



The Many Roads to Failure

Some things they don't teach you
in business school



Probability Theory?

- There are a finite number of ways to succeed and an infinite number of ways to fail.
- The saving grace is they still add up to one and the finite ways to succeed adds up to about 0.01 or 1%!



Rad Lab

- At Berkeley Rad Lab computer center went from IBM 709 to 7090.
- Expected 10x performance but got 1.5x
- Manager ordered monitor on 7090 program stop light
- Found machine idle 80% of the time
- His conclusion: Computer operators were goofing off



Rad Lab Cont'd

- His solution
- Put fire alarm bell on program stop light
- Result – operators quit
- Real problem – many short reel to reel tapes that had to be mounted for each job.
- Lesson – Drill down!



Associated Data Consultants

- Playing Office -- Unnecessary overhead
- U.C. profs -- Clients with little money
- Hired some marginally qualified people
- No specific goals
- Finally sold to IMI



Autologic Inc.

- Made product world wasn't ready for.
- Not sufficient resources for customer education
- didn't build intermediate or transitional products (getting them pregnant)
- Pig headed and arrogant



Minicomputer Technology

- Past employees became partners
- No plan or initial products
- Laissez-faire problems
 - The dog incidents
 - The deli
- The Kama Sutra illustrations on PC Board master artwork
- The Porsche Carrera and the Lotus Elan



Inner Access Corporation

- Used consulting business to bootstrap products. -- Hurt consulting business
- Some bad hires – too slow to dump
- Riding tail of Alpha Micro
- Diversified Products
 - Injunction against use of OS by AM
 - Zilog lost recipe for Super8
 - Exabyte backup systems failed



Intergraph APD (Palo Alto)

- Lost Focus
- Didn't believe experts on staff regarding future of CMOS technology
- Decided to build liquid cooled ECL computer. All staff new this was a bad idea. Project collapsed and we lost CMOS architecture lead.
- APD Division sold to Sun (fire sale)

The logo for Raycer Graphics features a stylized graphic on the left consisting of overlapping colored squares (yellow, red, blue) and a black crosshair. To the right of this graphic, the text "Raycer Graphics" is written in a blue, sans-serif font.

Raycer Graphics

- Developing product for yesterday's market.
- \$5,000 in a \$500 market
- Survivors: ATI and NVidia
- For NT system, overhead reduced performance by over 50%
- 3 mega-chip system, one only improved performance by <5%



Lessons Learned

- Drill down through numbers
- Be slow to hire and quick to fire
- Don't play Office
- Riding coat tails is dangerous
- Consultants don't always make good employees.
- Employees don't always make good partners.



Lessons Learned (Cont'd)

- Laissez-faire doesn't work – make rules
- Diversification has a price
- Don't flail in the product space
- Consumer products take large capital
- Don't just hire people that look like you.
- Don't just hire people that think like you.



Lessons Cont'd

- Drill down through the numbers
- Don't become a disciple
- Make it an Adventure

Endangered Species

