Looking for Leverage

A Tale of Two Startups

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Venture Operations
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Robin Porter - Bio

- Education: BSEE, University of Colorado
- 30 years in engineering
- 1st (real) job: Hewlett Packard, Ft. Collins Division
  - Located at HP Loveland!
- Digital Equipment Corporation
  - Nearly 15 years
  - Engineering Manager DecStation line (Mips R2K…R4K)
- Fujitsu
- Network Peripherals
- “Tool on the Tool Belt” of VC’s and entrepreneurs
  - Cobalt Networks, Scout Electromedia, Kavari Networks, etc...

First Principle in a Startup

Every day before you go home think about:

- There is another company trying to do what you are doing.
- There is another person doing the same job you are doing.
- How did you beat them today?

Cobalt vs.. Whistle

- Thin server appliance

Cobalt Qube

- Thin server appliance

Whistle InterJet

Who “won?”

Why?

- Announced before Cobalt
- Available before Cobalt
- Approximately same
  - Architecture
  - Parts
  - Performance

Cobalt

- Cobalt recorded net revenues of $20.4 million for the quarter ended September 29, 2000, which represented a 25 percent sequential increase over net revenues of $16.2 million in the quarter ended June 30, 2000, and a 229 percent year-over-year increase relative to net revenues of $6.2 million in the quarter ended October 1, 1999.
- Third largest IPO in the history of Wall Street (at the time) and 8th overall.
- Acquired by Sun Microsystems after 3 years for over $2B.

It’s not just about the  !

- Whatever the innovation or invention, “it” is only a part of building the business and a part of the company’s success.

- These two initial servers were nearly identical.

- Cobalt was initially funded without any idea at all. Cobalt was funded for the team that was assembled to find an idea.

So what were the factors?

Corporate Structure

- Finance
- Engineering
- Operations
- Marketing
- Sales
- Customer Service

Interdepartmental Synergy

Culture

Finance

- Not 3 guys working out of a Starbucks
- Early on: Venture CFO – not a full time CFO, but one that worked with multiple startups to apply A vs. B vs. C scenarios to the business plan
- Added credibility to business plan and with the Venture Capital community

Finance

- Forced thinking of 3-5 years out and future exit strategy
- Set up the mechanisms to spend and receive money
- Stayed “legal”
  - With banks, credit card companies, landlords
  - With patent attorneys
  - With finances – employees knew status

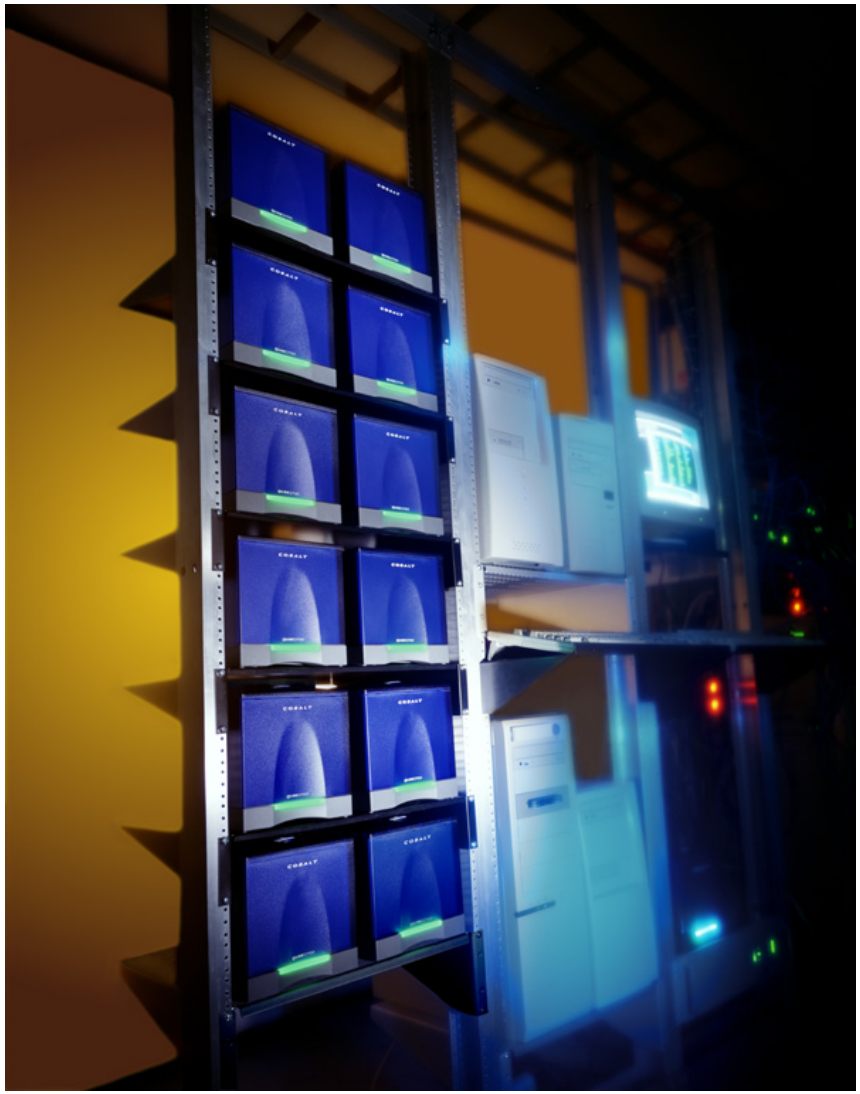
Financial Leverages

- Rent-a-CFO:
  - Better terms
    - VCs, banks, credit
  - Built in controls instead of catch-up-controls
- Forward thinking company
- Brought some stability into workforce
  - Knew what was in the bank and going out

Engineering

- Nimble Evolution
  - Initially designed for the home market
  - ISPs started buying them for web “condos”
  - Rack density was major issue with ISPs
  - Access to controls was major issue with ISPs

So…….



Engineering

- Enter the Cobalt RaQ

Model	CPU	Speed
RaQ 1	**MIPS RM5230**	**150 MHz**
RaQ 2	**MIPS RM5231**	**250 MHz**
RaQ 3	**AMD K6 3D**	**300 MHz**
RaQ 4	**AMD K6-2**	**450 MHz**
RaQ XTR	**IntelPentium3**	**733 – 1 GHz**
RaQ 550	**IntelPentium 3**	**1.26 GHz**

Engineering

In parallel to this development, two other product lines:

- Enter the NasRaQ

- And the CacheRaQ*

All launched simultaneously with each release of the RaQ

*cultural note: proposed by one engineer presenting his idea to executive staff with 3 slides drawn by crayon.

Engineering

- A single motherboard was designed for the entire line of RaQ, NASRaQ and CacheRaQ and populated the day before it shipped to customer.
- Sheet metal was designed for the entire line and configured the day before it shipped to customer.
- Software was developed to load product identity just minutes before shipment.

Engineering Leverages

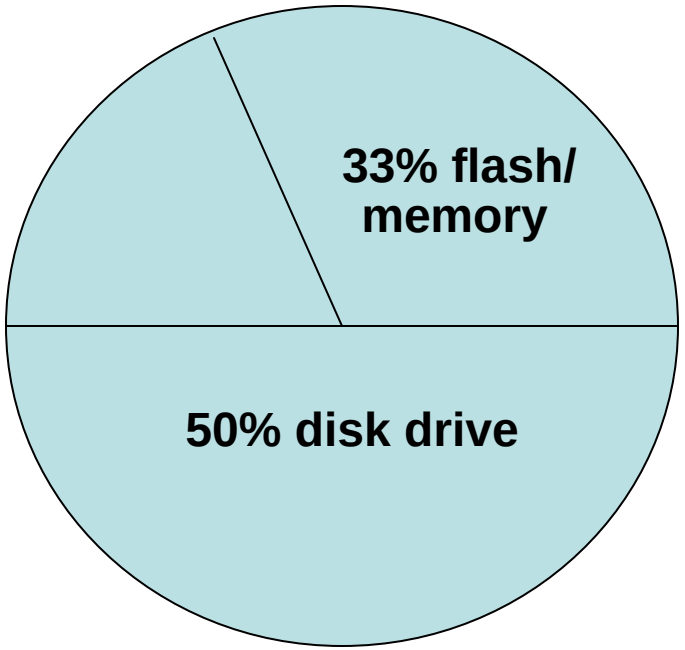
- One hardware design cycle
- One hardware qualification
- Simplified regulatory compliance
- One set of tooling
- One set of RaQ packaging
- One manufacturing line
- One (nearly) free Linux (RedHat)

…all servicing four product lines

Results: lower cost, higher quality, quicker time to many parallel markets.

Operations

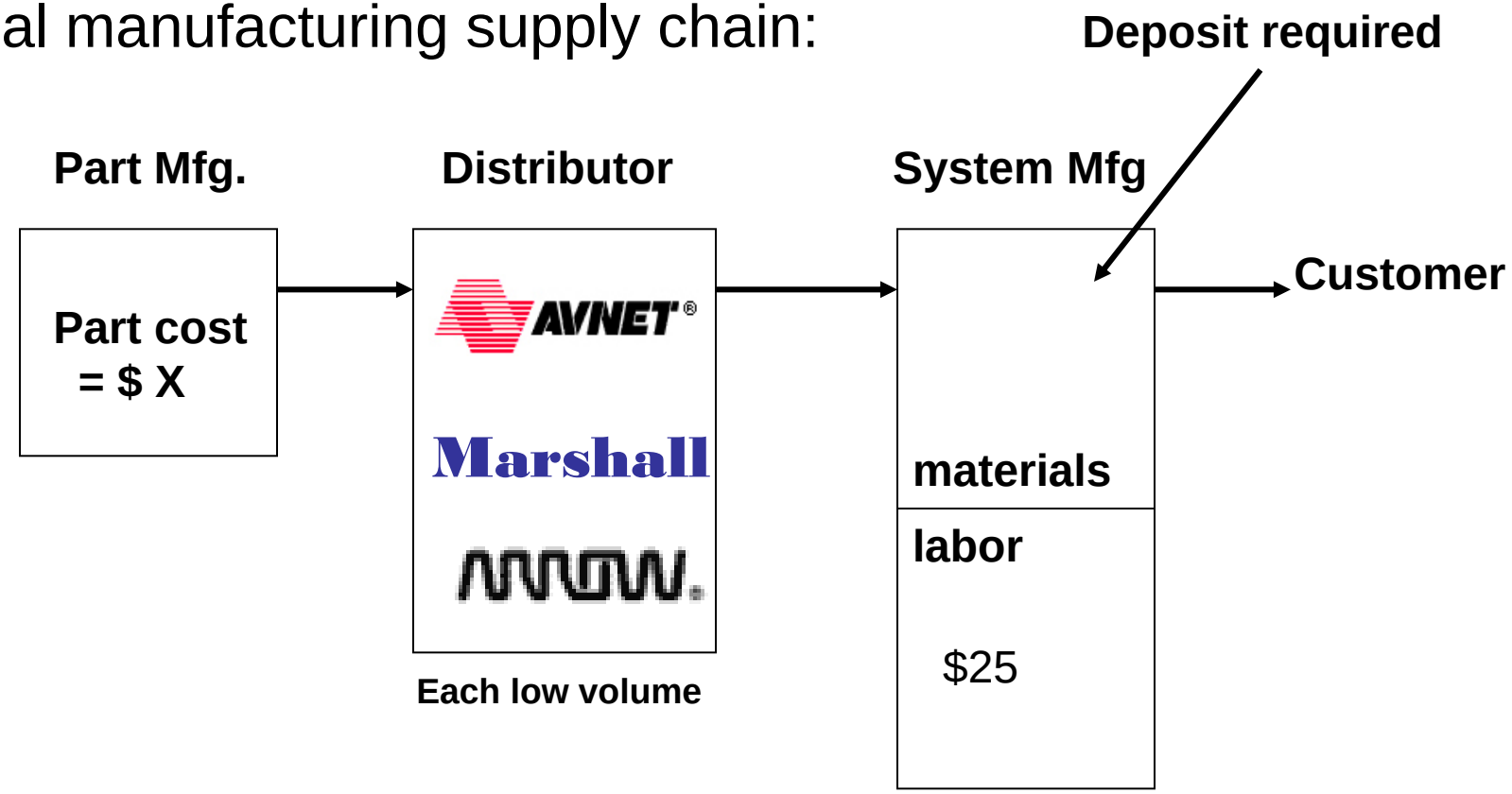
- Matched the supply chain to an emerging high volume product line: laptops



Cobalt didn’t have money to tie up in working capital. It needed a high growth industry to draft behind. Cobalt designed all the major cost items so that Dell, Gateway, etc. volumes would drive the entire commodity cost down (Startups have no clout!)

Operations

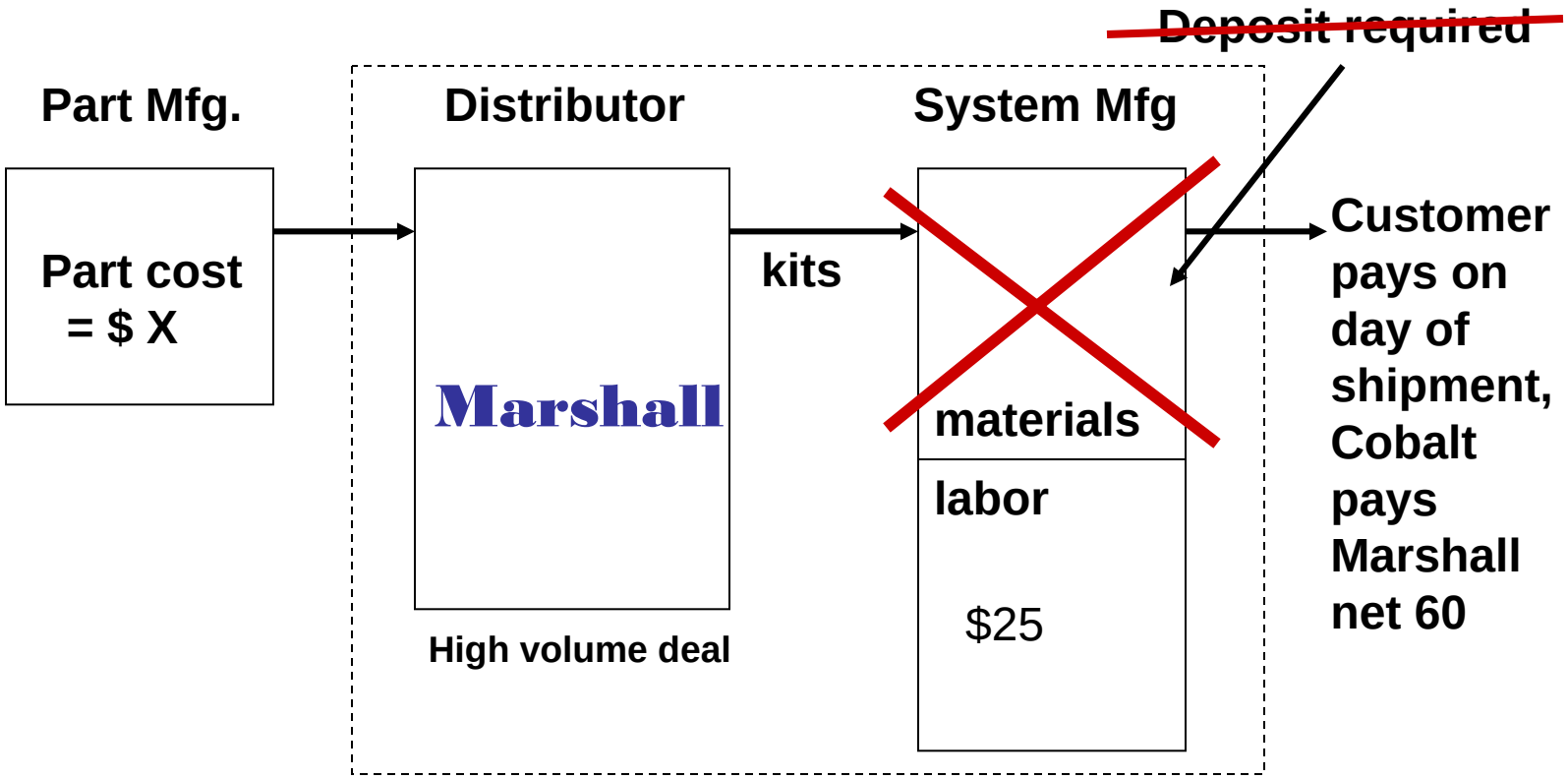
Typical manufacturing supply chain:



Total cost: initial $ X uplifted by multiple distributors then uplifted by mfg + labor
Large deposit required for System Mfg. to buy parts ahead of time and stock.

Operations

Cobalt supply chain, design to match Marshall's line card:



Total cost: initial $X uplifted by 6% plus labor, net 60 = positive cash flow $5-7M
No deposit required. Lower cost at Marshall, lower risk.

Operations

- Cobalt carried no inventory, hence no inventory costs
- From time to order to time of shipment was typically 1-2 days
- Worldwide shipping at Marshall's rate
  - Lower freight
  - Export expertise
  - Customs clout
- Configure to order

Operational Leverages

- Cobalt list was $999, with 40% margin
- Whistle's was $1999 with substantially lower margin
- Cobalt had positive cash flow (no manufacturing working capital tied up) of $5-7M at any one time.
- Cobalt had big clout partner (less shortages in an era of severe commodity allocation)
- Cobalt carried no inventory
- Cobalt leveraged Marshall's worldwide shipping and costs

Marketing

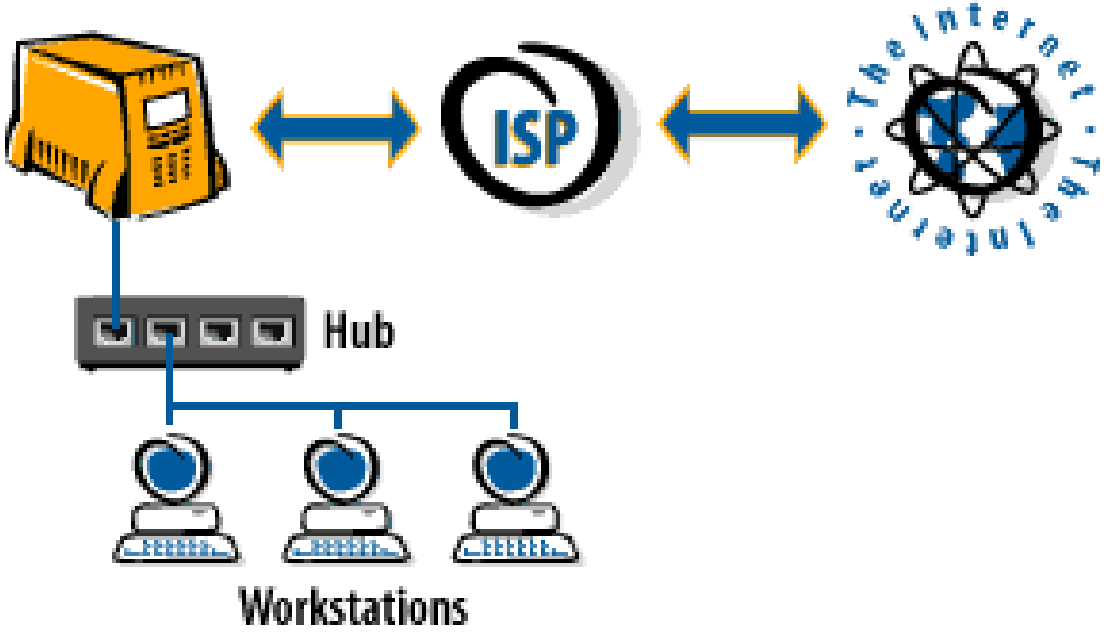
- Both Cobalt and Whistle were initially aimed at the home market.
  - Nowhere near the chasm*…even now.

- Cobalt shifted gears to the quickly growing ISP market – easy to manage web sites for the emerging ebusiness.
- Cobalt expanded to other emerging functions, like Network Attached Storage, Caching, and Firewall/Security.
- Cobalt forged partnerships with companies like Gateway and Seagate to also market and sell – leveraging their marketing budgets and expansive sales forces.

*Crossing the Chasm by Geoffrey A. Moore

Marketing

- Whistle’s business model was to provide the box and connectivity, to be the ISP



Marketing

- Cobalt sold to ISPs

Sales

- Whistle's main initial focus was to sell to homes in the United States
- Cobalt's initial sales were 40% outside the U.S.
- Cobalt was the first to open up Japan
- Cobalt ISPs were a multi-system sales channel before a formal distribution channel was built

Sales Leverages

- Cobalt had
  - The same system at half the price and nearly twice the margins
  - ISPs that bought multiple systems on one order
  - A worldwide market
  - More money to spend on sales and marketing because of efficiencies in other departments
  - Multiple product lines, multiple verticals
  - Not tied to a service model

Customer Service

- For the first 6 months, done by engineering only
- Learnings:
  - Routine debugging
  - Mom and Dad weren’t buying these, ISPs were, needed RaQ format to solve their problems
  - People who contacted Sales and CS didn’t speak English almost half the time

Synergies and Conclusions

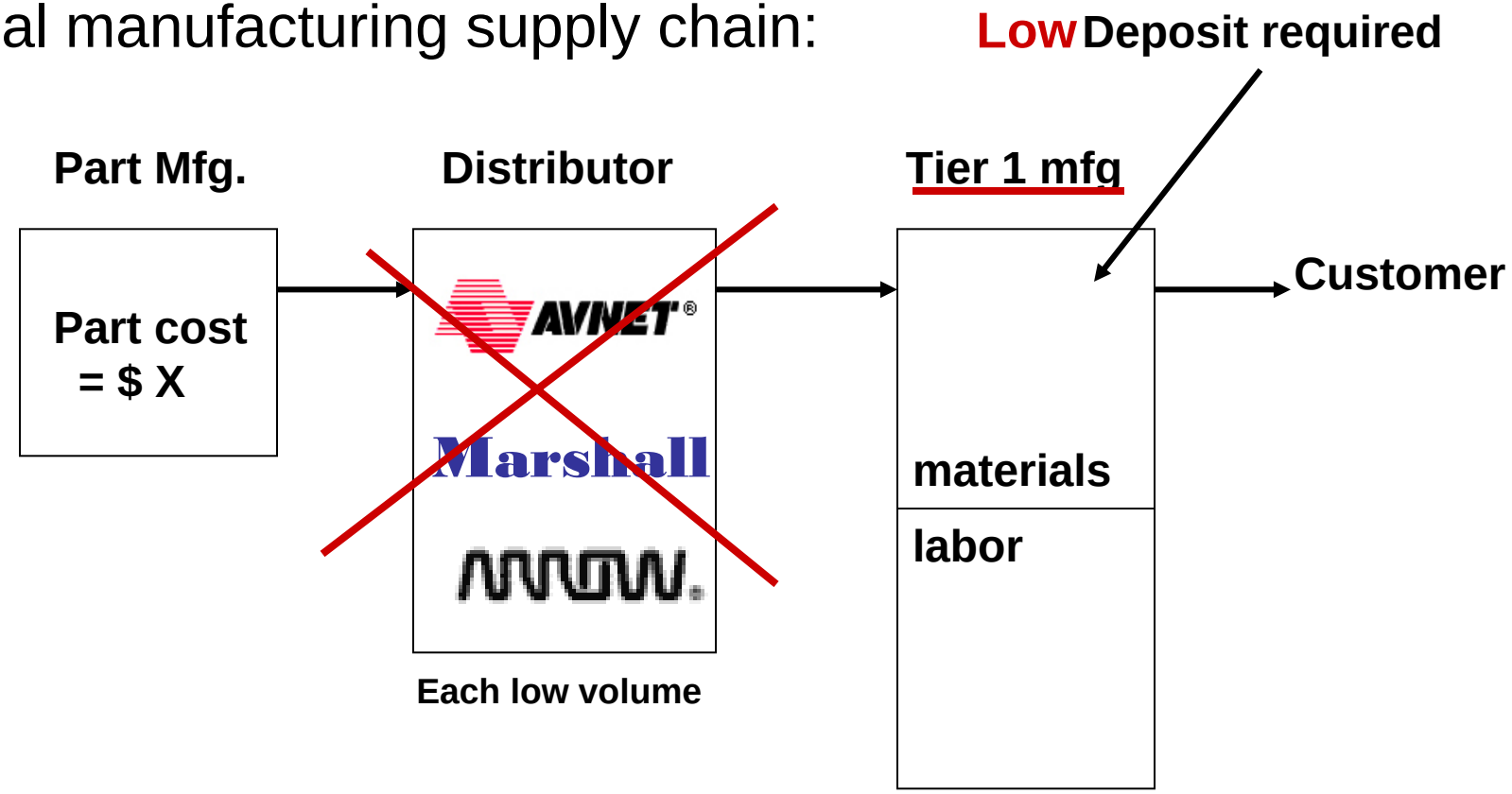
- Design worked up front with operations to structure the supply chain to reduce price, costs and free up cash.
- Customer Service and Operations noticed all the foreign calls and shipments, Sales and Marketing opened Japan.
- Limited residential sales reported by CS and Ops steered Marketing and Sales to ISP market.

Appendix A: Operational Leverage II

- Scout Electromedia (sold to WideRay)
  - Needed free wireless network!
    - Got a 3 year free deal from PageNet
  - Architecture (and parts) nearly identical to Palm
    - Only $12 unique parts (plastics, etc)

Appendix A: Operational Leverage II (cont.)

Typical manufacturing supply chain:



Total cost: Leverage of all of Palm Pilot's BOM, low Letter of Credit required. Initial BOM $243, after partnership, less than $60.

Appendix B: Culture

Imagine a world where:

- Everyone in the company can go out to lunch in just your car.
- You bring in toilet paper from home, not because the company is out of money, but because there is no process to buy it yet.
- A new hire shows up and has to build his own desk before he can start work. Someone spent the previous Saturday running around to get a laptop for him on their own credit card. Pray he doesn't need a pencil, or phone, or…
- You go to turn in an expense report for the above PC and desk, but there isn't a form, or a finance guy, or anyone to write you the check.
- Next week 10 new people start…Dell won't give you an account (you have no credit references), so you buy 10 PCs and desks on your own credit card…
- Next week 15 new people start – oops, they need chairs too.
- Call from your own credit card company….

Appendix B: Culture (cont.)

Imagine a world where:

- You don't know who the customer is
- You don't know how you are going to build it
- You don't have any of the tools to design it
  - Software licenses and databases are expensive, no credit yet…
- There is no corporate email – yet, wait until next week
- There is no parts system
- There are no problem tracking systems
- There are no trade show booths
- 3 guys share the one remaining king suite in Las Vegas for a customer visit and somebody snores.

Appendix C: How to get money

- IEEE presentation given by Don Bartlett
  - An Engineer in a Small Business or Start-up Environment, 10/17/03
  - Excellent review of types of funding and trade-offs of accepting money
- Databases of all VCs, networking
- VC websites
- SVASE
  EMPOWERING ENTREPRENEURS
  … accelerating the formation, growth and success of high growth, technology based companies.

DEMO
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Conference where over 70 companies launch emerging technologies. Held twice a year.

- Allows musicians across the globe to connect and seamlessly play together as if they were in the same rehearsal room. Includes pick up artists and recording.
- Less than 1% of movies made make it into US distribution. Jamon has the rest. Morph of NexFlix and MySpace for movies.
- Lets you “annotate” house plans with the shopping list….for example bathroom would have picture of Koehler sink, website link, price in budget spreadsheet.
- Keeps a travel calendar across companies so you can make sure you set aside time to meet with someone when you are both in Boston…
- Inkless photo printer