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May 2013

Why the Lean Start-Up Changes Everything

by Steve Blank

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Photography: Courtesy of the artist and the Wallace Trust

Artwork: **Sara Hughes,** *Download,* 2005, acrylic on linen, 1.5 m x 1.5 m, Wallace Trust Collection

Launching a new enterprise—whether it's a tech start-up, a small business, or an initiative within a large corporation—has always been a hit-or-miss proposition. According to the decades-old formula, you write a business plan, pitch it to investors, assemble a team, introduce a product, and start selling as hard as you can. And somewhere in this sequence of events, you'll probably suffer a fatal setback. The odds are not with you: As new research by Harvard Business School's Shikhar Ghosh shows, 75% of all start-ups fail.

But recently an important countervailing force has emerged, one that can make the process of starting a company less risky. It's a methodology called the "lean start-up," and it favors experimentation over elaborate planning, customer feedback over intuition, and iterative design over traditional "big design up front" development. Although the methodology is just a few years old, its concepts—such as "minimum viable product" and "pivoting"—have quickly taken root in the start-up world, and business schools have already begun adapting their curricula to teach them.

The lean start-up movement hasn't gone totally mainstream, however, and we have yet to feel its full impact. In many ways it is roughly where the big data movement was five years ago—consisting mainly of a buzzword that's not yet widely understood, whose implications companies are just beginning to grasp. But as its practices spread, they're turning the conventional wisdom about entrepreneurship on its head. New ventures of all kinds are attempting to improve their chances of success by following its principles of failing fast and continually learning. And despite the

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methodology's name, in the long term some of its biggest payoffs may be gained by the *large* companies that embrace it.

In this article I'll offer a brief overview of lean start-up techniques and how they've evolved. Most important, I'll explain how, in combination with other business trends, they could ignite a new entrepreneurial economy.

The Fallacy of the Perfect Business Plan

According to conventional wisdom, the first thing every founder must do is create a business plan—a static document that describes the size of an opportunity, the problem to be solved, and the solution that the new venture will provide. Typically it includes a five-year forecast for income, profits, and cash flow. A business plan is essentially a research exercise written in isolation at a desk before an entrepreneur has even begun to build a product. The assumption is that it's possible to figure out most of the unknowns of a business in advance, before you raise money and actually execute the idea.
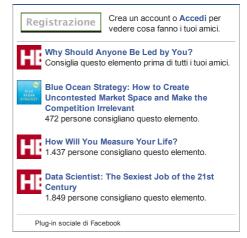
Once an entrepreneur with a convincing business plan obtains money from investors, he or she begins developing the product in a similarly insular fashion. Developers invest thousands of man-hours to get it ready for launch, with little if any customer input. Only after building and launching the product does the venture get substantial feedback from customers—when the sales force attempts to sell it. And too often, after months or even years of development, entrepreneurs learn the hard way that customers do not need or want most of the product's features.

After decades of watching thousands of start-ups follow this standard regimen, we've now learned at least three things:

1. Business plans rarely survive first contact with customers. As the boxer Mike Tyson once said about his opponents' prefight strategies: "Everybody has a plan until they get punched in the mouth."
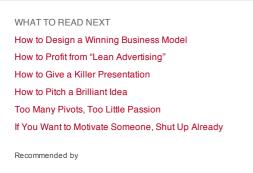

Steve Blank is a consulting associate professor at Stanford University and a lecturer and National Science Foundation principal investigator at the University of California at Berkeley and Columbia University. He has participated in eight high-tech start-ups as either a cofounder or an early employee.

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Kelsey T. • a month ago
Hi Steve,
Would you be able to point me to Sikhar Ghosh's original research cited in your article? Thx
⌃ | ⌄ • Reply • Share ›

Jeff Armour • 2 months ago
Excellent article
∧ | 1 ∨ • Reply • Share ›

Rocky Balboa • 3 months ago
What today is called lean startup, was called "no-hierarchy-founder" 10 years ago. So, for me there is no difference - every startup is lean.
2 ∧ | ∨ • Reply • Share ›

Amik Ahmad • 3 months ago
it's just marketing. a way to get more young people to forget just how difficult it is to start a company, and make them think it's easier than it really is. this goes hand-in-hand with all the trendy tv shows that come out now about the sexy life of a start-up entrepreneur. sad really.
2 ∧ | ∨ • Reply • Share ›

Mike Eppel • 3 months ago
I continue to be amazed how Lean principles are still seen as new. Taiichi Ohno and W. Edwards Deming (Martin Fowler and Mary Poppendieck for software)... read their work. Lean Start-up is great but it really is synthetic.

Hopefully our young entrepreneurs will live Lean and create great companies. Most of the old dogs can't or won't learn. They see this as "flavour of the month" stuff, and that is your competitive advantage. :)
2 ∧ | ∨ • Reply • Share ›

James Noble • 4 months ago
Sadly, it has been MY personal experience in a $4 billion company, that Lean Startup is simply an excuse to sidestep process, ignore documentation, and shove 1/2 working applications on to our existing (once loyal) customer base.

There are times when having your customers be your 'beta' testers is acceptable, but subjecting long term loyal customers to 'experiments' and never finishing the 'backlog' of requirements for documentation and operational rigor and process, means that the problem of maintaining the poorly designed, written and now deployed software is "someone-elses" problem. Guess who that 'someone else' would be?
1 ∧ | ∨ • Reply • Share ›

> **Eprofessor** → James Noble • 3 months ago
> I have taught students in non-business disciplines how to start a business for several years and have used the business canvas as a tool to develop a feasibility plan. In my experience there is perhaps a middle ground - between the traditional B plan approach and the lean start-up approach.
> 4 ∧ | ∨ • Reply • Share ›

> **Robert Uomini** → James Noble • 3 months ago
> I couldn't agree more. Try selling the "Lean Start-up" methodology to Steve Jobs and see what he would say.
> ∧ | ∨ • Reply • Share ›

>> **Perler** → Robert Uomini • 3 months ago
>> that may be difficult with steve jobs...
>> 5 ∧ | ∨ • Reply • Share ›

> **Jason S** → James Noble • 4 months ago
> Isn't this for start-ups and entrepreneurs though rather than $4 billion dollar companies? They function very differently and are at different stages of development.
> ∧ | ∨ • Reply • Share ›

James Noble → Jason S • 4 months ago

Jason, that is what I thought as well, yet, BECAUSE Harvard and others are teaching this as the "new" way to do things, our company has "embraced" it fully, as our new development practice.

Sadly no one has really clarified where using Lean Startup and Agile will cause you problems... and clearly, some people just don't understand.

So, our woes continue, until the wheels fall off the bus...

∧ | ∨ • Reply • Share ›

Robert Uomini → James Noble • 3 months ago

Agile is another methodology embraced by the ADHD crowd and others who are unable or unwilling to take the time to, or who don't have the patience for, detailed product design. And company sales groups are equally to blame: if they were on the ball, they'd engage with their customers and prospects more to determine what they really want. Poor product functionality is often due to an incomplete understanding of what the customer wants and this can be overcome without having to go through an iterative input process with same.

∧ | ∨ • Reply • Share ›

Jessica Brookman @ N*O → Robert Uomini • 2 months ago

Whoa dude. Nobody is to blame. It just is.

If your products are quality and selling, then why worry about what other people use for methodology (or lack thereof)?

You are so focused on the fact that many people cry "lean" when they mean "disorganized." But that doesn't mean that lean itself is a bad approach. The fact that it's done poorly frequently should indicate that it's difficult to do well, which makes it an art when done exceptionally.

Art is nice.

3 ∧ | ∨ • Reply • Share ›

Mike Eppel → James Noble • 3 months ago

Good Lean process takes more discipline by the participants... not less. Lean (and Agile) is not an excuse for sloppy work. Oh, more documentation will not fix that problem.

8 ∧ | ∨ • Reply • Share ›

Raphael • 4 months ago

The Tyson quote puts it all in perspective.

4 ∧ | ∨ • Reply • Share ›

Stuwalker Adi • 4 months ago

Thought provoking article. Thanks Steve.

∧ | ∨ • Reply • Share ›

Mwai Gichimu • 4 months ago

More action, less planning. In the end, it's planning as you act.It's what most creatives do. Mwai Gichimu www.creativeheritage.org

2 ∧ | ∨ • Reply • Share ›

Prakash Subbarao • 4 months ago

It looks like common sense to me. Invest time & energy and less money.

Spend more money when you earn more money. If you lived a middle class life this is no brainer!

5 ⌃ | ⌄ • Reply • Share ›

RaunaqSingh ➤ Prakash Subbarao • 4 months ago
What you've said is so true! I know someone who was from a middle class background, and he didn't really think of all this too much, he had no choice but to follow this way and he made it!

1 ⌃ | ⌄ • Reply • Share ›

Rmotion • 4 months ago
"Everybody has a plan until they get punched in the mouth."
If you have not been punched in the mouth yet it will not be as poignant. Every business plan should lead with this in mind.

⌃ | ⌄ • Reply • Share ›

Steve Hubbard • 5 months ago
I think one of the reasons that the Lean Startup approach works is that it dramatically accelerates a kind of natural-selection process (a la Darwinian evolution) in a company. Processes, features and ideas that have merit are kept, while those that do not become extinct. Evolution happens when there is a rapid birth-and-death rate, and a rapid rate of small mutations.

What is different in this case is that the "mutations" are based upon thought and hypothesis rather than being random.

Other natural concepts also apply, such as the extinction of a native species (e.g. a horse-and-buggy) caused by the introduction of an invasive species (e.g. an automobile).

The question you need to ask is: When two species are evolving at different rates, which one will be more likely to dominate?

5 ⌃ | ⌄ • Reply • Share ›

Aarondura • 6 months ago
Nice.... I've seen this occurring over the a decade in the southern part of Nigeria. I always asked my self "do these people have business plans? of course yes; i answered" but, in reality they have the right models which they diligently execute. Now, i'm inspired by this article to conduct a research. Flying to Southern Nigeria, to meet the "igbo business men".

2 ⌃ | ⌄ • Reply • Share ›

Monty • 6 months ago
I like this article. While it's not all new, as some have commented correctly here, the spike in lean start-ups has been influenced by some things that are in fact new. Things like web/social media and crowd funding. In addition to new funding mechanisms these phenomena give developers a way to lay claim to their ideas publicly so they worry less about plagiarism (despite recent patent law changes) and thereby are less inclined to develop products in a black hole...or "stealthly" as the author points out.

⌃ | ⌄ • Reply • Share ›

Andrew Crookston • 6 months ago
I have been trying to figure out how I can implement this at my 18 year old company, which has a veto culture for new ideas. I started a new agile team with one other person called the Lean IdeaLab. I'd like to share some actual results of how the Lean Startup can impact an established company.

For example, we created an 850 person engaged Customer Advisory Panel without spending a dime by making it a selection process and recognizing those selected on our website. We secured for our team autonomy to pursue any idea create any Minimum Viable Product (MVP) without being stopped or needing any approvals, including my own boss. This alone has been a key to implementing the Lean Startup. It has enabled us to move rapidly and cut through the bureaucracy, approval committees, and veto culture. We've also produced rapid results which has built

credibility, creating 4 MVP's in the first 8 weeks.

We held a Lean IdeaJam offsite brainstorming session with 11 people from across various departments. About two thirds the way through our IdeaJam, we sent a survey to our Advisory Panel and received real-time learning on what they thought were the best ideas (we received 341 surveys).

My CEO even had me talk at our board meeting and asked me to give an hour presentation at our upcoming all-staff meeting. And we even included some of our Board of Directors in our learning as well, giving them a demo of our MVPs and ideas to get their feedback.

The way we build our products now has been changed. So thanks for the article and how these principles can impact established companies as well!

9 ^ | ∨ • Reply • Share ›

Niaz Ahmed ↱ Andrew Crookston • 2 months ago
Interesting to see an established organization using lean. Can you please share what were some of the challenges you faced while trying to implement Lean principles.

1 ^ | ∨ • Reply • Share ›

Gary ↱ Andrew Crookston • 6 months ago
Hi Andrew. GReat post! WOuld you be willing to share a bit about your brainstorming and ideation process? What does an Idea Jam look like in terms of how it's facilitated, by whom and for how may people? Do you use a set process or it is an idea free for all? Best, Gary
Gary@oneworldmusic.com

1 ^ | ∨ • Reply • Share ›

Andrew Crookston ↱ Gary • 6 months ago
Sure. I'd be happy to share all of the details of what we did. You can also reach me at acrookston1@yahoo.com for additional details (and I'd be happy to be contacted by anyone else as well to answer any questions and share what we learned, including our agenda).

I think unlike other brainstorming sessions, a couple of the differences in the Lean IdeaJam (which I created) is that we got real-time learning by sending a survey 2/3 through the IdeaJam to our Customer Advisory Panel. We received 345 responses. A couple of people told me afterwards this was the best part – seeing in real-time what our advisors thought of the ideas.

Secondly, before the IdeaJam we also asked our advisors for any ideas we could discuss at the IdeaJam, and received 7 pages of comments.

As this was our first IdeaJam, we had 11 participants from ~~across various departments and one facilitator (he was referred~~

see more

4 ^ | ∨ • Reply • Share ›

thinkx ↱ Andrew Crookston • 5 months ago
Thanks for sharing your success story. Seems typically positive for lean and scrum teams. Surely the way to go.

1 ^ | ∨ • Reply • Share ›

Tchandu • 6 months ago
I don't see what is new or eye-opening here.

^ | ∨ • Reply • Share ›

Wes O • 7 months ago

This is a great

article from Steve Blank written for HBR. Being a business developer myself for
many years and having to test the industries reaction to a potentially new product, I see the advantages of having very flexible product development plans, sales plans and marketing plans that can be adapted and changed through
out the design cycle without having to go back to the drawing board so to speak. The feedback from the field will help shape a more perfect product that
addresses the true needs of the market. I have seen many product failures because well drawn up plans were heavily relied upon for the success of the product.

Unfortunately the
industry's needs had changed or the technology had taken a turn into a different direction. What was left were two things a beautiful, well designed state of the art product and quality sales strategy but no one who could use it.

⌃ | ⌄ • Reply • Share ›

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whoismother • 7 months ago

This is an old idea, repackaged and sexified Lol

1 ⌃ | ⌄ • Reply • Share ›

> **Patrick C** ➔ whoismother • 7 months ago
>
> This may be repackaged but
> still this idea has allowed the Lean giant Toyota to triple results in a period
> during which other can barely make it...If only we would really take the time
> to understand what Lean is really about!
>
> 2 ⌃ | ⌄ • Reply • Share ›

Jai Cheswick • 7 months ago

Great article
Models exist a long time before academics get hold of them and package them. It's almost the packaging that breaks the model because the same model can't fit every business. Imagine if we all had the same wife, husband, partner...wouldn't work.

1 ⌃ | ⌄ • Reply • Share ›

Nidia Batlle • 7 months ago

I believe that Lean Startup minimize the product development time, cost related to it goes down and probably customer satisfaction goes up because you are practically developing a product hand on hand with the customer.

The speed at what we are advancing through life does not give you much time for investigation. It is invention, production and sales almost at the same time.
Nidia Batlle

2 ⌃ | ⌄ • Reply • Share ›

Larry Philip Monster • 7 months ago

Indeed, a very good development that the Lean Startup gets exposure. As an industrial design student at Northumbria University, UK, I rather see my design school adapt or at least introduce the Lean Startup methodology in our curriculum as well. It would heavily involve customers early on in the design projects. It would reduce the amount of wasted time on producing products and services that would only remain as pictures in the portfolio, and not as potential product on the market. Design students + lean startup = Design school as an incubator for creative entrepreneurs.

⌃ | ⌄ • Reply • Share ›

Paulo Sousa • 7 months ago

The
many times I have heard managers and analysts associated with venture
capitalists, venture capital investors, lines of investment programs, etc, I
never heard questioning on the learning ability of an entrepreneur. And this is
precisely what Lean stratup is all
about: learning and the capability of learn.

1 ∧ | ∨ • Reply • Share ›

Jack Derby • 7 months ago
Pretty good article; good tactics to employ, which for me just reinforces the
need for creating a business plan. Lots of semantics here, but after being
ground floor in 11 startups, continuing to teach business planning
and marketing at MIT and Tufts, and continuing to actively invest as a venture
guy, there's no substitute for creating a business plan. Call it a business
model, a business plan, a framework, an outline, a guide, but if there is no
plan, I might as well go out and play tennis without a net. Good exercise
maybe, but no idea of how to improve my game.

I tell my entrepreneurs and my students that by definition, the business plan
is going to be wrong, but it's not the numbers that count at the startup stage,
it's the strategic thinking, the customer testing and the modeling behind the
assumptions, and the assumptions need to be written down and agreed to
among the team. Last I looked, sounds like a business plan.

3 ∧ | ∨ • Reply • Share ›

Millier • 7 months ago
Outstanding article as usually from S Blank. Every single word is important
Paul Millier EMLYON

∧ | ∨ • Reply • Share ›

Amber W. • 7 months ago
This is a fantastic article. As a triple small business owner, I know for a fact
that the lean start up works, and it works amazingly well. The only thing I
didn't agree with was a comment made by one of the commenters under the
article, that this would work well for non-profits, unless they were able to find
finding through consistent private donors. It is almost impossible, as I know
it, to get 501c3 status unless you come up with a formal business plan. I
would know. I've got a non-profit too.

1 ∧ | ∨ • Reply • Share ›

michael gogis ↱ Amber W. • 7 months ago
Hi Amber, it is actually quite simple to get 501c3 status without a
formal business plan. All you need is 3 years of projected revenue and
expense, which while sounds like a business plan, is really just some
made up numbers. The IRS is mainly looking to see how much to
charge you based on anticipated revenues and make sure your plan
actually spends some money on programs. I've worked at a non-
profit for 20 years and have help start a handful of them. None had a
formal business plan during application.

I think "lean" is a great idea for non-profits and any company that is
trying to meet a customer need. If more non-profits were run more
lean, it would increase efficiency and maximize social good.

1 ∧ | ∨ • Reply • Share ›

Amber W. ↱ Amber W. • 7 months ago
Funding*

∧ | ∨ • Reply • Share ›

Rajesh Ahuja • 7 months ago
So much emphasis on process?? Where is the human element. Start-ups
don't fail, founders of those start-ups fail.

Does anyone has the comparative data of 3+ years survival rate of lean and
non-lean start-ups?

~~how lean start-ups~~

11 ^ | ⌄ • Reply • Share ›

Isis nuñez • 7 months ago

Es muy interesante el hecho de que se tengan como buenas ideas las hipótesis no probadas y que se tome muy en cuenta la opinión de clientes potenciales con los cuales se va a trabajar de la mano. Trabajar con ciclos cortos es una innovación que va a permitir desarrollar variedad de productos en tiempos reducidos creando nuevas estructuras y desarrollando nuevas y mejores habilidades

1 ^ | ⌄ • Reply • Share ›

Phillip Bandler • 7 months ago

I am so fed up with this lean tripe. Go read old issues if Inc magazine from the 1980s and you will articles in every issue on how to be a lean startup. Websites like www.antiventurecapital.com have been promoting the concept since 1995. Is the collective memory really this short?

7 ^ | ⌄ • Reply • Share ›

> **Pierre Hervouet** ➔ Phillip Bandler • 7 months ago
>
> Yes
> the collective memory is short and having an idea the first is not a guarantee of
> success. The success on a new idea depends on lot of things among them, Timing,
> Resonance (lean is a nice name and startup also), Channel (i.e. open source or
> not?).
>
> 1 ^ | ⌄ • Reply • Share ›

Adrian Meli • 7 months ago

Thought this was great and seems like it applies to other areas beyond start-ups like non-profits, etc. And, the Tyson quote is still a winner years later :-)

1 ^ | ⌄ • Reply • Share ›

John Coumbe-Lilley • 7 months ago

Really enjoyed the article. The importance of the innovation economy and shift in mindset to a rapid test/fail concept seems like it should be infused into a veriaty of educstional curriculums. Echoing previous comments, innovating in governmental, educational and medical institutions might lead to societal gains.

^ | ⌄ • Reply • Share ›

Loudoun • 7 months ago

I've found the lean methodology to be useful in synthesizing many aspects of a product into one "canvas." I use it for www.Electorate.Me and have been using it for our new products WriteMyRep and Movements.Us, which I think will be game changers for distributed, little-guy, grassroots advocacy...once I get the wrinkles ironed out. Thanks for the article!

^ | ⌄ • Reply • Share ›

Dennisallar • 7 months ago

Excellent article....

1 ^ | ⌄ • Reply • Share ›

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