“If you build it they will come!”

Not always true
TOP 10 STARTUP MISTAKES

#1 Building something nobody wants
Score: 300
36% of Tot.

#2 Hiring Poorly
Score: 153
18% of Tot.

#3 Lack of Focus
Score: 112
13% of Tot.

#4 Fail to execute Sales & Marketing
Score: 98
12% of Tot.

5. Not Having The Right Co-Founders
6. Chasing Investors, Not Customers
7. Not Making Sure You Have Enough Money
8. Spending Too Much Money
9. Failing To Ask For Help
10. Ignoring Social Media

www.100FirstHits.com
PowerHub provides interoperable battery storage systems at the edge of the grid for demand management.

Through Customer Discovery we moved from V2G to Community Energy Storage.
So what?

• Am I solving a problem that somebody really cares about?
• If I solve it, will they come/buy it?
• What problem should I be solving?
I-Corps Story
$7 Billion
“How can we increase the economic impact of the research dollars invested every year?”
Investors
Industry
GOALI
STTR
AIR/PFI
ERC
I/UCRC
SBIR
STC
NSF Primary Funding
Valley of Death
Innovation Corps
I-Corps “Home”
Foundations
Investors
Small Business
University
“Ditch of Death”
Discovery
Development
Commercialization
Resources Invested
The Nation’s I-Corps “Fabric”

I-Corps Nodes

I-Corps Sites

I-Corps Mentors

I-Corps Teams
Why the Lean Start-Up Changes Everything

by Steve Blank

Harvard Business Review

TURN A GREAT IDEA INTO A GREAT BUSINESS

“Lean” is changing everything you know about starting a new venture PAGE 63

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 buzzword that’s not yet widely understood, whose implications companies are just beginning to grasp. 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 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.
Developed by entrepreneurs
Taught by entrepreneurs
Our Goal
Improve Odds
Pick Winners
We use Customer Discovery and follow Scientific Method
Talk to customers? What do customers have to do with the products we eventually want them to buy?
What's a startup?
A temporary organization designed to search for a repeatable and scalable business model
Startups

• More startups fail from a lack of customers than from product/tech failure.

• Startups **are not** smaller versions of large companies.
Startup to Company

SEARCH

Business Model Hypothesis

EXECUTION

Operating Plan + Financial Forecasts

Startup

Company
“Customer Development”

how you go from startup to company
how you search for Product-Market fit
Product-Market Fit

“The Holy Grail!”

“MVP”

The Holy Grail!
MVP (Minimum Viable Product)

Minimum Viable Product – The product with the minimum feature set to meet the needs of a Customer Segment and Value Proposition(s)

With Product-Market Fit
Customer Development

+ Research Outcomes

NSF

CORPS
NSF Innovation Corps
Don’t be A Faith Based Organization

Business Model Canvas

100+ Interviews
Get out of the building!
The art of customer interviews

My product blah blah I think... I created... I just wanted... the free coffee...
INTERVIEW PROPERLY

–Do not sell!
  • Don’t show a demo.
  • Don’t do a technical presentation

–You are there to learn. Ask about how they do their job. Ask about their problems

–Look for the unexpected. The surprises
Moveline.com founder Fred Cook pitching at TechStars' Demo Day.
GAINING INSIGHT

—Insights are your goal

—Don’t just scratch the surface, dive deep ... Find the hidden motivations.

—Depth of understanding always leads to insight
ASK THE RIGHT QUESTIONS

– Always ask open-ended questions

– Ask questions starting with: who, what, why, how

– Do not ask questions starting with: is, are, would, do you think, should

– Ask why? then why? then why? again
The Challenger

Why?
- Tank Ignition
  - Escaping Gas
  - Leaky Seal
    - Extreme Temperature
      - O-Ring Failure
        - Specification
          - Design Flaw
            - Proceeded Anyway
              - Why?
                - Management Failure
Types of I-Corps Training
# TYPES OF I-CORPS TRAINING

## National
- $50,000 NSF Grant
- Opening on-site – 4 days
- 3 hour Webex once a week – 5 weeks
- Closing on-site – 3 days

100 Interviews – 7 Weeks
17 interviews per week! OFFICE HOURS!

## Regional
- Introduction to I-Corps
  - Oct 25 – Nov. 29
- Office Hours: Nov. 17-18, Virtual (Mike & Jack), In-person (Lisa), times are TBD

[www.dcicorps.org/introatvt2016application](http://www.dcicorps.org/introatvt2016application)
An I-Corps Team

Goal: Prepares scientists and engineers to extend their focus beyond the laboratory and broadens the impact of federally funded research
The Startup Class

- An interdisciplinary pilot course
- Deploys the Customer Discovery curriculum
- To become part of a minor/certificate
- Broad mentor engagement (VT Alums)

ENGE 4214
The Startup Class

Dept. of Engineering Education

VTECC
Language is Power. Break the Mold.

INSTITUTE FOR CREATIVITY, ARTS, AND TECHNOLOGY

NCIIA
NATIONAL COLLEGIATE INVENTORS AND INNOVATORS ALLIANCE
funding and training faculty and student technology innovators
Card Isle - The Startup Class Grads

www.cardisle.com
I-Corps and the CURENT NSF ERC
I-Corps and You

- Better identify what you should be building, for and why
- Makes you a better researcher
- Research the issues that people care about
- Alternate ways to integrate I-Corps principles into the NSF ERC
GET UNCOMFORTABLE

#GetOutOfTheBuilding