

Overcoming the Innovation Execution Gap: A Process for Enhancing the Success of Company Innovation Initiatives

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Abstract

Combining theoretical and practical engineering management knowledge, this paper describes a process that enables business leaders to determine and prioritize the innovation projects that are worth pursuing when viewed in the context of their existing organization. Further, we describe an implementation methodology that promotes the discovery of knowable obstacles to success inherent within the organization. Our process integrates design, systems, and business thinking by using a canvas methodology – a proven facilitation, collaboration, and teamwork approach that helps leaders discover, clarify and understand the Critical To Value™ drivers for their innovation projects. Importantly, our work supports current and future organizational leaders as they contribute to and lead innovation efforts within their organization.

Keywords

Innovation Execution Gap, Innovation, Execution, Value, Performance Engine, Innovation Value Canvas, Customer Value Canvas, Critical To Value

Introduction

The desire to innovate or remain innovative is pervasive throughout our society (i.e., within corporations, the government, academia, non-profits, etc.) and innovation within an organization can include business model innovation, product and process innovation, and enabling/managing for innovation (Kline et al., 2014). More broadly, innovation efforts also include change efforts within an organization that require organizations to develop and employ the skills and resources needed to successfully change an aspect of the organization's operation. Evidence for the importance of innovation is widespread. For example, corporate executives named innovation a leading priority for their organization in a 2010 Boston Consulting Group survey (Andrew, Manget, Michael, Taylor, & Zablit, 2010). In 2012, Ernst & Young developed a spiral model for business model innovation in an attempt to address organizations' need to continuously innovate (Ernst & Young, 2012). Tony Wagner, Expert-in-Residence at Harvard's Innovation Lab, noted in his recent book that employers must continue to take bold steps to develop their employees' capacity to become innovators (Wagner, 2012).

It has been stated, and we agree, that innovation and invention are distinct activities (Schoen, Mason, Kline, & Bunch, 2005). Invention is often considered the creation of new knowledge from research efforts. This new knowledge manifests itself through the creation of tangible products and services. Innovation advances invention a step further, requiring the consideration of business and market factors as well as determining methods to develop a path for commercialization. However, innovation does not require a preceding invention and, as described before, can take the form of a change effort within an existing organization. Regardless of whether innovation occurs by moving an invention into the marketplace or by a change within an organization, innovation seeks to produce societal impact and is essential for an organization to grow and succeed.

Despite its importance, innovation efforts pose a variety of challenges to an organization. While a detailed discussion of the challenges within innovation initiatives is beyond the scope of this paper, these challenges are magnified when placed in the context of an organization that has an existing performance engine (in contrast to a startup organization that has yet to establish its performance engine). An organization's performance engine is made up of the existing people, processes, and products that serve to uphold the organization's success. It is the "ongoing operations" needed to sustain an organization's current level of performance (Govindarajan & Trimble, 2010, 2013). The reality in business is many successful companies, especially those that desire to develop and implement cutting-edge innovations, have an existing performance engine that is optimized for and must remain a fundamental part of a successful business model. Performance engines strive to be predictable and repeatable; as a result, they play a significant role in keeping customers satisfied, costs down, and profits high (Govindarajan & Trimble, 2013). Other benefits of the performance engine are describe as:

[The performance engine] excels at serving today's customers and fighting today's rivals. It is terrific at driving for efficiency by holding employees accountable. It is on time, on budget, and on spec— every day, every week, and every month. It delivers bottom-line results each and every quarter. Like a finely crafted Swiss timepiece, a great Performance Engine never misses a beat. (Govindarajan & Trimble, 2013, Ch. 1 Sect. 3 Para. 2)

Often though, it is challenging for companies to successfully pursue both the performance engine and an innovation initiative. Obstacles between innovation and performance can arise such as corporate culture, company structure, lack of relevant expertise, and many more. The difficulties, challenges, and obstacles companies face when trying to execute innovation initiatives alongside their current performance engine represent a concept referred to as the innovation execution gap (Williams, 2011). This gap is not limited to poorly managed or underperforming organizations as Govindarajan and Trimble found that "even the best-managed corporations in the world struggle to execute innovation initiatives." (Govindarajan & Trimble, 2013, Preface Para. 3)

Considering that overcoming the innovation execution gap is a need for many organizations, we have noticed that organizations frequently use tools and processes that primarily attempt to answer externally-focused innovation questions such as, "Why do customers engage with our company?" and "How can we provide additional value to current and potential customers?" While this external perspective is important, an equally important view consisting of internally-focused questions (such as, "Why is our company pursuing an innovation initiative?") is also essential for project leaders facing the innovation execution gap. Furthermore, when companies identify and actively pursue an innovation initiative, they often fail to fully assess and evaluate the internal considerations of the organization (i.e., the needs of the innovation project and the current capabilities of their organization). This failure to adequately assess and evaluate often results in unanticipated execution challenges for companies including determining ways to implement the innovation project within the context of the existing performance engine, hiring or developing specialized expertise, and leading multifunctional teams that have different goals and structures.

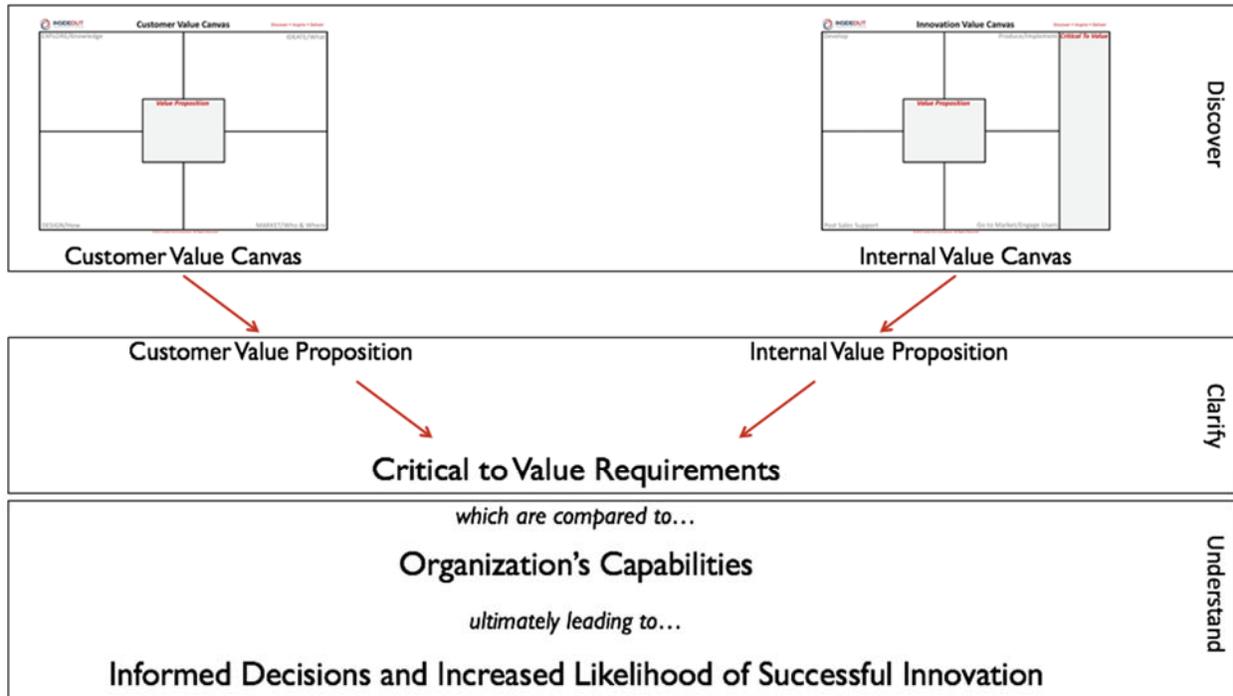
After exploring the innovation execution gap in the literature (theoretically) and with clients (practically), we acknowledge the need for many of today's top companies to simultaneously perform and innovate. We also believe that for most companies successful innovation execution is an internal execution problem, not an ideation problem; therefore, we have developed a methodology that helps leaders understand their organization's capabilities, what is required to overcome the innovation execution gap, and the resultant impact on their internal and external value propositions. Importantly, the methodology and tools we have developed enhance leaders' ability to sustain the existing performance engine while advancing their companies to the forefront of innovation. Our process has three distinct phases: *discover*, *clarify*, and *understand* – which support the potential for success in realizing both the external and internal value propositions. We believe understanding both the external and internal value is critical to ensuring that the organization has successfully framed the decision making criteria that must be consistently applied by project team members to deliver on an innovation effort. The remainder of this paper will focus on an explanation of our methodology and tools.

A Process for Overcoming the Innovation Execution Gap

Exhibit 1 provides an overview regarding how we help project teams evaluate and overcome the innovation execution gap. As you can see in this figure we emphasize a three step process. First, we help business leaders and their teams *discover* the value of their innovation initiative. Next, the information that is discovered is *clarified* by

reduction into a set of concise statements and requirements. Lastly, the statements and requirements developed for the innovation initiative are tested to ensure that there is *understanding* in relation to the existing organization. The remainder of this section will provide additional detail about each step of our process.

Exhibit 1. A Process for Overcoming the Innovation Execution Gap.



Discover

First, from the perspective of creating value, we believe companies must discover both the external and internal value considerations related to their innovation initiative. These value considerations ensure that all relevant stakeholders have a common understanding and can be aligned on the critical external and internal value drivers of the innovation initiative. An exploration of external value helps companies discover the answer to the question, “Why do or will customers engage with our company?” Via the internal value exploration, a process that is seldom considered or completed, companies discover the answer to questions such as, “Why is our company pursuing or what do we hope to achieve through the innovation initiative?” Thorough exploration of these two areas is enhanced by the use of two canvas tools our team has developed: the Customer Value Canvas and the Innovation Value Canvas. The use of a canvas as a visual method to collect, organize, and understand information has become increasingly popular largely due to the efficacy and utility demonstrated by Osterwalder and Pigneur’s (2010) Business Model Canvas. Specifically, our Customer Value Canvas (CVC) encourages participants to think critically about the value their innovation initiative provides (or could provide) to their external customers. Participants using the canvas are required to explore

- what they know about their customer,
- what they need to do to provide value to their customer,
- how they should go about providing that value,
- who their customers actually are, and
- where their value exists in a given market.

Importantly and unlike many other business and innovation methodologies, we extend beyond external value using an internally-focused canvas, which encourages participants to think critically about how an innovation project adds value back to the company, what is needed to execute on the innovation project, and what considerations represent the Critical To Value™ considerations (or those factors that if unmet significantly decrease the likelihood of success

of the innovation project). We call this canvas the Innovation Value Canvas (IVC). Our canvases support discovery by increasing stakeholders teamwork, communication, information processing, and knowledge organization (Kline et al., 2014). Both of these canvases will be discussed further in later sections of the paper.

Clarify

Exploring and discovering sources of external and internal value not only helps align key stakeholders, but it also helps leaders within those organizations create and refine concise external and internal value propositions. These propositions are statements that efficiently and effectively capture the initiative's external and internal value and serve to clarify these ideas within the innovation team and leadership. Next, these proposition statements are used in the development of a list of requirements that we call Critical To Value™ requirements, or statements that further clarify the essential elements and actions needed to successfully realize the internal and external value drivers of the innovation initiative. These Critical To Value™ requirements should be measurable so that all stakeholders can align in their knowledge of what is quantifiably necessary to succeed. The external and internal value propositions along with these Critical To Value™ requirements provide a *true north* or vision for the initiative. Most importantly, this true north vision supports the three purposes of a vision's ability to enable change: 1) clarify the general direction of the change to facilitate decision making, 2) motivate individuals to take action, and 3) coordinate actions across individuals within the organization (Kotter, 1996). This clarified true north provides the aligned independence necessary for stakeholders to make the myriad of decisions necessary to innovate or effect change.

Understand

Lastly, the Critical To Value™ requirements are then compared to the organization's existing capabilities. This important step allows company leaders to fully understand and make informed decisions regarding the innovation initiative within the context of their own organization. For example, an organization may not have the knowledge, skills, and abilities needed to develop, manufacture or support an innovative new product. As a result, this step in our process allows organizational leaders to determine if they will train, hire, or subcontract for this expertise. Another option could result in the termination of the innovation initiative because the costs to overcome an organizational deficiency may be too great or have a high probability of undermining other aspects of the performance engine. Ultimately, our process allows leaders to make informed decisions regarding whether or not to pursue the innovation initiative or how best to pursue the initiative while increasing the overall likelihood of innovation success.

Additional Detail about the Canvases

Completing the Customer and Innovation Value Canvases often consists of placing basic text or lists of text into the segments of the canvas; however, diagrams, sketches, and visual connections between content on the canvas are also effective. The canvases are best completed by a team of at least two people and encourage real-time engagement with stakeholders ranging from senior leadership to floor level personnel. It is desirable to include the broadest representation of stakeholders with a focus on those responsible for implementing the innovation as these individuals will contribute to the richest understanding for the decision-makers on the team. That being said, there must be sufficient representation of strategic objectives and sufficient market understanding so that the internal and external value propositions can be explored in the absence of executive management and customers. With sufficient work upfront, there should be no need for the presence of these two classes of stakeholders to fully develop or understand the key unanswered questions regarding the two value propositions. Next, we provide additional detail regarding each specific canvas as well as the benefits of using canvases for discovery and clarification.

Customer Value Canvas

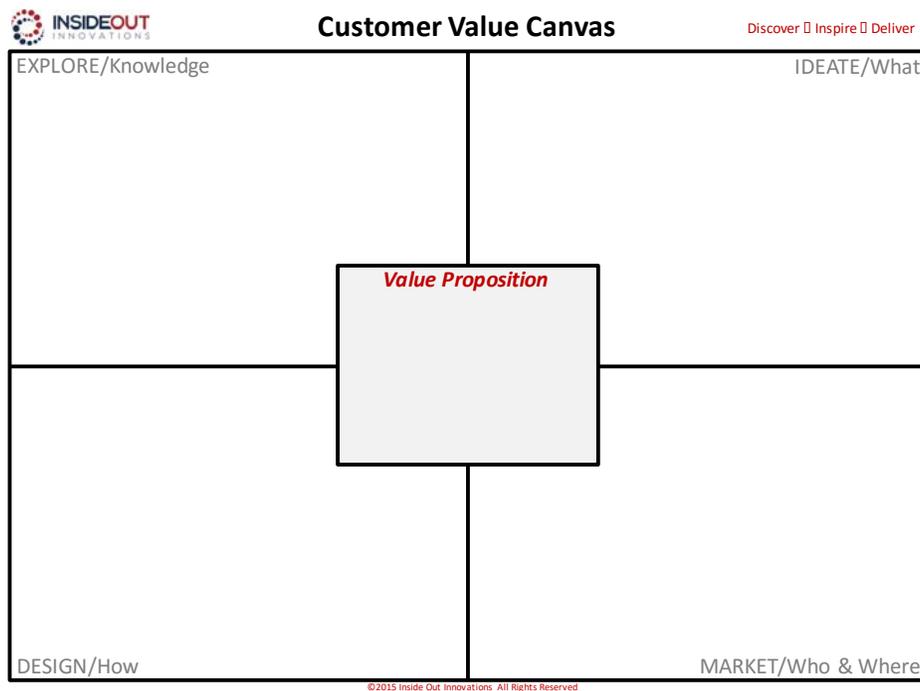
The Customer Value Canvas (CVC) is used to explore, analyze, and communicate external value (i.e., value to customers, users, or partners) in a variety of business and design situations including products, services, and processes. The CVC is a refined version two of the authors' previous work on the Innovation Canvas (Kline et al., 2014) and, overall, the CVC helps users answer the questions: "Why will customers engage with our company?" The canvas includes five essential themes that should be considered when determining sources of potential external value. These themes are each represented as a segment on the canvas in Exhibit 2 and include

- your organization's existing or newly developed customer value proposition (an expression of the value of the innovation effort to the customer, the benefit it provides, and why customers will use/pay for your

offering), which serves to integrate and center all of the thinking and exploration described in the other themes (Value Proposition).

- the basic concept or idea for your product, service, or process as well as the information you already know, what needs to be learned, and any stories or scenarios that illustrate potential use cases (EXPLORE/Knowledge).
- how your offering should/could function, the essential features needed to deliver value, and the external systems that interface with your offering (IDEATE/What).
- the design considerations that are critical to the success of your offering; represent key risk factors; and explore how to realize any functions, features, and interfaces (DESIGN/How).
- the market considerations including revenue, cost, partners, resources, channels, etc. in order to determine where opportunities exist and critical external partners (MARKET/Who & Where).

Exhibit 2. The Customer Value Canvas.



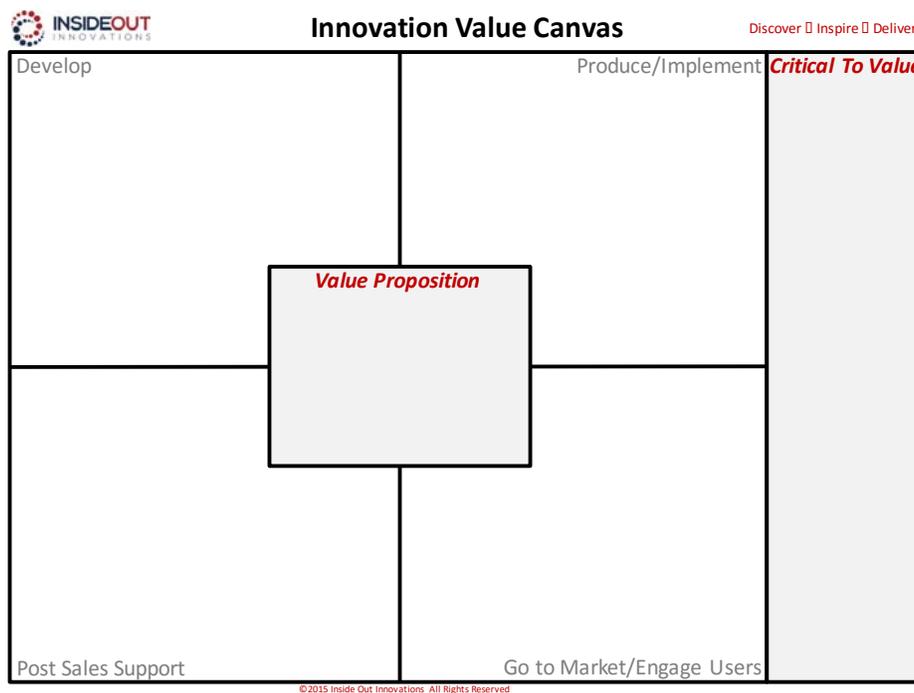
Innovation Value Canvas

The Innovation Value Canvas (IVC) (Exhibit 3) is used to explore, analyze, and communicate internal value beyond the overly simplistic perspective “to make money” (i.e., value to our company and its key stakeholders). Specifically, the IVC helps users understand the question: “Why is our company pursuing an innovation project?” or “What do we hope to accomplish with this project?” Understanding the internal value proposition in conjunction with the external value proposition provides critically important context upon which all subsequent project decisions should be based. The canvas includes six essential themes, again each represented as a segment of the canvas, that should be considered when determining why the innovation project is worth pursuing. These themes are

- your organization’s existing or newly developed innovation value proposition (an expression of the value of the innovation effort to the company, the benefit it provides, and the desired impact on the business), which serves to integrate and center all of the thinking and exploration described in the other themes (Value Proposition).

- understanding the required capabilities of your organization that will be critical to realizing the customer and innovation value propositions. This includes personnel, processes, technology and any other competencies that might be critical to achieving the desired outcome (Develop).
- production and implementation elements that must be considered in order to achieve the customer and innovation value propositions such as employee work procedures, relationships with critical suppliers, manufacturing capabilities and business processes (Produce/Implement).
- strategies for market success such as how to target and reach customers, determining if there is a direct to customer or distributor model, ensuring customers are properly trained on the use of the innovation, and ensuring customers understand the differentiated value of the innovation as compared to alternatives (Go to Market/Engage Users).
- critical support considerations that are necessary to ensure customers realize and sustain the intended value (i.e., recurring customer incentives, new customer support expertise, field service, ongoing enhancements/upgrades) (Post Sales Support).
- The Critical To Value™ elements for a plan necessary to achieve the two value propositions which provides the necessary focus to analyze your organization's ability to execute on the plan and identify the necessary changes or adaptations required to succeed (Critical To Value).

Exhibit 3. The Innovation Value Canvas.



Benefits for using canvases to *discover, clarify, and understand* the external and internal value

There are a range of benefits achieved through using the canvases. As with the use of any canvas tool, there is value in both the populated canvas and the process used to create the populated canvas. More specifically, when two or more individuals work to populate a canvas they are encouraged to communicate (verbally and visually) about what should be placed on the canvas, where it should be placed, and how ideas connect. The collective brainstorming, open discussion, and negotiation of what is important surrounding the above themes, combined with the visual nature of the canvas, enhances participants ability to *discover, clarify, and understand* the external and internal value of the innovation initiative. Additionally, this collective process supports participation (by allowing everyone to have a voice), alignment (through the negotiation of what goes on the canvas and where it should be placed), and a common understanding (via production of the populated canvas) which enables each team member to make significant contributions in the subsequent project execution.

From the external perspective, benefits of using a canvas include identification of the actual customer (which is not always obvious), better segmentation of known customers, important elements of the path to product or service delivery, and necessary customer support structures, all of which are critical to meeting the customer's value proposition. From the internal perspective, the canvases are critical in determining how the project should be pursued. For example, does the internal value reside primarily in the profits from the new product launch, from the development and understanding of the market that the new product serves, or, perhaps, through the development of the manufacturing process or distribution channel which will permit the launch of future similar products or products into the same market? These considerations should be clearly explored, negotiated, and clarified so that the implementation path during execution can focus on the essential considerations. This execution path may involve difficult trade-offs, such as trading incremental margin for time to market, investing or partnering in new manufacturing capability rather than wringing the best out of the current processes, establishing new distribution partnerships rather than trying to develop internally, or willingly losing the minimum amount of money on a product launch to learn quickly about a new market. Overall, having these discussions early benefits the potential success for the innovation initiative and the canvas tools we have developed enhance these discussions.

Conclusion

In order to successfully execute an innovation project, companies must take into account two important considerations. First, "Why do or will customers engage with your company?" The answer to this question is essential to ensure that you have a market for your product or a need for your process. Second, "Why is your company pursuing an innovation project?" This question encourages organizational leaders to thoroughly explore whether the innovation project will provide value to the organization's internal stakeholders and to ensure that it survives internal pressures long enough to be realized. Both of these questions are critical to successfully discovering why your organization needs to create and execute an innovation initiative. Through our methodology and the use of our canvases we help organizations *discover* the value of their innovation initiative. However, successful organizations can't stop there to overcome the innovation execution gap. They must *clarify* their discovery in order to align key stakeholders, establish a vision, and hold the organization accountable to achieving both external and internal value. Finally, it is essential for organizations to *understand* how their clarified value statements and initiative requirements compare to the existing organization and the performance engine. Only through this understanding can the organization make informed decisions regarding their innovation initiatives. These decisions along with the "true north" established by the clarified value and requirement statements will enhance an organization's likelihood of innovation success. Through our methodology, we help organizations optimize the outcomes of innovation efforts by helping organizational leaders align internal stakeholders with critical customer and company objectives.

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Tim Bruemmer is President and CEO of Inside Out Innovations, LLC - a business consulting firm supporting companies' innovation efforts. Tim has been engaged in the conception and development of products and businesses throughout the majority of his career primarily spent as both an entrepreneur and large company executive. Tim recently served as Vice President of Research and Development for Beckman Coulter Life Sciences (a Danaher Operating Company) after Danaher's acquisition of Beckman Coulter in 2011. Prior to that Tim held the position of Vice President of the Instrument Systems Development Center. From 1991 until 2007 Tim co-founded a variety of engineering-oriented companies amongst which were SAGIAN Inc. and Camile Products LLC serving laboratory automation needs through products and services. Tim started his career as a research scientist in the Kodak Research Laboratories after graduating with a B.S. degree in chemical engineering from the University of California at Berkeley.