INNOVATION COLONIES:
Disrupting the Fortune 500
ACM Highlights

- **Learning Center** tools for professional development: [http://learning.acm.org](http://learning.acm.org)
  - 4,000+ trusted technical books and videos by O’Reilly, Morgan Kaufmann, etc.
  - 1,000+ courses, virtual labs, test preps, live mentoring for software professionals covering programming, data management, cybersecurity, networking, project management, more
  - Training toward top vendor certifications (CEH, Cisco, CISSP, CompTIA, ITIL, PMI, etc.)
  - Learning Webinars from thought leaders and top practitioner
  - Podcast interviews with innovators, entrepreneurs, and award winners

- Popular publications:
  - Flagship *Communications of the ACM (CACM)* magazine: [http://cacm.acm.org/](http://cacm.acm.org/)
  - *ACM Queue* magazine for practitioners: [http://queue.acm.org/](http://queue.acm.org/)

- ACM Digital Library, the world’s most comprehensive database of computing literature: [http://dl.acm.org](http://dl.acm.org).

- International **conferences** that draw leading experts on a broad spectrum of computing topics: [http://www.acm.org/conferences](http://www.acm.org/conferences).

- Prestigious awards, including the ACM A.M. Turing and Infosys: [http://awards.acm.org](http://awards.acm.org)

- And much more... [http://www.acm.org](http://www.acm.org).
Dominic Holt is Co-Founder and CEO of Divine Intervention Software and Director of Advanced Concepts at Solute, Inc. Dominic has a zeal for bringing together amazing technologists in pursuit of building world-class software and inventing revolutionary technology that changes the world for the better. He is passionate about entrepreneurship and designing, architecting and conceptualizing software that makes an impact in the lives of its users. In 2008 he co-wrote an Xbox game that won the PAX10 Top 10 Indie Games of the Year and demoed the game at the PAX festival with 70,000 attendees. From 2009-2012 he wrote mobile and web geospatial intelligence applications for US Military.

From 2012-2015 he created and ran an elite skunk works group of technologists in emerging technologies at Lockheed Martin; being a discriminator in over $1 billion annually in revenue and fostering the realm of the possible with innovation colonies in Fortune 500 companies. He also serves on ACM’s Professional Development Committee Board as well as the boards of several startups and an investment fund.
Agenda

• Some Background (And other interesting facts about me)
• The more we’re different, the more we’re the same (Working for a Fortune 500 company)
• The state of the industry (Working outside a Fortune 500 company)
• Glass Half Empty (A reality check about being an entrepreneur)
• I am Spartacus (And why every large company thinks they are innovative)
• The Vice President of Innovation and other star-crossed titles (What large companies do to innovate, and why they fail)
• Things to bring to a deserted island (How large companies should innovate)
• You’re special, just like everyone else (Some thoughts on culture)
• Don’t rock the boat (Risk Aversion of large companies)
• Tinder for your soul mate (Why your executive will swipe left on the right person for the job)
Background
And other random, pseudo-interesting facts about me

- **Compulsive Problem Solver**
  If you tell me about your problems, I will try to solve them. Even though that’s probably not what you wanted.

- **3 E’s and an A**
  I have been and/or am an engineer, entrepreneur, executive and advisor.

- **Saving the world one Netflix show at a time**
  I’m one of those lazy millennial types.

- **Early Beginnings**
  I started writing code when I was 12.
Working for a Fortune 500 Company

- Your experience may vary
- Typically large company interests are
  - mainly interested in the bottom line and providing shareholder value
  - exceptionally risk averse
  - Keep in mind, this is their legal responsibility
- It is very difficult to see how your work makes an impact
  - True of both ends of the hierarchy
- Sub-divisions tend to operate like entirely separate companies
  - When building my colony, very hard to cross silos
State of the Industry

- There has literally never been a better time to be a software engineer
  - VC’s and investment funds are looking for the next big thing to invest in
  - There is an abundance of API’s to build on top of
  - App Stores have leveled the playing field for entrepreneurs
  - Startup doesn’t work? Companies will fight each other for you to work for them
  - Tech founders are the new rock stars

Quarterly Global Financing Trends to VC-Backed Companies

Q1’11 - Q2’15

Source: Data provided by CB Insights, July 23, 2015
Most Startups Fail

- You are more likely to end up in tears, broke with 2 mortgages on your house than with a term sheet
  - ~90% of Tech Startups Fail*

- Popular culture makes people believe that to be an entrepreneur you just have to have a great idea and VC’s will throw money at you, but entrepreneurship is
  - Endless nights building your product instead of sleeping
  - Finding a revenue stream/product market fit
  - Convincing people to care about what you’re doing

*Mashable/Forbes/BusinessInside
Top Reasons Startups Fail

- No Market Need
- Ran Out of Cash
- Not the Right Team
- Get Outcompeted
- Pricing/Cost Issues
- Lack of Business Model
- Poor Product
- Ignore Customers
- Poor Marketing
- Disharmony on Team/Investors
- Lose Focus
- Product Mis-Timed
- Pivot Gone Bad
- Bad Location
- Lack Passion
- Burnout
- Lack of Network/Advisors
- Legal Challenges
- No Financing
- Failure to Pivot

Dominic Holt
• Large companies are always looking out for the next “big thing”
  • No company would ever claim they are not innovative
  • “We do innovation here” and other red herrings
  • A culture of innovation
  • Innovation is everyone’s job
  • We’re making major investments in...
  • We just acquired a company that does X
What Large Companies do to innovate; and why they fail

• Meet Bob, the new VP of Innovation
  • Bob has never run a startup
  • He has 25 years of experience doing something (most likely unrelated to the task at hand) for the same company
  • He has risen through the ranks because where others took risks, he stayed the course
  • Bob works for Amy, who wants results by the end of the year
  • Bob’s chances of succeeding are 0%

• Three Forms of Big Business Innovation
  • Skunkworks
  • Innovation Labs
  • Intrepreneurship

• Surely there’s a better way
How Large Companies Should Innovate: Innovation Colonies

• Investment fund for employee ideas
• Employees give up salary in exchange for equity
  • Could be a salary/equity mix
• Majority of colony owned by employee entrepreneurs
• Mother ship does not interfere, but advises
• Original company has the right to buy back the startup
• Employees that are good candidates will
  • challenge the status quo
  • be willing to take risks
  • look for ownership in their work
  • possess “grit”
Some thoughts on culture

• In order to succeed at creating an Innovation Colony, you will need to distance yourself from the mother ship’s culture

• Trust must exist between members of a colony, especially if they have been entrenched in the mother ship’s culture for long periods of time

• If you’re looking for people to build a colony with, search for
  • Troublemakers (Rule Breakers vs Ex Cons)
  • Owners
  • The Entrepreneurial Minded
  • Good Communicators
Large Company Risk Aversion

• Most large companies are risk averse
• Most large companies also have an Innovation initiative
  \[ \text{Innovation} = \text{Risk} \]
• Smaller Investment + Shorter Payoff = Less Risk
  • Eventually the investment becomes zero, payoff maps to performance cycles, and nothing of value is ever created
  • Based on individuals, not business needs
• Solution
  • Require Leadership to function more like VC’s
  • Must have a portfolio of low, medium and high risk investments
• Caveat
  • There’s a fine line between taking a calculated risk and stupidity
Swiping Left on Success

• In order to succeed as an entrepreneur, you must find a product-market fit

• People best suited to search for new business models and conduct experiments usually are not the same managers who succeed at running existing business units

• Intrapreneurs are more likely to be rebels who don’t like to follow the rules or societal norm, continually question authority, and have a high tolerance for failure

• Big companies often select managers who meet standard competencies and are easier to manage
Lessons Learned

• Skirting the line between differentiating yourself and insubordination
  • Marketing problem

• You will need visionary leadership
  • Someone to plan out what the future likes, create small steps to reach it

• Return on Investment is what will make or break you in the short term
  • Try to run without any money for as long as possible (less expectations)
  • Make money before asking for it (just like with a VC)
  • Easier to beg for forgiveness than ask permission

• You will need Executive Allies
• You will have to play politics (A LOT)
• You will need thick skin
Thank you
Sources

• http://thenextweb.com/insider/2015/07/23/the-amount-of-money-vcs-are-raising-right-now-is-insane/
• https://www.cbinsights.com/research-reports/The-20-Reasons-Startups-Fail.pdf
• https://pando.com/2014/03/21/dancing-giants-how-a-rusting-giant-can-act-more-like-a-startup/
• Questions about this webcast? learning@acm.org

• ACM Learning Webinars (on-demand archive): http://learning.acm.org/webinar

• ACM Learning Center: http://learning.acm.org

• ACM Queue: http://queue.acm.org/