



Startups and Requirements

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What's a Startup?



A startup is an organization formed to search for a repeatable and scalable business model.

-- Steve Blank

San Francisco has > 4000 startups



What's a Requirement?



A thing that is needed or wanted



Focus on organizations building innovative, software-intensive products



Challenges for a Startup

- Identify something that people need or want
- Build the initial functionality with limited resources
- Get people to use what you have built
- Continually revise what you have built based on user and market feedback
- Figure out a way to monetize your idea



**Build something users love,
and spend less than you make.**

- Paul Graham



Where do you begin?

- a vision of a product with a set of features
- a set of hypotheses about the business
 - ❑ Who are the customers/users?
 - ❑ What's the distribution channel?
 - ❑ How do we price and position the product?
 - ❑ How do we create awareness and demand?
 - ❑ Who are our partners?
 - ❑ Where/how do we build the product?
 - ❑ How do we finance the business?

-- Steve Blank

What's a Business Model?



A business model describes how your business will make money and/or how your business will attract users



How do you develop that vision?



How do you develop that vision?

Not by thinking that you can identify all of the features that someone will want



How do you develop that vision?

Not by writing a lengthy document



How do you develop that vision?

Instead, talk to people to see if your vision meets a need that they have

KEEP CALM ...



AND GET OUT OF THE BUILDING!



**Focus on *early* and *frequent* delivery of
useful software to real users using
just-in-time techniques**

-- Alistair Cockburn, 2003



Minimum Viable Product (MVP)

- The result of repeated iterations on the initial vision based on
 - user feedback
 - analysis
- The basis for continued development

When is your MVP good enough to launch?



What about written requirements?



With an innovative product, we can only make a rough guess about features and functions.



**Sometimes we don't know that we need
or want something until it exists**



**Sometimes we don't know that we need
or want something until it exists**

so it's hard to write requirements for it



Sometimes the MVP helps customers refine their idea of what they really need



Startups are very different from established companies



Established businesses have...

- Existing source(s) of financial support
- Existing products and services with customers
- Existing applications for business-critical activities
- Existing sales and marketing organizations
- Management hierarchy
- Internal competition for resources



Startups have...

- Strong focus on building their product
- No revenue and few sources of financial support
- Flat organization
- No history of existing products or customers
- Need to build relationships and partnerships
- Need to raise awareness and funding

“Requirements Engineering” and Startups



- “Engineering” implies a rigorous and repeatable process
- “Lean development” advocates view documents as “waste”
- “The code is the truth”
- Early stage “requirements” activities for startups are
 - Contextual design
 - Scenario creation
 - Identification of personas
 - Agile development
 - Preparing a funding “pitch”



Some general observations

- Most initial ideas for startups are off-target
- “Tuning” the set of features and the product plan is common; failure is even more common
- “Pivoting” toward new or modified ideas is common
- User and customer involvement is essential
- The bigger the initial team and product, the more that a formal requirements process is needed

Successful startups grow into established companies with...



- Need for more organizational structure
- Need for more processes
- Need to support and maintain existing products



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