Do It Again!

Eugen Bacic Chief Scientist Cinnabar Networks Inc.

March 19, 2003

Who I am, What I did, Why I'm Here

- Eugen Bacic
- Founder Texar
- Computer nerd
- World renown IT security expert
- Raised \$20M in 3 rounds across 4 years
- Hired 100 people
- Had a blast
- This is my [cautionary] tale

The Life of an Entrepreneur

Life of an Entrepreneur

- Desire to build a company to be proud of
- Work with interesting people on interesting projects
- Change the world in some way
- Make a difference
- Build something cool
- Realize a dream
- Get rich? Maybe. It's nice to dream...

Life altering event

- You won't be the same afterwards
- 20 minute intervals
- Travel
- Stress
- Friends
- Need to go in knowing the odds

You Have to be Prepared

- It is so much more difficult than you can imagine
- Extremely tiring
- No one will understand
- You better have an understanding family, they have no choice but to put up with you!
- Joy ride...
 - Heaven
 - Hell
 - Find out at the end...

Timeline for a Start-up

- Idea
- Business Plan
- Dog & Pony shows
- Investment / Financing
- Start-up!
 - Now the real work begins

Now that you have the money

• • •

- Hiring & firing
- Setting up the company
 - Labs
 - Offices
 - Financials
 - Suppliers
 - Landlords
 - etc.

Endgame:

- Three Possible Outcomes
 - Failure
 - Sale
 - IPO

Endgame: Failure

- Easy to figure out
 - Everyone loses
 - Shares become worthless
 - Asset sale
 - IP? Who knows, different for each deal

Endgame: Sale

- Two types:
 - Multiple of invested amount
 - Good all around
 - Everyone wins
 - Sale at Loss
 - Bad all around
 - Everyone loses
 - You lose for sure
 - Investors are first up for any value that can be extruded
 - Creditors and employees, etc. are at the bottom
 - Similar to asset sale

Endgame: IPO

- VCs and other big investors win big
- Founders may win some
- Employees get some
- If you get really lucky (and big) everyone gets *really* rich (see Microsoft)
- Least likely scenario
- It's the *dream* scenario

At the End...

- Would you do this with those folks again?
 - Yes? regardless of outcome? Congratulations!
 - No? Why were you in business with those people in the first place?

Highlights, Lowlights, & Dynamics

Highlights of a Start-up

- 90% or more of start-up companies fail
- No slack for success
- Everything has to go right
- Mistakes will be made
 - They use up slack
 - They are inevitable
 - If they use up too much slack (and goodwill) you're toast

And This Life is Hard

- No matter where you are on the curve
 - Odds are lousy
 - 90% still fail
 - If you're not profitable you're at the mercy of investors
 - Customers have no pity
 - Did I say 90% fail?

And Even When ...

- You think you have everything you need
- External forces can cripple you
 - Adoption rates
 - The Bubble
 - The Market
- Texar did better than most
 - Lasted 3 years from financing
 - 4 years from product inception
 - Part of the technology lives on
 - Too far ahead of the curve

Focus is Paramount

- Focus, focus, focus
- Always ask:
 - Will this help you succeed?
 - Will this materially affect our chance of success?
 - How many customers will we lose if we opt to do X?
 - None? \rightarrow ok
 - Lots? \rightarrow don't do it
 - Will it gain customers \rightarrow do it
- Constantly question deviations

Revenue is King (again)

- Longer it takes the worse it'll be
- Partners are Crucial
 - Get good partners early
 - Can't guarantee success but bad partners can guarantee failure
 - Unfortunately, you can't easily determine who is a good partner and who is a bad one
 - Hence: end bad relationships early
- Partners facilitate revenue generation

Group Dynamics

- Everyone must be focused on the same goals
 - Everyone is a critical resource!
 - Engineering
 - Marketing
 - Sales
 - Finance
 - Project management
 - Personnel
 - ...

One For All ...

- Everyone pitching in where needed
 - No one is deadwood
 - If they won't play for the team, get rid of them
 - You have to be brutal
 - Those on the bus need to be willing to do what's necessary for the company
 - If someone is in it for themselves they'll be disruptive toss them
 - Company first *all of the time*
- Business is not about fair

Sharing the Joy Sharing the Pain

- Trials and tribulations are shared
- Highly likely that if a few go down, we all go down
 - We *have* tied our fortune to a single boat
 - We *do* have all our eggs in one basket
- Yes, it's risky not everyone is cut out for this
 - Everything is very energetic
 - Everyone is empowered
 - Decisions are made at all levels all the time
 - Need to trust everyone to do the right thing

Building the Company

"Evil Necessities"

- Sales
- Marketing
- Finance Officer
- Project Management
- Product Management
- Professional Services
- R&D / Engineering
- Quality Assurance
- Administrative Staff

Hiring & Firing

- Most crucial thing you'll probably every do
- Need to hire only the best
- If it's not a slam dunk, don't hire
- If you have to fire someone, do it as soon as possible
- Think hard about hiring friends
- Think doubly hard about relatives
- Always think: value add

Sales

- Sales people are crucial
- If you can't sell, hire someone early who can
- Hold them to numbers and promises
- Keep good salespeople and toss the rest
- How can you know a good salesperson?
 - Easy... let me count the ways...

26

Marketing

- Do you need it?
- What do you think?

• Now I'll tell you what I think...

Finance

- Money is king
- It's precious, treat it as such
- Dot Coms blew hundreds of millions each
- Be brutally honest:
 - Do you need that gizmo?
 - Can you do it more cheaply?
 - Are you as frugal as possible?
 - Where can you *realistically* cut costs?
- You really need a good Finance Officer

Product Management

- Crucial liaison between techies, management, and customers
- Precludes need for professional services
- A good one is literally worth their weight in gold
- They are rarer than emeralds
 - If you find one, don't let them go!
 - The good ones are easy to tell once you've experienced the bad ones, that is ;-)

Project Management

- Founders usually aren't process driven
- Process is crucial
- Too much is deadly, so is too little
- Need someone who is a detail person
- Must be sufficiently technical to understand what's going on
- Needs to be able to develop a process for development and for delivery
- Will work with QA and Sales and later, PS

Professional Services

- ◆ You will need it ...
- But the question is *when!*
- Not early on:
 - What are they servicing if the product isn't done yet?
 - What value add are they giving you?
 - What can they do that R&D or QA staff can't do as well?
 - Be frugal, be cheap, every dollar you save is an extra minute of life...

R&D

- Hire the best
- Can't? Don't hire anyone
- Why?
- R&D makes or breaks a company
 - More on this later
 - Techies need to be controlled
 - Control must come via respect
 - Respect comes only from those that have done it before
- Never put a sales guy in charge of R&D!

Development vs. QA

- 50:50 effort
- You need good QA people and good QA tools
- Don't listen to those that say otherwise
- Tools to assist QA-development loop increase productivity and limit cost
- First to market is still crucial
- Senior vs. Junior QA resources
- QA Manager

Quality Assurance

- Need to continually raise bar
- Quality may be your only differentiator
- As a small company, if your quality sucks you won't have buyers
- You are *not* Microsoft
- Trying it out on the customer will inevitably backfire
- Remember: "Their bug is our bug!"
- Never put a sales guy in charge of QA!

Administrative Staff

- Admin Assistant
 - If you want to get work done, hire one early
 - It's simple economics:
 - Engineer @ \$100k photocopying is bad
 - EA @ \$35k photocopying is better
 - EA sending it to Business Depot is best ;-)
 - Scheduling
 - Travel
 - Logistics
 - Dealing with and coordinating staffing, etc.

Administrative Staff ... 2

- Other positions of interest:
 - IT
 - HR
 - Comptroller
- Which do *you* think you *need*?

What about Executives

- VCs will want to install executives
- Be wary:
 - Not all executives are worth it
 - Big company executives
 - Start-up executives
- Running it yourself
- Installing additional senior staff
- Is it ever time for an external CEO?

Structure of the Company

- Don't fixate on titles
- Use them for outward facing necessities
 - CEO, CTO, Director, etc.
- Keep your organization flat

In the Beginning ...

- Initially you'll need:
 - CEO/President
 - Sr. Sales
 - R&D and QA heads
 - Product Manager
 - Project Manager
 - Admin (Executive) Assistant
 - Finance Officer
 - R&D and QA teams
 - IT Admin

Business & How to Lose It

Annoy a User – Lose a Customer

- Surprising how easy it is to lose a customer:
 - Slightly distracting "cosmetic" defect
 - Too many steps in common task
 - Mildly surprising UI interaction
 - Unexpected error message
 - Browser, OS, file system, compiler problems
 - Bad internet weather
- You need to make it easy
- Users use computers in ways computer scientists would never fathom

Things Everyone Does Wrong

- Competing with the wrong competitor
- Not doing the little things competitors do
- Underestimate how long things will take
- Believe you're smarter than the competition
- How long can it take?
- Lose focus
- Get it to work on only *certain* hardware
- Assume developers will flock to you
- Not thinking like a business

Ease of Use

- Very important
- Think Mac vs. Windows
- Getting customers/users is very hard, you can't afford to lose them.
- Easy for whom?
- Assume nothing!
 - assume the customer hasn't read the manual
 - make it as fool proof as possible
 - assume they'll do stupid things and plan for it

Going Off the Chosen Path

- Once you've picked a path stay on it
- Eschew anything that doesn't add to the user experience and that the user will pay for!
 - Don't waste cycles on "cool"
 - Start-ups are small
 - Focus on what needs to get done
 - Keep focus
 - Even so you'll go off on tangents, but at least you'll do so less often
- If it isn't core to the company's business, toss it

Puritanical Techie-ism

KISS

- Choose a platform and stick to it
 - Think it through and choose a platform
 - If you need to use something exotic, hide it initially
- Use as many standards as possible
- Try to foresee and use forthcoming standards
 - You may end up betting the company on them,
 - Anything with XML is a safe bet
- Build only when necessary

Product Functionality

- Useable or disgusting? So long as it works!
 - Focus on customer needs
 - Make it work, fix it later
 - If customer can't use it in his environment he won't
- Worst case is always:
 - Loss of sale
 - Loss of reference account
 - People talk

Think Things Through

- Latency through networks
- Latency through firewalls and VPNs
- Plan on large numbers
 - It should scale early
 - Customers won't wait for you to get it to scale later
- Think about this and come up with a solution
 - Think hundreds or thousands of users/computers
 - This will (usually) be a key differentiator

Leverage

- Leverage free performance upgrades:
 - Improved VMs
 - Improved servers
 - Better hardware
- Do whatever it takes to keep yourself in the lead
- Think about it and be prepared to go there when necessary

Rules of Optimization

- Rule 1:
 - Don't Optimize.
- Rule 2 (for experts only):
 - Don't Optimize, yet.

VC Speak

Investors

- Self funding
- Angel
- Venture capitalists
- Friends and family

Valuations

- You wont' own a huge percentage
- Pre money
- Post money
- Crunch down
- Down rounds
- Influencers:
 - Cash flow positive as quickly as possible
 - Revenue positive
 - Barriers to entry

Your Dream

- Does it fit with your vision
 - who cares: customer pain = revenue
- Nerds are rarely right (unfortunately)
- Are you likely to be right first time, no; 3rd time? yup
- Validated by competitors
 - competitors are a good thing
 - validates space
 - makes VCs happy
 - encourages new money, etc.
 - gets marketing going magazines talk about it

Darth Vader: Venture Capitalist

- I find your lack of faith disturbing.
- No one will stop us now.
- I am altering our deal. Pray I don't alter it any further.
- The Emperor is not as forgiving as I am.
- Don't fail me again.
- Perhaps I can find new ways to motivate them.
- I'm here to put them *back* on schedule.

The Obvious

Some Things Should Be Obvious

- Make sure your product is actually used by *customers*
- Call and check
- Offer help
- Ask if they have ideas for new features
- Bend over backwards to ensure customers use it
- You'll lose money on the first N transactions
 - Who cares!
 - You want customers that gush over your product
 - They won't if they don't use it

Love the End-User Be the End-User

- Eat your own dog food : Be that End-User
- End-user experience improves the product
- End-user experience provides credibility to:
 - Bank on
 - Industry rags
 - Potential customers
 - Investors
 - Potential partners
- Your biggest fear should be shelfware

How to Do Things Right

- Pick the right application early on
- Stumble upon it if necessary
- Listen to those strange, crazy ideas, they usually come from customers who have problems
 - solving those problems = sales
 - so long as you can equate the solution to an ROI
- Try ideas on potential customers
- Make sure they get it FAST
- ◆ → Easy, right?

If Possible: Sell a Platform & an Application

- But what about focus?
 - VCs say choose one or the other
 - Not usually necessary
 - Obviously depends on the application
 - Application has bigger market potential
 - Platform is a steady source of revenue
- Investors will be schizophrenic on this subject
 - Sell the platform as a license
 - Find ways to leverage what you've built
 - Don't be afraid to sell to competitors
 - Think "lock in"
- Hard to sell infrastructure
- But if customers buy the infrastructure you really have them

Questions?

Thank You!

Eugen Bacic
Chief Scientist
Cinnabar Networks Inc.
ebacic@acm.org