

# **Building the Enterprise Solution**

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## **Agenda**

- Trends and indicators
- The essence of enterprise networks
- How can Nortel help?

### **Trends and Indicators**

1980 business model 2000 business model

Traditional applications — Multimedia applications

LAN or WAN \_\_\_\_ LAN and WAN

Private or public Private and public

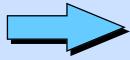
Closed — Open

Our role is changing from:

Manager of the network Agent of change

## Trend #1 Characteristics of Corporate Business

1980 business model



2000 business model

Geographic concept

Centralization

**Polymorphic** 

**Isolationism** 

Not invented here

Self-sufficient

Control

Rigid

communications

**Replication of resources** 

Business concept
Any place / any time
Isomorphic

Low boundaries

**Networks of trust** 

**Outsource** 

Coordination

Flexible, networked

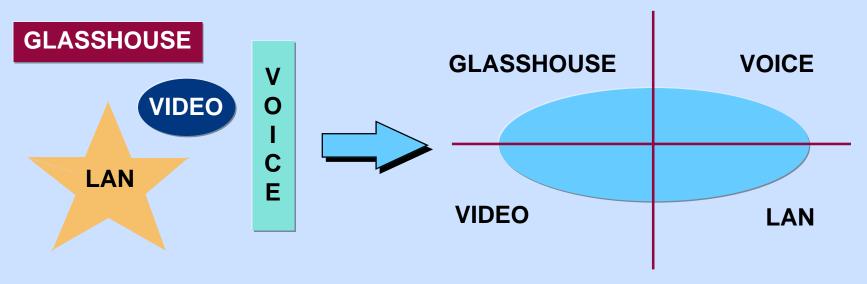
communications

**Economies of scale** 

## Trend #2 Traditional



### **Multimedia Applications**



- Separate networks
- Separate budgets
- Separate organization
- Reactive integration

- Consolidated multimedia desktops
- Multiple traffic flows versus time
- Multiple priorities
- High-velocity applications

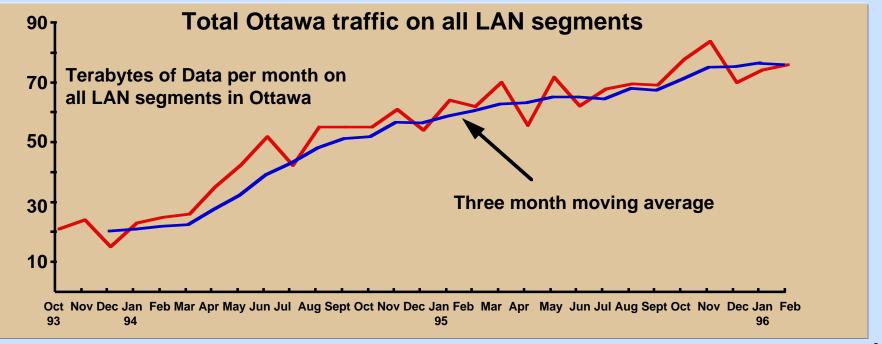
User application demands + flat budget constraint = need for cost-effective dynamic bandwidth

### **Traffic Growth**

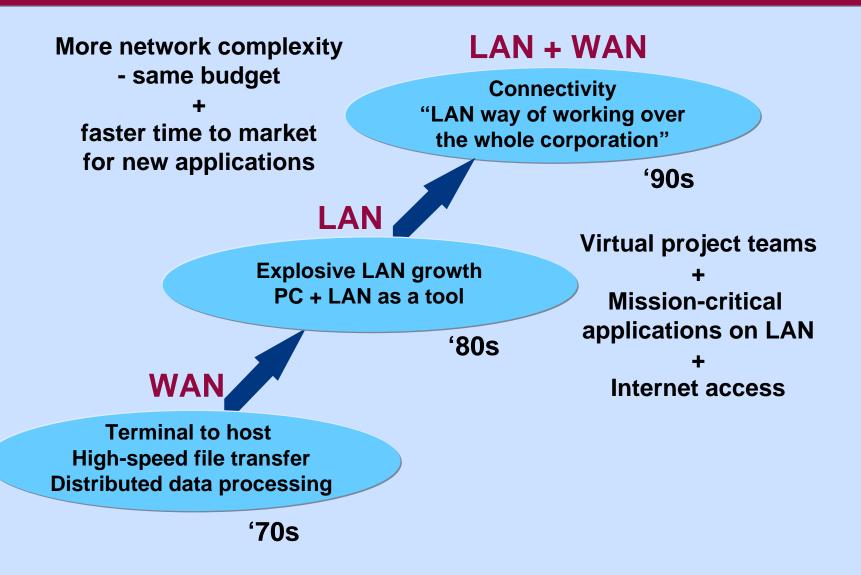
- Desktop power increasing
- Multimedia (including voice integration)
- Application functionality richness growth
- Globalization and larger communities of interest
- Graphics/image orientation
- World Wide Web

The traffic on BNR's network in Ottawa exceeds 2,000,000,000,000 bytes (2 terabytes) per day

Data network traffic growth: 300% per year



## Trend #3 LAN or WAN — LAN and WAN



## Trend #4 Private Line Virtual Private Line

powerful protocols bandwidth efficiency geographic reach flexible services network control evolution security

simple services

powerful protocols
bandwidth efficiency
geographic reach
flexible services
network control
evolution
security
virtual networking
new technology

**Private** 

**Public** 

**Private/Public** 

- Complexity of decision making increasing
- Interoperability standards important
- Evolution is key

## Trend #5 Closed — Open

#### **CLOSED**

- Proprietary architecture
- Focused on one application
- In-house network

Dominant vendors

#### **OPEN**

- Best-in-class
- Open standards
- Multi-vendor
- Multi-region internetworking with partners
- Responsive vendors

### The Challenge of Enterprise Networking

#### **Organizational dynamics**

- Flattening org structures
- Telecommuting
- Internet growth
- PC and client/server proliferation
- Cost containment
- Competitive pressure

#### Many networks have developed...

- Separate data, voice, and video networks
- Overlapping technologies, staff
- Expensive
- Impedes innovations

#### **Network dynamics**

- Explosive data growth
- Changing economics with ATM and frame relay
- High-performance requirements

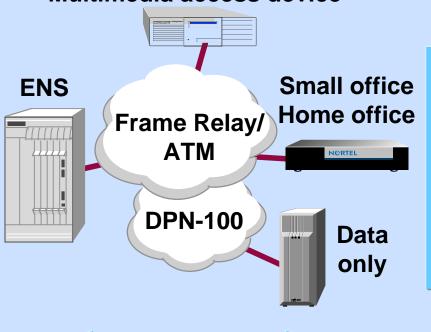
#### **Essence of this business**

- Cost-effective use of bandwidth
- Flexible wide area connectivity
- Open multi-vendor networking
- Evolution to ATM

## Corporations must use technology to create competitive advantage

## **Building Solutions for the Enterprise of the Future**

#### Multimedia access device

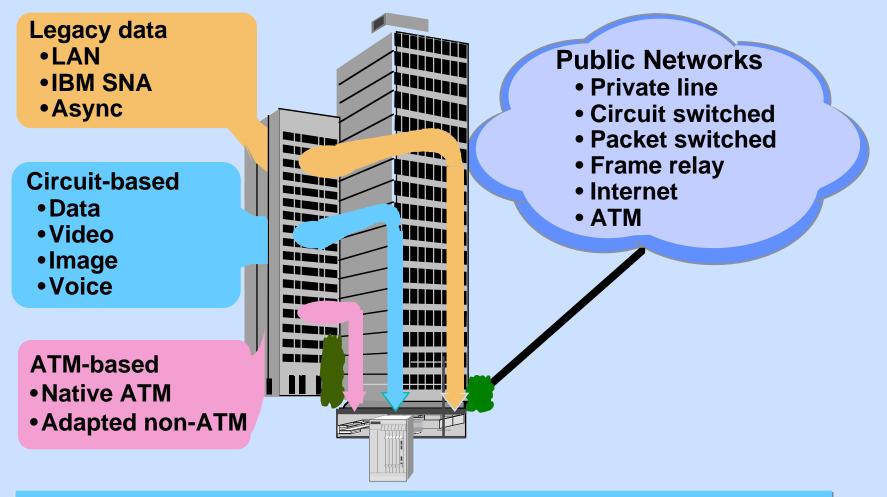


- Multimedia consolidation
- Campus/in-building Magellan values
- At the branch with Magellan
- At home, on the road with Rapport
- Flexible connectivity

**Network Management** 

The Magellan vision applies across your entire network

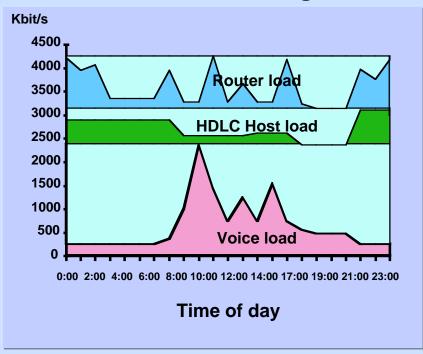
### **Multimedia Consolidation**



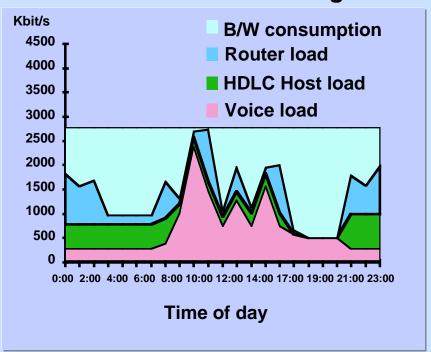
Passport bandwidth management brings compelling economics

## **Cell-based Bandwidth Management**

1980 Fixed bandwidth management

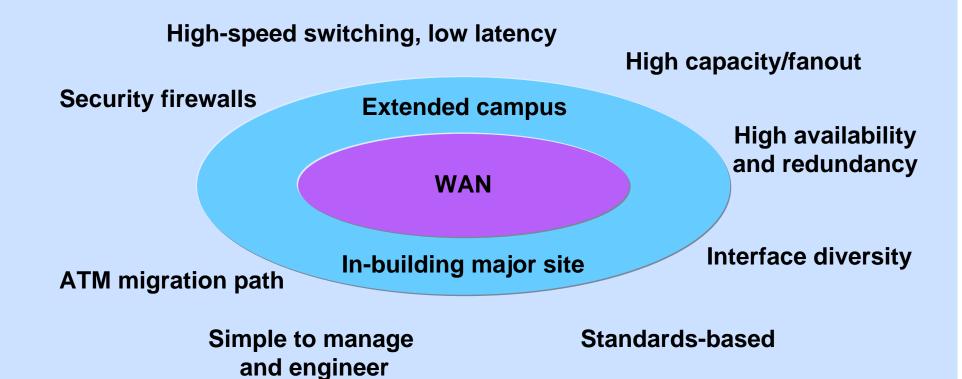


#### 2000 Cell-based bandwidth management



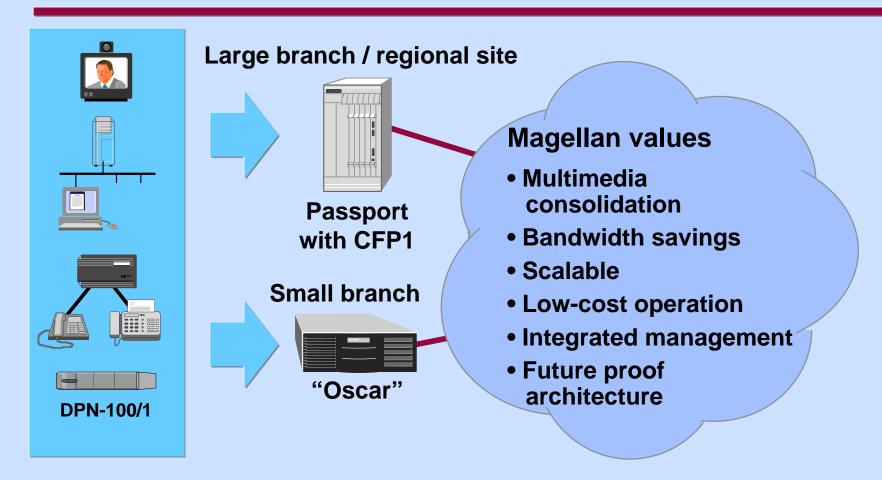
1996 Datacomm Hot Product Award

## Campus/In-Building Magellan Values



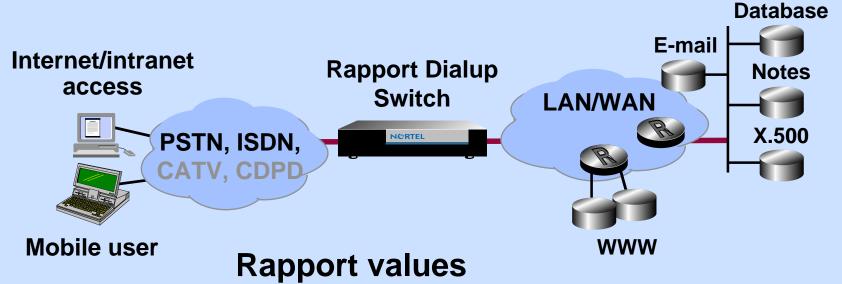
"A LAN way of working over the whole corporation"

## At the Branch with Magellan



**Extending Magellan's value set to the branch** 

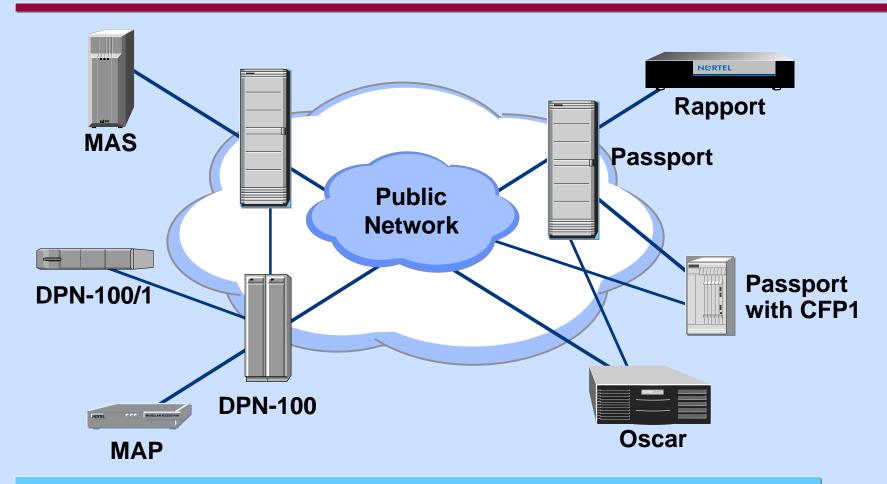
## At Home, on the Road with Rapport



- Highly scalable portfolio
- High performance
- Integrated service management
- Dependable, carrier-grade

### Flexible, robust Internet access

## **Flexible Connectivity**



Optimized use of dedicated and public network services

## Nortel Can Help You Become an Agent of Change

- 2000 Business Model
- Multimedia applications
- LAN and WAN
- Private and public
- Open
- Agent of change



- Cost-effective use of bandwidth
- Flexible wide-area connectivity
- Open multi-vendor networking
- Evolution to ATM