Open Source Framework: Linux, The Business Case
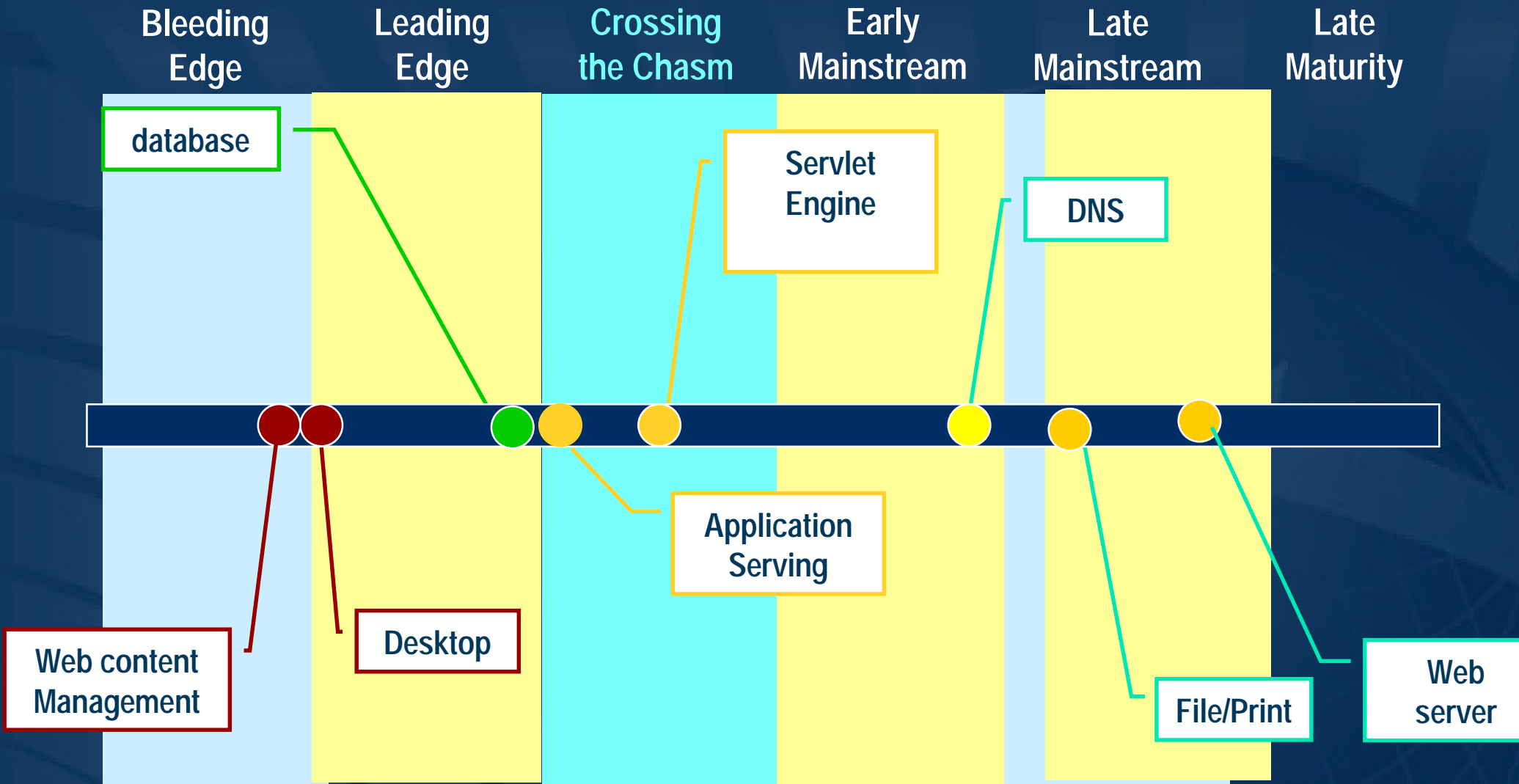
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Summary of IT Trends 2003: Linux

- Rapid maturation of Linux
- Linux as a driver of return on investment (ROI) will continue to play a major role
- Debate between Linux vs. closed source operating systems security will intensify
- Legal implications of open source software will persist
- Consolidation of the Linux distribution market will drive customer focus on Linux distribution provider ecosystems
- Linux as a database platform will increase

Linux Technology Adoption: Q2 2003

Bleeding Edge	Leading Edge	Crossing the Chasm	Early Mainstream	Late Mainstream	Late Maturity

database

Servlet Engine

DNS

Application Serving

Web content Management

Desktop

File/Print

Web server

The Business Case

- The process of building a business should yield the following:
  - An understanding of the financial impact of the decision
  - An understanding of the sensitivity of the potential outcome to various controls - what's critical and what's not
  - Sets groundwork for how the project should be measured and managed
  - Should feed directly into project management Buy-in.
  - The process of creating the business case is a dialog that helps the business understand their role in making the project a success
  - An understanding of risk. This should feed directly into risk mitigation strategies.
  - An alignment to strategy - the business case process, uniformly applied, should ensure all projects have been aligned to strategy.

A Decision Framework for ROI vs. TCO

IT organizations need to start talking value

- Stop talking cost - unless you like perpetuating IT being viewed as a cost center!

TCO measures line item costs

- Focus can be limiting to the enterprise
  - Precludes benefits and flexibility of alternative IT solutions
- Single dimensional cost (TCO) view was appropriate when IT was the Data Center

An ROI Multi-dimensional value view is appropriate for IT as a business enabler

Cost (TCO) – Provides a Partial Answer

- Generally measured within IT
  - Includes cost avoidance (what is generally considered "benefit")
  - Basic Cost Categories:
    - Corporate Budget
    - Any other specified chart of accounts
  - IT can only control its own budget
  - Traditional TCO influence

An ROI Model is Relative

- Return on Investment is always as compared to something. "If we invest "x" we can make "y" and create a "z" return on investment"
  - As compared to what?
    - Usually, as compared to doing nothing - the status quo.
  - Making the decision to invest means deciding to make something different
    - The business case attempts to construct a model that "monetizes" the difference

Total Economic Impact (TEI)

Applications of Total Economic Impact

- Shed the "cost center" label - talk "value"
- Refocus IT as a business partner - driver of business rather than just a utility
- Rank order IT investment opportunities using a value criteria

Seven Steps for Highly Effective Linux ROI

1. Estimate the current yearly cost of running applications on the existing operating system environment

2. Isolate the operational cost per server

3. Determine if the licensing cost of the application will be the same on Linux

4. Calculate the cost to deploy/migrate the application to Linux (e.g., is a port required?)

5. Estimate the capital costs of the new hardware kits and resource costs to deploy/migrate the applications (TCO can provide a foundation)

6. Calculate savings resulting from the consolidation of existing applications on Linux

7. Calculate the new operational costs of running applications on Linux (e.g., yearly hardware, bandwidth, maintenance, management, or network cost reductions)

The ROI measures the costs of the Linux deployment/migration compared to the benefits of operational cost savings of the migration + cost avoidance savings

Business Cases

Banco do Brasil

Banco do Brasil,the first Brazilian bank to operate in the domestic and international markets with a network of branches in 30 countries,and correspondent banking services with nearly 1,000 top banks in 145 countries.

Challenge

Looking for an IT solution to consolidate its European operations and at the same time support its growing business, increase efficiency and reduce licensing costs.

Solution

Migrated from PC-based Windows NT server farm to Linux onto three iSeries servers –the first to run its core banking application, the second is a dedicated server running Domino, the third is a Linux server connected directly to xSeries systems. Generated licensing and administration savings as well as increased reliability and ease of management

E*TRADE

A provider of personal financial services

Challenge

Needs to upgrade the Web services of its North America financial services business. Currently running many applications on Sun Solaris.

Solution

Upgraded its data center by deploying 90 xSeries 330 servers running Linux. Reduced software license fees and service costs. Benefit shifts balance of power back to the customer. Claims sizable cost savings.

Ministerio Administraciones Públicas (MAP) - Dirección General para la Administración Local

Public administration ministry in Spain. A department within the ministry, Dirección General para la Administración Local (DGAL) is in charge of cooperation for local development. Responsible for the management of national and European subsidies. Since 1995 running Hewlett-Packard system with an Informix database (previously Ingres)

Challenge

Using Informix technology, and sought to keep database, particularly the Web DataBlade, a Web application generator. Looking to consolidate hardware and migrate database to a Linux platform

Solution

Purchased an IBM xSeries 250 server (4-way SMP), running Linux Red Hat V7. and the company's Informix Dynamic Server V9.21 database. Key benefits ease to install and learn, scalability, reduced maintenance costs, high security at a low price, Fast searching, great performance

Alcanet

Alcanet International Deutschland GmbH is the IT Service provider for the Alcatel Group in Europe, South America, and India. Alcatel produces mobile phones, telephones, switches and routers.

Challenge

Alcanet needed to cut costs. The company's mySAP.com application was running on IBM mainframes with OS/390. Discovered that Linux would be less expensive than OS/390 and would still offer outstanding stability and reliability.

Solution

Migrated to a new zSeries 900 running a 64-bit SuSE Linux partition and a z/OS partition. The mySAP.com software was migrated to the Linux partition, which now acts as the mySAP.com Application Server. Using z/OS partition primarily for data storage, and manages the SAP data with DB2 and Tivoli storage manager Processing time between the application server and database server for Alcanet's mySAP data decreased dramatically. Achieved higher scalability, availability, and improvements in system-management, monitoring and control.

Possibility for reduction of software cost with Linux in comparison with USS mode

Recommendations

- Linux is a contender in the enterprise
- Measure benefit of Linux inside and outside of IT (within the business)
- Use an ROI analysis to determine if Linux is an enabler of Business Value
  - The business may need to change in order to "capture" the benefit made possible by Linux
  - Consider tangible numbers placed on "Worth" (perceived value)
  - Linux can cut your costs as a way to gain greater control over your architecture
- Remember - All value statements must be relevant to the users and measured from the user perspective
  - Must address strategy or else it's just a "feature"

In the presence of perceived value, cost is a secondary concern.

Questions?