Preparing for Industry

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• My Story
• Writing Your Story
• Startups vs. Enterprise
• Dealing with Conflict
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My Story
My Story
Background

• Brown: Math and Music
• Chase Manhattan Bank: Corporate Finance, Oil & Gas
• Thermo Electron: Mergers & Acquisitions
• MIT: Masters of Science, Mechanical Engineering
My Story

Z Corporation

- 3D Printing Technology invented at MIT
- Founded in 1994 in Kendall Square, Cambridge
- Delivered product within 2 years
- Fastest-growing business in New England (2001)
- Over 10 years, grew to $30M, 125 employees
- Market leader with #2 in market share
My Story
Post-Sale

• Corporate Board Director
• Angel investor
• Advisor
• Guest lecturing at MIT, Brown & elsewhere
• Greek startup ecosystem
• Writing: Articles, Essays & Stories
• windystreet.com
Writing Your Story

• Up to now, most everything has been prescribed
• This is your first opportunity to move in a direction that is particular to your specific needs and desires
• So many options, it’s daunting & overwhelming!
Write your obituary

• What would you like to be known for someday?
• How can you get there from here? [Ask people]
• What skills are you missing that you need to acquire?
• Where can you get these skills?
• What diversions can your remove from your life to help you focus your time and energy on this goal?
Introspection: Know yourself

• What makes you different than most other people?
• What are your core strengths?
• What are your core weaknesses?
• What interests you?
• What does the world need?
• Whom do you admire and why? Who are your heroes?
• Write this all down on paper & look at it
• What position would combine these elements?
Skills

• Organizing your tasks within a schedule
• Selling: yourself, your ideas, your vision, perspective
• Negotiating within a relationship: win-win
• Basic Accounting: can’t win if you can’t keep score
Analytical approach

• What are the ultimate objectives?
• How can we break it down to measurable steps?
• How can we measure progress?
Winning Mindset

• Reliability: meeting schedule, doing what you say
• Responsiveness
• Hustle, show urgency
• Try to solve problems; can-do attitude, esp. bumps in road
• Stand back and look at the big picture, not just fire-fighting
  • Good to fight fires, better to have no fires
School no more

• No begging for credit for your efforts; it’s about results
• Not an individual sport; you’re on a team
• You’re not competing against your peers
• Although a good organization will develop its employees, that is not their primary objective
Communication

• Technical advancements don’t speak for themselves
• Persuasive writing
• Engaging speaker
• Focused, with direction
• Adjust to your audience (eg, technical vs. non-technical)
• Bridging technical and non-technical is HUGE value-add
Startups
Startups Create New Jobs

Net Job Creation by Firm Age, 2000-2018

Blue: <5 years
Red: 5-9 years
Grey: 10+ years

Data from the Bureau of Labor Statistics
Startup Formation

• Low barriers to entry are fueling tech entrepreneurship
• Opportunity and socio-economic mobility
Startup Formation

Why do a startup?
• Independence (no boss)
• Make money
• Employ people
• Teamwork and community
• Passion for a particular technology
• Make the world a little better
Startup Formation

• To innovate, need to do something different
• Learn what’s out there and do better
• State-of-the-Art is the starting point, not the endpoint
Startup Formation

Idea

- Universities and research centers
  - Researchers need entrepreneurs and vice versa
- Startups offer solutions to problems
  - Articulate problem and how solution is better than anything else
- Opportunity comes from disruptions in the market
  - Startups have an edge over established businesses
  - New regulations, new enabling technologies, cultural shifts
Greek-Founded Startup Examples

• Dementia diagnosis from speech patterns
• Transdermal patch to avoid need for big needles
• Software for drug discovery
• Genetic disorder diagnosis
• Breath analysis for health assessment & advice
• Municipal water system piping quality
• Lightweight materials for aerospace
• Blockchain efficiency
Startups vs. Established Companies

• Startups may give more responsibility
  • BUT fewer resources to do what you’d like to do

• Startups have less bureaucracy
  • BUT fewer systems or examples of “best practice”

• Startups can be fun
  • BUT they are very risky and can be an emotional rollercoaster

• Startups provide on-the-job training
  • BUT often little formal training

• Know yourself, esp. risk tolerance, self-starter, okay with less structure and rules
Dealing with Conflict
New Job

• Company raised $100M in IPO
• Energy sustainability
• Your mom is so proud
• World-famous, brilliant boss is a tyrant
New Job

• Leave
Interview

- Interviewer knows your old boss
- Jokes about what a jerk he is
- Asks why you left
Interview

- Don’t get personal; keep comments general
- “Culture didn’t support my values: teamwork, people supporting each other”
Year-end Reviews

• Tough year for the industry
• Company has to cut back
• No raise or bonus for you, even though your peer got both
Year-end Reviews

- Ask your boss what you need to do to improve your performance.
- Solve your company’s problems.
- Make your boss look good.
Teamwork

• Heated debate about whether to ship product with a known technical issue
• Peer: “Low chance they’ll come across the issue. Ship it.”
• You: “We’ll have to fix it eventually anyway, so let’s fix it now, and then we won’t risk an angry customer.”
• Peer: “You have no idea what our customers think. You’re in front of your computer all day. When was the last time you even spoke with a customer?”
Teamwork

• Don’t call HR
• Don’t escalate personal jabs
• Shift the conversation back to solving the problem
• “Let’s see how long it would take us to fix it, and whether the customer is okay to wait.”
Think for yourself

• Your boss asks the team to design a new vent for the car’s front panel. You have an idea that the rest of your team doesn’t like. What should you do?
Think for yourself

• Respectfully offer your perspective, as to why you think your idea is better. Argue on the merits which they may not see.

• If they still disagree, you could try moving forward with your idea, to see if it’s a good solution.

• Turns out your boss likes your idea the best. Now what do you say?
Think for yourself

• Don’t tell the boss everyone was making fun of you.
• Share the credit with the team: “We decided it was better this way.” People will want to work with you.
Oops!

A customer called with questions about your product specifications and a few days later you realize you gave them the wrong answer, claiming higher engine efficiency than reality. Your boss calls you in to tell you how happy the customer seems to be, because they just placed a big new order. She says you’re up for a bonus.
Oops!

• Don’t hide it and hope nobody finds out.
• Don’t defend what you did.
• Tell your boss what happened and your plans to fix it. In this case, call the customer and explain that you made a mistake, and offer to cancel the order they just placed.
Oops!

• What if your peer did this?
• Don’t make them look bad. Help them tell your boss & fix it.
Look out for opportunity

• How can the company increase revenue or lower costs?
• What new markets could the company go after?
• What new technologies could expand the market?
• How could the company—or your group—work better?
• Don’t whine; come up with solutions & advocate
Conclusions

• Check in with yourself periodically if you’re on the right path
• Don’t be scared to change paths; long road ahead
• No matter where you head from any point, your experience to that point can be an asset to you
Thank you

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