Linux and Open Source For e-Government: The Busines Case
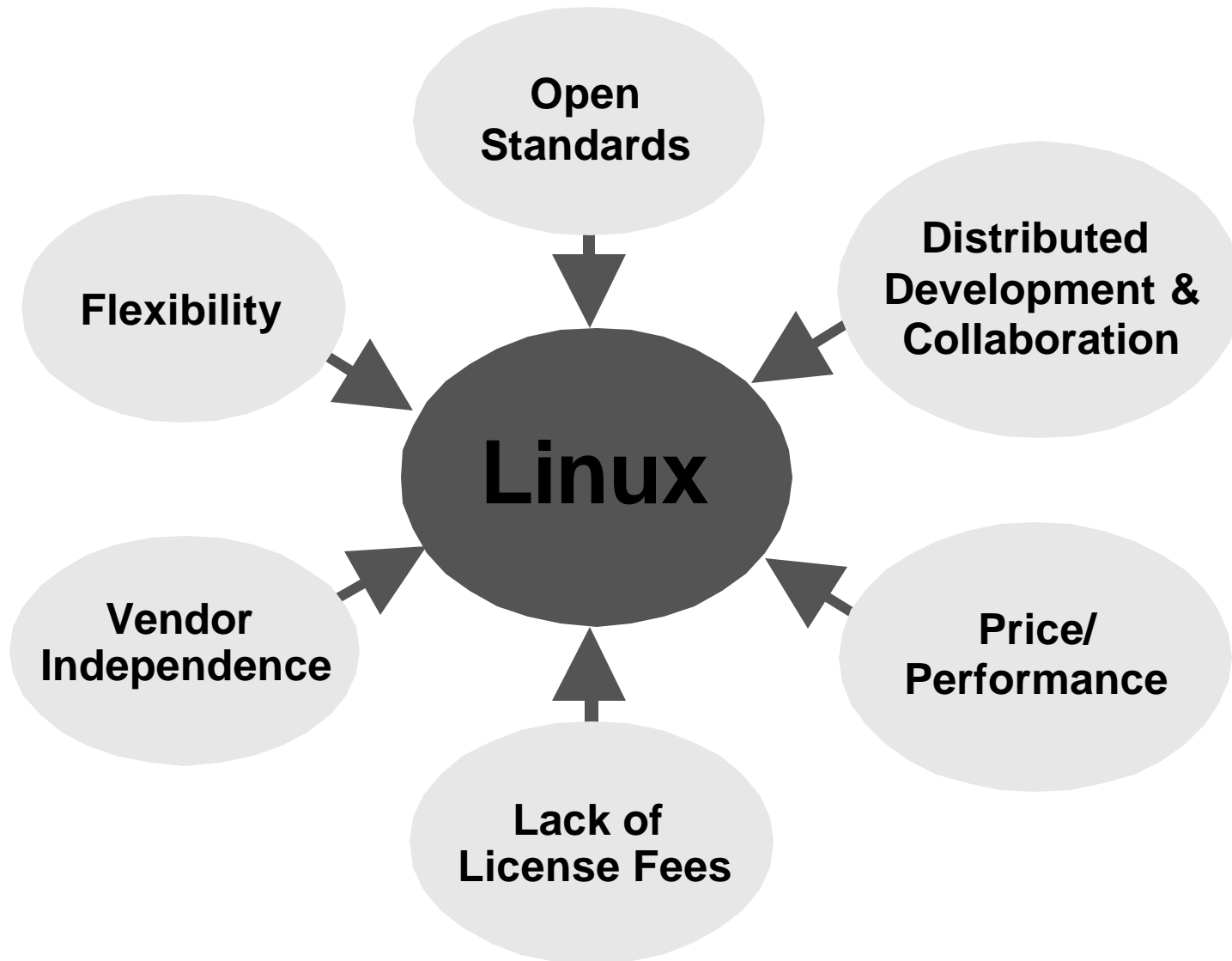
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Agenda

- Background – Linux trends and positioning

- Current Linux utilization in private and public sector

- The open source business case

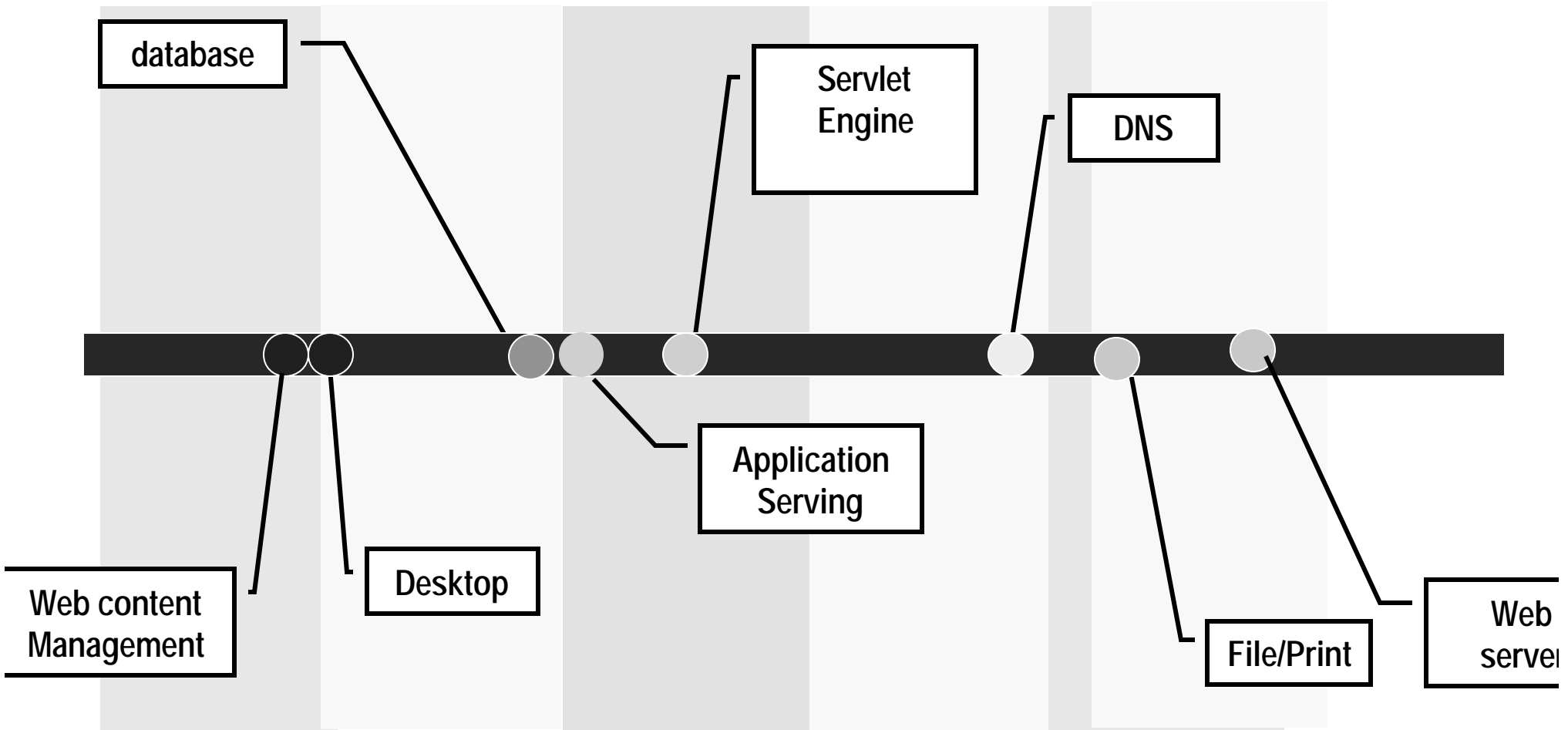# Linux Dynamics:
Critical Mass in the Market

Summary of IT Trends 2003: Linux

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

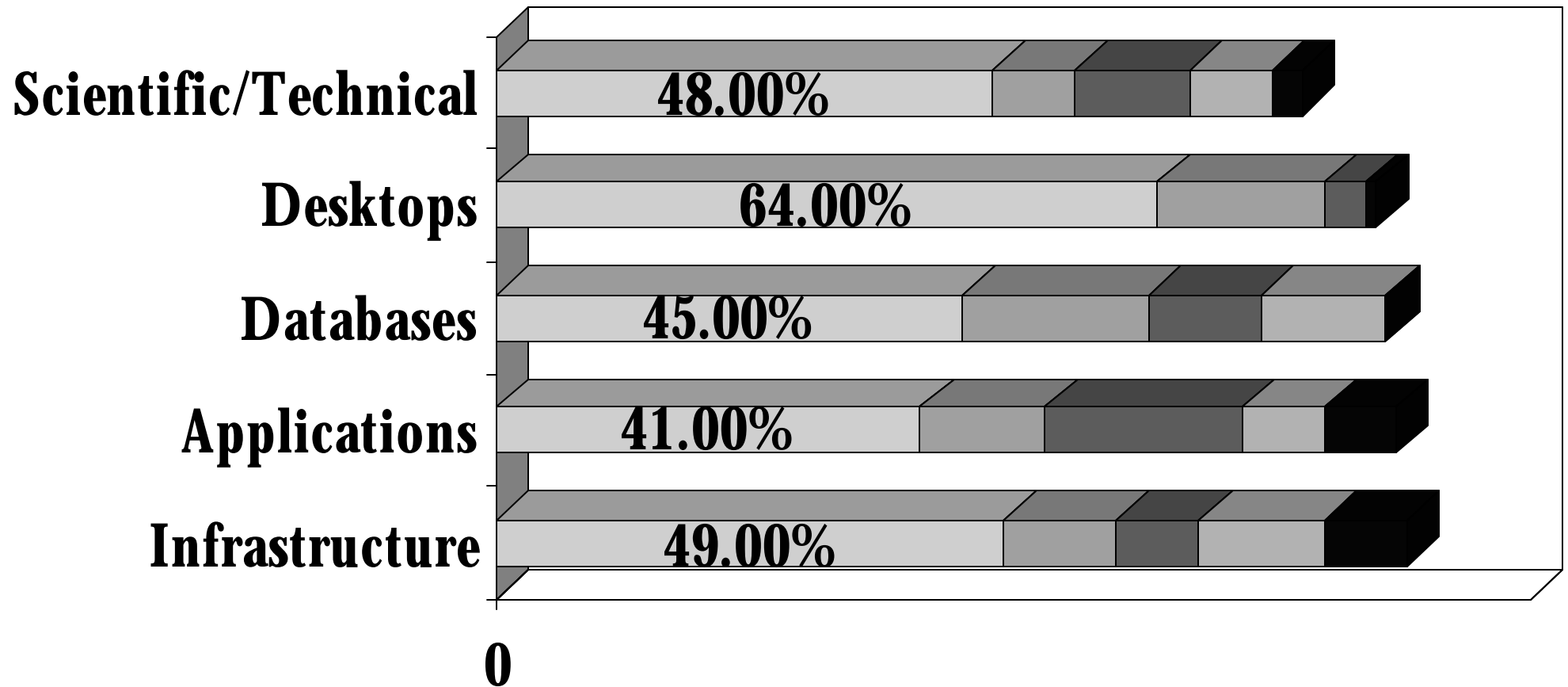# Linux Technology Adoption: Q1 2003

Crossing
the Chasm

database

Servlet
Engine

DNS

Application
Serving

Web content
Management

Desktop

File/Print

Web
server

Linux is growing, but is still playing catchup

"How likely is your enterprise to adopt Linux this year for:'

Scientific/Technical — **48.00%**

Desktops — **64.00%**

Databases — **45.00%**

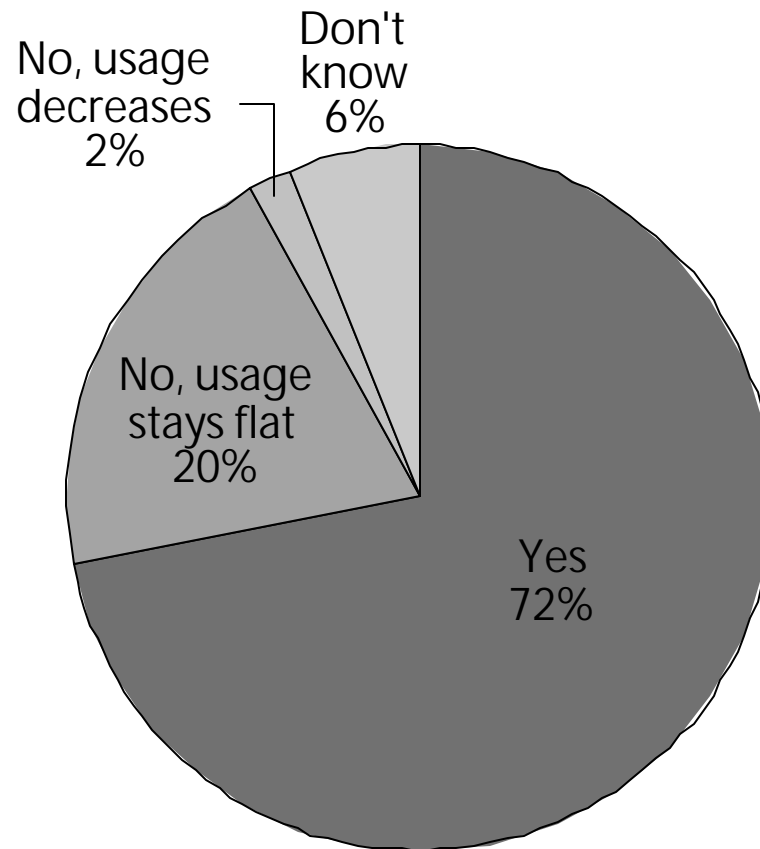Applications — **41.00%**

Infrastructure — **49.00%**

0

Base: 75 $1B firms

☐ **Highly unlikely** ▨ ▪ ▨ ■ **Highly likely**

Linux users are having a good experience…
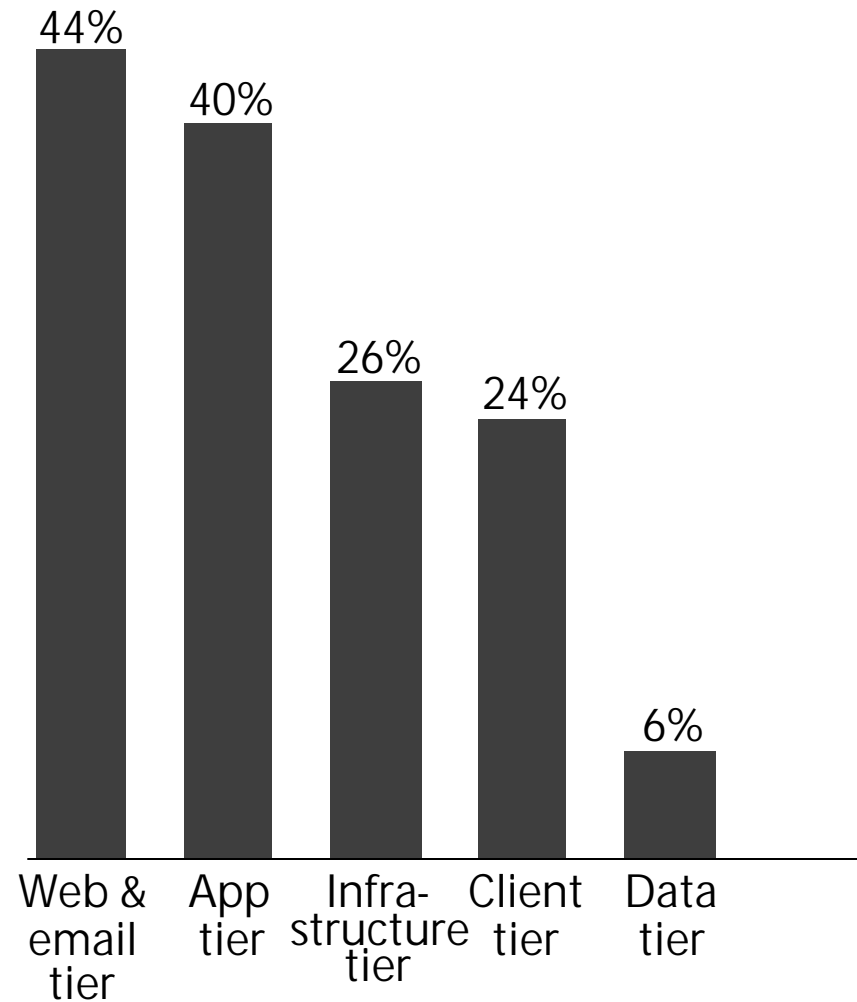
Are you planning to increase yourLinux usage?

This lopsided
distribution
Of future plans is a
strong positive
For Linux

No, usage
decreases
2%

Don't
know
6%

No, usage
stays flat
20%

Yes
72%

Base: 50 $1B+ companies using Linux

…though mostly at the front of the datacenter

Where are you running Linux today?

Base: 50 $1B+ companies using Linux
(multiple responses accepted)

Technology Futures – 2003/4

- Scalability improvements – 16 way SMP by end '03
- Increased community focus on manageability, HA/RAS, and virtualization layers
- Strong move to 64-bit Linux
- Low numbers, high hype factor adoption of Linux desktops
  - But public sector is a very good candidate environment for Linux desktop deployment
- Stronger adoption as a database platform
  - Public sector requirements very similar to private sector for database applications

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 various controls - what's critical and what's not
  - Sets groundwork for how the project should be measured an 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 proje 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!
- But let's be realistic about how much we can change public sector governance models

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 (but don't even try telling this to an elected official :-)
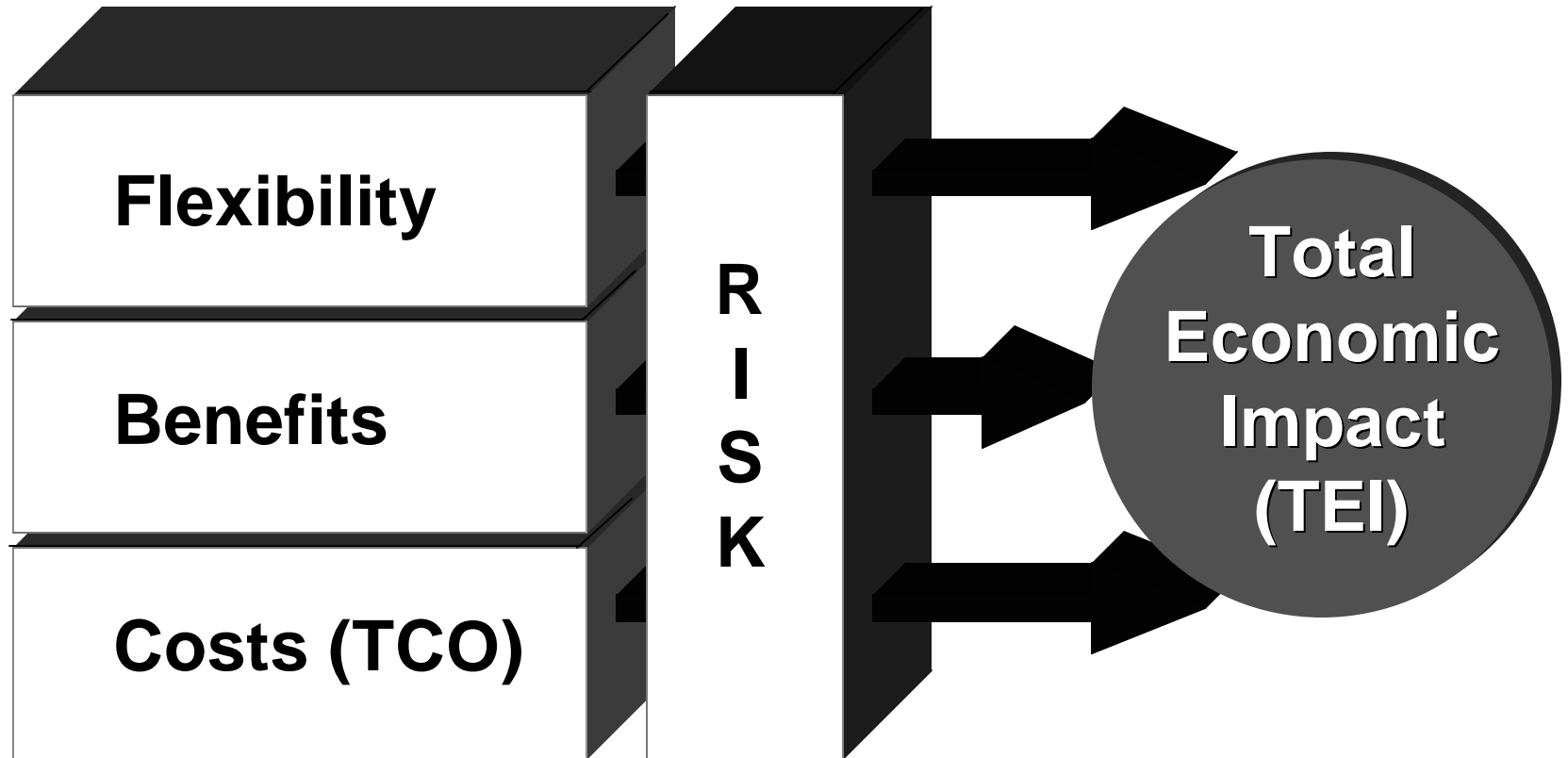
Cost (TCO) – Provides a Partial Answer

- 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
  - For better or worse, TCO may be better suited for some public sector environments because it deals with measures that are traditionally visible in the budgeting and management environment

An ROI Model is Relative

- Return on Investment is always as compared to something. "If we invest "x" we can make "y" and creat a "z" return on investment"
  - As compared to what?
    - Usually, as compared to doing nothing - the statu 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
- Even in public sector environments where only cost models can be used, TEI concepts can help in the planning and evaluation of alternatives

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 nation 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 an migrate database to a Linux platform

Solution

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

Alcanet

Alcanet International Deutschland GmbH is the IT Service provider for the Alcat
Group in IT company for 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 runnin
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 no
acts as the mySAP.com Application Server. Using z/OS partition primarily for dat
storage, and manages the SAP data with DB2 and Tivoli storage manager
Processing time between the application server and database server for Alcanet
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

Recommendations

- 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.