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The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses

Eric Ries. New York: Crown Business, 2011, 320 pages. US\$26.00.

In late 2011, *The Lean Startup* by Eric Ries became one of the top selling business books. A significant portion of the content is dedicated to the development of radically new products.

Ries asserts that "Startup success can be engineered by following the right process, which means it can be learned, which means it can be taught" (p. 3). His stated mission is "to improve the success rate of new innovative products worldwide" (p. 8). The book is written for entrepreneurs around his definition of a startup which is "a human institution designed to create new products and services under conditions of extreme uncertainty" (p. 8).

In *The Lean Startup*, use of the term 'lean' is consistent with the meaning in the phrase 'lean manufacturing,' the management philosophy derived from the Toyota Production System (TPS). In this context, lean is an approach that strives to minimize the expenditure of resources for anything but the creation of value for the customer.

The Lean Startup is not difficult to read or comprehend. It is also available in an audio version that is nine hours in duration. It is segmented into three parts. The first two, Vision and Steer, address fundamentals. The focus of the Vision part is to provide a paradigm for entrepreneurial management. The central tenet demands 'validated learning' to determine if your assumptions correct. It is rigorous method for demonstrating progress that benefits customers. The Steer part provides technique to speed learning. The final part, Accelerate, presents techniques to allow "Lean Startups to grow without sacrificing the speed and agility that are the lifeblood of every startup" (p. 182).

Much of the book's content is derived from of stories that describe the author's approach to dealing with the extreme uncertainty that is typical in startups. In Chapter 3, Ries relates the story of six months of his development efforts that produced a product that no one wanted. Ries' realized that he could have learned this lesson earlier. Knowing this earlier would have reduced wasted efforts. This realization shaped the core recommendations described in *The Lean Startup*. The author's recommendations include:

- 1. Validated Learning: An empirical method of measuring progress regarding present and future business prospects (p. 38). A typical scenario starts with a hypothesis and then quickly transitions to an experiment. A common experiment involved building two version of a prototype. This enabled split testing (also known as A/B testing) that produced empirical results. In *The Lean Startup*, entrepreneurs are advised to seek experimental results instead of accepting information from unvalidated opinions in the form of estimate, projections, and forecasts.
- 2. Build-Measure-Learn Feedback Loop: The graphical representation of Ries' process that produces validated learning. The entire loop includes Ideas (preceding Build), Product (preceding Measure), and Data (preceding Learn).
- 3. Minimum Viable Product: a version of a product during development that "enables a full turn of the Build-Measure-Learn loop with a minimum amount of effort and the least amount of development time" (p. 77). Ries recommends testing the riskiest elements of a startup's plan first (p. 76). To test fundamental business hypotheses, the recommendation is to test new versions of minimum viable products throughout product development. In contrast, a common use of product prototypes is to test functionality.
- 4. Innovation Accounting: an approach that uses the concepts of a minimum viable product, tuning, and pivot or persevere decisions to test business plan assumptions. It is used to determine if a product is becoming more valuable to customers. Innovation accounting does not reward items such as the achieve-

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- ment of internal milestones or the addition of features or the number of lines of code.
- Pivot or Persevere: A strategic decision made using actionable, accessible, and auditable (pp. 143-147) metrics after completing a Build-Measure-Learn loop to repurpose or continue the current vision to align business and product efforts.
- 6. Continuous Deployment: A systematic approach that combines the lean concept of small batch sizes with automated test to detect problems and return the production system to the previous state. Continuous deployment is suited to environments, such as software development, that can iterate quickly. This phrase was coined by Ries' coworker at IMVU, Timothy Fitz.

Recognized lean principles, such as Kanban and the elimination of waste are included in the list of recommendations in *The Lean Startup*.

Chapter 10, provides descriptions of three engines of entrepreneurial growth: sticky, viral, and paid and their relationship to product/market fit, a term coined by Marc Andreessen to "describe the moment when a startup finally finds a widespread set of customers that resonate with its product" (p. 219). Within a few pages, Ries ties these concepts to the previous list of six recommendations.

The Learn Startup includes anecdotes to support Ries' recommendations. Ries gleaned these stories directly from peers at companies including Intuit, Zappos, Dropbox, and Facebook. The Facebook story highlights their value creation hypothesis and their growth hypothesis and the empirical data that supported these assumptions.

The goal of *The Lean Startup* was to answer the question "How can we build a sustainable organization around a new set of products or services?" (p. 275). The core advice is to implement projects that are "based on fundamental hypotheses that are testable" (p 276).

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