



**17-356/17-766
SOFTWARE ENGINEERING
FOR STARTUPS**



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**Our Startup definition: A company
without an empirically validated
business plan.**



Minimum Viable Product “The Lean Startup”

“The minimum viable product is that version of a new product which allows a team to collect the maximum amount of validated learning about customers with the least effort.”

-Eric Reis, author of The Lean Startup

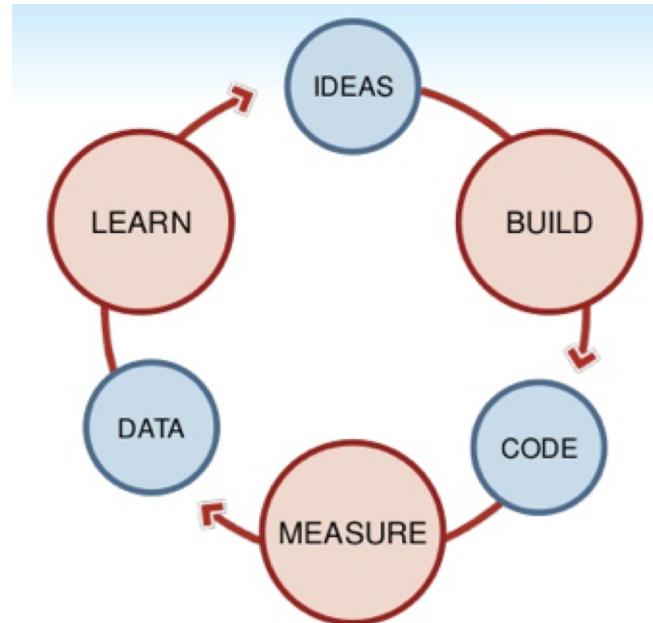
WHY MVP?

- The minimum set of features needed to learn from visionary early adopters.
- Avoid building a product no one wants
- Maximize the learning per dollar spent
- Probably more minimal than you think.
- Visionary customers can “fill in the gaps” on missing features, if the product solves a real problem for them.

More reasons for MVP

- Show them a real product, get them to react
- Charge them money, if they pay, they really want it
- Pivot to a new MVP if not getting a positive signal from customers
- Consider RAT (Riskiest Assumption Test)

Minimize time in the MVP loop



https://www.slideshare.net/startuplessonslearned/minimum-viable-product/6-Minimize_TOTAL_time_through_the

The Lean Startup suggested techniques

- Smoke Test with landing pages, AdWords
- \$5 on Search Engine Marketing a day. How will you convert these to customers?
- In-product split testing
- Paper prototypes
- Customer discovery/validation
- Remove features

Early Iterations of MVP

- Smokescreen MVP
- Concierge (Wizard of Oz) MVP

Example MVP Video (smokescreen)



Wizard of Oz / Concierge MVP

The screenshot shows the homepage of Zappos.com. At the top, there's a banner with the text "free shipping & no sales tax." Below the banner, there are two main navigation sections: "women's" and "men's". Each section has three categories: dress, casual, and athletic. To the right of these, there are links for "customer service", "shopping bag", and "account & register". A large central area is titled "The world's largest shoe store!" and features a "WHAT WE'RE HEARING!" section with a "Live Customer Service!" button. Below this, there's a "Free Shoes!" section showing a pair of black dress shoes. A message congratulates Adriana Rodriguez from Oakland, CA as the November 24 winner. Another message encourages users to become registered users or enter a weekly drawing for a free pair of shoes. The "featured brands" section lists Bostonian, Sudini, Meeker, Animal, L.B. Evans, and others. At the bottom, there's a "Zappos Special: Free Shipping & No Sales Tax" offer. The footer contains links for home, women's dress, women's casual, women's athletic, men's dress, men's casual, men's athletic, and kids.



Ethics?

- How can we ensure our startup is ethical?
- How can we surface concerns early?