

Tiger Team Innovation in the Enterprise

15 March 2007

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An assumption...

- Startup company innovation has advantages we'd like to replicate in the enterprise
 - Challenge to status quo
 - Speed
 - Operating expense
 - Capital expense

Startup innovation: Freedom of a naive view

- Believe that things can be done better
- Removed from real-world operations in the space they are about to enter
- Receive input from many directions, but ultimately make their own decisions about what is important

Startup innovation: Unconstrained by legacy

- Build only as much as they think is needed to deliver their first version
- Choose whichever tools they think are best suited to their team and product
- No need to be consistent with a product line, strategy or approach to the market

Startup innovation: A different risk model

1. Test assumptions as early and as inexpensively as possible
2. Fix it fast or move on
3. Build out the product in iterations, in sync with the adoption curve

Sidebar: enterprise and the adoption curve

Considering how companies grow, they are naturally optimized to deliver products to the middle majority

- Innovators
- Early Adopters
- Early Majority
- Late Majority
- Laggards

Startup innovation: Alignment of interest

- Every individual in a startup has a direct, visible impact on the company
- The outcome for the company has a direct impact on every individual
- Opportunity cost can be as important as direct cost

Enterprise innovation: Areas of change

- Product - new approaches to what the company sells to its customers
- Infrastructure - new approaches to how the company operates

Enterprise innovation: Achieving change

- External
 - mergers and acquisitions
 - major technology purchases
- Internal - ???

Enterprise innovation: Achieving change

- Compare internal and external innovation
 - Risk / reward differences
 - Timing of investment vs adoption curve
- Think about internal innovation as a VC fund
 - Some investments will fail, some will deliver modest returns, a few will be hits
 - Without some risk, hits cost a fortune

Sidebar: thinking differently

- Compete with the company's own products
- Ignore most requirements
- Ignore most process and standards
- Use emerging technologies and techniques
- In short... think like a startup trying to disrupt your market

Ideas

- Priming the pump - good ideas are encouraged by an environment that values them
- Input from all directions - sales force, customers, users, analysts... and anyone else with an opinion
- Responsibility - new ideas are part of a particular person's job

Choosing ideas

- Avoid ideas that could fit into existing roadmaps
- Go for the scary idea
 - “If another company pulled that off, our core business would be at risk!”
- Go for the impossible idea
 - If there is a credible believer

Team

- as few people as possible, mapping on startup roles:
 - CEO
 - Product
 - Engineering
 - Sales
- a few words about alignment of interest...

Constraints

- Seek to generate all constraints within the team
 - Almost no process, standards or other organizational constraints
 - No external feature or requirement constraints
- Key constraint is the minimum effort to validate the idea and move on at each stage

Caveat...

- Source / revision control
- Tests
- Security
- Legal

Execution

- Run to nearby milestones
 - Validate some assumptions, or prove technical feasibility - SUCCESS
 - Create a prototype to demo - SUCCESS
 - Iterate to a beta product - SUCCESS
- Be OK with a successful exit at any stage

Execution

- Innovative ideas will be controversial
- Projects that don't play by the rules will be even more controversial
- Make sure the team has management support
- Explain the project to the rest of the org

Execution

- Understand and embrace skepticism
- Make sure people understand that their skepticism is an acknowledgment of the risk part of risk/reward
- Get people to acknowledge the reward part

The role of emerging technologies

- The world has changed for technology startup companies
- Products built to first customer ship today:
 - Costs as low as 10% of a few years ago
 - Smaller teams
 - Faster development
- Bulk of investment has shifted to later

Emerging technologies

- Open source
 - OS and infrastructure
 - Development platforms
 - Major applications
- Newer languages
- Web development frameworks

Emerging methods

- Agile software development
 - Iterative development
 - Emphasis on testing
 - Emphasis on collaboration
 - Ship early, ship often

Emerging methods

- Philosophies of the new methods
 - Design and usability focus
 - Principle of least surprise
 - DRY - don't repeat yourself
 - Convention over configuration

The bleeding edge

- Virtualization
- EC2, S3, SQS
- GFS, BigTable, MapReduce

The role of emerging technologies

- Ancillary benefits
 - Professional development
 - Organizational growth
 - Morale
- Try lots of new tools
- Share with the rest of the company

Getting started

- Look for low hanging fruit
 - Example: users looking up data in one web-based system, keying results in another system, taking action on a third system
 - Opportunity: a quick Ruby on Rails app to tie all three systems together with a slick AJAX interface

Getting started

- Look at what is funded by angels and VCs
 - Example: someone giving away something that might one day be considered interchangeable with what you sell
 - Opportunity: create a layer of user generated content and collaboration on top of your product, moving the value up so that you can give away the lower layer

Speaking of VCs...

- Get to know the VCs active in your sector
- You can benefit from their finger on the pulse of startup innovation
- They can benefit from your real-world understanding of markets, customers and challenges

War Stories?

Questions?

Discussion?

Slides will be posted later today:

<http://WhatComesNext.brussin.com>

Thank you...

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