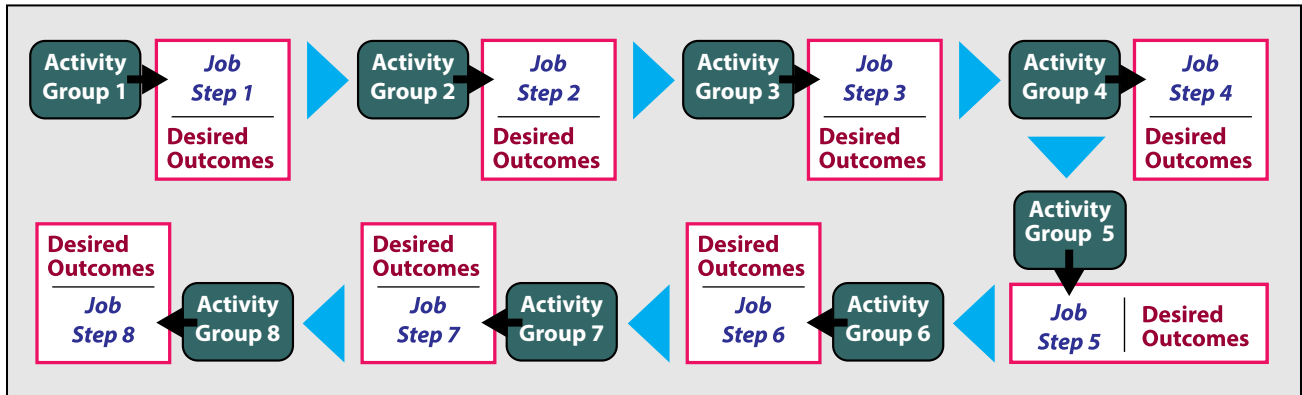
Because customers use a combination of products and services to help them get jobs done, solutions often involve the co-execution of jobs via—physical products (i.e., service appliances), provider organizations, digital agents, and/or non-providers. Co-job executors perform some or all of the activities required to generate wanted results. As customers interact with a particular solution(s), they experience intermediate consequences or outcomes from those interactions regardless of who or what is performing job activities. It is worth emphasizing that these outcomes occur while job executors are performing activities and should not be confused with job steps—which are the logical objectives that customers are trying to accomplish via activities.

Customers evaluate the efficiency and perceived effectiveness of solution interactions by comparing the actual outcomes of those interactions against desired outcomes—their performance criteria for successfully executing a job. Customers have a good experience using a particular solution to the extent that actual outcomes meet the customers' expectations for those outcomes. Because desired outcomes are tethered to job process logic, these performance criteria are independent of solutions. That is, solutions come and go but the criteria customers use to evaluate the efficiency and effectiveness of solutions remains the same as long as a job continues to be executed—usually well into the future. Stated another way, desired outcomes are the criteria used to evaluate the performance of solutions with respect to job execution, but solutions do not define these criteria.

To summarize, job steps are the logical objectives customers are trying to accomplish by way of performing activities. In contrast, desired outcomes indicate how customers want to perform those activities as they try to accomplish job steps. As such, desired outcomes are the customers' needs with respect to executing a job; they are independent of solutions and

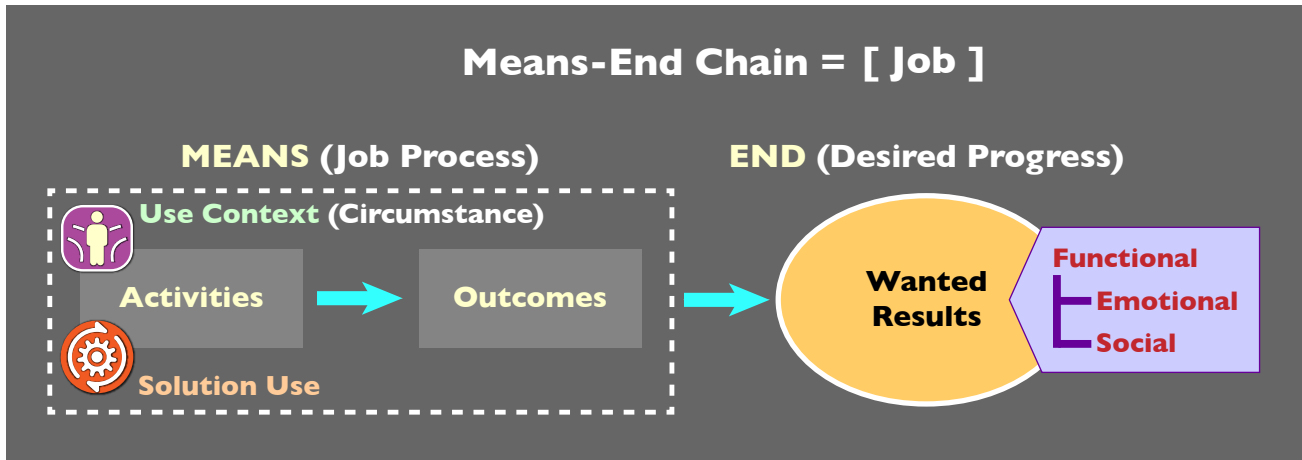
therefore stable over time. That being the case, desired outcomes are the criteria customers use to gauge how well a job is executed via solutions (see Figure 10).

Complete Job Process Framework



(Figure 10)

Like the jobs theory model, Ulwick’s job process framework is well aligned with means-end theory. For comparison purposes, the comprehensive means-end model is again shown juxtaposed with jobs theory constructs (see Figure 11). Recall that the means-end model suggests that customers orchestrate a number of discrete activities with the help of solutions (the means) to achieve wanted results (ends). It should be noted that “discrete activities” are conceptualized as “activity groups” in the job process framework. A means-end chain consists of all the activities that customers are trying to perform in a particular solution-use context. As such, a means-end chain represents the “consumer process” linking wanted results to a customer’s behavior with respect to the purchase and use of solutions.



(Figure 11)

As a discrete activity is performed using a particular solution, certain outcomes occur due to customer-solution interactions (i.e., customer experiences). The outcomes that customers want to happen are called desired outcomes and these often differ from actual outcomes. Therefore, customers have one or more desired outcomes associated with each discrete activity. Customers achieve wanted results, as expected, to the extent that all the outcomes associated with the use of a particular solution(s) are capable of generating those results ⁽⁴³⁾.

The limitation of means-end theory is that the desired outcomes associated with a “consumer process” cannot be defined without first knowing all the discrete activities customers are performing in a particular use context. By way of laddering interviews, customers are asked—what activities are you performing as you use this particular solution? And therein lies the problem. Customers can use different solutions to execute the same consumer process in the same use context. Different solutions structure activities in different ways—which is the nature of solutions. This creates a lot of diversity with respect to the activities customers are performing in a particular means-end chain.

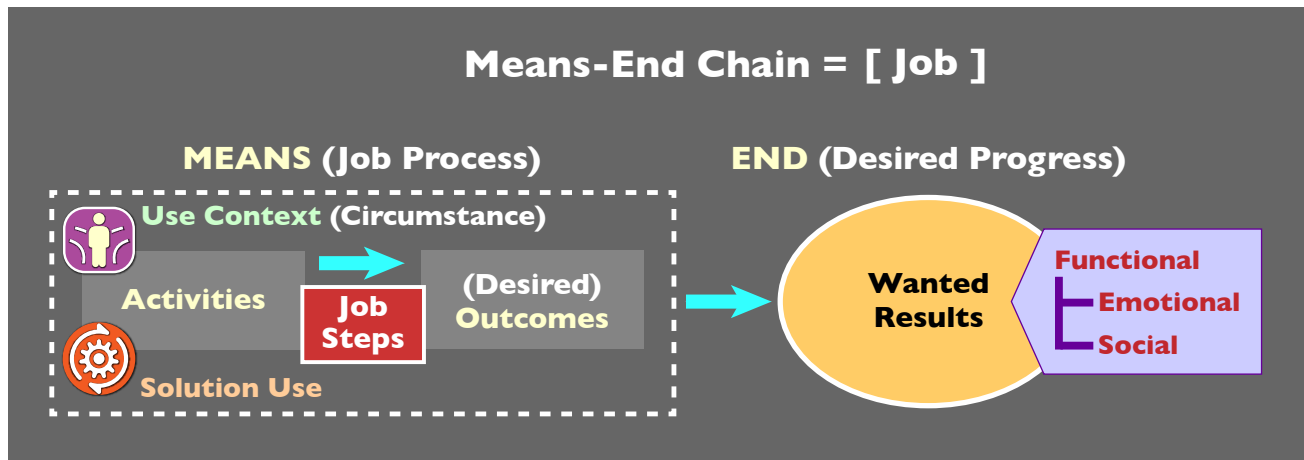
That being the case, a lot of qualitative data must be collected from a number of different customers. That data is then coded, sorted and analyzed to surface the standardized sequence of discrete activities associated with a particular means-end chain. Once these activities are identified, customers are interviewed to ascertain all desired outcomes associated with those activities. The techniques involved in doing all of this are not only time and effort intensive, but they require knowledge of sophisticated statistical methods and tools. This is what makes the

means-end approach very cumbersome to use and is partly why means-end theory has not been widely adopted by practitioners.

Ulwick's job process framework is a much faster and simpler approach. Rather than focusing on the activities associated with a number of different solutions, job process logic is first defined independent of solutions-in-use. That is, job steps are delineated for a customer job irrespective of available solutions creating what Ulwick calls a "job map." To aid in this process, Ulwick developed a universal job map template that depicts the generic structure of any job process. Adapting this template as a starting point to frame-out job process logic, innovators can quickly map out the job steps for any customer job.

With a job map in hand, customers are then interviewed to capture all the desired outcomes associated with the activities that must be performed to accomplish those job steps. It doesn't matter that customers may be performing those activities in different ways via the use of different solutions. So long as customers are trying to get the same job done, they are also trying to accomplish the same job steps. As such, customers have the same desired outcomes with respect to performing job activities. Ulwick's approach vastly reduces the time, effort and complexity of defining a complete set of desired outcomes for a particular job ⁽⁵⁰⁾.

In short, I posit that Ulwick's job process framework advances means-end theory. Introducing the concept of job steps to the comprehensive means-end model shifts the primary unit of analysis from solution attributes and activities to job process logic. In doing so, it becomes much faster and less complicated to capture all customer desired outcomes associated with a particular job. This overcomes a limitation of means-end theory that has impeded its broad adoption among innovators. But more than that, Ulwick's job process framework operationalizes the job process construct that remains non-explicit in the jobs theory model—the implications of which will be discussed going forward. An augmented (comprehensive) means-end model that incorporates job steps is depicted as Figure 12.



(Figure 12)

Job process logic is not apparent to most innovators because this logic exists in the background like an invisible substrate. Instead, the primary focus of innovation is most often on what can be seen, namely customer activities (aka: the customer experience). In fact, customers themselves are seldom aware of job process logic as a whole since they are faithfully following the routines structured for them by solutions. Because customers are oriented around using solutions, asking customers to define their needs with respect to getting a job done will likely yield suggestions about how to improve solutions-in-use rather than articulating their desired outcomes ⁽⁵¹⁾.

This is a subtle, yet important distinction. When the primary focus (aka: unit of analysis) of innovation is on solutions rather than the jobs customers are trying to get done, innovation possibilities are significantly constrained. For example, it's often the case that innovation efforts start with mapping customer activities associated with specific solutions (aka: a customer journey map). Customer "pains" and "hassles" associated with those activities are identified. Innovators then endeavor to solve the customers' "problems" by enhancing existing solutions and creating new solutions. However, ideating on solution possibilities before defining and prioritizing all customer needs with respect to a job-to-be-done is like putting the cart before the horse, so to speak.

Innovation efforts that take this kind of "solutions-first approach" are naturally funneled into the current design paradigm of existing solutions (aka: the dominant design). Constrained within this paradigm, innovation efforts seek to incrementally improve, optimize or enhance the

dominant design. With such a myopic perspective, companies can easily miss ground-breaking innovation opportunities since they often lie outside the scope of the current paradigm. When companies fail to recognize such opportunities, they run the risk of getting blindsided by game-changing solutions introduced by competitors who recognize and successfully exploit those opportunities. Classic examples include the failure of Kodak and Blockbuster to recognize the potential of digital photography and content streaming until it was too late.

Ulwick suggests a better approach to innovation is to first understand all the customers' needs with respect to getting a particular job done before ideating on possible solutions. This is accomplished by mapping all the job steps associated with a job, thereby defining the logical job process. The resulting job map provides the structure around which a complete set of customer needs can be quickly captured for that job. Customers are then asked to prioritize the set of needs. That is, customers rate each desired outcome for importance and the extent to which each desired outcome is satisfied by solutions-in-use.

An analysis of the importance and satisfaction ratings reveals which needs are under-served, over-served and appropriately served. Once this is clearly understood, innovators can enhance existing solutions and create new solutions that help customers get a job done better than competing alternatives at the lowest possible cost to the provider. Innovation efforts that follow this kind of "needs-first approach" are far more likely to create game-changing solutions with huge growth potential. Because innovators know in advance the value that customers want from solutions to get a job done better, innovation efforts become predictable rather than hit or miss ⁽⁵²⁾.

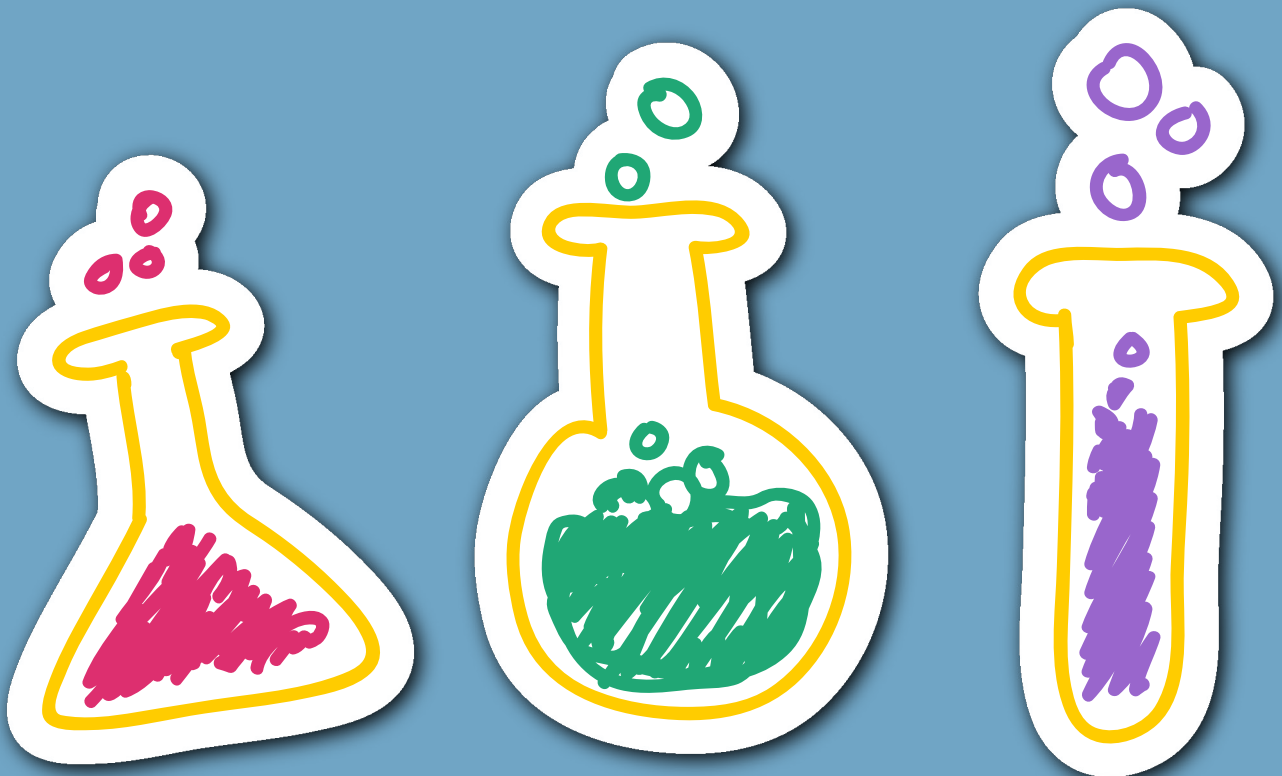
Like Christensen, Ulwick makes no mention of means-end theory in his writings and presentations. Regardless of whether Ulwick was aware of means-end theory or not, his job process framework is nonetheless a significant contribution to this stream of research. Additionally, the job process framework operationalizes the job process construct implied by Christensen's jobs theory model. Christensen was well aware of Ulwick's job process approach even before he first wrote about jobs theory in 2003. Notwithstanding this knowledge, Christensen chose to keep the job process construct non explicit in the jobs theory model. Instead, jobs theory focuses entirely on progress, even though, as Christensen posits, "a job is always a process to make progress."

One reason I believe Christensen did not adapt Ulwick's job process concept was that it was

too meshed with Outcome-Driven Innovation (ODI), which was entirely proprietary at the time (protected by patents). Today, Ulwick's job process framework as described here is in the public domain. However, other parts of the Outcome-Driven Innovation methodology remain proprietary. Christensen may have also concluded that adapting Ulwick's job process approach would make jobs theory too complex for the mainstream. This could doom jobs theory to the same fate as means-end theory. For this reason, Christensen strived to keep jobs theory relatively simple to increase its broad adoption among practitioners. Ironically, however, I assert that the lack of structure around the practice of jobs theory has hampered its broader use.

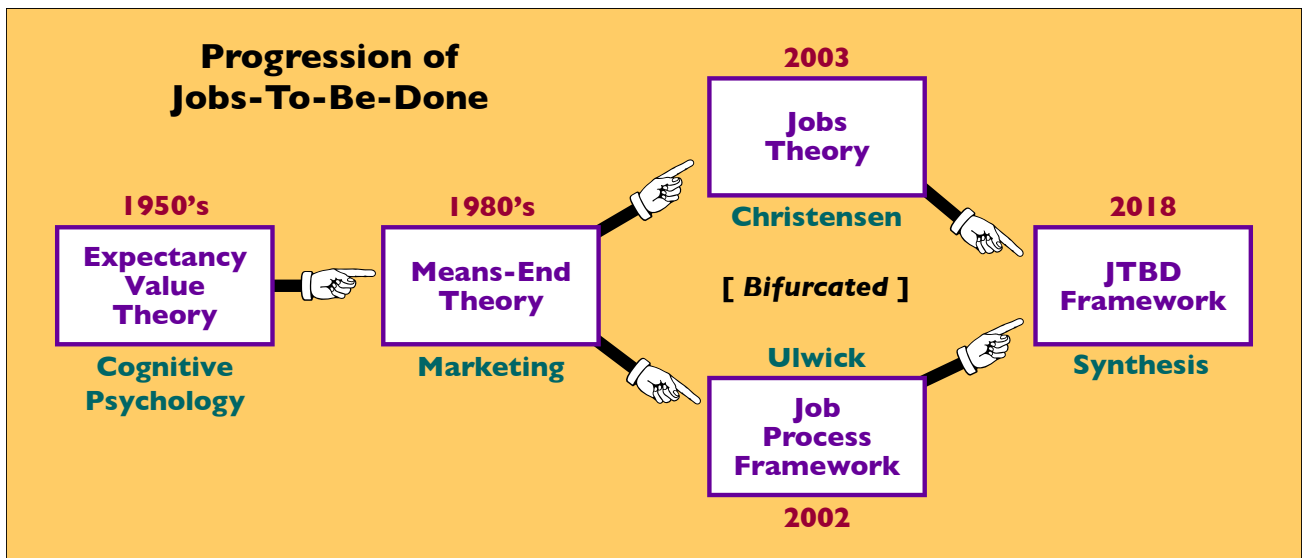
Chapter 2

Synthesizing the Two Schools of Thought for Practicing Jobs to be Done



As previously discussed, both jobs theory and Ulwick's job process framework are well aligned with means-end theory. That is the reality even if Christensen and Ulwick were unaware of this body of work—which is unlikely. This means that jobs theory and the job process framework represent a progression of scholarly research dating back to the 1950's with the development of expectancy value theory in cognitive psychology. For reasons not entirely understood, however, the progression of means-end theory bifurcated (split) into two schools of thought for practicing jobs to be done—1) Christensen's job-as-progress approach and 2) Ulwick's job-as-a-process approach.

Over the years, both Christensen and Ulwick have been quite active, and even competitive, promoting their respective approaches to jobs-to-be-done. These seemingly dichotomous approaches have created some confusion among the mainstream because it is not clear which approach is the best practice for innovation. Both have their strengths and limitations. I contend that the limitations of each approach have impeded the broad adoption of jobs-to-be-done in their own way. I posit that combining these two approaches produces a comprehensive jobs-to-be-done framework (aka: JTBD framework) that leverages the strengths of both while eliminating their individual limitations (see Figure 13).



(Figure 13)

I rationalize a synthesis based solely on the method synergies that exist between jobs theory and the job process framework without invoking means-end theory to inform this synthesis. It has already been shown that jobs theory and the job process framework are complimentary aspects of means-end theory. The following rationalizations are yet a second path to the JTBD framework based on the merits of both approaches. I start with jobs theory as the primary basis of a synthesis and then discuss the adaptation of Ulwick's job process framework into the jobs theory model.

Rationale for Synthesis

Jobs theory is a powerful tool in the hands of those who have taken the time to effectively apply it through years of practice. However, I content that its broader adoption has been constrained because Christensen did not operationalize the jobs theory model into an explicit framework. Generally speaking, a framework provides the structure around which a methodology can be developed while also enabling the integration of other complementary tools and methods. Instead of a framework, Christensen provides a number of guidelines or quasi methods for applying jobs theory which many practitioners find too conceptual in nature. Consequently, the learning curve associated with the practice of jobs theory can be steep due to a lack of structure.

The strength of jobs theory is that it lays out a system of interrelated concepts that together explains why customers make the choices they do to buy/use solutions. As such, jobs theory can predict certain aspects of customer behavior. Innovation efforts that are informed by this foresight are far more likely to succeed as opposed to efforts that hinge on a significant degree of speculation (or as Christensen would say, "luck"). Further, the names of jobs theory constructs are based on familiar and relatable metaphors such as job, progress, circumstance, hire, fire, struggle, etc. These metaphors tell the story of what happens when customers buy and use solutions. So, in a narrative sense, jobs theory is relatively easy to understand. However, applying jobs theory in practice can be challenging.

Ulwick, on the other hand, did develop a framework for the rigorous application of jobs-to-be-done, but the framework lacks an explicit theoretical basis. It has been shown that Ulwick's job process approach is a unique application of means-end theory. But as previously discussed, it is not clear whether Ulwick was informed by means-end theory, or any other theory for that matter, when he developed the job process framework. He does not mention a theoretical basis

in any of his writing or presentations. Without a theoretical basis, it appears that claims to the efficacy of the job process framework are informed primarily by years of practice via consulting projects. The efficacy of Ulwick's job process framework as a stand-alone methodology therefore relies solely on the success stories published by Ulwick himself.

Further, Ulwick's job process framework is the front-end or core component of Outcome-Driven Innovation (ODI)—a proprietary and protected methodology. Now, it should be noted that Ulwick and his associates have made substantial efforts to make the job process framework available apart from ODI. For example, Ulwick created the Jobs-to-Be-Done Canvas under a Creative Commons license ⁽⁵³⁾. While this is a stand-alone jobs-to-be-done tool, it is nonetheless an integral part of the larger methodology that subsumes it, namely ODI.

As such, customer needs captured via the Jobs-to-be-Done Canvas will not be very useful without a way to prioritize those needs for the purpose of identifying innovation and cost reduction opportunities. Doing so will require the back end of the ODI process since the Jobs-to-be-Done Canvas is aligned with this methodology. Therefore, Ulwick's job process framework is useful to the extent that it is paired with ODI. In some cases, a license or certification is required to practice Outcome-Driven Innovation.

I contend that the systematic and rigorous application of the jobs-to-be-done approach requires an understanding of both Christensen's jobs theory model and Ulwick's job process framework. That is because each perspective has certain limitations that are rectified by the strength of the other (i.e., method synergy). In many respects, both of these perspectives are "two sides of the same coin," so to speak. Combining both into a single framework—

- Eliminates confusion about which approach to adopt.
- Enhances the structure of the jobs theory model.
- Provides a theoretical basis for the job process framework.
- Offers practitioners a complete jobs-to-be-done methodology in the public domain.

Doing so would make jobs-to-be-done more widely accessible and useful to a broad spectrum of innovation practitioners. The problem is that there are also conceptual inconsistencies and disagreements between jobs theory and Ulwick's job process framework that cannot be effectively resolved post hoc (that is, via mashup or simple combination). Specifically, the job

process framework—

- Does not explicitly recognize the concept of job circumstance.
- Does not recognize that the functional goals and aspirations that customers are trying to achieve can have emotional and social dimensions. Instead, Ulwick suggests that there are functional, social and emotional jobs.
- Does not recognize that customer moments of struggle (MoS) can be identified apart from analyzing prioritized desired outcomes to identify unmet needs. In contrast, Christensen suggests that MoS and the circumstance causing those struggles can be identified via job stories.

On the other hand, jobs theory—

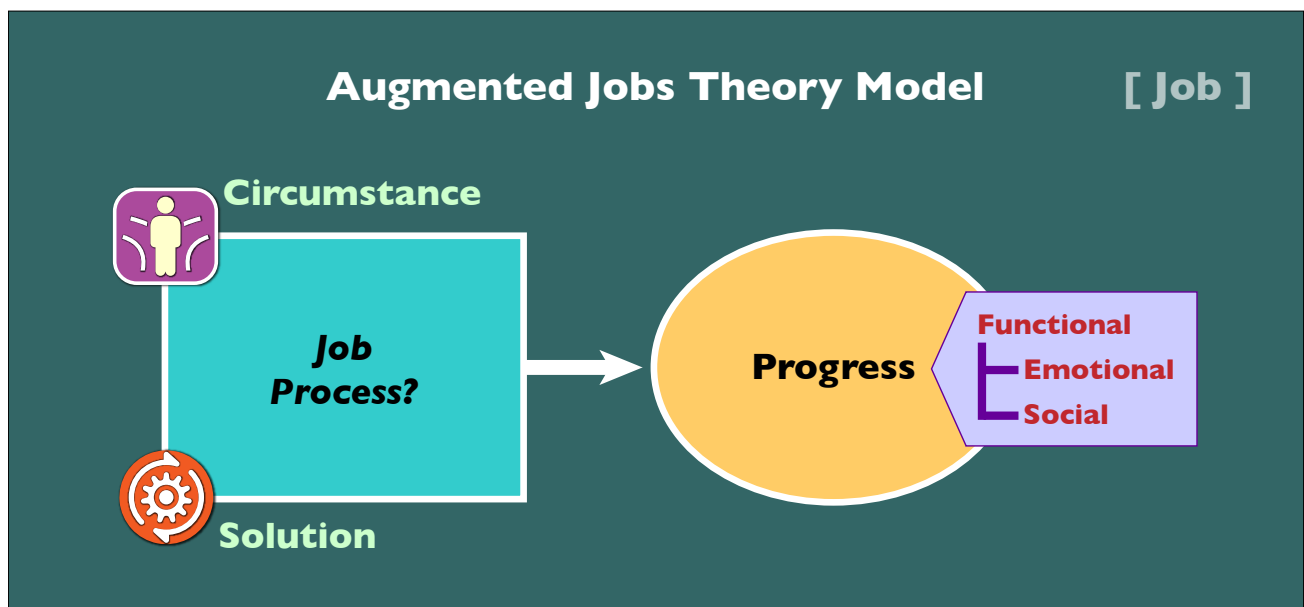
- Does not explicitly recognize the logical structure of a job process as the means for making progress (although Christensen does imply this).
- By extension does not recognize that this job process can be used to define a set of customer needs associated with any executable job. Instead, Christensen suggests creating a “job spec” that informs how to resolve the MoS caused by job circumstance.
- Does not explicitly recognize that moments of struggle can also occur as job executors are trying to perform job activities for the purpose of accomplishing job steps (but again, these kinds of struggles are implied by Christensen).

Pursuant to harnessing method synergies, Christensen’s jobs theory model and Ulwick’s job process framework are synthesized in a manner that resolves the aforementioned conceptual inconsistencies and disagreements while reconciling their common truths. I term this new conceptual structure the jobs-to-be-done framework (aka: JTBD framework). The JTBD framework provides a well-structured and theory-based methodology for the systematic and rigorous practice of jobs-to-be-done. The approach for synthesizing the two schools of thought regarding the practice of jobs-to-be-done is subsequently discussed.

Refinements to Christensen's Jobs Theory Model

The following is an overview of the synthesis approach. In the augmented jobs theory model, the progress construct is operationalized while the job process construct is implied (see Figure 14). Therefore, the basis for synthesizing the two schools of thought is to refine the augmented jobs theory model since this model already implies job process. Additionally, the jobs theory model has an inherent theoretical basis.

Ulwick's job process framework is adopted to operationalize the job process construct. The progress and job process constructs are then further refined to align with each in a manner that is consistent with established jobs theory tenets. It is worth emphasizing that these operational refinements do not change the fundamental nature of Christensen's jobs theory model since all the constructs and their causal relationships remain intact.



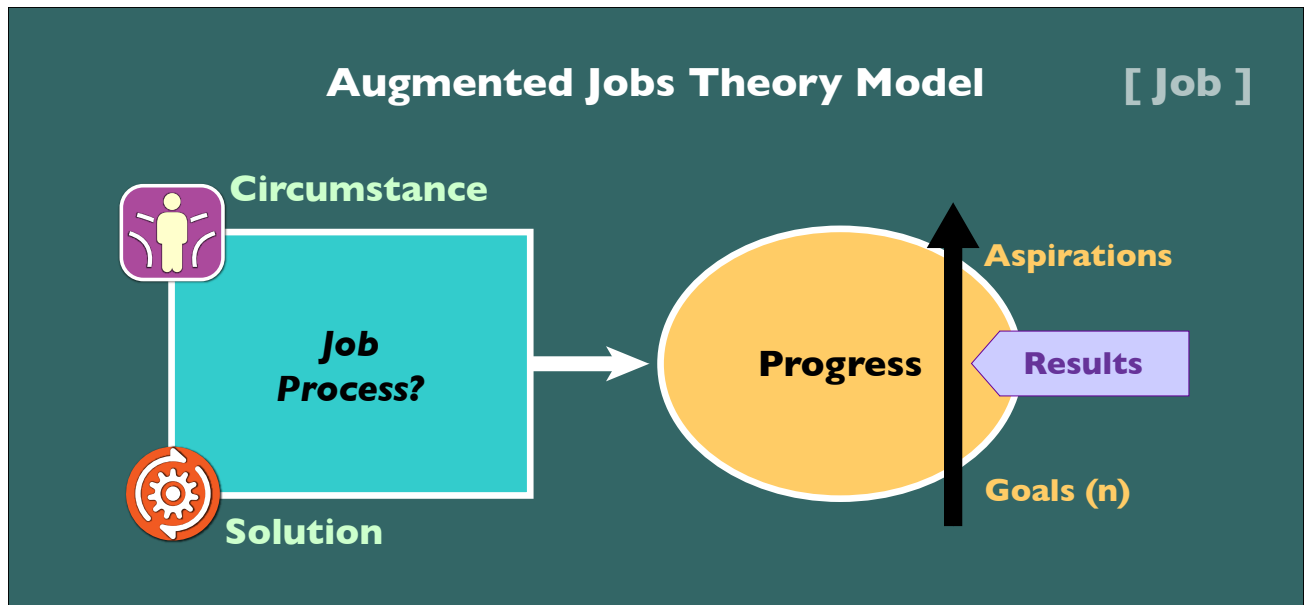
(Figure 14)

Progress

Recall that Christensen defines progress as, “the movement toward a goal or aspiration.” It should be clarified that although a goal and an aspiration are both a result, an aspiration is at

a higher-level of abstraction than a goal. As such, reaching an aspiration involves achieving or obtaining a number of goals(n) and this can only be accomplished by successfully executing multiple related jobs. So, a goal and an aspiration represent different levels of progress and this has implications for operationalizing the progress construct.

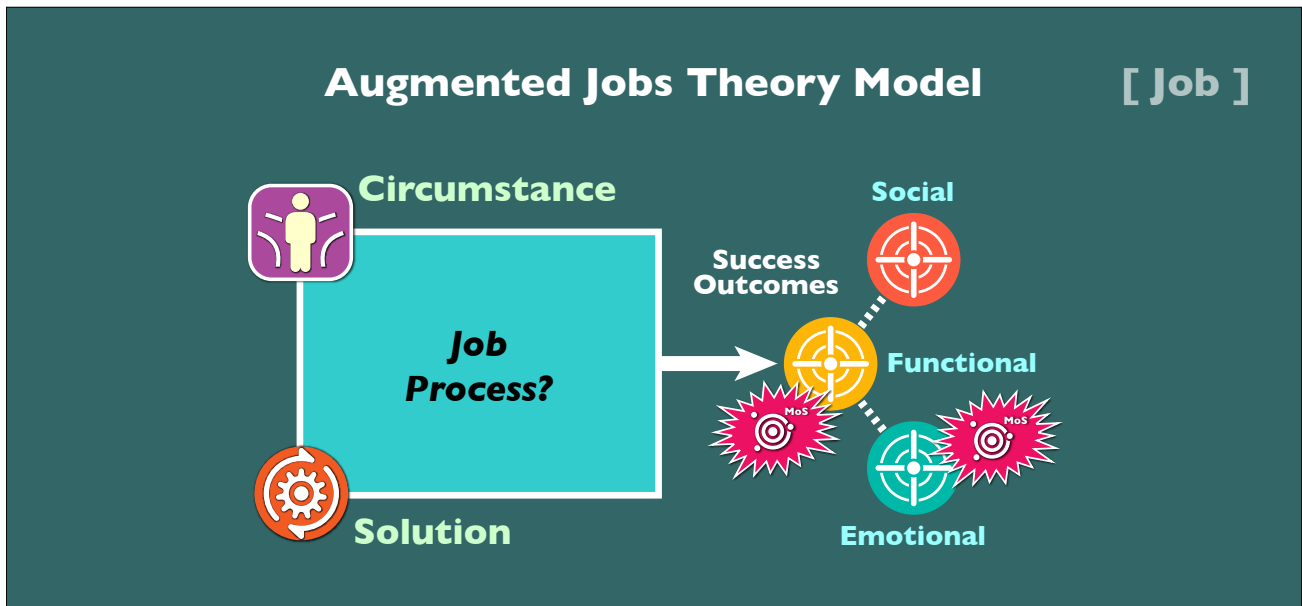
Further, customers are often trying to achieve multiple goals and aspirations—not just one—for any given job. Even though functional results are tangible occurrences, any functional result can have emotional and social dimensions. This means that emotional and social results are dependent on functional results for effect. Progress therefore is defined as the functional results and their emotional and social dimensions that customers are trying to achieve as they execute a job and these results can be at different levels of abstraction (Figure 15).



(Figure 15)

Following this rationale, the progress construct is operationalized as one or more results that a customer wants to happen and those results that a customer wants to avoid. I term these results “success outcomes” because a job gets done successfully in a customer’s mind to the extent that wanted results are achieved and unwanted results are avoided. Further, lower-level success outcomes must be “stacked” (or rolled up) in a way that enables a customer to achieve higher-level results. Therefore, customers must stack jobs to make desired progress at higher levels of abstraction (i.e., job stacking behavior).

As previously stated, functional success outcomes can have emotional and social dimensions. The dotted line indicates that emotional and social success outcomes are dependent on functional success outcomes for effect. Customers struggle to make progress when any success outcome falls short of expectation or is not generated at all (see Figure 16).



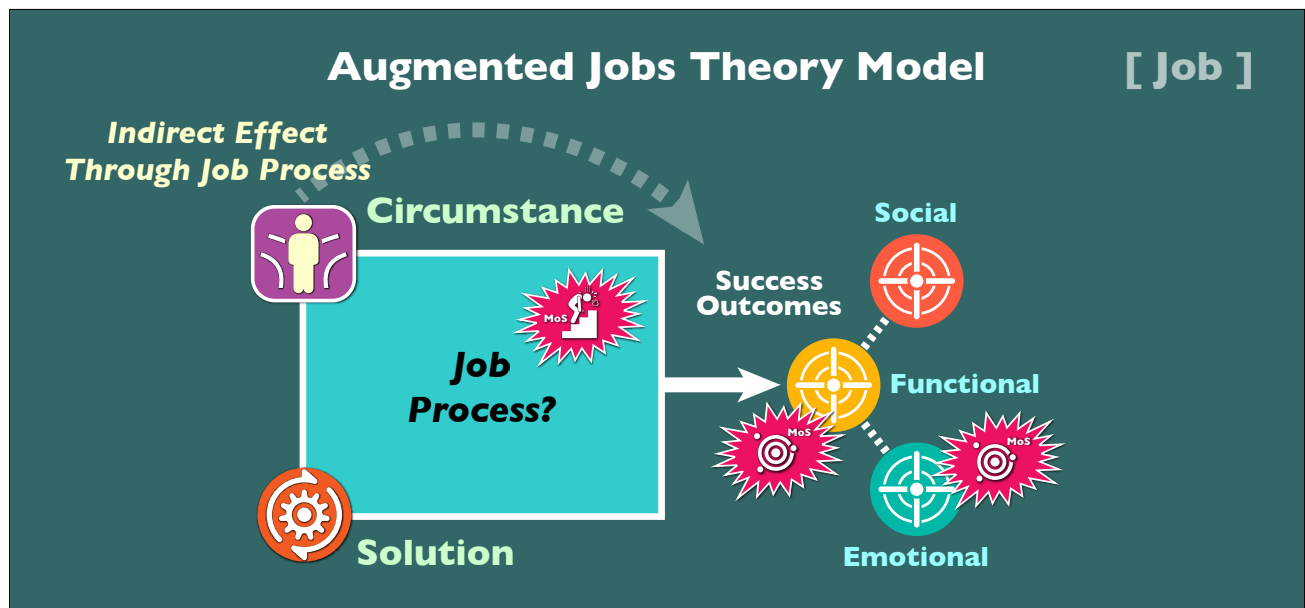
(Figure 16)

Job Process

As previously noted, Christensen's states that "a job is always a process to make progress" meaning that individuals must execute a job process to make progress. This assertion is axiomatic (self-evident) in the sense that it is not possible for a job executor(s) to achieve results without taking action—either performing all activities required to execute a job process or performing those activities in concert with a service provider(s), which includes physical service appliances. Further, Christensen posits that any job is executed under a particular circumstance; that the inability of solutions to accommodate and resolve job circumstance is what ultimately causes individuals to struggle to make desired progress.

Given that progress is made by executing a job process, the only way that circumstance can

cause a customer to struggle to make progress is to influence job process. As such, the job process construct must be operating in the jobs theory model, albeit non explicit. This means that the influence of job circumstance on desired progress is mediated by job process. That is, circumstance has an indirect effect on desired progress through job process (Figure 17). The causal relationship between circumstance and the struggle to make progress simply cannot be explained without the mediated role of job process. Since customers must execute a job process to make progress, moments of struggle associated with performing job activities can occur. For this reason, job process must be made explicit to systematically identify all struggles with respect to job execution.



(Figure 17)

To address this, the job process framework suggested by Anthony Ulwick is adopted to operationalize the process construct implied in the job theory model. As previously discussed, a job process is comprised of a number of logical objectives called job steps that customers are trying to accomplish as they (and co-job executors) perform required job activities. Job executors must accomplish all job steps to get a job one well regardless of the solutions that could be used to execute that job. Stated another way, job steps are the intermediate goals associated with activity groups and these job steps are the same regardless of the solutions customers may use to perform those activities—today and well into the future.

As customers perform the required job activities to accomplish job steps, they use a number of outcome metrics (aka: customer needs) to gauge how efficiently and effectively job steps are accomplished. The better a solution performs relative to these outcome metrics, the more valuable that solution is in the mind of a customer—which is why these needs are called metrics of value. But rather than calling these outcome metrics “desired outcomes” as Ulwick does, I term these “customer value metrics” (CVMs) to convey the relationship between customer needs and customer value.

Job Circumstance

Jobs theory makes the claim that circumstance is the causal mechanism underlying customer choice. The rationale is as follows. A job is always executed under a particular set of circumstances. A customer has a “bundle of needs that are in play” in any job circumstance and these needs collectively define what it means to get a job done both efficiently and effectively. When customer needs are satisfied, customers are able to efficiently make desired progress. Solutions structure job activities and they facilitate the integration of the necessary resources to execute an entire job process (aka: solution capabilities), which is why customers hire solutions to get jobs done.

When the capabilities of a solution-in-use cannot sufficiently accommodate or resolve job circumstance, customer needs are not satisfied to one extent or another (aka: moments of struggle). Stated another way, the limitations of solutions-in-use are caused by job circumstance and these limitations, in turn, cause customers to struggle to get a job done well. It has been established that progress can only be made by executing a job process; that circumstance has an indirect effect on progress through job process. Therefore, customers struggle to get a job done well to the extent that circumstance reduces the efficiency and/or effectiveness of job process execution ⁽³⁶⁾.

Customers are keenly aware of the job circumstance causing their struggles by way of solutions, and these are the problems they are trying to solve for. As such, customers seek out job solutions that offer features and benefits they perceive will best accommodate or resolve job circumstance. This reflects that a customer’s hiring criteria is based on how well a solution addresses the circumstance causing their struggles (aka: circumstance of struggle), not moments of struggle, per se. In a customer’s mind, a moment of struggle is the problem and job circumstance is the cause.

In their never-ending quest to get jobs done better, faster and cheaper, customers want to execute any job as efficiently and effectively as possible given the trade-offs they are willing to make with respect to solution capabilities. That being the case, customers choose solutions that best accommodate or resolve the circumstance they perceive can reduce job execution efficiency and/or reduce job execution effectiveness. Therefore, job circumstance causes customers to buy/use certain solutions they perceive will get a job done better than competing alternatives. Based on this rationale, circumstance is the causal mechanism underlying customer choice as jobs theory claims.

Yet despite the fact that circumstance is central to jobs theory, circumstance as a concept is “black boxed” at a high level of abstraction in Christensen’s writings and presentations. Because of this, circumstance is virtually indistinguishable from the context or “reality” that surrounds customers as they try to execute a job. This creates four problems for innovators. First, because job context is highly nuanced and idiosyncratic to individual customers, job execution will never occur in exactly the same context. Second, most context has no influence on the kind of progress a customer wants to make or how they want to make that process. Third, a group of customers may be executing the same job in different contexts, yet they can experience the same or similar moments of struggle due to overlapping or common circumstance. Fourth, an individual customer may be executing the same job in different circumstances and experience different moments of struggle in each of those circumstances.

When innovators get immersed in customers’ job context without knowing precisely what they are looking for, the causal links between circumstance and moments of struggle are obscured. For this reason, it is necessary to distinguish job context and job circumstance. According to jobs theory, there are a number of circumstantial factors that determine the progress customers want to make and how a job must be executed to make that progress. Since some contextual factors influence job execution while other contextual factors do not, this means that circumstantial factors exist within job context. Therefore, job circumstance is defined as the causal factors within job context(s) that collectively determine the kind of progress a customer wants to make and the extent that a customer can efficiently and effectively make that progress.

To put a finer point on it, some circumstantial factors cause customers to want to obtain or achieve certain functional, emotional and social success outcomes. Other circumstantial factors affect how efficiently and effectively customers can execute a job process to make

that progress. As discussed, customers always want to execute a job process as efficiently and effectively as possible given the trade-offs they are willing to make with respect solution capabilities.

Further, customers are able to efficiently make expected progress to the extent that a solution-in-use is capable of accommodating and resolving circumstantial factors per a customer's expectation. That being the case, circumstance determines how customers want to get a particular job done. This, in turn, influences the solutions customers buy/use to get that job done well in a particular circumstance(s). To be clear, "circumstance," "job circumstance," and "circumstantial factors" are synonymous terms.

Retrofitting the Job Process Framework

Ulwick's job process framework is not completely compatible with the augmented jobs theory model because success outcomes are not recognized (aka: progress) as they have been defined here. From Ulwick's perspective, the "desired outcomes" that define the wanted end results that customers want are part of the job process itself. These kinds of desired outcomes are almost always associated with the "execution" job step in Ulwick's model because this is when the efficacy of a solution comes into play with respect to generating end results. Desired outcomes of this type express the probability (aka: likelihood) that a particular end result will happen or not happen. For example, "Increase the likelihood that the package is delivered on time" (wanted result) and "Minimize the likelihood that the package is not damaged" (unwanted result).

Success outcomes, on the other hand, externalize or objectify wanted end results as though they have already happened (expressing desired future states). Because these are the results customers are aiming to obtain or achieve by way of executing a job process (aka: purposeful behavior), they represent the progress that customers want to make in their lives and businesses. It has been established that progress can only be made by executing a job process which means that progress is a lagging indicator of job execution success. Therefore, success outcomes are associated with the progress construct rather than the job process construct.

Additionally, the augmented jobs theory model recognizes that any functional success outcome can have emotional and social dimensions, which is also progress. In some cases, a customer's primary motivation for obtaining or achieving a functional success outcome is to

satisfy the emotional and social needs associated with that functional outcome. In contrast, Ulwick asserts that customers have “core jobs” they are trying to get done to generate only functional end results. Ulwick posits that customers satisfy emotional needs by executing “emotional jobs,” where such jobs do not have desired outcomes. Rather, the emotional job statement itself defines the end state that customers are trying to achieve by way of getting that job done. It should also be noted that Ulwick does not make the same distinction between emotional and social needs as that made by jobs theory.

In the augmented job theory model, some success outcomes are stated in the simple present tense indicating a wanted one-time result. For example, “The package arrives on time” (wanted result) and “The package is not damaged” (unwanted result). Other success outcomes are stated in the present continuous tense indicating that a wanted result is being maintained. For example, “I am maintaining a good credit score” and “Bills are continually paid on time.” Conversely, a customer may want to continuously avoid an unwanted result—“I am protected against identity theft.”

Still there are other desired outcomes in Ulwick’s job process model that state the probability of intermediate consequences occurring while performing activities. These intermediate consequences are desired by customers because they are perceived to be necessary precursors for achieving wanted (end) results. I term these precursor CVMs. For example, “increase the likelihood that a support person will know how to resolve my problem” (a desired outcome of explaining the problem to a support person—a job activity). A support person that knows how to resolve a customer’s problem (i.e., capability) is a necessary precursor to taking the appropriate action to actually resolve the problem (a wanted result).

Because precursor CVMs are intermediate consequences that customers (and co-job executors) experience as they are performing job activities, they remain associated with job process execution in the augmented jobs theory model. Unlike Ulwick’s job process model, however, customer needs that state probabilities of wanted (end) results are expressed as success outcomes. To be clear, customer needs relating to wanted results are not associated with job process execution in the augmented jobs theory model. That’s because customer expectations around success outcomes are met to the extent that a job has been successfully executed.

As such, success outcomes are lagging indicators of job execution effectiveness. Although

precursor CVMs can predict the satisfaction of success outcomes to some extent (in a customer's mind), the satisfaction of these needs is ultimately a function of solution efficacy (which is a function of solution design). The efficacy of a solution, beyond which customers can experience while performing job activities, is beyond the purview of customers. Accordingly, precursor CVMs (predictive indicators) and success outcomes (lagging indicators) are both customer needs that have to do with job execution effectiveness.

Customer Needs Are Associated with Jobs, Not Solutions

As customers are trying to execute any job, intermediate consequences or outcomes happen (or not) along the way and final outcomes are generated (or not) when the job is done. Customer needs are a set of metrics that customers use to measure these job outcomes. Specifically, these are outcomes relating to desired progress (end results) and the outcomes relating to performing the job activities required to make that progress. With a set of outcome metrics in mind for any job, customers are able to gauge how efficiently and effectively a job gets done with the help of solutions.

Customers do this by mentally comparing the difference between actual job outcomes and their expectations for those outcomes. For example, say that a generic outcome metric is “the time it takes to perform a particular job activity.” It is determined on average that this activity currently takes about 20 minutes to perform (actual outcome). However, most customers expect to perform this activity in 10 minutes or less (expected outcome). In this case, customers are struggling to efficiently perform this particular activity because it is currently taking twice as long as expected in the mind of most customers.

Job outcome metrics are referred to as “customer needs” because they indicate what customers want to happen and do not want to happen as they execute a job to ensure the job gets done well in a particular circumstance(s). Stated another way, job outcomes represent all the aspects of job execution that matter to customers with respect to making efficient progress. This is why individuals and organizations “need” actual job outcomes to meet their expectations if a job is going to get done well—hence the term “customer needs.” As discrete occurrences, job outcomes themselves cannot define customer needs because they change every time a job is executed. As job process objectives and end goals, job outcome metrics do not change even though the job outcomes they measure change. As such, job outcomes metrics are stationary—that is, they remain the same over time.

To put a finer point on it, a set of customer needs is valid for a job as long as those needs reflect all possible circumstances in which the target customer group is executing that job. How a target customer group is defined depends on the innovation strategy (jobs-based customer segmentation will be discussed ahead). If a new circumstance arises, then this can change how a customer group wants to get the job in that particular circumstance. As such, new outcome metrics may have to be added to reflect aspects of job execution that are affected by that circumstance. On the other hand, existing outcome metrics will not drop off over time even if a particular circumstance(s) becomes less likely to occur as long as the circumstance(s) is still possible.

As previously discussed, there is confusion as to the difference between customer needs and customer value. Although there is a relationship between the two, customer needs and customer value are distinctly different concepts. To be clear, customer needs are metrics of job execution performance that are used to measure and compare actual outcomes to a customer's expectations for those outcomes. Because customer needs are tethered to job process logic and desired progress, those needs define what it means to get a job done well—not solutions. Jobs arise because customers want to change some kind of circumstance. As such, circumstance determines the progress customers want to make. To make that progress, all customers trying to get any job done must accomplish the same logical job steps, else a job cannot get done well.

Since job solutions necessarily structure job activities and customers use different solutions to execute jobs, customers perform job activities in different ways to accomplish the same logical job steps. Because customers want to perform these activities in the most efficient and effective way possible, they use the same outcome metrics to gauge how well those activities are performed regardless of how the activities are structured by solutions. For these reasons, customers will continue to use the same set of outcome metrics to gauge how well a job gets done independent of solutions, today and well into the future.

For their part, solutions are the means to satisfy customer needs, but solutions do not define those needs. If solutions did define needs, then the progress customers want to make in their lives and businesses would originate with solutions. However, this does not reflect the reality of customer behavior. It is well established among scholars and practitioners that customers are keenly aware of the “jobs” they are trying to get done—or alternatively the “problems” they are trying to solve—before solutions are even considered. That being the case, customers have a

set of needs associated with how they want to get those jobs done. With job outcome metrics already in mind, customers proactively seek out specific solutions that can best satisfy those needs at a price they are willing to pay.

When a solution-in-use is not capable of meeting a customer's expectations for certain job outcomes, then those particular outcomes are not satisfied (aka: unsatisfied and unmet customer needs). This indicates that there is a gap between the actual outcomes and the expectations for those outcomes. Closing the gaps between actual and expected job outcomes represents the value the customers want from solutions to get a job done better. To be clear, closing these gaps is what it means to satisfy customer needs. In the previous example, an actual job outcome is 20 minutes to perform a certain activity. Most customers executing this job expect to perform that activity in 10 minutes or less. Therefore, the value those customers want from solutions with respect to this particular need is to reduce the time it takes to perform the activity to 10 minutes or less.

This underscores that from a customer's perspective, "value" is not defined by solution features and benefits, per se. Rather, a solution is valuable to the extent that its' features and benefits (aka: attributes) are capable of closing any gaps between actual outcomes and expected outcomes with respect to a job that customers are trying to get done well. Some solutions are more valuable than other solutions because they offer features and benefits that are more capable of satisfying customer needs (aka: job-solution fit). It is worth reiterating that a solution is capable to the extent that it can accommodate and resolve job circumstance per a customer's expectations. As noted earlier, customers will not value solution features and benefits that do not help them to close job outcome gaps, which is what it means to get a job done better.

To recap, customer needs are the metrics used to measure the aspects of job execution that matter to customers with respect to getting a job well in a particular circumstance(s). As such, customer needs are associated with jobs, not solutions. Customers will use the same set of metrics over and over again to gauge how efficiently and effectively a job gets done today and well into the future. Closing any gaps between actual and expected job outcomes represents the additional value that customers want from solutions to get jobs done better. Providing solutions that help customers close those gaps is what it means to satisfy customer needs. A solution offers value to customers to the extent that it is capable of satisfying a set of needs associated with efficiently making progress. In short, customer needs have to do with jobs and

customer value has to do with the satisfaction of those needs via job solution capabilities.

Relevance and Importance of Customer Needs

All customers trying to get a particular job done do not use exactly the same set of outcomes metrics because many of them are executing that same job in different circumstances. Recall that a solution must sufficiently accommodate and resolve circumstantial factors in order to get a job done well in the mind of a customer. This means that a job executed in one circumstance may have to be executed differently in another circumstance to meet customer expectations. That being the case, customers use a set of outcome metrics that are relevant to the circumstance(s) in which they are executing a job because those are the outcomes that matter in that circumstance(s). For this reason, certain job outcomes that are relevant in one circumstance can be non-relevant in another circumstance. It is important to note that a job outcome is either relevant to a particular circumstance or it is not (binary). A job outcome cannot be more relevant or less relevant to job circumstance.

Therefore, a set of job outcomes metrics (aka: customer needs) is differentiated or varies among customers trying to get the same job done to the extent that there is diversity in the circumstantial factors influencing how those customers want to get that job done. Simply put, a set of customer needs differs to the extent that circumstantial factors differ. Conversely, a set of job outcome metrics become less differentiated or converge to the extent that customers share common circumstantial factors that define job execution performance.

This explains why customers trying to get the same job done in different contexts can have the same or similar struggles around that job. Those customers have a number of common or overlapping circumstantial factors causing similar moments of struggle. This would be difficult to discern across different job contexts if not for a keen understanding of jobs theory. On the other hand, customers can struggle to get the same job done in very different ways across different job contexts. Those customers have unique or non-overlapping circumstantial factors in those job contexts that are causing different moments of struggle.

However, relevance does not mean the same thing as importance. All the outcome metrics associated with a certain job that are relevant to a particular circumstance(s) can have varying levels of importance in the mind of a customer. That is, some job outcome metrics matter more than other outcomes in a particular circumstance(s). Important outcomes reflect aspects of job

execution that must meet a customer's expectation before that job is considered successfully executed. Conversely, the relevant outcomes that a customer perceives to be less important reflect aspects of job execution that have less impact on the customer's expectations in terms of what it means to get a job done well. In short, the more important an outcome metric is to a customer, the more weight that aspect of job execution has with respect to getting a job done efficiently and/or effectively in a particular circumstance(s).

It should be noted that if a job outcome metric is relevant to a customer, then it must have some level of importance by virtue of the fact that it is relevant. As previously discussed, some relevant outcome metrics matter more in a particular circumstance(s) than other outcome metrics. Conversely, if a job outcome metric is not relevant to a customer, then that metric has no importance with respect to the circumstance(s) a customer is currently executing a job. The level of importance for a relevant job outcome metric ranges from a little or somewhat important to extremely important. From another perspective, if a job outcome metric is not important at all to a customer, this indicates that the metric has no relevance to any circumstance in which that customer is currently executing a job.

To recap, job outcome metrics that have any level of importance to a customer indicates relevance to job circumstance. Knowing what job outcome metrics are highly important to a customer is useful for surfacing those aspects of job execution that matter the most to that customer with respect to getting a job done well in a particular circumstance. Recall that moments of struggle indicate that a solution-in-use does not adequately accommodate and resolve job circumstance. When innovators can connect highly important job outcome metrics to the common circumstance in which a group of customers is struggling to execute a job, they can design solutions that accommodate and resolve that circumstance better than competing alternatives. Understanding the relevance and importance of job outcome metrics vis-à-vis job circumstance is the key to identifying high potential innovation opportunities.

Customer Value Metrics

A single customer need (aka: a job outcome metric) is called a customer value metric (CVM) and it is a specialized yardstick of sorts that customers use to gauge how well a specific aspect of a job is executed via solutions. With a set of these yardsticks in mind, customers determine how well they are able to execute an entire job. That is, each of these yardsticks is specifically designed to measure—1) how effectively job action generates the success outcomes

customers are aiming to obtain or achieve and 2) how efficiently the job process (aka: job action) is carried out and the intermediate outcomes of job action that customers perceive must happen along the way if success outcomes are to be generated as expected.

To be clear, a yardstick is a metric—not a measure. A physical yardstick is a way to measure the length of a physical object. As such, a yardstick doesn't describe the characteristics or behavior (aka: dimensions) of something until it is used to measure something. Therefore, there are no attributes or dimensions associated with a metric itself which is why a metric is dimensionless. The same metric can be used over and over again to describe the attributes of many things for which it is designed to measure. Further, a metric does not change when the nature of what it measures changes, which is why metrics remain the same or stationary over time. Like a yardstick, customer value metrics (CVMs) themselves are dimensionless and stationary. Customers use the same CVMs over and over again to gauge the efficiency and effectiveness of the various aspects of job execution that matter to them.

As previously discussed, solutions naturally structure job activities which is partly how they help customers get jobs done. Therefore, the way job activities are performed will vary according to the solution used. Further, the nature of job activities can change significantly over time as solutions evolve. For example, think of a horse a buggy versus an automobile as solutions to get transportation jobs done. The job steps remain roughly the same even though the way job activities are performed is very different due to the fact that solutions have evolved. However, CVMs remain stationary regardless of the changing nature of job activities because they are tethered to job process logic and desired progress, not the job activities themselves.

In contrast to a yardstick which is a physical metric, a CVM is a variable-based metric. Specifically, a CVM specifies a particular job execution variable and an object of that variable to be measured. Together, a variable and the object of that variable enables customers to ascertain how efficiently and effectively a specific aspect of job execution gets done. Variables relating to performing job activities are time, number, amount, frequency and likelihood of occurrence. Take, for example, the job process metric—"the time it takes to evaluate service options." For this CVM, "time" is the job execution variable and "evaluate service options" is the object of that variable, which has to do with performing a specific job activity. This CVM remains stationary regardless of the solutions used to execute the job.

Consider the success outcome—the package is delivered on time. For this metric, "the package

is delivered” is an object or result of job process execution and “time,” is the variable against which that result is measured. This wanted outcome remains the same for any job that involves sending a package to some destination regardless of the solution used. The fact the customers use different solutions to send packages does not change this job metric. Therefore, a set of CVMs for a particular job will be valid for that job independent of the solutions customers use to get the job done today and well into the future.

The way customers actually think about CVMs is personalized or organic. An example of an organic CVM is—“the time it takes to evaluate service options.” When articulated this way to innovators, this particular CVM is non ambiguous because it is clear that customers want to reduce the time to perform this job activity. However, customers more often have CVMs in mind that make perfect sense to them but are ambiguous for the purpose of innovation. For example—“the service is resilient” and “I get robust results” and “there are no hassles while providing payment information.” These CVMs are not actionable for the purpose of innovation without making assumptions about what resilient, robust, and hassles means to those customers. Worse yet, there are often different interpretations of these terms among customers themselves.

Additionally, customers think about wanted outcomes in the context of solution usage. For example, when shopping in a store, customers think about the “number of open check-out terminals” when they are ready to purchase selected items. When visiting a healthcare clinic, customers think about “time spent to fill out required forms.” In the first case, it is clear that customers want cashiers and/or self-check-out terminals to be available when they are ready to leave. In the second case, it is clear that customers want to spend as little time as possible filling out paper forms in preparation to see a healthcare professional.

However, these kind of customer statements present a different problem for innovators other than ambiguous meaning. If such solution-contextualized statements are accepted as customer needs, then innovation efforts will tend to be constrained around those solution contexts. For example, customers may be thinking about the “number of open check-out terminals” when shopping at a store. But what those customers really want is to “reduce the time it takes to purchase items.” Given what is possible with technology, design, and business models, there may be better ways for customers to accomplish this job step that doesn’t involve the use of check-out terminals. For example, some stores are starting to offer a check-out free shopping experience. Technology automatically tracks what customers take off the shelves. When

customers are ready to leave, they just walk out the door. Payment is transacted automatically.

Likewise, customers may be thinking about the “time spent to fill out required forms” while visiting a healthcare clinic. But what they really want is to “reduce the time to provide required personal and health information” before seeing a healthcare professional. Given what is possible, there may be better ways for customers to accomplish this job step that doesn’t involve paper forms. For example, a number of healthcare clinics now offer patient portals that streamline the entry of required information before going to their appointment. Information that is already on file does not have to be entered again. Other healthcare clinics have the ability to wirelessly pull the information they need from a personal medical device (like a bracelet or smartphone) which stores the patient information the clinic requires.

The aim of innovation is to offer solutions that satisfy the needs of a group of customers better than competing alternatives at a price those customers are willing to pay while minimizing the cost of generating that value. When customer needs are ambiguous in their meanings and customer needs are contextualized around existing solutions, innovation efforts will likely disappoint. That is, a solution will undershoot the expectations of some customers while overshooting the expectations of other customers. A solution that is burdened with features and benefits that customers do not value increases the cost structure without a commensurate increase in customer value. Therefore, the way customers naturally think about CVMs are not suitable in their organic form for the purpose of innovation. Once all CVMs have been captured in their organic form, they are defined in a way that is non ambiguous and without reference to solutions.

As discussed previously, a success outcome CVM is defined as a desired future state and is expressed as though it has already happened or is currently happening, which includes future states that a customer is trying to avoid. There are two types of future states. First there are one-time future states expressed in the simple present tense. For example, “The package is delivered to the correct address” and “The package is not stolen after it is delivered” (an outcome customers want to avoid). Second, there are future states that a customer wants to maintain which is expressed in the present continuous tense. For example, “I’m maintaining good health” and “I’m protected against contracting the flu” (the continual avoidance of an unwanted result).

A job process CVM is defined as a directional metric indicating that a customer either wants to

minimize or increase something relating to performing job activities. Specifically, a customer may want to—

- Minimize the time/effort to perform a certain activity.
- Minimize the number, amount or frequency of something while performing certain activities Minimize the likelihood that certain outcomes will not occur as they perform certain activities.
- Minimize the expense of performing certain activities beyond the selling price of a solution.

Additionally, a customer may want to—

- Increase the number, amount or frequency of something while performing job activities.
- Increase the likelihood that certain outcomes will occur while performing those activities.

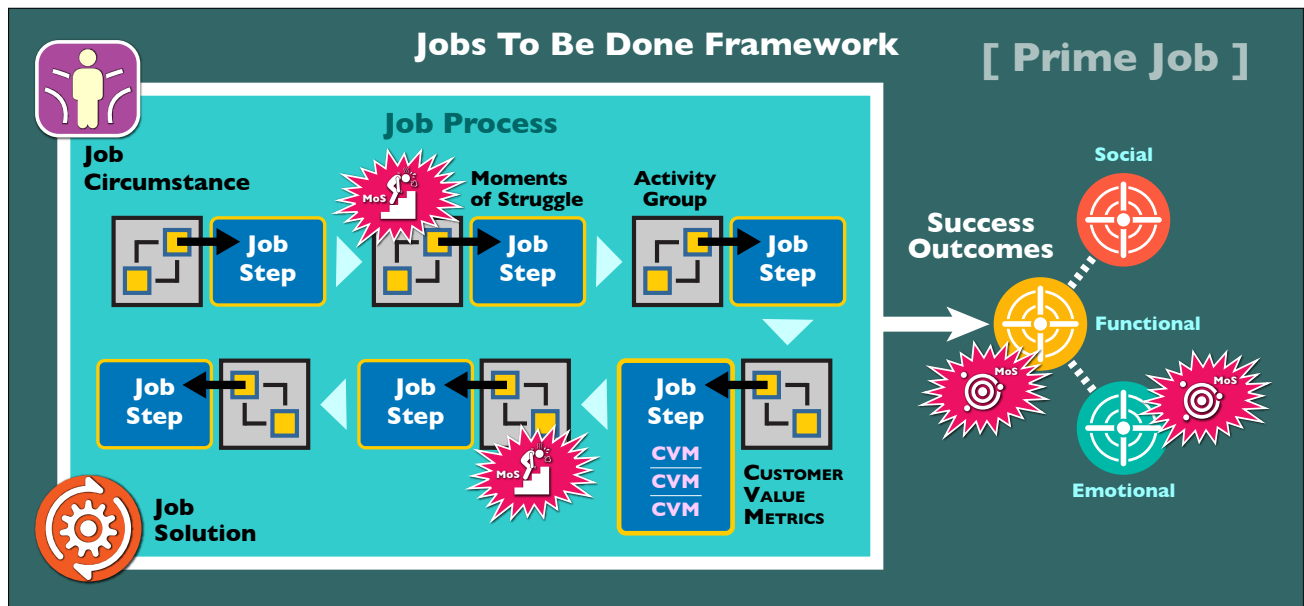
Job Solution

Customers hire one or more solutions to execute an entire job process with the aim of obtaining or achieving success outcomes. Solutions help customers do this by structuring some or all of the job activities required to accomplish job steps. Based on their design, some solutions structure job activities more efficiently and/or effectively than other solutions with respect to accommodating and resolving job circumstance. A solution itself comprises a number of tangible and/or non-tangible resources necessary to perform job activities. Some solutions provide or integrate better and/or more complete resources than other solutions. The efficiency and effectiveness in which a solution structures job activities and the resources a solution provides/integrates to perform those activities characterizes the capability of a solution.

Customers are able to efficiently generate success outcomes to the extent that a solution-in-use is capable of generating those results. Moments of struggle arise when a solution is not capable of accommodating or resolving job circumstance per a customer's expectation. When this happens, there is a significant difference between actual job outcomes and expected job outcomes in the mind of a customer. In other words, a solution falls short of satisfying customer needs associated with both efficiently and/or effectively executing a job.

The Jobs-to-be-Done Framework

Based on the aforementioned rationale, the transformation from the augmented job theory model to the jobs-to-be-done framework is complete (see Figure 18). The jobs-to-be-done framework (aka: JTBD framework) establishes a predictive relationship between circumstance, job process, desired progress, solution capabilities and moments of struggle vis-à-vis a set of customer needs associated with any prime (executable) job.



(Figure 18)

It has been established that ambiguity around the meaning of customer needs and customer value is the reason why a great many innovation efforts disappoint. A provider cannot consistently create new products and services and enhance existing solutions in a way that will create profitable customer demand without completely and accurately defining customer needs. Yet even today, customer needs are not well understood by many providers. Further, customer needs and customer value are often conflated creating a fuzzy distinction between the two when in fact these are different concepts.

Without first having a comprehensive understanding of customer needs, the solutions-first approach is generally the default path. This direction leads to— 1) asking customers what features they want in a solution without knowing if there is a better and/or cheaper way to

satisfy those needs (which is tantamount to asking customers to innovate for the provider), 2) blindly following competitors with “line extensions” to existing solutions without first knowing how much customers would value those enhancements and 3) imitating new solutions introduced by other providers without knowing if those solutions will be successful for the imitator. Ideating on solutions before customer needs are understood is like putting the cart in front of the horse, so to speak. Because innovation efforts are informed by inputs other than customer needs, results are unpredictable. Simply put, a solutions-first approach to innovation is hit or miss which is why it has a low probability of success.

If the intention is to create and maintain products and services that customers want, it is imperative to understand the jobs customers are trying to get done because customer needs are associated with jobs, not solutions. That is, solution features/benefits and the struggles that result from the limitations of solutions-in-use do not define needs—quite the opposite. Customers want solutions that satisfy their needs with respect to getting jobs done well. As such, solutions are valuable to customers to the extent that the benefits offered help customers efficiently make desired progress. If a solution offers a benefit(s) that does not help customers do this, that benefit will be of no value to customers even though it is touted as being valuable by a provider. Disconnects between offered benefits and the customers’ perceived value of those benefits limits the demand creation potential of any new or existing solution.

The JTBD framework is useful because it enables innovators to completely and accurately capture all customer needs associated with any executable job before ideating on new solutions or solution enhancement possibilities. Such a needs-first orientation is a more effective approach to innovation for the following reasons. A set of customer value metrics defines what it means for a group of customers (aka: customer segment) to get a job done well in all circumstances in which they could execute that job. With those metrics in hand, innovators can quickly home in on how those customers are struggling to get the job done by looking for job outcomes that fall significantly short of expectations. Closing the gap between the actual outcomes and what is expected for those outcomes is what it means to satisfy those needs. Doing so enables those customers to get the job done better.

With moments of struggle identified, innovators can quickly surface what is causing those struggles by recognizing the circumstance in which customers are trying to get a job done. With this understanding, it becomes apparent how solutions-in-use are failing to accommodate and resolve that circumstance per the customer’s expectations. Informed with these insights,

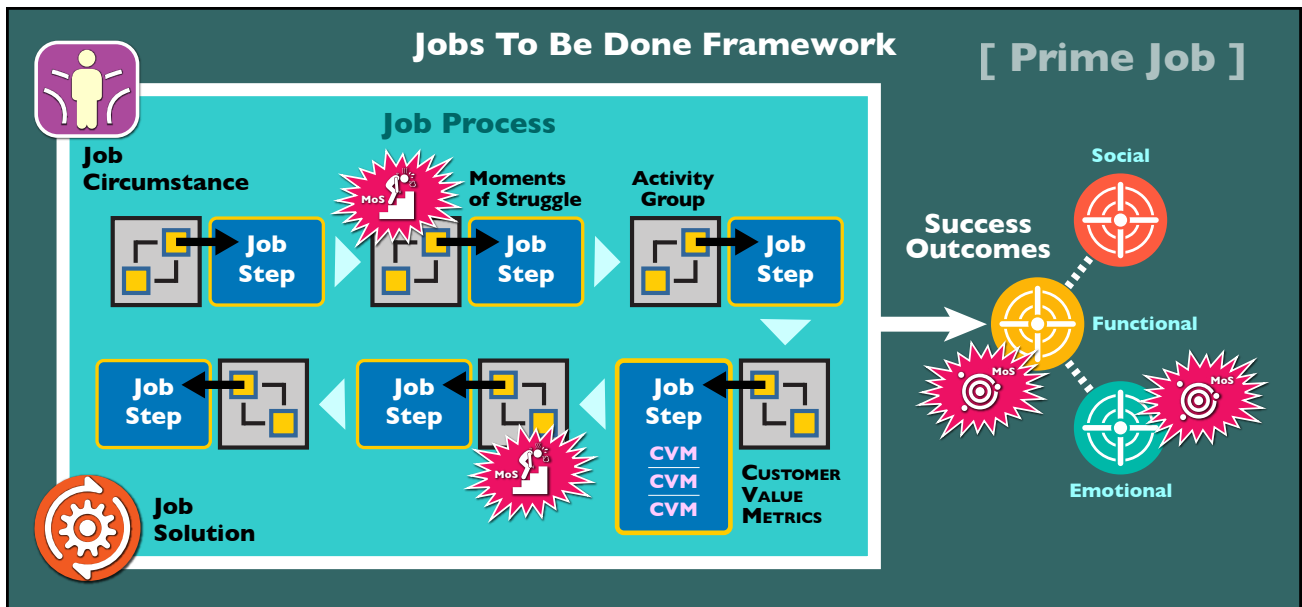
providers can quickly create new solutions and enhance existing solutions that accommodate and resolve job circumstance much better than solutions-in-use. These are solutions that customers will want to buy/use—no speculation required. Because the needs-first approach to innovation is predictable the probability of success is high.

Chapter 3

Jobs to be Done Framework Concepts and Application



The JTBD framework increases the jobs-to-be-done lexicon since concepts from both jobs theory and Ulwick's job process framework are combined. Additionally, I expand and/or refine the meaning of a number of JTBD concepts pursuant to attaining internal consistency within the JTBD framework as well as extending the scale and scope of practice for jobs-to-be-done. Post-synthesis, each of the JTBD framework concepts is defined in detail.



Customer

A customer is an individual or organization who makes the decision or choice to use a particular job solution to execute a personal or organizational job. In the case of an organizational customer, an individual (or multiple individuals acting collectively) makes a choice to buy/use a solution as an agent(s) of the organization. The customer may or may not be a job executor.

Job Executor

A job executor is an individual, service appliance (aka: physical product), or a digital agent (any combination of AI's, Web/mobile apps and/or back-end information systems) that performs one or more job activities associated with a particular job-to-be-done. A job is co-executed when there are two or more job executors (which is nearly always the case).

Provider

An individual or organization that offers a solution(s) or resource(s) to customers to help them get a job done. A commercial provider (aka: value producer) offers a solution or a resource for a price (a commercial solution or resource); a commercial solution or resource competes in an organized market with other solutions and resources. A non-commercial provider offers a solution or resource without stipulating price (a non-commercial solution or resource); the non-commercial solution or resource can be obtained absent an organized market.

Job-to-be-Done

A job-to-be-done (aka: “customer job” or simply “job”) is the progress that a customer is trying to make in a particular circumstance by way of executing a job process; where progress is defined as wanted functional, emotional and social success outcomes. A job process consists of all the job activities that a job executor(s) performs with the aim of accomplishing the logical job steps required to generate expected success outcomes.

Job steps are the intermediate goals that job executors have in mind as they perform job activities. Job process logic (as represented by job steps) is implied when activities are organized and performed in a way that achieves wanted success outcomes—characterizing purposeful behavior. Absent this logic, activities would be random and would have no aim (non-purposeful behavior) which is not consistent with how jobs get done.

Economically speaking, a rational customer always exhibits purposeful behavior with respect to means and ends. A job is successfully executed (aka: job gets done well) in a customer’s mind to the extent that the customer’s needs relating to performing job activities and needs relating to success outcomes are satisfied per a customer’s expectation.

There are two types of jobs—prime jobs and high-level jobs. A prime job is executable as a job process, the structure of which is defined by the jobs-to-be-done framework. A high-level job is not executable as a job process, but rather gets done by executing a number of related prime jobs and related high-level jobs (aka: job stacking behavior).

Customer Needs

Once an executable job is properly defined, the logical job steps are then delineated. A number of customers are interviewed to elicit the metrics they use to measure job execution outcomes. These are called customer value metrics (CVMs) and they are the customers' needs with respect to job execution. To be clear, customer value metrics and customer needs are synonymous terms.

The JTBD framework recognizes two distinct categories of customer needs—1) Job process CVMs and 2) success outcomes. There are two types of job process CVMs—1) efficiency CVMs and 2) precursor CVMs. Efficiency CVMs reflect that customers want to perform any job as efficiently as possible which means minimizing the time, effort and additional expense of performing job activities. Job execution efficiency is important because customers have limited time, energy and money (resources) to work with, but they have virtually unlimited jobs they want to get done and needs they want to satisfy. Customers want to perform job activities in a way that minimizes the use of those resources so they can maximize progress in their lives and businesses.

Precursor CVMs reflect that customers want to execute any job process as effectively as possible. To gauge whether a job is getting done in an effective manner, customers want certain outcomes while performing activities that they perceive are necessary precursors to achieving desired end results. In their mind, these job outcomes indicate or predict that they are on track to obtaining or achieving the results they want when the job is done. It should be noted that precursor CVMs can predict the satisfaction of success outcomes to one extent or another. However, generating expected success outcomes is ultimately a function of solution capability which is a function of solution design. The capability of a solution, beyond which customers can experience while performing job activities, is beyond the purview of customers.

All job process CVMs are structured as directional metrics—that is, customers either want to minimize or increase something relating to job process execution. Examples of efficiency CVMs are— “minimize the time it takes to explain a problem,” and “minimize the time it takes to purchase items.” Examples of precursor CVMs are—“increase the likelihood that a support person will know how to resolve my problem.” A support person that has this capability will be able to take the appropriate action to actually resolve the problem (a functional success outcome). Another precursor CVM is—“increase the number of patrols in my neighborhood.” In

a customer's mind, a certain number of patrols is a necessary intermediate outcome required to "feel safe in my home" (an emotional success outcome).

Success outcomes are CVMs that reflect the end results customers are aiming to generate by means of executing a job (aka: desired progress). Success outcomes include results that customers want to happen and results that customer want to avoid (potential hazards). A job is executed effectively to the extent that wanted results are generated as expected and unwanted results are avoided. Success outcomes are functional occurrences (tangible results) which may have wanted or unwanted emotional and social dimensions.

Emotional and social success outcomes are dependent on functional success outcomes for effect. That is, emotional and social success outcomes can only be satisfied to the extent that dependent functional success outcomes are generated. This is represented in the jobs-to-be-done framework as dotted lines connecting a functional success outcome with dependent emotional and social success outcomes. There are times when only functional success outcomes are wanted—such as the case with most organizational jobs. But the jobs that individuals are trying to get done in their personal lives often involve emotional and social dimensions as well, which is why customer jobs can get quite complex or "multilayered" as Christensen often states. Further, emotional and social success outcomes can have a higher priority than functional success outcomes in the mind of a customer.

Success outcome CVMs are structured as desired future states expressed in the present or present continuous tense. For example, "The package arrives on time" (wanted result) and "The package is not damaged" (unwanted result) and "I am maintaining a good credit score" and "Bills are continually paid on time." Conversely, a customer may want to continuously avoid an unwanted result—"I am protected against identity theft." Because success outcomes are an effect of performing job activities, they are lagging indicators of job process effectiveness. Therefore, increasing the level of satisfaction for success outcomes can only be accomplished by increasing the capability of a solution-in-use. To be clear, precursor CVMs (predictive indicators) and success outcomes (lagging indicators) are customer needs that have to do with job execution effectiveness.

It is important to note that job execution efficiency and job execution effectiveness are both a function of solution design, but they address different customer needs. A solution can efficiently structure job activities but may be less effective in generating expected success outcomes.

Conversely, a solution may effectively generate expected success outcomes but may not do so efficiently. Customers always want solutions that efficiently generate expected success outcomes not given the trade-offs they are willing to make with respect to solution capabilities. Therefore, the design of any job solution must take into account customer needs relating to job execution efficiency and customer needs relating to job execution effectiveness.

Once a complete set of CVMs is captured for a group of customers that takes into account all the circumstances in which those customers could execute a job, that set of needs is valid for as long as the job exists. That is because customer needs are anchored to job process logic and desired progress which are stationary and independent of solutions. Customers will have the same set of needs well into the future for those job circumstances.

Job Circumstance

First, it is important to distinguish job context and job circumstance. Job context is the nuanced and idiosyncratic reality that surrounds individual and organizational customers as they try to execute jobs (aka: contextual factors). Job circumstance refers to specific causal factors (aka: circumstantial factors) within job context(s) that affects the way a customer wants to get a job done—both the kind of progress a customer wants to make and how efficiently and effectively a customer wants to make that progress. There are always multiple circumstantial factors that collectively influence the way a particular job gets done—not a single circumstantial factor.

To be clear, circumstantial factors are contextual factors. The difference is that circumstantial factors have an effect on why and how customers want to execute a job while contextual factors do not. To keep things simple, non-circumstantial factors (or non-causal contextual factors) that have no influence on job execution are collectively called “job context.” It is sometimes said that a customer job is executed in a particular circumstance or under a particular set of circumstances (Clayton Christensen’s preferred expression). To clarify, the expressions “circumstance” and “job circumstance” and “set of circumstances” and “circumstantial factors” all have the same meaning.

Because job context is a reality unique to individual customers, jobs are never executed in exactly the same context. However, overlapping or common circumstantial factors can exist across different job contexts for a group of customers. The aim of any innovation effort is to offer a solution that helps a group of customers (aka: a customer segment) get a job done

well in a particular circumstance(s). Therefore, the challenge for innovators is to identify all circumstantial factors common to those customers across different job contexts that collectively have an effect on the way they want to get a job done in that circumstance(s). This is the classic “signal in the noise” issue. The signal is job circumstance, and the noise is job context. Circumstantial factors fall into two broad categories—situation and condition.

Situation. These are circumstantial factors extrinsic to a customer that can cause moments of struggle with respect to job execution efficiency and effectiveness (aka: situational factors or situational circumstance). Some examples of situational circumstance include—the time, place and with whom a job is executed; government, organizational, and personal policies (rules); economic, environmental and social events/occurrences, the behaviors of others, to mention a few. It is worth emphasizing that situational circumstance are only those factors that affect job execution from a customer’s perspective. Everything else comprises job context, which has no influence on how a customer wants to get a job done. A key question to ask is—what situational factors are causing a particular group of customers to experience moments of struggle with respect job execution?

Condition. These are contextual factors intrinsic to a customer that can cause moments of struggle with respect to job execution efficiency and effectiveness (aka: conditional factors or conditional circumstance). Some examples of conditional circumstance include—the personal characteristics/attributes of a customer or job executor such as demographic, psychographic and behavioral profile, knowledge, and abilities, to mention a few. Again, it is worth emphasizing that conditional circumstance are only those factors that affect job execution from a customer’s perspective. Everything else comprises job context, which has no influence on how a customer wants to get a job done. A key question to ask is—what conditional factors are causing a particular group of customers to experience moments of struggle with respect job execution?

Recall that job activities are clustered within activity groups and those activities are performed in tandem (or rapid coordinated succession) for the purpose of accomplishing logical objectives or job steps. Within any activity group there are the activities required to accomplish the corresponding job step (aka: required activities). Other activities in a group may be performed, but they are not required (aka: unnecessary activities). Required activities constitute a logical or purposeful job process which must be executed in order to get a job done well or as expected. At this point, it is important to clarify that activities are performed whereas a job process is executed.

Certain tangible and non-tangible resources are required to perform key activities. These kinds of resources are called “key resources.” Other resources may be used, but they are not required by key activities and are therefore unnecessary for job execution (aka: unnecessary resources). Generally speaking, key resources are those things that collectively make it possible to perform a key activity such as—time, data/information, a license or right, natural resources, products, facilities, power/energy, co-job executors, software/apps, and infrastructure, to mention a few. An individual job executor is a kind of key resource. However, it is more appropriate to conceptualize an individual as a bundle of physical and mental capabilities rather than a single resource. An individual’s capability(s) is a key resource(s) with respect to job execution. The role of key activities is to integrate the use of various kinds of resources into a job process that enables customers to efficiently make desired progress.

When a customer executes a job in a particular circumstance, certain key activities and key resources are required to successfully execute that job. Therefore, it apt to say that job circumstance imposes specific (key) activity/resource requirements on job execution—which includes job executor capability(s). The activity/resource requirements are often unique to a particular job circumstance—even if just a few key activities and/or key resources in that mix is different vis-à-vis other job circumstances. Therefore, executing the same job in a different circumstance may impose different activity/resource requirements to get that job done well. While these requirements may overlap to some extent across different job circumstances, the challenge for innovators is to recognize how the mix changes across those circumstances for a group of customers.

Customers hire solutions expressly to help them perform the key activities required by job circumstance. As such, the moments of struggle customers experience while executing a job are most often due to the limitations of solution design. First, a solution may not structure a key activity(s) at all. Customers have to perform activities on their own because that part of the job process is not structured by a solution (aka: rogue activities). Some of those activities may be unnecessary. A solution may also structure a key activity(s) in a way that is inefficient to some extent. Second, unnecessary activities may be structured into the solution itself. In either case, poorly structured key activities and unnecessary activities decrease job execution efficiency. Additionally, those activities may require the use of unnecessary resources which can increase the expense of executing a job.

Solutions also enable customers to get jobs done by providing/integrating the key resources

required to perform key activities. Sometimes circumstance creates constraints and impediments that limit customer access to one or more key resources exogenous to a solution—that is, outside of that solution. For example, an exogenous resource constraint might be the high cost of a resource, a resource takes significant time/effort to acquire, or a resource is not available. Sometimes circumstance limits the physical and/or mental capability(s) of a customer to perform certain key activities. Without all the key resources/capabilities required to perform a key activity, customers will experience a moment(s) of struggle. The design of a solution resolves these resource/capability limitations by—

- Integrating or providing all key resources with the solution.
- Enabling customers to substitute a constrained key resource an available resource.
- Rendering an exogenous resource unnecessary for job execution.
- Compensating for the lack of customer capability(s).

A physical solution (aka: product) is a service appliance that performs a number of key activities for customers. A product is either a resource that customers combine with other resources to create a cobbled solution or a product is an integral part of a provider service solution. Aside from durability, product design limitations take the form of physical and/or operational attributes that impede key activities or impede the integration of key resources as a customer is trying to execute a job in a particular circumstance. Like all solutions, the efficacy of products is limited to specific job circumstances. This means that while a product may perform well in one particular job circumstance(s), it may perform poorly in other circumstance(s).

To recap, a solution enables customers to get a job done efficiently and effectively in a particular circumstance(s) to the extent it can—

- Accommodate required activities/resources.
- Help customers avoid performing inefficient key activities and performing unnecessary activities.
- Resolve resource/capability limitations.

Simply put, the solution accommodates and resolves job circumstance(s) per the customers' expectations. A solution that can do this better than competing alternatives is a solution that customers will want to buy/use.

Moment of Struggle (MoS)

A moment of struggle is an important customer value metric associated with a particular job that is not satisfied to one extent or another by a solution-in-use in the mind of a customer. The customer struggles because there is a significant gap between an actual job outcome and the expectation for that outcome. This gap exists because a solution-in-use is not capable of accommodating and/or resolving the circumstance(s) in which the customer is executing the job per the customer's expectation.

Because there are two categories of customer needs, there are two types of struggles—those relating to job execution efficiency and those relating to job execution effectiveness. In a customer's mind, when a particular job activity takes too much time, effort and/or additional expense to perform via a particular solution, the customer experiences a moment of struggle (MoS) relating to job execution efficiency. Due to design limitations, the solution does not structure a job activity(s) in a way that enables a customer to efficiently perform that activity (as expected) in a particular circumstance(s).

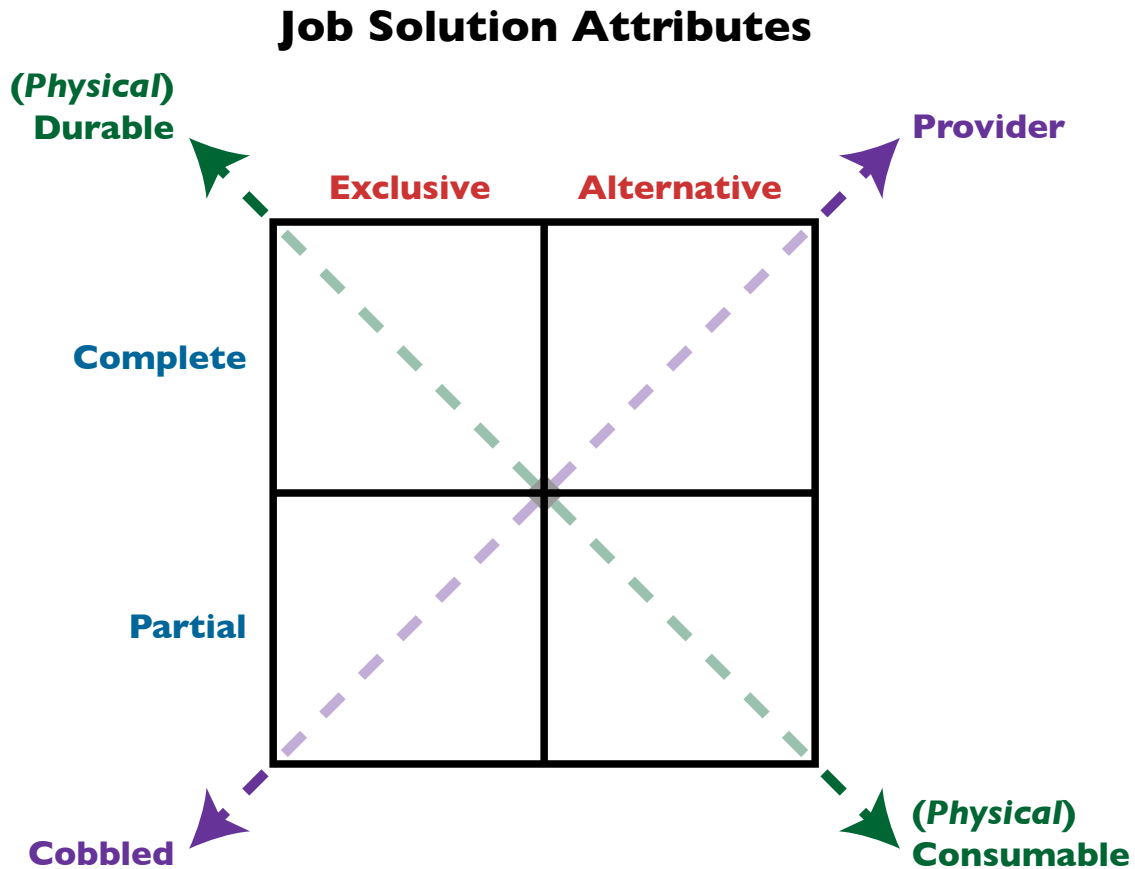
In a customer's mind, when a precursor CVM or success outcome falls short of a customer's expectation, the customer experiences a moment of struggle relating to job execution effectiveness. Due to design limitations, the solution does not structure job activities in a way that enables the effective execution of a job process for a customer and/or co-job executors. Consequently, the intermediate precursor outcome or success outcome is not generated as expected in that circumstance(s).

Job Solution

A job solution is any product or service (or combination of the two) offered by a provider or created by a customer (aka: a cobbled solution) that enables a job executor to perform job activities. Any job solution is characterized as a combination of the following three binary attributes—

- A provider or cobbled solution.
- An exclusive or alternative solution.
- A complete or partial solution.

Additionally, physical solutions (or a physical component of a service solution) are either durable or consumable—a fourth attribute (see Figure 19).



Job solution attributes are defined as follows—

A **provider solution** is one that is offered by a provider. A commercial provider offers a commercial solution for a price by way of an organized market. A non-commercial provider offers a non-commercial solution without stipulating price and absent an organized market.

A **cobbled solution** is one that customers create themselves by combining or cobbling two or more resources into a do-it-yourself job solution that enables them to perform job activities. Customers obtain resources for a cobbled solution from providers and/or a natural ecosystem.

An **exclusive solution** is one that a customer hires on an exclusive basis to perform the same job activities over and over again in a particular circumstance(s). That is, only one exclusive solution is required to get a certain job done in that circumstance(s). A solution is exclusive when—

- There is no desire for variety with respect to executing a job.
- There is a sunk cost that drives the motivation to use a particular solution exclusively.
- A customer makes a hire commitment to a provider (via an agreement) to use a particular solution over a period of time.

Consider the following examples. People typically have one mobile phone provider, one home Internet provider, and one car insurance provider, not multiple providers for these jobs (there is no desire for variety). For a homeowner, it does not make economic sense to buy more than one lawn mower to cut the same yard every time that job arises (assuming the same circumstance). Spending money on an additional lawn mower would not get the job done any better.

A customer commits to a year-long contract with a stock image provider which requires a monthly installment payment. The customer uses this solution exclusively to get the most value for the money paid each month (a hire commitment). If a customer chooses to use an additional stock image provider to increase the selection of images, then each of those stock image providers is a partial solution. Together, they are an exclusive solution-in-use.

Exclusive Solutions: FIRE ► HIRE

An exclusive solution competes with other exclusive solutions. If a customer fires a complete or partial solution-in-use and hires a new solution to replace it, then those are competing exclusive solutions. When Clayton Christensen poses the question—*What [solution] must be fired to hire your solution?*—he is referring to exclusive solutions.

An **alternative solution** is one that is not used exclusively. A customer hires an alternative solution to execute the same job in a different way. The reason for doing this is to generate variety in a set of success outcomes (that is, a customer wants a “different experience”). Alternative solutions are used when variety is desired with respect to executing a job. For instance, customers hire different alternative solutions like restaurants, movie theaters,

entertainment venues, and meal kit services expressly to generate a variety of experiences with respect to executing the same job. Circumstance can also influence the choice among alternative solutions. Alternative solutions compete with other alternative solutions.

Consider the following example. A couple decides to dine out one particular evening. The prior week, the couple hired their favorite Mexican restaurant to get this job done as they have many times before. However, the couple prefers to have a different experience this particular evening (they desire variety). Perhaps it is snowing (an ephemeral circumstantial factor) and the couple does not want to travel to the Mexican restaurant, which is a considerable distance away.

Instead, the couple opts for an Asian restaurant this time around. The fact that the couple chooses the Asian restaurant does not mean they fire their favorite Mexican restaurant. Indeed, the couple may choose the Mexican restaurant once again the following week and many weeks after that. The couple is simply “in the mood for something different” or ephemeral circumstance makes the Mexican restaurant less desirable on this particular occasion. The different restaurant choices that the couple considers are competing alternative solutions.

Alternative Solutions: PASS ► HIRE ► RE-HIRE

Competing alternative solutions are not fired. Rather, customers choose one alternative solution out of a group of competing alternative solutions to get a job done on a particular occasion. Customers “pass” on the competing alternative solutions not selected to get the job done. The next time that same job arises, a customer may choose a different alternative solution out of that same group (or they may change the solution choices). But they do not fire the last alternative solution used to get the job done. However, if a customer has a “bad experience” with an alternative solution (that is, they experience moments of struggle), the customer may remove that solution from consideration the next time the same job arises.

A **complete solution** is one that is used to perform all the job activities required to fully execute a job process. A complete solution can be comprised of two or more partial solutions. Together, those partial solutions are a complete solution.

A **partial solution** is one that is used to perform some (but not all) of the job activities required to execute a job process.

A **durable solution** is a physical product that can be used over a long period without

diminishing its value (i.e., a car, a computer, etc).

A **consumable solution** (aka: “disposable solution”) is a physical product that is diminished over a short period of time with use. A consumable solution is replaced when it is “used up” or “worn down” (i.e., disposable razor, disposable camera, etc).

To be clear, durable and consumable solution attributes apply only to physical solutions or physical components of service solutions.

Solution-In-Use

A solution-in-use is a job solution that a customer is currently using to execute a job. A solution-in-use can also be NO-solution. While this may seem counter-intuitive, a customer makes a deliberate choice not to use a solution for the following reasons—

- A customer chooses not to execute a job because the job has little or no importance to that customer.
- A customer wants to get a job done, but there is a constraint(s) or barrier(s) impeding them from doing so (i.e., ability-to-pay, time, emotional or social stigma, fear, etc).
- A customer is not aware that a solution exists that can help them get a job done.

It should be noted that it is seldom the case that individuals and organizations are not getting jobs done because they have very low importance. Usually, they are getting those jobs done, albeit with very poor solutions—often with cobbled solutions (which is why these kinds of solutions are sometimes difficult to recognize).

Competing Job Solution

A competing job solution is any provider or cobbled solution that an individual or organizational customer regard as being able to satisfy his/her needs or the needs of an organization with respect to getting a particular job done. In their never-ending quest to get jobs done better, faster and/or cheaper, customers get very creative with respect to the solutions they hire to execute jobs. Customers consider all possible job solutions. They do not confine their search solely to solution categories defined by commercial providers.

Michael Porter makes a distinction between competing solutions offered by “direct rivals” within a defined industry and “substitutes” offered by firms outside an industry. Specifically, Porter defines a substitute as a product or service that satisfies the same basic needs as the industry’s products, but in a different way ^(54, 55). However, jobs theory makes no such distinction. From a customer’s perspective, any provider or cobbled solution that can satisfy a customer’s needs is a competing solution.

A competing solution can also be NO-solution. Since a customer is making a deliberate choice not to use a solution to get a particular job done, the customer must make a deliberate choice to switch from NO-solution to a competing solution. Christensen refers to situations where customers are using NO-solution with respect to a particular job as “non consumption” ⁽³⁶⁾. In such cases, a provider solution must compete with NO-solution.

A customer will not switch from NO-solution to a competing solution with respect to a particular job if that solution does not resolve the constraint(s) or barrier(s) that prevents the customer from getting the job done. Lacking evidence of other provider solutions, commercial providers can mistakenly assume that there are no competing solutions vis-à-vis the solutions they are offering. In the customers’ mind, there are always competing solutions—either provider solutions, cobbled solutions or NO-solution.

Consider the following example. A customer using NO-solution with respect to a particular job is offered solution X by a commercial provider. Unbeknown to the provider, solution X is competing with NO-solution. If the job is not important enough to the customer, the customer will not switch to solution X regardless of how many benefits solution X offers. If the job is important enough, then the customer is motivated to get that job done better. However, if solution X fails to resolve the constraint(s) or barrier(s) that impedes the customer from even trying to get the job done, then the customer will not switch to solution X. In both cases, NO-solution is better than solution X in the customer’s mind.

Commercial providers sometimes assume that any solution is better than NO-solution. However, this is not the case from a customer’s perspective. Further, commercial providers seldom consider that their solutions are competing with NO-solution when they are targeting non-customers. But, from a non-customer’s perspective, a competing solution must be significantly better than NO-solution. Unfortunately, commercial solutions can sometimes fail to make that case.

Job Solution Resource

A job solution resource is a tangible or intangible component that when combined with another resource(s) enables a customer to create a do-it-yourself or cobbled solution. Many providers offer resources to customers rather than solutions. For example, yarn, construction materials, individual meal ingredients, individual clothing items, paper, individual jewelry items, toner cartridges, computer cables, chemicals, electronic components and batteries are all resources, not job solutions.

Application of the JTBD Framework

Before setting out to design a new solution or enhance an existing solution, it is paramount to capture a complete set of customer needs for the target job. The following is a generic step-by-step method for accomplishing this. However, this method can vary depending on the innovation scenario and the innovation methodology/tools involved. The sequence below assumes that a high-potential opportunity has been identified. To be clear, an important job that is not getting done well represents a high-potential opportunity for a provider that is positioned to offer the additional value those customers want to get the job done better than competing solutions.

In one scenario, innovators recognize that a group of customers is struggling to get a job done well under a particular set of circumstances. The assumption is that those customers are motivated to switch to a better solution if one is offered to them. The intention is to exploit this opportunity by creating a new solution that enables those customers to get the target job done better, faster and/or cheaper in that circumstance. If innovators are able to do this, the new solution will pull customers away from poorly performing and/or higher priced solutions-in-use thereby creating demand for that solution.

In another scenario, a provider wants to grow market share for an existing product/service. Innovators recognize a group of non-customers who are getting a job done poorly in a particular circumstance via a competing solution(s). The assumption is that those customers are motivated to switch to a better solution if one is offered to them—a high-potential opportunity. The intention is to exploit this opportunity by enhancing an existing solution in ways that will enable these non-customers to get the target job done much better and/or cheaper

in that particular circumstance. By doing so, the existing solution pulls customers away from competing solutions thereby increasing its market share.

In both innovation scenarios, the assumption is that there is a group of customers who are ready to switch to a better and/or cheaper solution. Before investing time and expense into capturing a set of needs for those customers, it is advisable to first verify that there is enough “push” or dissatisfaction with solutions-in-use to motivate a switch. It is also advisable to verify there is enough “pull” or attraction for a conceptual solution (aka: value proposition) that can profitably remove moments of struggle for the customer group. The method described here for capturing a set of customer needs via the jobs-to-be-done framework is oriented towards this approach.

By first verifying there is sufficient push and pull forces at work to motivate a switch, innovators can have confidence that they do indeed have a high-potential opportunity and not fools gold. However, doing so entails understanding how the customer group is struggling to get the target job done and the circumstance causing those struggles. Although innovation strategies and methodologies are not discussed here, the suggested practice is to create a job storyboard for those customers as explained below. A job storyboard will not only make it easier to subsequently capture a set of customer needs, but it will also inform the innovation methodology as to how customers want to get a job done better.

Define the Target Job

If the intention is to create a new solution, then the first question that must be answered is—what job would customers hire the new solution to get done? If the intention is to enhance an existing solution, then the question to ask is—what job are customers currently hiring the product/service to get done? This is the target job for the solution. Make sure the target job is a prime job, not a high-level job. A prime job is executable as a process whereas a high-level job gets done by executing related prime jobs within a job stack. Job definitions are typically short (see Table 1).

Shop for groceries	Conduct an online meeting	Perform cardio exercise
Repair an appliance	Prepare a person tax return	Fix a flat tire
Share a document or file	Remove debris from gutters	Register for an event
Pay a bill	Prepare a healthy meal	Replace a car headlight
Resolve a service problem	View entertainment	Order a meal

Table 1

The suggested convention is to define the target job in terms of the action that describes the purpose of the job. Customers will often say, “I need to,” or “I want to,” or “I’m going to” and then follow that up with an action verb and then an object of that action. For example, I’m going to conduct (action verb) an online meeting (object of that action). Restating a job definition in the past tense describes the purpose of the job fulfilled. For example, a customer needs to “repair an appliance.” The purpose of the job is fulfilled when the appliance is repaired.

Scope of Circumstance for the Target Job

For any job, there are many customers trying to get that job done under different circumstances. But the high-potential opportunity is based on a specific group of customers struggling to get the target job done well—not all customers. Recall that circumstance determines how customers want to get a job done—both the progress they want to make and how efficiently and effectively they want to make that progress. Because the customer group shares the same or similar struggles around the target job, this suggests that they also share the same or similar job circumstance causing those struggles. If so, that entire group of customers will have a high degree of uniformity around a common set of needs for the target job that is relevant to that circumstance.

Before innovators can offer the additional value those customers want, it is necessary to understand where the gaps are with respect to actual job outcomes versus what is expected for those outcomes. Again, the job outcomes that are important to customers are the ones that are relevant to job circumstance. Those aspects of job execution must be satisfied per the customers’ expectation before the target job can get done better. Closing these gaps is the essence of satisfying customer needs. If these needs are not completely understood, then

the probability of creating a new solution or enhancing an existing solution that satisfies those needs will be low. Consequently, the innovation will disappoint. For this reason, it is necessary to define the scope of circumstance for a group(s) of customers before it is possible to capture a complete set of needs relevant to that circumstance.

The scope of circumstance is the number of circumstantial factors that a new or existing solution must sufficiently accommodate and resolve to attract new customers (aka: pull). This is important because without enough pull, those customers will have little motivation to switch to that solution from competing products and services. Since there are many customers trying to get the target job done well under different circumstances, the scope of circumstance defines how customers are segmented or grouped for the purpose of innovation. To offer a group of customers (aka: customer segment) the value that they want to get a job done better in a particular circumstance, a solution must satisfy all the needs relevant to that circumstance better than competing alternatives.

The challenge for innovators is to define a scope of circumstance for a customer group that makes it possible to design or enhance a solution that profitably satisfies the needs of that group. As the scope of circumstance becomes broader, the diversity of customers who are trying to execute that job in unique or non-overlapping circumstances increases. That is, there is less common circumstance among those customers. If more customers are trying to execute the target job in diverse circumstances, certain needs in a set will be relevant to some customers while being non-relevant to other customers.

In turn, variations in relevance will affect the perceived importance of those needs across the customer group. This is because needs can only have a degree of importance if they are relevant to job circumstance. Needs that have no relevance to job circumstance will have no importance. In short, broadening the scope of circumstance for a target job increases the variation in a set of needs for a group of customers trying to get that job done.

The problem is that such variation increases the complexity of solution design. A solution has to accommodate and resolve non overlapping circumstances in a way that profitably satisfies all customer needs. This can be a tricky balancing act. Design trade-offs will have to be made for the sake of profitability that result in over satisfying some customer needs while under satisfying other customer needs. When this happens, no customers are completely satisfied with the solution. Consequently, demand remains flat. The diversity of features and benefits

results in a high cost structure relative to the value offered. Without enough customer demand to offset that cost, the profit margin for the solution is squeezed. To compensate, providers may inflate the selling price of the solution which further depresses customer demand. The solution disappoints or fails altogether—the ultimate fate of a one-size fits all solution. For this reason, the scope of circumstance must be carefully determined.

Create a Job Storyboard

A useful tool for surfacing and scoping job circumstance for a customer group of interest is the job storyboard (aka: job story). A job storyboard describes what is happening as customers try to execute the target job under a particular set of circumstances. It should be noted that a job storyboard is not a theoretical exercise and cannot be created in a vacuum. Innovators must interact with a number of customers to put the whole picture together. The suggested format for a job storyboard is a slide deck that incorporates a lot of illustrations and some text. A job storyboard has the following four layers.

Layer 1

Briefly describe the target job-to-be-done and the general context(s) around that job for the customer group of interest. If those customers are executing the target job in multiple contexts (which is often the case), then describe each of those contexts on a separate slide. Again, use mostly illustrations and some text to describe the general context(s). Recall that job context consists mostly of inert factors that have no influence on how a job gets done. Circumstantial factors, on the other hand, exist within that context and these factors affect how customers want to get a job done. Keep in mind that a single customer can have the same struggles executing the target job in different contexts due to the same circumstantial factors that persist across those contexts. As well, different customers executing the target job exclusively in different contexts can have the same struggles across those contexts due to common circumstance.

Layer 2

Select a popular product/service that most customers in the group are using if the intention is to create a new solution. If the intention is to enhance an existing solution, then that solution will be selected for the job storyboard. Describe the activities customers are performing as they try to get the target job done via the selected solution. If some customers are performing activities a little differently, then describe the most common way those activities are performed. But since

these activities are structured by the same solution, there should be little variation in those activities.

The reason for using a single solution as the basis for a job storyboard is to minimize differences in the way job activities are performed. This makes it easier to recognize the continuity of struggles and the common circumstantial factors causing those struggles for a group of customers. This technique works well because the logical job steps are the same regardless of how activities are performed or in what order they are performed.

Recall that job activities are clustered around activity groups. An activity group consists of one or more activities that are performed in tandem (rapid coordinated succession) for the purpose of achieving a logical objective—that is, a job step. Associate activities that are performed in tandem together on a single slide (aka: an activity group slide).

Layer 3

Describe the moments of struggle associated with each activity group slide. That is, layer in the moments of struggle (MoS) for activities performed in tandem if MoS exist. Specifically, home in on those struggles that customers are unwilling to tolerate. Recall that customers often tolerate MoS for a number of reasons. First, tolerated MoS may be job outcomes that have a low importance even though they are relevant to job circumstance. Second, tolerated MoS can reflect the trade-offs customers are willing to make for a lower price or because they cannot find a better solution.

Generally speaking, tolerated struggles as a whole do not have enough push to motivate a switch. However, the MoS that customers are unwilling to tolerate drive the “push” or motivation to find a better solution which is why this is the stuff of demand creation. Ask—what activities take too much time/effort and additional expense to perform in the customers’ mind? Also look for activities that are performed with the expectation of producing a job outcome(s) that customers perceive is a necessary precursor to fulfil the purpose of the target job.

Layer 4

Describe all common circumstantial factors that are causing the moments of struggle identified on the activity group slides (aka: circumstance of struggle). Recall that circumstantial factors can be characterized as a situation and/or a condition(s) that has an effect on how customers want to get a job done. Make sure to keep group activities, the moments of struggle associated

with those activities and the circumstance of that struggle compartmentalized on the same slides. As previously discussed, the scope of circumstance for a customer group as described via the job storyboard determines the segmentation criteria for those customers. If innovators decide to focus on more than one customer group for a target job, then a separate storyboard will be required for each of those groups.

Once the scope of circumstance has been determined for the customer group, innovators may want to extend and refine the target job definition to include that circumstance. Say the target job is to “Prepare a healthy meal.” The customer group of interest consists of individuals who struggle to get this job done due to certain circumstantial factors. For instance, some individuals have a health condition that restricts them to a certain kind of diet. Others adopt dietary restrictions because they want more mental focus, vitality/energy, or lean muscle mass for body building (desired future state vis-à-vis current state). In both cases, a restricted diet imposes certain requirements that must be accommodated and certain limitations that must be resolved in order to get the target job done well.

For example, some customers have difficulty shopping for certain healthy meal ingredients (key resource limitation) because those ingredients are not available in their area (situation). Some customers do not have the time, energy and/or motivation required to prepare healthy meals (key resource limitation). While traveling (situation), some customers do not have access to a kitchen to prepare healthy meals (resource limitation). Many customers do not have access to meal recipes that are both healthy and tasty (resource limitation). Still other customers (parents) have a child who has dietary restrictions (situation) which imposes a number of requirements and limitations on those parents. Understanding the circumstance of struggle for the target job is critical because a solution that accommodates and resolves that circumstance will help customers get the target job done better. Customers will want to buy/use that solution.

If the innovation strategy is to help customers who are on a low-carb diet prepare a healthy meal, then the target job can be defined as “Prepare a healthy meal on a low-carb diet” (reflecting a narrow scope of circumstance). If the innovation strategy is to help all customers who are trying to prepare a healthy meal with any dietary restriction, then the job can be defined as, “Prepare a healthy meal with dietary restrictions” (reflecting a broader scope of circumstance). In short, the innovation strategy, scope of circumstance and the value proposition should be well aligned. Developing a job storyboard(s) facilitates this alignment. It should be noted that job storyboarding is often an iterative process that involves pivoting on all

three until a good alignment is achieved.

Delineate the Logic of Progress for the Target Job

With a completed job storyboard in hand that reflects an appropriate scope of circumstance, the next step is to delineate the logic of progress for the target job. The logic of progress consists of all the job steps that customers must accomplish to fulfill the purpose of the job—not just the customer group of interest. For example, all customers trying to pay a bill must accomplish the same job steps to ensure the bill is paid (the purpose of the job fulfilled).

Job: Pay a Bill

Job Steps ► Bill is Paid (The Purpose of the Job Fulfilled)

Recall that a single job step is an end point or objective toward which an activity group can be logically directed. Without such objectives, activity groups would be aimless or nonsensical which is not consistent with purposeful behavior. Only by orchestrating activity groups in a logical manner are they collectively capable of helping customers make desired progress. Since job steps are the logical objectives of activity groups, they are collectively called the logic of progress.

On the job storyboard, go to the first activity group slide and ask—what logical objective or job step are customers trying to accomplish by way of performing these activities in tandem? There must be a logical objective, otherwise those activities would constitute non rational behavior. What is that job step? For example, say that the target job is to “Resolve a service problem.” Using a cobbled solution, some customers begin executing this job by—

- Searching for the provider’s Website address.
- Searching the provider’s Website for an appropriate customer support phone number or email address.
- Then calling the customer support number or sending an email to the provider.

The logical objective or job step that customers are trying to accomplish by way of performing these activities in tandem (aka: an activity group) is to “Contact the service provider.” Although other customers may perform these activities in different ways depending on the solution-in-use, the logical objective they are all trying to accomplish is the same.

Differences in job circumstance and solutions-in-use do not change the fact that all customers—*not just the customer group of interest*—must successfully accomplish this first job step to fulfill the purpose of the job. For any customer, the target job cannot get done if the service provider is not contacted. Once the first job step is defined, move to the next activity group slide and then the next until the logic of progress is delineated for the target job. Again, these same job steps are valid for all customers trying to get the target job done. This is good to know because if innovators decide to focus on another customer group for the target job, the same job steps will apply to those customers as well.

It should be noted that delineating the logic of progress via a job storyboard is seldom linear and clear but. This exercise broadens and sharpens how innovators think about job activities and job steps. Relationships that were blurred before come into clear view. Therefore, it is not uncommon to revise activity group slides several times while delineating the logic of progress. A particular activity may be moved to another activity group or an additional activity may be added to an activity group that was originally missed. Like a job storyboard, delineating the logic of progress is an iterative exercise.

Capture Customer Needs for the Target Job

Once the logic of progress has been delineated, job steps provide the structure around which customer needs are captured for the target job. Recall that there are one or more outcome metrics associated with every job step. Customers use these metrics to gauge how well these logical objectives are accomplished by way of performing job activities. The difference between actual job outcomes and the expectation for those outcomes determines a customer's experience with respect to executing the target job via a particular solution(s).

A number of customers were consulted to develop a job storyboard. A different group of customers is now interviewed to capture all the job outcome metrics associated with the target job for the defined scope of circumstance. An issue that arises is that individual customers tend to think of only the job outcome metrics that have high importance to them. Job outcome metrics of lower importance are still relevant to these customers, but those metrics do not typically come to mind during interviews. There are two reasons why the perceived importance of job outcome metrics varies among customers that have overlapping or common circumstance.

First, no customer ever executes a job in exactly the same circumstance. Even though common circumstantial factors are identified for a group of customers, there are other circumstantial factors that are unique to each of those customers that do not overlap. Second, even though these customers share the same outcome metrics relevant to common circumstance, there are differences among them in terms of how much each of those metrics matter. Specifically, outcome metrics that have greater importance represent aspects of job execution that matter more with respect to getting the target job done well vis-à-vis common circumstance. Because customers have different perceptions about what it means to get a job done well in the same or similar circumstance, the perceived importance of relevant job outcomes will vary among those customers.

This is why customers executing the same target job who have overlapping or common circumstance often buy/use different solutions to get that job done. Customers choose solutions they perceive have a better fit with respect to satisfying their most important needs. Therefore, the diversity of solution choice reflects differences in the way customers rank the importance of relevant outcome metrics. Now, innovators want to capture all customer needs associated with getting the target job vis-à-vis common circumstance. This includes relevant outcomes metrics that range from low importance to high importance for a group of customers.

The best way to capture this entire range of outcome metrics is to select a mix of customers to interview who are using competing solutions to get the target job done. Since the diversity of solution choice reflects differences in perceived importance, relevant outcome metrics that have a lower importance to some customers will have a higher importance to other customers. Pooling these perceived differences makes it more likely that all outcome metrics will come to mind during customer interviews. That is, every outcome metric will have enough importance to some customers to surface during interviews. This yields a complete set of outcome metrics for the target job.

Customer interviews are semi-structured in that customers are asked the below referenced questions without directing their responses. Interviewers do not suggest outcome metrics, nor do they share outcome metrics that have been articulated by other customers. Rather, customers are prompted to explain in their own words the job outcome metrics they use to gauge how well a job is executed in terms of both job process (performing activities) and desired progress (success outcomes). Customer interviews center around the following three questions—

- ▶ **Question 1:** What functional, emotional and social success outcomes are customers aiming to obtain or achieve as they try to execute the target job (aka: desired progress)?
 - Rephrased for customer: What end results are you aiming for as you're trying to get this job done? That is, what does success look like and feel like when you have [*substitute the purpose of the job fulfilled here*]?

- ▶ **Question 2:** What outcome metrics do customers use that collectively indicate or predict that a job is on-track to generate success outcomes (aka: job process effectiveness)?
 - Rephrased for customer: As you're performing activities to [*substitute a job step here*], what do you expect to happen here that indicates that you're on track to achieve the expected end results you described earlier? That is, what early results do you want to see that indicates the job is getting done effectively?

- ▶ **Question 3:** What metrics do customers use to gauge the time, effort and additional expense involved in performing job activities (aka: job process efficiency)?
 - Rephrased for customer: As you're performing activities to [*substitute a job step here*], what criteria do you use to gauge how much time, effort and additional expense is involved with performing these activities? That is, how do you know when activities take too much time/effort and expense to perform?

During these interviews customers are not asked about the solutions they are currently using to get the target job done. For example, an (organic) functional success outcome might be, "I expect a package to be delivered on time." Customers are not asked to define "on time" performance in the context of a particular solution-in-use versus what they expect on-time performance should be. Of course, customers often want to discuss what is wrong with the solutions they are currently using and how to fix it. When this happens, the interviewer responds—*"We are not really interested in how to improve your current solution. Rather, our intent here is to understand what you are trying to do and how you want to go about doing that regardless of whatever solution you may be using. Can you help us do that?"*

Another organic job outcome metric might be, "I don't want to spend a lot of time placing an order." Customers are not asked about the average time to place an order using a solution-in-use versus what they consider an acceptable order time to be. The objective of these interviews is to capture the organic outcome metrics for the target job, not to understand the limitations

of solutions-in-use (not at this point anyway). The organic metrics captured should have no reference to performance measures nor should they be framed within a solution context.

That said, it is difficult for most customers to articulate job process metrics without thinking about the activities they typically perform using their current solution. Like the job storyboard, customers must re-enact how they perform these activities in their mind before they can articulate process outcomes metrics. But while these activities are solution dependent, the outcome metrics associated with performing those activities are independent of solutions. As metrics, they have no dimensions and are not bound to solution performance or solution context. On the other hand, customers can usually articulate wanted success outcomes without referencing solutions-in-use since these results are not tied directly to activities.

As customers respond to the three aforementioned questions, interviewers listen carefully for outcome variables relating to performing job activities (time/effort, number, amount, frequency and likelihood of occurrence) and the objects of those variables. Additionally, interviewers listen for the functional, emotional and social results that customers are aiming to obtain or achieve by way of job process execution and the variables against which those results are measured. In this way, job outcome metrics are systematically captured in their organic form during customer interviews.

After each interview, organic outcome metrics are further refined to conform to the structure of customer value metrics (CVMs). Job outcome metrics that have already been articulated in prior interviews are marked as repeats. As more customers are interviewed, outcome metrics repeat to a greater extent. When customers cease to articulate new outcome metrics, no additional customer interviews are necessary. At this point, a complete set of customer value metrics has been captured for the target job. This set of CVMs will be valid for all customers trying to get the target job done in the defined scope of circumstance as long as those customers continue to execute that job—which is usually a very long time.

With all the needs for the target job in hand, it is now possible to precisely define the value that customers want from solutions to get the target job done better at the least cost to the provider. This is accomplished by having customers prioritize a set of needs via a methodology called Value Target Analysis—which is discussed in the next chapter. In short, Value Target Analysis entails asking a number of customers to rate the level of importance of each of the needs in a set and the extent to which those needs are currently satisfied by solutions-in-use. The analysis

of the importance and satisfaction ratings reveals four kinds of value targets or aspects of perceived customer value with respect to current solutions that are actionable for the purpose of innovation—

- **Important needs that are not well satisfied.** These are the aspects of job execution (job outcomes) that do not yet meet customer expectations. That is, these needs are undershot by current solutions. Satisfying these needs represents the additional value customers want from solutions to get the target job done better—the stuff of demand creation. The appropriate action is to scale-up solution performance with respect to these CVMs.
- **Important needs that are satisfied well enough.** These are the aspects of job execution that currently meet customer expectations. Certain features/benefits must be offered in any competing solution before customers consider that solution viable (aka: “table stakes”). The appropriate action is to maintain current satisfaction levels for these CVMs at the least possible cost to the provider.
- **Needs of low importance that are oversatisfied.** These are aspects of job execution that well exceed customer expectations. Even though these needs have low importance, solutions offer features/benefits aimed at satisfying those needs. That is, these needs are overshot by current solutions. The appropriate action is to scale down solution performance with respect to these CVMs. Reducing or eliminating features/benefits that have little/no value to customers can reduce the cost structure of a solution and increase pricing flexibility.
- **Needs of low importance with low/no satisfaction.** Current solutions have few or no features/benefits that address these needs because these are aspects of job execution that customers are indifferent about. This could be because customers are not aware of how solutions can help them get a job done better via those particular outcomes. Indifferent needs can signal opportunities to “surprise and delight” customers in different ways making those needs instantly important and undershot. That is, customers want that value once they recognize what is possible. The appropriate action is to either find a way to increase the importance of these needs or minimize the cost associated with these CVMs until a way can be found to increase their importance.

Moving from ambiguity around the meaning of customer needs and customer value to clarity, providers can know in advance the value that customers want from solutions rather than speculating about this. Providers can quickly and efficiently create new products and enhance existing product/services that help customers get jobs done better than competing alternatives. Innovation becomes predictable and far more profitable. ▲

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