the Entrepreneur's Guide to Customer Development



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What Lean and Lean Startup is

Lean Startup is an iterative learning approach to building a scalable new business, combining Agile and Customer Development practices.

The principles above appeared in Eric Ries book, *The Lean Startup*. He coined and trademarked the term "Lean Startup" in 2008 to protect his definition. Hilarity ensued.

My favorite early criticism of the term involved defining each word in turn and using that to re-define what Ries meant by "Lean Startup." "Lean" means "to incline." "Startup" means to begin something. A lean startup therefore means to incline while starting something. Or taking things in a different direction: "Lean" means "small;" "startup" means "new business," so "lean startup" is a "small new business."

But wait, "lean" can also mean not having much fat. And a startup, at least in Silicon Valley, means to launch a new, scalable business. Lean Startup can also be defined as "launching a new, scalable business without much fat." Is that right? With false logic, you can make anything seem absurd. For instance: "Kinder" is German for "children;" "garten" is German for "garden." If we apply such false logic, "Kindergarten" is, therefore, a field where children are planted. (Barbarians!)

In Ries' original blog post on *Startup Lessons Learned*, he refers to "lean thinking" in the connotation of the Toyota Production System, or the system Toyota used to build cars in Japan starting in the 1950s.

The fundamental concept of lean is to reduce waste. From this simple impulse, lean manufacturing evolved into a bunch of processes for reducing waste in the manufacturing of cars. They strove to use natural resources more efficiently, organize the assembly line for greater productivity, modify the product itself to reduce failures, and so on.

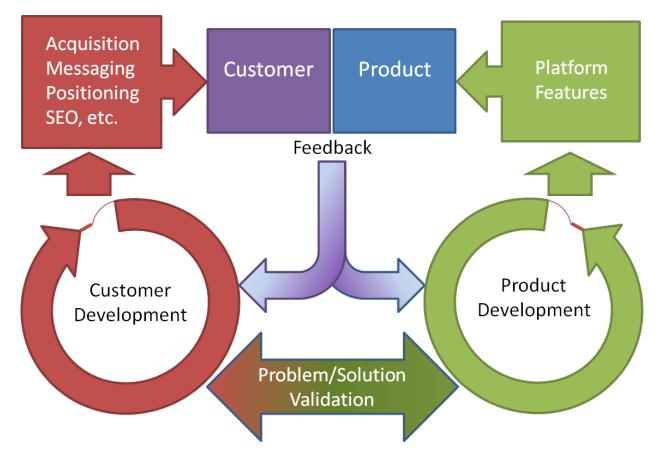
The idea wasn't just about assembly line up-time, which might seem like the most obvious course. If you concentrate solely on the waste of downtime, you may unwittingly produce other waste that has long term consequences. If the metric you focus on optimizing is up-time, that might lead to people making poor decisions. They will perhaps patch machine problems, rather than fixing them. They create workarounds in order to keep the line running resulting in an increase in injuries. Or when the system finally fails, it fails massively.

Toyota took a different approach. Their idea was to empower employees to stop the line if they experienced a problem. If you solved problems as they were encountered, rather than patch them, the longer-term throughput would increase. Management looked to line workers to improve processes to increase efficiencies. Employees changed tool placement, managed materials flow, or modified work processes. They knew best since they were the ones who encountered the problems day in and day out on the line. The goal was zero waste. That could never be achieved, of course, but the idea of continuous improvement became the standard operating principle.

Ries' original post introducing Lean Startup provides more context on his thinking, when he describes the characteristics of a Lean Startup as a startup that leverages open source and free software and cloud computing, applies the Agile development philosophy, and practices Customer Development.

The first third of the definition is relevant in that it empowers software development without heavy investment. It's part of a larger trend of "democratization" of startups, where, quite literally, anyone can be a tech entrepreneur. While pertinent to a discussion about how "Lean Startup" came to be, it's not particularly relevant today as a characteristic of a Lean Startup. Relatively low development cost is now a reality in the software world, not a trend, and doesn't really contribute to describing how a Lean Startup operates.

An integration of Agile and Customer Development still applies. As shown in Figure x, customer development and Agile product development are two distinct, but interrelated processes. Customer Development uses iterative, learning methods that focus on testing and validating assumptions about who the right customers are, the problem the customers have, and what the solution should look like. The Product Development team uses learning, iterative methods to ensure the product, works and solves the customer's problem.



Generally, the Product Development process receives input from customers indirectly through Customer Development, and (when available) by measuring product use directly. The Product Development process iterates on the product continuously, releasing new or different functionality directly to the customer as quickly as possible. They also run experiments, both automated inside the product such as split testing, and outside the product in order to validate or invalidate assumptions about how customers will use the product.

The learning, iterative process doesn't stop at the product. The process is now used across the entire business model, not just for customer and product assumptions. The correct sales, marketing, pricing, distribution, and so on, are also likely based on not-yet-validated assumption exists and are critical to the success of business, so must be tested.

The learning, iterative process also doesn't stop at a particular stage of the company. The process is used wherever there's uncertainty. Therefore, it's relevant at the earliest stages when one is considering what business opportunities to pursue, through customer and product development stages, and continues through to scaling, continuous improvement cycles, extending product end-of-life, and then again, when looking for new growth opportunities.

You may no longer be a "lean startup" at this point, but you should continue to use the methodologies.

To summarize, a Lean Startup in practice:

- Is trying to create a new scalable business.
- Faces uncertainty in doing so.
- Uses an iterative product development process.
- Interacts with customers in such a way as to discover and validate all aspects of a working business model.

Build – Measure – Learn

Perhaps the single most important aspect that Lean Startup brought to the innovation economy is the idea around experimentation. Covered in many books, the rigorous application of the "scientific method" to the non-technical parts of a business has successfully launched and scaled numerous businesses, including Dropbox, HubSpot, Meetup, and Buffer.

As applied to startup and corporate innovation, the "Lean Startup" way of experimenting includes:

• Creating a hypothesis representing what you're trying to learn: if we do *x*, *y*% of customers will do *z*.

- Specific experiment types, including landing page, "wizard of oz," concierge, and so on.
- Experiment data contributing to tracking early startup progress (innovation accounting).
- The first product as an experiment; in other words, the Minimum Viable Product.

Rapid experiment isn't merely rapid prototyping. It's not "throwing stuff against the wall." It's not "seeing what works." It is a rigorous process of measuring customer behavior to help indicate whether you're on the right path with the product, pricing, marketing, and so on.

Ries' background is as a software engineer and so much of his work tended toward the technical side of a business; in other words, product development. Additionally, high-tech startups tend to articulate ideas or products first, and think about the customer or problem second. At face value, there's very little "customer development" in the original concept of the Build-Measure-Learn loop.

When combined with Customer Development (see figure x), one can extrapolate build—measure—learn to include:

- Build an Experiment (to test your idea)
- Measure (get results from customers participating in the experiment)
- Learn (Extract lessons and insights from participant behavior).
- Next, you decide what to do with the idea. Do you:

-- Iterate (Test the idea again, differently) or

- -- Pivot (Change the idea fundamentally) or
- -- Press on (Test the next idea).

By "idea," I mean any idea you have for how your business will function that is not fully known and is necessary for the business to succeed. Or perhaps more concretely, say you have an assumption that a group of active, middle-aged, professional men are willing to change their lifestyle over warnings from their doctors that they are pre-diabetic.

So, you:

"Build" a way to test the assumption: "Interview 10 people who match the description, recommending a specific lifestyle change, provide them a "call to action" demonstrating willingness to change."

Measure the result: "6 out of 10 say they are willing; 2 out of 10 actually take the first step."

You learn from the result. "2 are different from the other 8. The 2 are similar in specific ways."

So you create a new idea: "A group of people who share the common characteristics of those 2 will take a specific step to change their lifestyle." You test again.

The iterative cycle from the customer development side integrates with the iterative buildmeasure-learn loop on the product development side. If you build an Internet app, you can measure customer behavior online. That's great data, but it doesn't tell you WHY a feature is working or not. You should interact with the user live in order to learn the WHY. The same goes for complex solutions, or physical products. The same goes for other stakeholders inside your business ecosystem. In the diabetes example, that ecosystem might include patients, nurses, doctors, hospital administrators, insurance companies, Medicare personnel, compliance officers, and so on.

The build-measure-learn loop should be applied to all critical assumptions across the business model. You want evidence before execution, regardless of whether you're adding features to an existing mobile application or figuring out the supply chain for a crowdfunded hardware device.

Lean vs Lean Startup

I find it frustrating that many people talk about "lean" when they really mean "Lean Startup" or "lean innovation." Generally, lean is about reducing waste in known products for known customers. How one goes about being lean in the known side of the universe is inherently different than how one goes about being lean in the deep void of the unknown.

The above discrepancy has caused much confusion in the market. There's an entire separate (but related) industry dedicated to the former. (See lean.org). Consider yourself forewarned (or corrected).