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Why should my business use OSS?

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Outline

- How products and markets develop
- Events that shaped IT
  - business and political
- Justifying the change to OSS
  - To management, IT staff, users
  - Training, support, goals achievement
- Protect your business
Market development:

Is the time right for change?
Four Market Development Phases

- Rapid development
  - Production orientation
- Market emergence phase
  - Distribution orientation
- Standardization phase
  - Market niche orientation
- Commodity phase
  - Global mobility orientation
How markets develop

![Graph showing the development of markets over time, with stages of market establishment, standardization, and commoditization. The x-axis represents market size (time), and the y-axis represents extent.]
Rapid development

- Focus on getting product released
  - Product development is central
    - Many technological barriers prior to release
    - Product features compromised
      - Some functionality costs too much before launch
      - Many challenges not anticipated in early design
  - The market is pure potential
Market establishment

- Pursuit of market share
  - Cost recovery
    - Market development
      - Real opportunity is demonstrated
  - Competition emerges
    - Rule of 2
      - The early bird catches the worm
    - Competition creates product / service differentiation
Standardization

- Customer needs satisfaction
  - Interoperability is key user demand
  - Vendor lock-in is major issue

- Market differentiation emerges
  - Every market eventually standardized
  - Global standards v's local standards
Commoditization

- **Affordability key to size of buying market**
  - Global markets
    - Cost reduction everywhere
      - Margins shrink
        » even in niche markets
    - Build local service specialization
      - Service-level differentiation
        » successful businesses understand how to add value customers want
Current OSS market phase

- The IT market is established
  - There is competitive choice
    - but OSS is not clearly targeted
    - interoperability is a problem
    - competitive differentiation is at the product level
      - not at the service level

- The current market is at the point of early standardization
OSS adoption implications

- Those who embrace OSS now are at the early majority phase of the market
  - will capture the maximum benefits yield
  - will experience the most rapid maturation
  - will be adventure driven
    - not conservative
    - seeking significant benefits

- Are you adventure driven or conservative?
Events that shaped IT:

How did we get here?
IT Origins – Pre 1980

- Software and OS as computer infrastructure
  - Software delivered with hardware
  - High costs limited who could afford a computer

- UNIX systems gained ground in 1970s
  - Mainly custom systems
  - High cost of ownership
IT developments in the 1980's

- OS delivered with the hardware
  - Apple II, Apple III, Lisa and the Macintosh
  - The IBM PC
    - IBM PC DOS, MS DOS, MS Windows

- Software as an add-on
  - Visicalc, Lotus 123, StarOffice, Word, WordPerfect, MultiMate, etc.
Battle lines

- Consumer v's specialty IT market
  - shrink-wrapped software displaces custom software

- Platform polarization
  - IBM PC v's Apple
  - PCs v's *technical workstations* (UNIX)
    - UNIX meant high cost hardware and licenses
Real differences

- **UNIX Systems**
  - Focus on “soup-to-nuts” business solution
    - Vertical business process solution
      - Point of sale, ERP, CRM, customized software
    - Software sells purpose chosen hardware

- **PC DOS / Windows**
  - Focus on low cost “cookie-cutter” software
    - Hardware is a low cost commodity
    - Software is generic
Start of the OS wars

- UNIX vendors
  - not tuned to creation of a commodity market
    - Buying public want lower cost & more flexible business solutions

- UNIX standards
  - undermined by proprietary extension
    - Non-portable features
      - Software and vendors locked to hardware
      - Licensing cost high - tied to CPU power
Market shake-out

- Many mergers and acquisitions
  - Products rationalized
    - Customers forced to change

- Companies fail
  - Go out of business
    - Customers left marooned
      - OSS will never leave customers in a hole
IT in the 1990's

- The genesis of Microsoft's monopoly
  - MS DOS obsoleted in late 1990s
  - Microsoft Windows matures
    - Shrink-wrapped volume-priced software
      - shrinking margins on software and hardware

- MS Windows competitive target
  - Pre-1996 – Windows NT the UNIX killer
  - Post-1996 – Dominate the Internet
UNIX over the last decade

- UNIX company rationalization
  - Many disappear
    - Catalyzes interest in alternatives
  - Unification of UNIX standards
    - Demands free reference implementation

- Open source gains popularity
  - Perl, apache, samba, *BSD, Linux, etc.
  - Awareness of robustness grows
    - Quick bug-fixes ideal for business use
1999 - 2002

- MS Windows NT5.0
  - Business welcomes Windows 2000
    - Better than Windows NT4
  - Slows Linux adoption

- MS Windows NT5.1
  - WinXP secures the desktop
  - Win2003 Server secures corporate IT

- Linux established in enterprise
  - web and database servers
2003 - 2006

- Linux company rationalization
  - Novell acquires SuSE
  - Linux continues to gain market share
    • many mergers and failures, but customers relatively unaffected because source is open

- Sun Microsystems Solaris

- Intellectual Property litigation involving Linux business
The current situation

- Linux is well entrenched in enterprise (500+ employee) businesses
  - Powers about 1/3\textsuperscript{rd} of all web servers
  - Has solid reputation in all basic infrastructure services

- What are you waiting for?
Why change to OSS?
Know Your Mind

- Why do you want to change IT supplier?
  - Cost reduction
  - Performance enhancement
  - Flexibility
  - Trust
  - Punish existing vendor

- What will cause you to change?
  - A permission note
  - Other ...
Golden Rules

- All IT expenditure must be justified
  – Forced spending of budget is no-go

- IT expenditure must match business goals and objectives
  – IT is an investment in business opportunity
    • Therefore measure ROI
Reasons for IT use in business

- Cost of IT has to be justified
  - May open up new business opportunity
  - Improve operating efficiency
    - Reduce head-count
  - Minimizes mundane work
  - Social standing
    - Being seen to be “with it”
Negative proprietary IT factors

- Vendor lock-in
  - Single point of supply for business-critical software
  - Inability to migrate or port data
  - Obstacles to sharing of business data

- Licensing costs
  - Restrictive partnerships
  - Multiple licenses in one software stack
    • eg: OS, 3GL, RAD, Business software itself
Agents of change

- Customer satisfaction
  - Happy customers do not change supplier
    - Business is based on relationships and trust
      - Customers want a supplier who protects their interests
      - Customers seek security in business
      - Supplier integrity compensates for supplier deficiencies
  - Communication is critical to business stability
    - Value perception needs constant reinforcement
Consumer concerns: commercial software

- Risk factors
  - Cost containment / control
  - Isolation
    - Vendor lock-in & data portability
    - Support availability / affordability
  - IPR exposure

- Benefits
  - Quantifiable accountability
    - Perception of transfer of exposure risk
Consumer concerns: open source software

- Risk factors
  - In-house accountability
    - Isolation
      - cost containment
      - support availability / affordability
    - IPR exposure
      - no ability to transfer exposure to a supplier

- Benefits
  - No vendor lock-in
  - Problems can be fixed
Major IT issues (from consumer perspective)

- Standards adherence
  - Fear of litigation for IPR / patent violation
  - Data portability assurance
  - Avoidance of lock-in
  - Integration risk
    (how to create a fully integrated system)

- Sustainable support
  - Cost and availability

Source: Open Standards, Open Source conference 9/04
Resisting isolation

- Standardized file / data formats
  - remove interoperability barriers
  - eliminates lock-in only when alternative application software is available
  - Key benefit
    - choice drives down cost
IT staff career opportunity

- OSS creates alternative careers
  - solutions are more transparent
  - careers are more portable

- Availability of source code means
  - problem solutions can be better understood
    - permits extension into new areas

- As traditional support roles shrink
  - provides new areas for deployment
Thorny questions

- OSS versus commercial software
  - How far can competition go?
    - 5 million OSS developers
    - < 1 million commercial developers

- Commercial software development
  - How can ROI be assured as OSS grows
Are your reasons real?

- Do all customers make logical decisions?
  - NO!
  - Emotional factors dominate purchase decisions
    • Logic is used to justify the decision

- What does this mean for OSS evaluation?
User experience

- IT changes must meet user needs
  - User dissatisfaction is fatal to success
    - Regardless of OSS or commercial software

- IT users should be involved in change process
  - evaluation
  - implementation
  - post-deployment evaluation
Ideal user involvement

- User driven change IT change
  - Users evaluate all solutions
  - Cost reduction and efficiency gain based incentives

- Users evaluate IT effectiveness
  - freedom to outsource IT
OSS global interest

- Initially commercial software companies deny OSS validity

- Major IT vendors join the thrust for a new way of doing business
  - Few find it!
Why interest in Linux / OSS?

- Many claim **Cost, cost, cost, cost**
  - Lower cost means more potential customers can afford to be in the market
    - Increases market for hardware sales
    - Expands opportunity for services / support

- **Extension of UNIX standards**
  - **Internationalization**
    - Expands the boundaries of business
    - Partly answers the quest for the universal OS
The big question for you

What is your reason for considering change of IT supplier?

- You do not need a permission note to adopt OSS
- You need a good reason for change
  - change is risky
  - not to change is also risk prone
    - may miss opportunity
    - risk being left behind
So ...

Which set of problems do you want?

Remember: TANSTAAFL
Questions