GATES 7/11 ("Gates Unplugged")

70's
- 8008
- 8085 vs. Z-80
- Dev. Sys
- RMX
- 432

Title: "Thoughts about 'our' industry"
→ FTC / DoJ sensitivity

* BG: "I've written as much code f/ 8008 as anything"

→ Bill first meets Intel: Terry Opendike comes to Albuquerque to ask f/ BASIC on blue box

→ 286 LoadAll
→ "IBM had an entire strategy built around LoadAll 'SysReq' key was to summon IBM's HyperVisor"

80's
- SW on Silicon
- UNIX
- DVI
- IBM "best customer"
- RISC debate

UNIX/Xenix
→ Andy/Bill Lattin tells Gates: (re: Xenix) He's "worse than Steve Jobs"
→
→ "One of the great mysteries of the computer industry that UNIX has not taken off" — "Can think of no possible series of actions that would have changed the outcome"

→ IBM: "1/3 of each MS exec summit [in '80's]"
→ "In the final analysis, unclear who divorced who[m]"
→ "Press was a significant factor .... IBM execs just reading the newspaper ... as well as Cannavino coming into the picture"

90's
- More RISC debate
- Compilers, B'marks
- Incr. communication
- IP complexities
- Common vision*

* but separate

→ RISC → ACE: DEC was key
→ Compaq spent 9 mos on SPARC after 860/MIPs

→ 386 conversion
→ Gates to Compaq: "You just stand for 'clone'" → so go to 386
→ "You can say we created a monster ..."
→ ASG: "You saved our ass"

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GOVERNMENT EXHIBIT 940
PENGAD-Bayonne, N.J.

→ "We hide under ... Business SW Alliance"
• Sun/Fujitsu backing anti-copyright → 30% MS
→ Lotus v. Borland is poorly-written → reverse compilations

→ "My opinion of copyright law will depend on the outcome [of Apple vs. MS appeal]"

→ IP
• "becoming a major focus"
• amount of thought on patents – $12m/yr in legal alone
• "purely defensive" – no desire to collect royalties
• "personally very negative on 17yr monopolies on stupid ideas"

• "As long as you prevent true piracy ... [MS is OK]"
[• "We're 16,000 people ... and Intel's even bigger than that"]

→ Communication
→ "improved about 3 yrs ago"
→ "we've missed more opptys than we've captured"

→ Common Vision
→ "a form of convergent evolution"

→ PC as a comm tool: "MS: Info@finger.tips"
→ Intel started w/video, evolving to same space

→ "We're more ecumenical about form-factors"

Intel like MS
• Tech DRIVEN
• High valuation
• High share
• Hard to work with?
• High mktg budgets
• Dangers of success

→ High valuation
→ Trend is toward 14% profit, not 20%
→ "We're very market-share oriented, we'll do with prices what we need to ~~then~~ retain market share"
→ Expect lower profits

→ High share → allows investment in mkt growth

→ Want to grow consumer > $1B → "bigger than Random House"

→ Ads: Selected the company that did Nike ads
→ very image-oriented
→ "Compaq is an adversary .... when you buy a computer, we want them to think of Windows"

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→ Going to move away fr a Version #'s to "model years"

→ Chicago = ? Windows '95 ?

→ 12/24 months
- → major improvement
- → "cosmetic improvement"

→ Prediction: 3x 24 mos cycles left in innovation of word processors, spreadsheets
→ voice, linguistics research, ...

→ Future: on-demand download of demo & app upgrade

→ "in the future, we're just a bits company — our channel is the Information Highway" ...
"in the interim, we need a few more channels"

5

→ "We're willing to sacrifice revenue for diffusion"

→ Dangers of Success

*

- → Does Intel need to run all those ads, "have all the SW people"
- → "In this industry, you're dead before you know it — need early-warning systems"
- → "things that are ancillary to the core" ... distracts

→ "Intel gets more $/PC" [DOS & Windows only]
→ Gordon: "but only once!"
→ ~~1/2~~ 1/3 $ f/ OEM; 2/3 later

Intel != MS
- MCG
- Visibility to user
- $/PC
- Fewer products

*

→ "You're not a diversified company ... it's scary"

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4/15

MICROSOFT

2 MS Vision

2 "A computer on every desk and in every home"

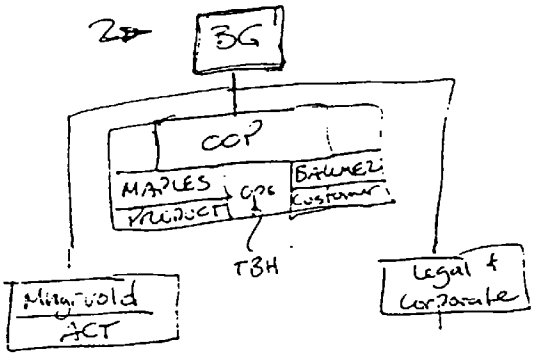
2 $4.3 B FY '93 → $5.5B next year

2 R&D % in apps: 10% – but high-cost channel
systems: 35% – zero-cost channel

20% COGS
8% support ...

4K heads on the phone

2



2 Nathan does stuff that's 3yrs out
→ "everything that's info highway"

Maples
- Windows (Silverberg) Borland
- NT (Allchin) Banyan
- Office (Pete Higgins)
- Home = Consumer (Patty S.) "Q"
- Developer (Roger Heinen) Apple
  Relations, VB, ...

Nathan
- ACT (Mundie)
- MS Online (Russ S.)
- Rashid – Research

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5/15

→ Chicago - street date in Jan/Feb

→ NT: "3 mos after ship of Daytona, people will figure out it's inevitable"

→ 60Mu cumulative Windows

→ Developer's Relations

→ "We're open' ... but that's the most abused word in our industry ...."

→ NT → "The Back Office"
→ SQL Server – RTM HI'95

→ System Mgmt Server ("Hermes")
→ RTM w/ Daytona

→ Exchange Server → Notes competitor
→ RTM HI '95
→ SNA Server

→ Will integrate FS, Mail, Directory

→ "Notes is a pathetic product that sends people down a dead-end"
problem is data-model → Forms a bag on the side

→ Collaborative Computing Strategy

→ Combine sending & sharing of information
• Tools f/ BIZ SOUNS
• Msging in OS via MAPI
• Integrate w/ existing mail & networks

→ Office: "Novell: a wounded bear ... how will they come back"
"Frankenberg is a reasonable guy – he's → Phillipe Kahn"

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→ Consumer Division – Patty Stonesifer

- Games, Entertainment & Kids
- Finance/Transactions & Sports (Money, Baseball)
- Reference
  - Atlas
- Personal Tools → Publisher
- Works
- Lifestyles

→ "CD phenomenon is English-speaking"

→ ASIA: 50% of PCs going into home (Korea, China)
  → education/family emphasis
  → Japan → Mac owns it

→ MS On-line

→ InfoBahn is 2-way, ~~at~~ high-B/W

→ Modems underutilized

→ Not email – low-penetration (but addictive)
  → but MSO will provide family email
    → online registration – tells PC config, etc.

MS On-line
→ Low mkt penetration
  - 40% of PCs have modems
  - < 5MU online
  - Hard to see...
→ MISSION – develop/deploy worldwide
  ~~online svcs to host~~
  branded content f/MS & 3rd party

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→ Novell

→ "overmanaged headcount"
→ milked standard rather than developing it

→ Met w/ Frankenberg →
"more constructive"

→ Focus, project share
→ Netware installed base
→ Acquired UNIX
→ Low-cost, efficient
→ Xition to E'prise
→ WordPerfect merger

→ Lotus

→ "Believe that Notes will be marginalized"

→ will have to do the migration work

→ Notes platform
• 1-2-3 momentum
• SmartSuite
• Aggressive pricing
• Getting Efficient

→ Other
→ OSF was scary for a while
→ UNIX as a free thing

→ ASG: why not IBM?

→ ASG: "don't have value stmt for Chicago"
→ Bill: Silverburg → EoU
Multi-tasking / Capacity
new Multimedia Features
Mobile Features
[total compatibility] ("item zero")

→ Taligent
"[Distributed Objects] is a valid approach"
→ Cairo competitor

→ OpenDoc
→ "a conspiracy to undermine Windows"

• Mac
• UNIX
• Taligent
• OpenDoc
• VideoGames
• OpenDoc
• Consumer Electronics

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→ IBM

→ "no central strategy" (60's-80's)

→ w/ Gerstner - strategy = PowerPC + Workplace OS

BG: "how will this work? IBM: Moto as HP: Intel"

→ Workplace OS: "SAA reborn"

→ Workplace OS != OS/2
→ won't be binary compatible

→ quip "... when we were on the OS/2 jihad ..."
→ IBM pays $3M to get the Fiesta Bowl"

→ "I don't understand IBM's strategy"

→ "$50B in revenue .... no one expects them to make money, so that's $50B they get to spend"
"they can destroy anything they want to"

→ "NT; we blew it - too big, too slow ....
Chicago is our answer to OS/2"

→ "Having a common enemy creates some of the best relationships in our industry"

→ "If [IBM] ever spoke with one voice ...
[they'd be dangerous]"

→ Gates: "Immaurice said

- Strategy: compete in all segments ...
- Complicated product segments
- PC Co. Reigned in
- Can IBM's strategy work
- Can IBM execute

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→ Compaq

"Proof that we're [MS] not good at predicting things"

→ thought they were dead

→ "all the things they're trying to do ... are dangerous"
→ own shell, ...

- Focused only on μP systems
- Low-cost mfgr
- Wants CPQ brand equity & avoid commoditization
- Attempting to use IP against competitors

→ HP
→ very effective vs. NT

→ DEC

→ Apple

→ majority share in K-12, college, etc – "niches"
→ not 12% of mass mkt

→ these are self-sustaining – will keep them in wild card & dangerous

→ "top of the list f/ Windows competition"

- EoU
- Loyal base
- Education mkt
- Media mkts
- Newton, etc.
- Future uncertain

→ PowerPC

→ Freudian slip: "if they had an OS for NT" (→ PPC)

- Good μP impl. (604, 620)
- Superior perf.
- Big $
- Apple gives volume
- IBM strategy unclear

→ Others
→ AMD, Cyrix, Nexgen, Sun, MicroUnity

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10/15

2 Next 2 yrs

- Chi on desk
- NT on server
- Consolidation of OEMs
- Demand elasticity f/ performance
- upgrades & new usys

2 Info Hiway

2 bad term → distance is a bad notion

2 Media convergence
→ "big packets"

2 "CD will be obsolete very quickly"
2 ~~dig~~ video → digital videotape
music → doesn't want it

2 no one to drive 3Meg CD's except PCs

2 Network convergence
2 bandwidth reservation & connection model
2 "ATM is a phenomenal technology"

2 ~~MS~~ ~~Drive~~ InfoBahn investment

Tiger - 30 people
Pulsar - 60 people
Online - 50 "

- 600 people - ACT
- 100 " elsewhere
- going up
- R&D
  - > $100 m/yr
  - starting 3 yrs ago
- ~~Ex~~ ACT charter

→ Design/develop ~~charter~~
SW/HW reference platforms ...

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- MS on InfoBahn
  - Develop open, powerful SW f/ InfoBahn
    - OS
    - HW ref. designs
    - Authoring tools → e.g. SoftImage (FITOM)
    - World-class consumer apps
  - Foster/encourage, multiply...
    - Full-svc nets, cable, telco
    - 1000's of interactive apps, svcs
    - "Open Tools" to enable broad set of 3rd party development tools f/ InfoBahn

- "It is pretty chaotic"
- "Rule" → one person per meeting f/ hierarchy is enough"
- Will use hotels/airplanes for high visibility
- Big focus on TCI Trial
- Apply existing state-of-the-art Tech
  - Win/NT tech
  - next-gen OLE
  - MPEG/JPEG
  - next-gen visual technology
  - tools f/ Soft Image

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12/15

→ "Once networks are extremely fast, no reason intelligence can't be central"

→ central servers, etc.

Nathan → stays in home/desk → but settop is very important

Gates → centralized, w/ video out, over net

→ so desk is never obsolete

→ Projects

- Amazon – near-term settop
  – optimized for "broadcast interactivity"
- Iceberg – longer-term, open arch, end-to-end advanced settop; uses MMCSA
- Tiger – SW sol'n f/ continuous media VoD
- Pulsar – SW/HW – Wallet PC ??

→ Tiger → "easy to visual"

Intel "on very short notice" == low value-add

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INT 0327

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→ Business Apps

- → Video conf / ...
- → Information
- → Electronic mkts
- → Directory, Yellow Pages
- → Telecomm
- → Mail, BBS

→ new strategy → don't field trial, ~~wait~~ → or posture (like Oracle) → wait for concrete stuff / deployments

!

→ "[InfoBahn] could do to AT&T what PC did to the mainframe"

- → ATM + MS SW → potent vs. AT&T switch biz
- → But everyone looks to AT&T for leadership

→ RJW: where's the $ → branded apps

!!!

↳ Gates → "mostly at branded apps, but some at every level, including selling the platform"

→ 1000 engineers in India on CompuServe

→ Education Apps

→ New compensation model → fame, satisfaction

→ ASG: When's $1B business?

- → A: has been wrong by 5 yrs (Windows, CD-ROM, PDAs)
- → "We can afford to be patient"
- → ASG: 5 yrs × $150 M/yr ⇒ ~ $1B R&D how do you sustain/patient enough?
- → Yes, if core biz is flat

$

→ "Intel is duplicating $30M of [MS'] $170M investment → in IAL & 'Intel Portland'"

→ '94 — CD, online, Internet

'95 – Trials

'95 – VoiceView – SVD

'96 – PC has MPEG/H.320

'96 – Digital Movie Player

'96 – ISDN Video

'96 – "Highway collect begins"

2000 – 20 Million homes connected

→ Most negative scenario

→ P7 features patented a la '338
→ someone else cross-licenses

INT 0328

→ Thoughts → Industry (Issues)

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→ IP tie-up
→ Highway
→ New users/upgrades
→ Demand elasticity → esp. $/performance
→ New form factors

→ "a plateau for a few years could be very damaging"

→ Intel
→ Transition to P7
→ Role on Info Bahn
→ Partnering
→ Core Competencies

- "A huge discontinuity looms on transition to P7"
  - Some say we should just run x86
    - yes, if we can get ~~[illegible]~~ w/in 25% of PowerPC

- InfoBalin role
  - "Should be willing to think very broadly"
    - Form factors

DOJ...

"If she understood the presentation I just made ... we'd have no problem ... this business is unbelievably competitive"

"This anti-trust thing will blow over"

"We haven't changed our business practices at all"

- may change e-mail retention policies.

"~~If~~ ~~After~~ The current level of competition is healthy"

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