Novas Iniciativas com S/390

Apresentação para:

Exploradores do OS/390

Marcelo L. Braunstein

marcelol@br.ibm.com
(55-21)546-3500
T/L: 831-3500
http://www.s390.ibm.com/brasil/

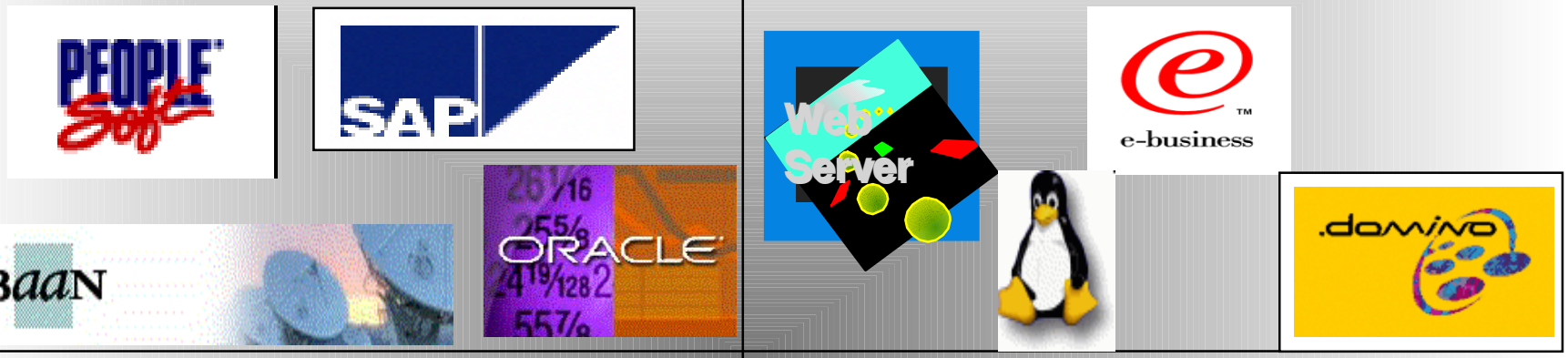
Agenda

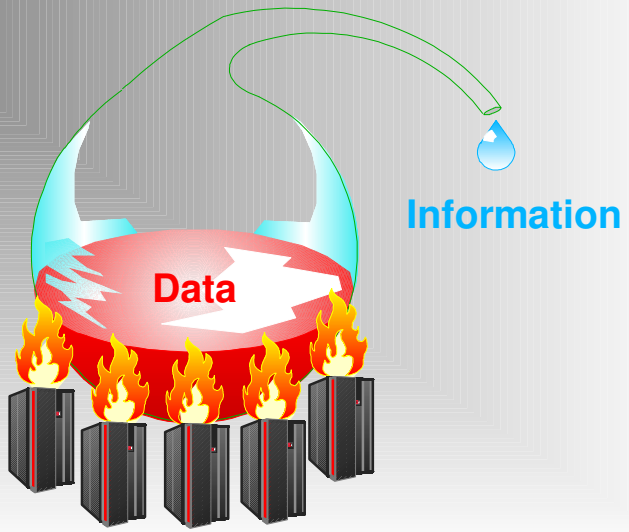
- 9:00 Abertura
- 9:15 Torne sua empresa mais competitiva usando as iniciativas S/390 - Marcelo L. Braunstein (IBM)
- 10:00 Intervalo para café
- 10:15 IBM ajudando voce a participar do mundo e-business - Eli Martins (IBM)
- 11:15 Utilizando o Unix Systems Services do OS/390 como plataforma de integração para ambientes distribuídos - Roberto M.F. de Souza e Ricardo Lanzuolo (MSA - Infor)
- 12:15 Almoço
- 13:30 Aumente os négocios de sua Empresa ao disponibilizar seu legado na Internet - André Ceciliano (ACE Informática)
- 14:45 Intervalo para café
- 15:00 Estado da arte em Java, VisulaAge e WebSphere em S/390 - Carlos Hirata (IBM)
- 16:15 S/390 também é LINUX ! - William Ventura (IBM)
- 16:40 Experiencia com Linux/390 no Banrisul - Fabio Becker (Banrisul)
- 17:30 Encerramento

Novas Aplicações para S/390 (ou Growth Initiatives)

ERP

e-Business / e-Collaboration





Server Consolidation

Business Intelligence

IBM

S/390

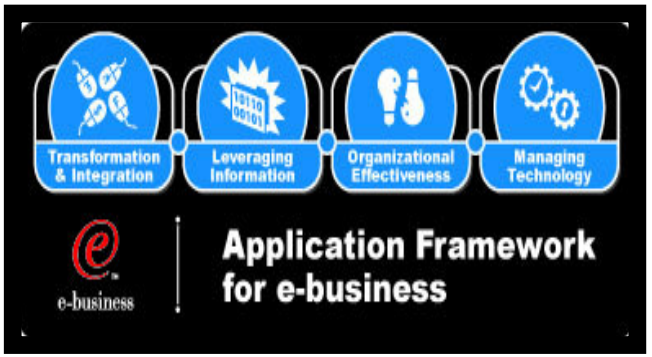
Bases para e-business avançado

IBM

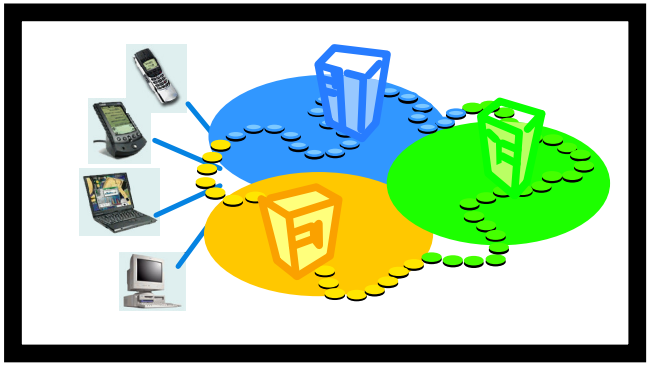
S/390

Business Innovation
& Integration Expertise

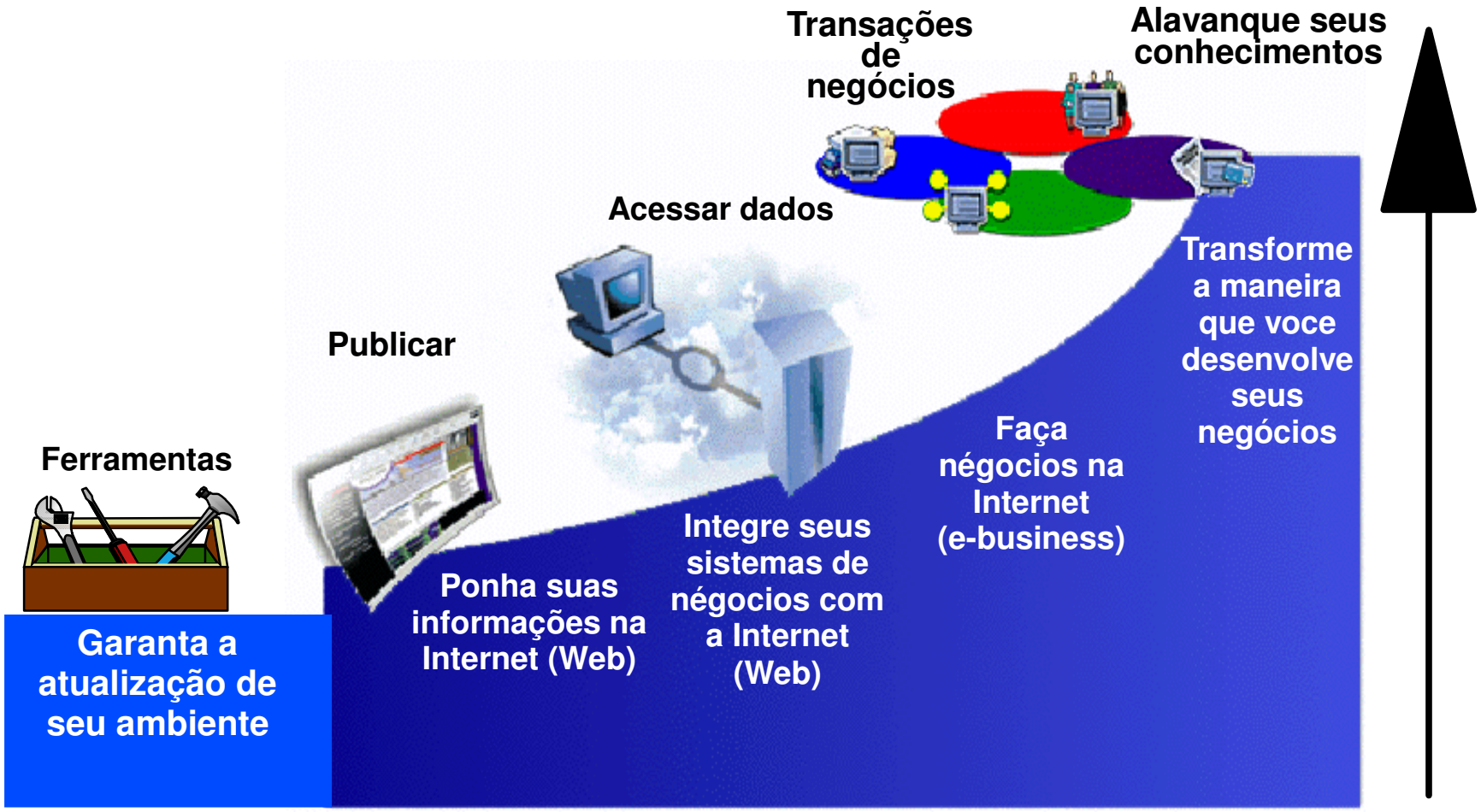
Application Development
& Deployment



Flexible Infrastructure



Business Innovation



Framework de aplicações para e-business

e-business

Transformation and Integration

Leveraging Information

Organizational Effectiveness

Managing Technology

Middleware

Lotus. .domino

DB2

MQSeries

WebSphere

Tivoli

Secureway

Build | Run | Manage

OS/390 OS/400 AIX HP-UX Solaris Linux OS/2 NT

Application Framework for e-business

IBM

S/390

Rápida implementação em servidores empresariais

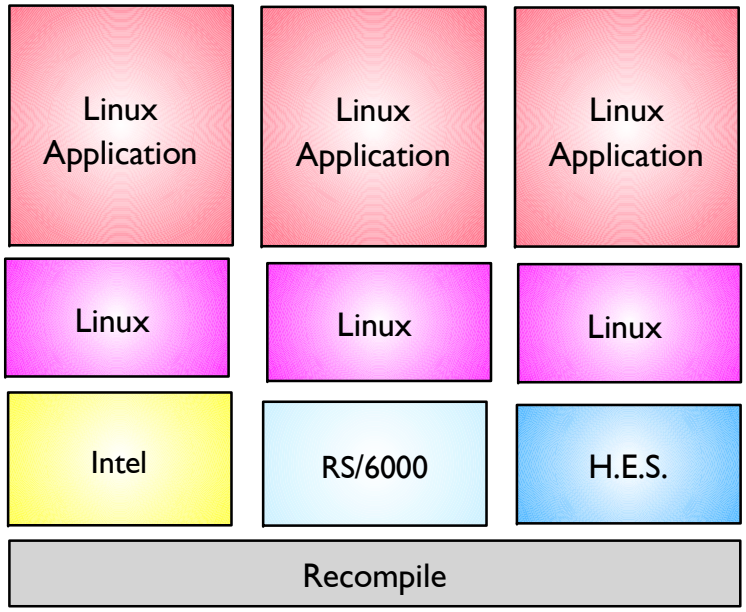
- **Web connectors**
  - **First generation** (1997 onwards): quick, but basic
    - e.g. CICS Web support, IMS, Net.Data,...
  - **Second generation** (1999 onwards): Java & framework
    - e.g. JDBC, SQLJ
    - CCF (Common Connector Framework) part of IBM application framework for e-business
    - Supported by WebSphere and VisualAge for Java
  - **Third generation** (2000 onwards): e-TP and re-use
    - e.g. Enterprise JavaBeans and Java2
- **WebSphere and Java specifics for 2000**
- **Linux**
- **High-end enterprise server Software Value Pricing**

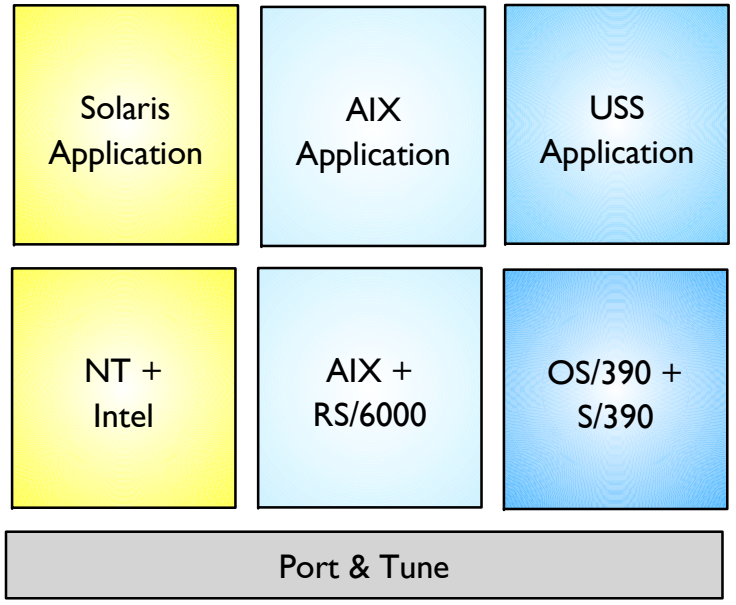
Objetivos principais são rapidez no desenvolvimento e na colocação em produção, e no re-uso de components

WebSphere, Java and EJB ...

- **Start now with WebSphere for S/390**
  - Non-Java: use HTTP server + non-Java connectors
  - Java: use VA Java, servlets, connectors via CCF or direct
- **Build Java skills base now with servlets**
- **Java Virtual Machine on S/390**
  - JDK 1.1.8 (12/99) exploits multiple threads
  - Performance comparable to COBOL and REXX
  - Scalable JVM support 4q00
- **Aim to exploit Java2 EE for advanced e-TP integration and performance (2q00 onwards)**
  - Build EJBs when initial Java skills developed
  - Based on WebSphere EE for OS/390

O Papel do Linux





- Simpler, faster deployment of UNIX applications
- Small kernel, fast execution
- Exploit dual foundation strengths of the high-end enterprise server

H.E.S. = High-end enterprise server

Linux so far...

Domino R5
DB2/Linux
WebSphere
Tivoli
LDK for Java
SAP
Oracle
CA

Linux em OS/390

Applications

- Large selection and ease of deployment

Skills

- Large numbers of highly skilled programmers familiar with Linux

Vendor enthusiasm

- Major ISV / USV efforts for Linux

Implementor enthusiasm

- Emerging interest in large data centers

Reliability

- The most reliable hardware platform available.

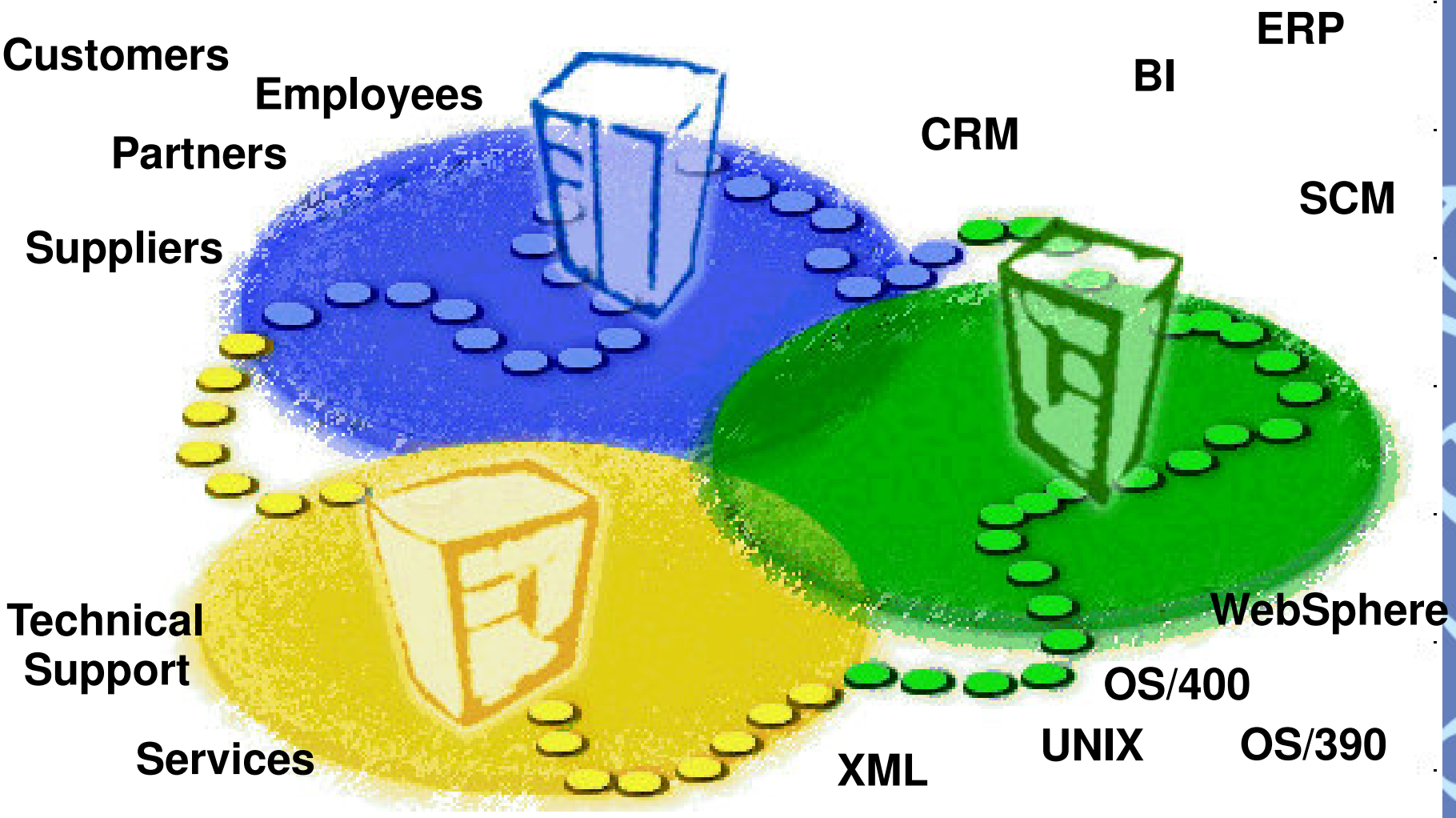
Scalability

- 15 Linux images possible on native hardware with more for VM/ESA customers

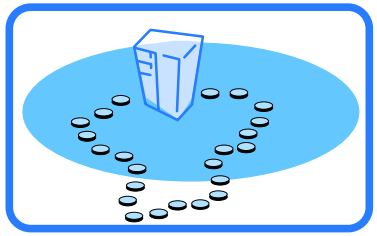
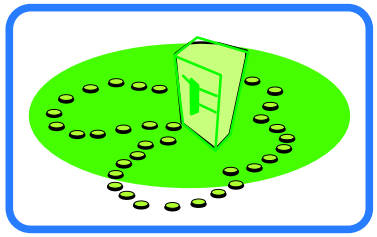
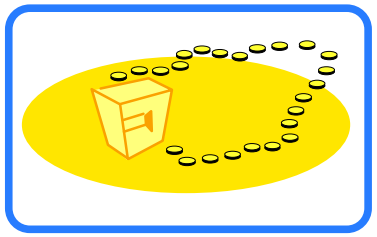
Manageability

- Easier to manage, duplicate and all S/390 systems capabilities

Novas opções para servidores empresariais

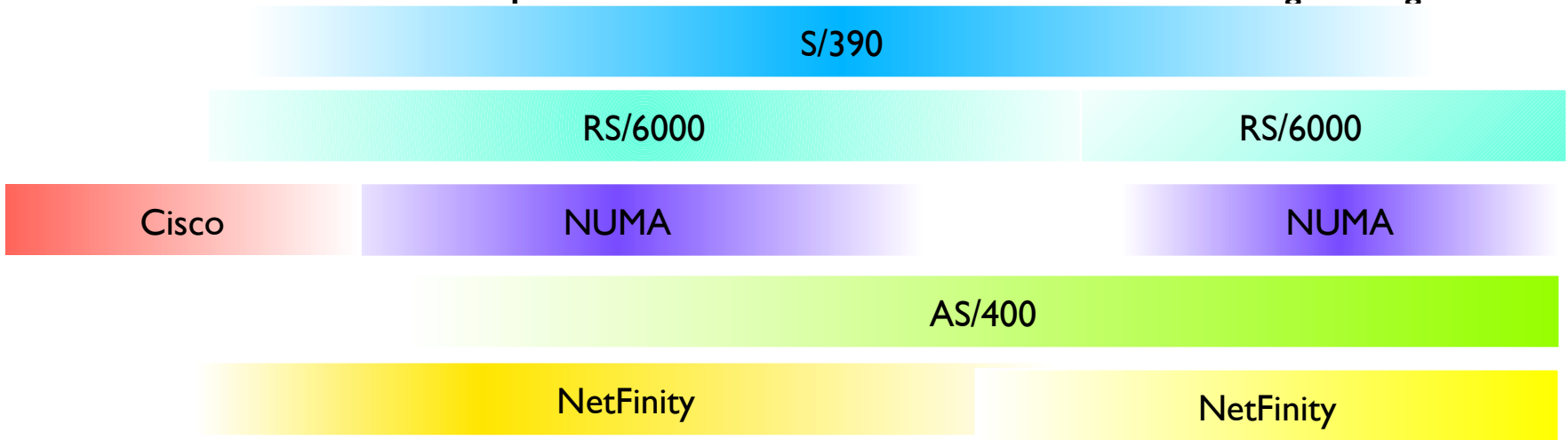


Tipo de cargas nos servidores

Data Transaction Applications		**Complex transactions, Continuous availability**
Web Applications		**Simple transactions, Availability through redundancy**
Special Function Applications		**Dedicated purpose, Optimized functionality**

Características do Servidor

Superclone	Regular clone	e-tp & OLTP	Special Apps
Router	Data warehouse	OLTP CICS/DB2	Remote NT cluster
Gateway	Data mart	e-TP CICS/DB2	Trading desks
IP firewall	e-mail server	ERP tran server	Call centers
Sprayer	Web server	Integrated workflow	Treasury
Web cache	File/print server		Engineering



Send and forget	Read intensive	Read and update	Single application
Read-only	Parallel data	Locking and scope	Special function
Rules driven	Simple function	Business critical	Limited data
		End-to-end security, etc.	

Embed **'Horizontal'** **'Vertical'** **Package**

Fatores técnicos chaves para seleção do servidor

- Business criticality (e.g. high, medium, low)
- Location and bandwidth (e.g. central vs. local dept)
- Common function/cloning (e.g. mail, file/print)
- Quality of service requirements (e.g. 24x7, 99.9%)

- Tight application/database integration (e.g. SAP R/3)
- Multi-application complexity (e.g. data linkages, replication)
- 'Read-only' vs. OLTP update (e.g. web content vs. e -TP)
- Single vs. multiple application constraints
- Platform support for application package

- Current users, transactions/events, growth rate
- Current system utilization % and load growth
- Current operating system, database version

... plus skills, cost, risk, speed

Infraestrutura de e-business: principais lições

- **Outages and response time highly visible to customers**
- **Volatile "round-the-clock" e-business workloads**
  - 10:1 spikes common, 5:1 typical peak to average
  - Low average utilization, with hotspots. Intense monitoring
  - Increasing impact of spikes on back-end OLTP systems
- **Systems and applications usually designed for "average workloads"**
- **Significant skill shortages, wide and deep technical skills needed**
- **Service delivery people cost dominates total systems cost**
  - Lack of integrated end-to-end systems management process and tools
  - Increasingly difficult end-to-end problem determination
- **Operator error continues to be the leading cause of downtime**
- **Hardware floor-space limits . . . need higher racks !!**

e-business integration requirements

- Real 24x7 service. No scheduled outages, end-to-end continuous access to data
- Load balancing of very spiky transaction rates that impact both the front and back-end server systems
- Highly compressed multi-transaction end-to-end response times
- Sustained high security of the enterprise "crown jewels"
  - Hardware crypto, workload isolation, security manager
- Automated systems management, backup, disaster and recovery
- Very rapid development and deployment
- Consistent standards, development tools and code compatibility across platforms
- Affordable end-to-end total service delivery cost

Os próximos passos são ...

- **Build a strategic e-business IT infrastructure blueprint and migration plan, considering**
  - WebSphere, connectors, VisualAge for Java
  - OS/390, Linux, AIX, Solaris and NT applications
  - Interim 'stepping stone' infrastructure
  - TCP/IP exploitation on S/390
- **Review key next step e-business applications vs. blueprint and server component selection criteria**
- **Initiate key e-TP pilot projects**
  - WebSphere and Web application servers
- **Ensure that key systems software and hardware components are all at the appropriate current release levels**
  - OS/390, DB2, CICS, AIX
  - S/390 HW and features

Eventos

- Wildfire Webcast
  - realizado em 2 de maio
  - http://www.ibm.com/s390/webcast
- S/390 e-business Conference
  - dia 6 de Junho no Hotel Transamerica - SP
- Eventos do ITSO
  - 29/5 a 2/6: VisualAge for Java and WebSphere/390
  - Outros no segundo semestre de 2000
- Novo RedBook: SG24-5755-00
  - Servlet and JSP Programming with IBM WebSphere Studio and VisualAge for Java
- Exploradores do OS/390
  - Brasilia (11/5), São Paulo(19/5) e Rio (22/5)