This presentation outlines Multimedia Networks' strategic directions through an examination of Magellan's commitment to the success of our customers.

The Magellan mission, and the significant steps taken over the past year are reviewed in the context of the key challenges and opportunities faced by enterprises and service providers.

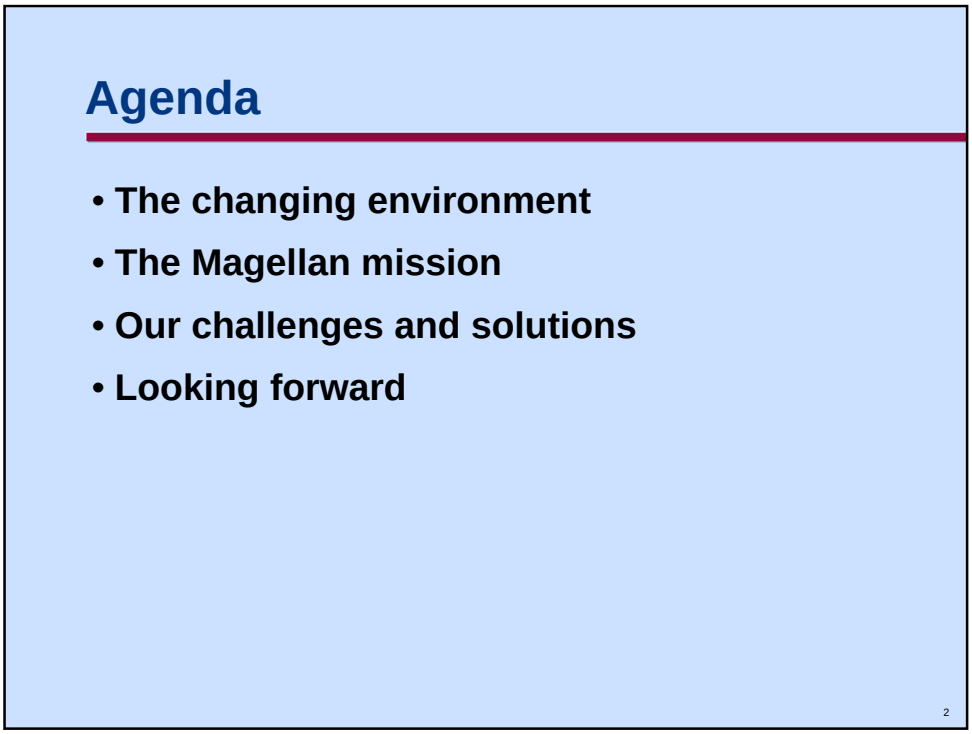
About the presenter:

Klaus M. Buechner is group vice president, Multimedia Networks, Multimedia Communications Systems, and is based in Mississauga, Ontario.

He is responsible for Nortel's global Magellan data and broadband access and backbone switching systems businesses.

Mr. Buechner joined Nortel in 1967, and has held a number of executive positions with Nortel and its subsidiaries. Most recently, he served two years each as vice president, Multimedia Business Products; vice-president, business development, Multimedia Communications Systems; vice president, product performance, Nortel. In addition he spent three years in World Trade as managing director, Northern Telecom GmbH, Nortel's subsidiary in West Germany; and served four years as group vice-president, office products, Nortel Technology (formerly BNR).

Mr. Buechner, who was born in Freiburg, Germany, is an electrical engineering graduate of Carleton University, Ottawa, Ontario.



The changing environment

Major change is currently occupying center stage in the telecommunications industry; rapid technological evolution and the general liberalization of communications markets around the world. These two driving forces, along with the market and business dynamics, accentuate the challenges and opportunities faced by many organizations. Our goal is to assist our customers in embracing change rather than simply adapting.

The Magellan mission

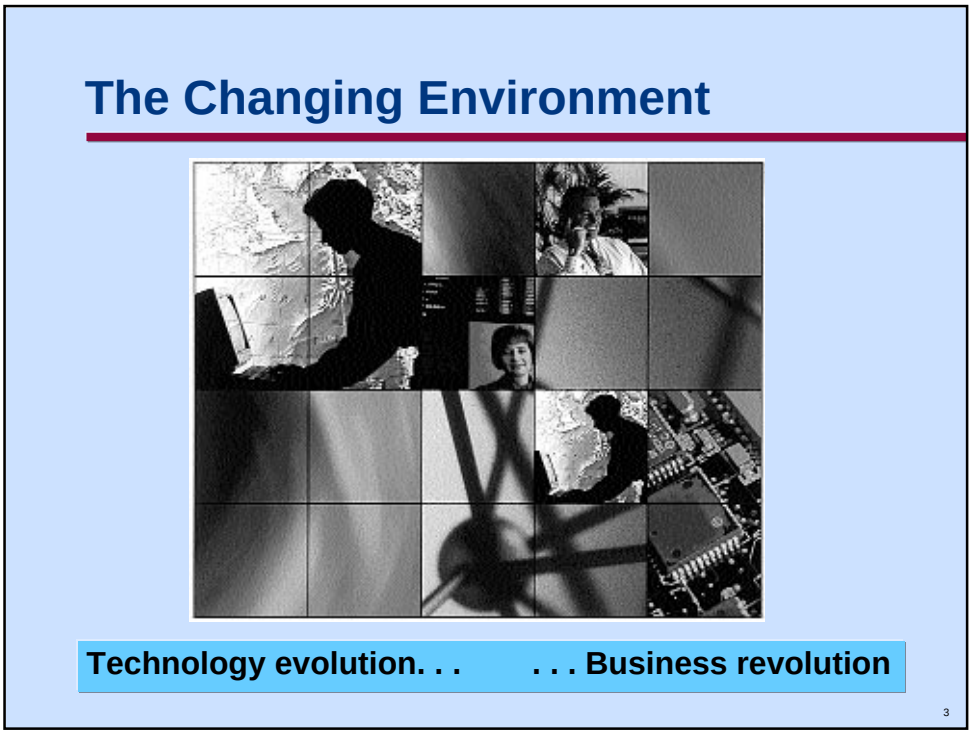
Nortel has a vision of creating an enterprise networking future where placing a multimedia call is as simple and cost-effective, and even more reliable and more secure, than a telephone call is today. Magellan's role is to assist our customers in designing, building and integrating networks to meet the application demands of end users.

Our challenges and solutions

Working as partners, the business and networking challenges we face are intertwined. This presentation will highlight real examples of the challenges/opportunities facing both enterprises and service providers, along with the solutions implemented. Product and business priorities for '96 to address these challenges will also be reviewed. Our solutions are focused on meeting the evolving enterprise communications needs via private, public, hybrid and virtual networks.

Looking forward

Looking forward, beyond 1996, we must envision how business will be done and the role of networking—we will share our view of Magellan's role.



The changing environment can be described as: Technology evolution . . . Business revolution. What does it mean it the context of the telecommunications industry and your business?

- Globalization of business - massive carrier partnerships and implementation of global private networks, including our own Nortel network
- Explosion of Internet access - electronic commerce—and the need for security (fire walls, encryption)
- World-wide growth of frame relay - recognizing that technology can help manage costs
- Deregulation - market entry of a new breed of competitive carriers (some from vertical industries)—trend of international alliances of phone companies, as they team up to compete more effectively in the newly liberalized telephone markets around the world
- Growth in networking options (private, public, hybrid, virtual) and complexity - increase in network outsourcing and decisions by business to focus on their core competencies, as demonstrated by the Eastman Kodak company
- Rising expectations from end users to 'do it faster, better and cheaper' - increased pressure on standards organizations and demand for compliance

Nortel Magellan can assist in harnessing these changes to transform them into opportunities. To take advantage of these changes we must take new approaches to doing business.

We are changing the way we do business

- focusing on understanding the values that are important to you, to ensure we meet your expectations and ultimately increase your satisfaction. Magellan's implementation of the Nortel Customer First program, has begun to identify your key business and networking values, measure your level of satisfaction with our performance, and align our business strategies to these core values
- engaging customers to develop high value products, i.e. ATM concept trials

We are partnering with leading industry vendors and other Nortel business units

- to offer better solutions in a responsive manner. Our strategic partners - FORE Systems, Shiva, NSC, X-CEL, SUN Microsystems, and Cabletron enable us to offer industry-leading capability sets in wide area networking, end-to-end ATM solutions, and the ability to jointly present, deploy and support best-in-class networking solutions
- we are also partnering with other Nortel organizations to provide complete solutions, i.e. Meridian Passport and Cornerstone residential broadband products
- these two groups of partners enable us to deliver a 'best-in-class' capability set—defined as meeting your end-to-end WAN communication needs

We are offering solutions that enable large network growth

- by eliminating barriers to growth, both in terms of product functionality (i.e. routing, network management, system performance) and rapid deployment

We have maintained our technical strategy

- offering products that enable a seamless evolution from X.25 to frame relay to ATM

Managing change in the telecom industry is a way of life. But while change may be constant, the rate of change varies. The one constant in our environment is our focus on our mission.

Our mission states:

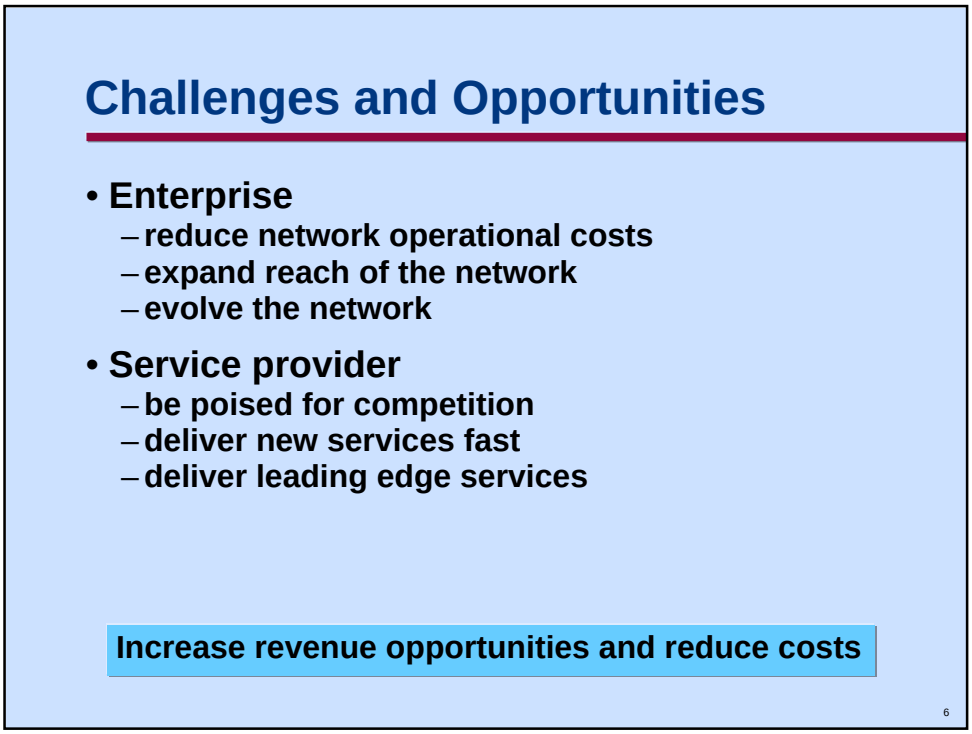
We will focus on our expertise in networks—designing, building and integrating mission-critical, multimedia communication networks for business enterprises and service providers around the world.

In 1995 we took significant steps towards achieving our mission:

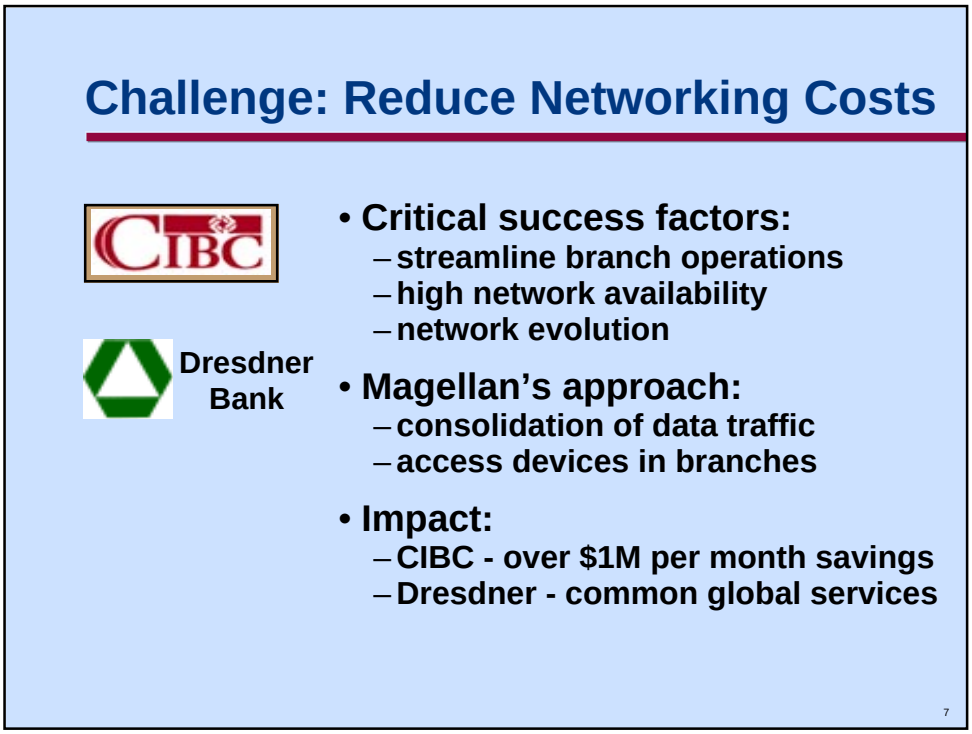
We said we would focus on enterprise requirements. We have delivered and will continue to offer the "best-in-class" solutions that have made many of you successful and in turn positioned us in the past year as the multimedia WAN vendor of choice. Specifically Passport, our enterprise network switch, has enabled the delivery of a spectrum of services across the wide area (whether in a private network or via public service offering) while addressing the need to use static resources more effectively. As a result, the industry recognized Passport with four major awards/shortlists in 1995: *Data Communications* magazine's "Hot Product of the Year Award", Interop "Best-of-Show" award, Network World shortlists for ATM/ENS and Bandwidth Manager.

As the deployment of frame relay exploded worldwide—in terms of the number of ports in service, number of competitive service offerings introduced, and enhancements, we delivered our industrial-strength Magellan frame relay service to more than 30 service providers worldwide, and to more than 75 Passport customers.

To enable the provision of multimedia ATM enterprise services, in combination with our partner FORE Systems, we delivered Vector and voice-over-ATM on Passport.



So how has Nortel and Magellan assisted you in increasing your revenue opportunities and reducing costs? We have selected some real world examples to highlight a few of the challenges/opportunities and how we worked together in 1995. In each category we will also cover how we will continue to work with you in 1996 to position both of us in a leadership position. Let's focus first on enterprise needs and solutions and then on service provider challenges in the new competitive arena.



Many network planners face the challenge of how to evolve their network and support existing packet and frame-based services cost-effectively. Operating in very different financial markets, two of our banking customers faced this issue: the Canadian Imperial Bank of Commerce (CIBC), the second largest bank in Canada providing a broad base of financial services, and Dresdner Bank, the second largest bank in Germany with a primary focus on large industrial clients.

Challenge:

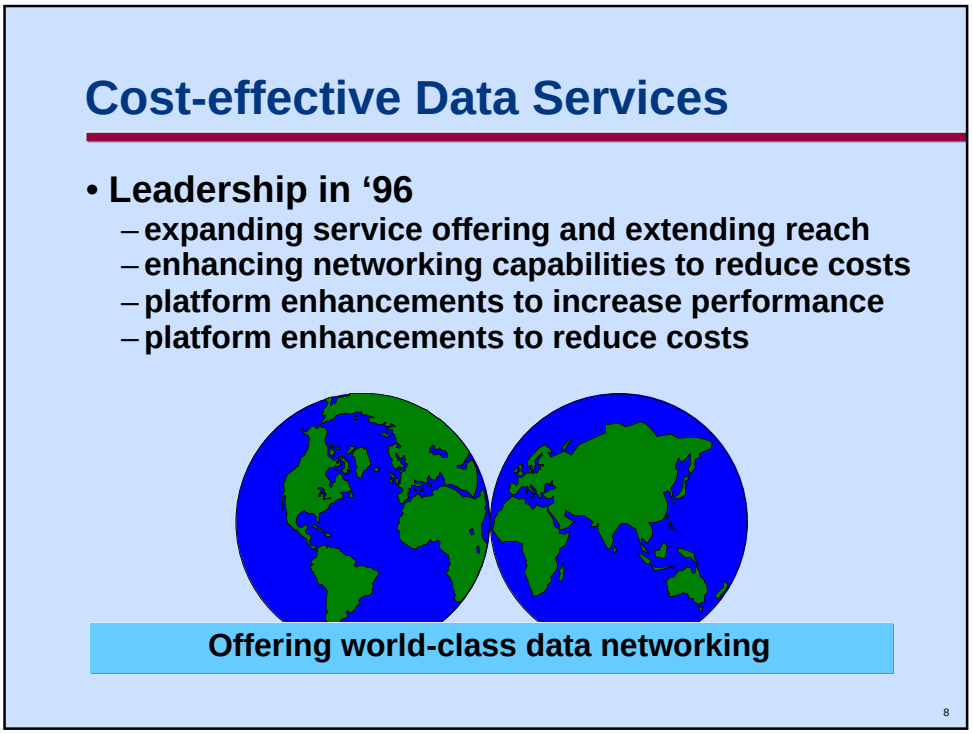
- CIBC was looking to: streamline operations amongst its 1200+ retail branches through electronic delivery of customer services; and reduce networking costs through data application consolidation amongst its branches and central processing sites. Of critical importance was ensuring high network availability for mission-critical applications running over SNA (primarily SDLC to token ring), ITI and X.25, and quick response time.
- Similarly, Dresdner bank aimed to offer equivalent financial services to all its branches and provide improved access to the EDP centers of the bank, including those in Germany, and those spanning the globe from Shenzen to Tokyo. With a flat networking budget, Dresdner faced the challenge of how its network could facilitate offering worldwide services to its customers cost-effectively when data traffic volumes were growing tremendously. Customer use of Dresdner Bank's services resulted in the internal data traffic doubling in the past year (from 100 Gigabytes to 210 Gigabytes).

Magellan's approach:

- For CIBC, the Magellan Access Switch was deployed in 1200 branches (over seven months in 1995) to consolidate data traffic of automated banking machines with branch-based network traffic. Presently, point-of-sale traffic is also being consolidated.
- For Dresdner Bank, access modules (including DPN-100/1, DPN-100/5 and MAS) were deployed across the network to support X.25 and native SNA data from branch applications, EDP, and stock exchange transactions.

Impact:

- CIBC generated operational savings in excess of $1 million per month. CIBC is continuing with its integration of X.25, SNA services and ITI services to deliver electronic bank services nationwide.
- Dresdner Bank achieved its goal of offering equivalent services of the highest quality to all branches and their customers with a flat networking budget.



The number of customers using DPN-100 and MAS has doubled in under two years to more than 250 customers. The 10,000th MAS was shipped in August. Industry consultants, such as International Data Corporation and Dataquest continue to recognize the DPN-100 portfolio as market leader in both revenues and units shipped.

We will continue to leverage our leadership position in offering you proven, best-in-class, standards-based data services that are cost-effective. Magellan will focus on enhancing the platforms, the networking capability, and ability to interface with other networks. In '96 we will focus on the following items:

Expanding service offering and extending reach with:

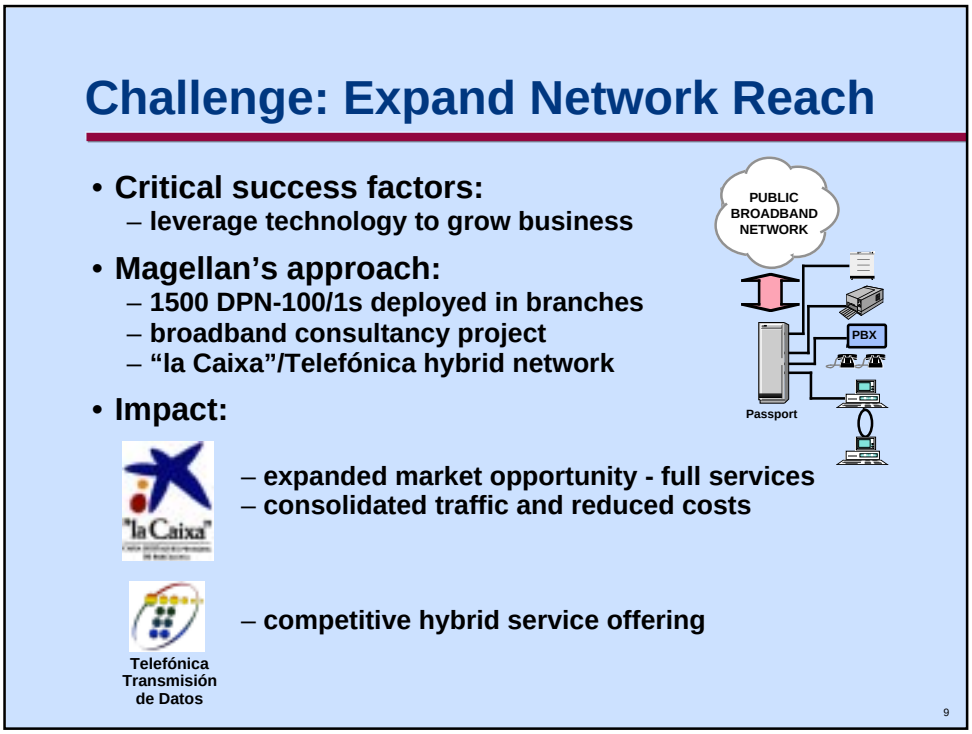
- remote LAN access and Internet traffic support with an async point-to-point (PPP) PAD supported on the MI-8 integrated modem PI and V.24 PI in MAS and DPN-100
- Magellan switching capabilities are extended economically into very small sites for low speed network access with the new Magellan Access Pad (MAP)
- full frame relay support across all platforms with the addition of frame relay to DPN-100/1 and MAP, as an access service and transport method (to interconnect modules across public frame relay networks instead of leased lines)

Enhancing networking capabilities to reduce costs:

- bandwidth-on-demand (BWOD) capability added to UTP network links, in combination with DBNL to ensure optimum use of leased lines and high availability
- adding ISDN PI to accomplish BWOD and DBNL functionality across public ISDN facilities to increase reliability and ease of implementation
- UTP network links over frame relay completed across all platforms (added to DPN-100/1 and MAP) leveraging the economics of frame relay versus leased lines

Platform enhancements to increase performance and cost savings:

- MAS high performance processing element (HPPE) and the enhanced primary rate peripheral interface (EPR PI) introduced in February of this year for high performance and high speed
- MI-8 integrated modem PI provides cost and footprint savings, central management and integrated high-density modem pool



Like Spain's "la Caixa", many of you are faced with expanding the reach of your network to deliver more comprehensive services to smaller sites and new markets. "la Caixa" was confronted not only with how to expand the physical reach of its banking network, but also how to expand the array of services offered to its 7 million banking clients.

Critical success factors:

"la Caixa" wanted to make efficient use of technology to grow the business and gain competitive advantage. Mr. Antoni Massanell, Executive Vice-Presdent of "la Caixa" told us "Broadband is coming. I do not want to learn about this technology watching how my competition makes good use of it".

Magellan's approach:

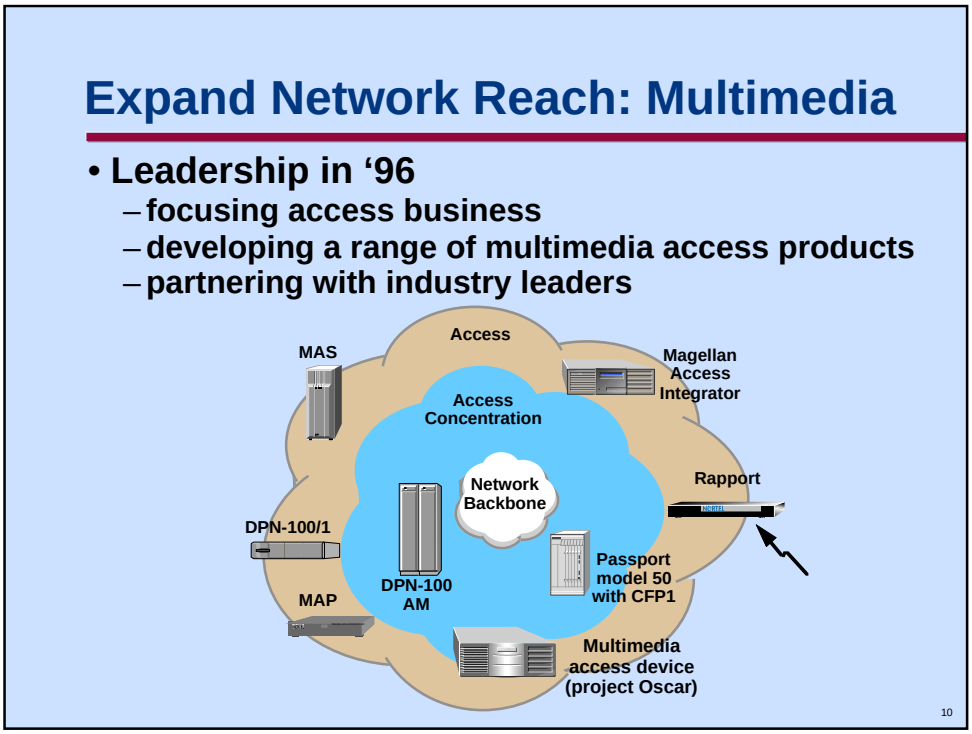
"la Caixa's" narrowband data packet switching network architecture was completed in '94 with the deployment of 1500 Magellan DPN-100/1 nodes in branches.

To facilitate the deployment of leading-edge multimedia banking services, Nortel worked with "la Caixa" on a consultancy project to advise on possible broadband networking alternatives. As a result of successful Passport trials and negotiations with Telefonica, the decision to migrate the network to a hybrid configuration was made using Telefonica's public switching network (Red Uno), also built with Magellan technology.

The hybrid configuration offers a reduction in operational costs and simplified maintenance, while leaving the control and management of the original private network in the hands of "la Caixa". This network will support the delivery of services, such as Servicaixa, which enable "la Caixa's" customers to purchase theatre and football tickets; bid in auctions; pay utility and telephone bills; or even purchase real estate. New services, like Fonocaixa, enabling a wide range of banking transactions from home or the office are also being introduced. The network will also be used to support the bank's internal administration, including such applications as Lotus Notes, e-mail, etc.

Impact:

- The "la Caixa"/Telefonica hybrid network based on DPN-100 and Passport technology enables "la Caixa" to provide new services to its branches. The network is able to run high bandwidth-demanding applications and test new multimedia banking tools without increasing operational costs
- Telefonica has expanded its competitive hybrid service offering



Recognizing the need to support new multimedia business applications, the requirements placed on access devices has expanded to include LAN internetworking, voice and video, and SNA.

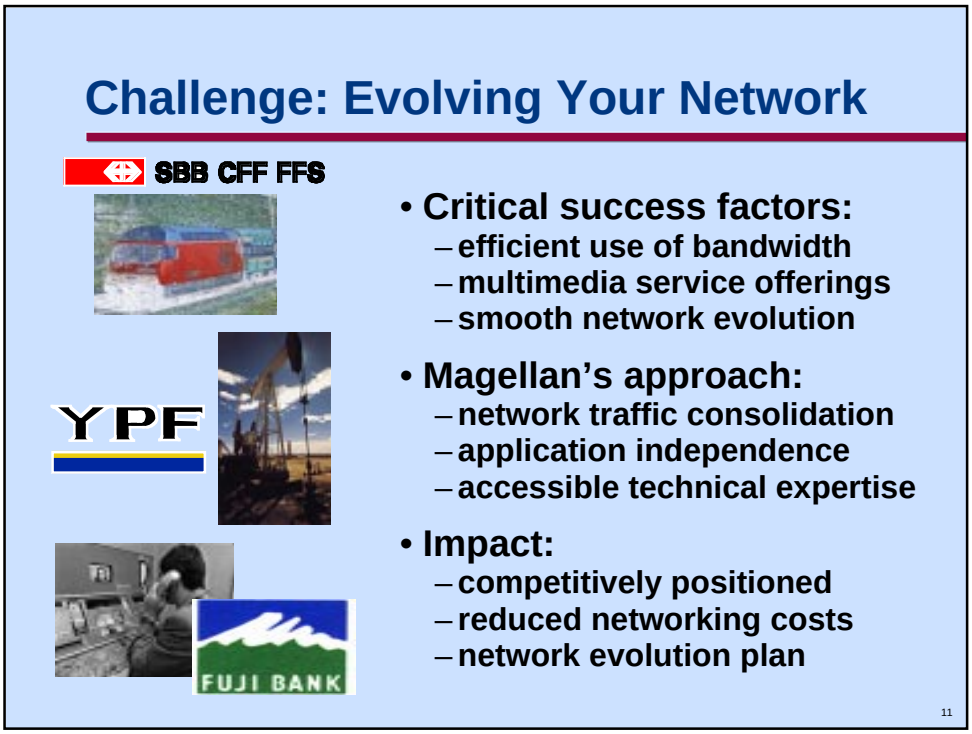
Focusing on the access business

- Within the Magellan organization we have consolidated the access networking products in one organization with the mandate to introduce a full range of products.

A rapidly expanding range of access products

- Magellan Access Switch has been enhanced.
- Magellan Access PAD will be introduced in the first quarter of '96 to provide a cost-effective access device for very small sites (supports up to four ports of SNA, X.25 or async).
- Magellan Access Integrator, a multimedia access platform developed by a leading access vendor. This device will provide voice, LAN and data consolidation services to branch environments, facilitating superior bandwidth savings and low cost operation and maintenance.
- To support full multimedia services and more cost-effective access concentration, we have combined CP/FP functionality on a single card and offer the Passport model 50 with CFP1.
- To meet remote LAN access and Internet access requirements, Rapport offers a range of high-performance dialup switches.
- A new multimedia access device (project name "Oscar") will be introduced to extend the values and benefits of Passport to the access layer of the network. Oscar has been designed, with lead customer input, to complement Passport networking solutions.

More information on the complete access portfolio will be covered in later presentations and workshops.



How do you evolve your network to meet an array of end-user demands and manage within your networking budget? Three enterprises who are successfully evolving their networks to meet their specific business demands are: SBB (Swiss Federal Railways), YPF, and Fuji Bank. More information on each of their experiences will be provided in other Inform sessions.

Challenge:

- SBB wanted to combine multiple data networks into a single global data network to support the operation of Switzerland's national railway cost-effectively, to enable the future delivery of multimedia services, and to potentially resell networking services. YPF looked to its network to facilitate the global integration of its businesses in oil and gas (exploration, refining, distribution, trade and sale). Fuji Bank wanted to follow through on their vision that 'multimedia banking' is the wave of the future and ensure Fuji Bank would be at the leading edge.

Critical success factors:

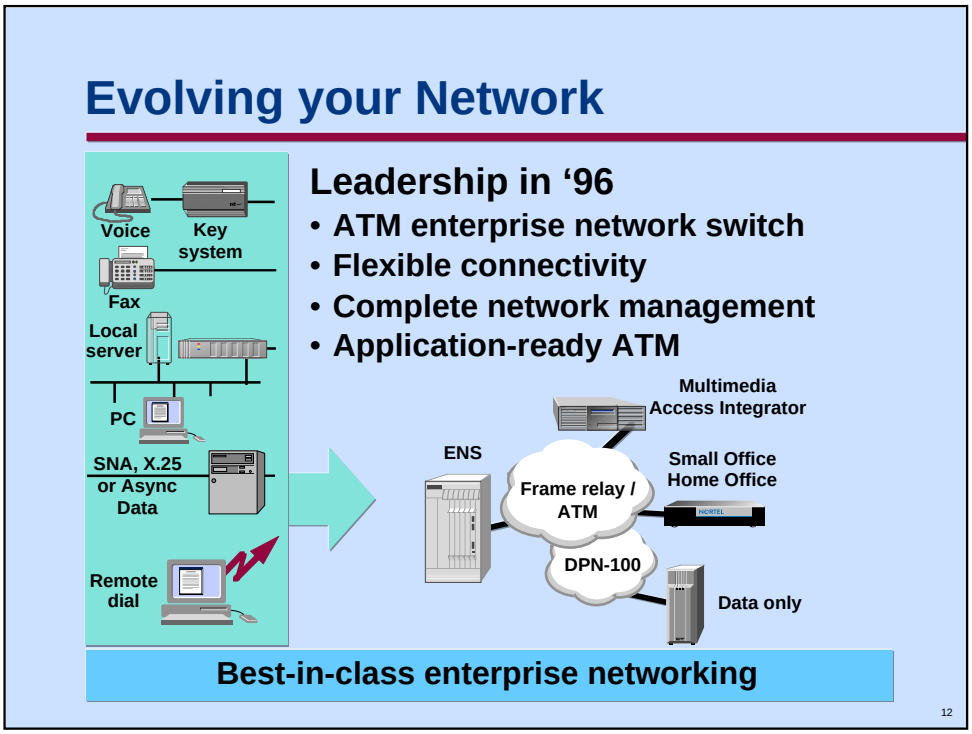
- Efficient use of network resources
- Use leading edge technology, and still meet very high reliability application requirements
- Flexibility to easily adapt to future changes, i.e. new public services—ATM, higher speed lines

Magellan's approach:

- In each case, multiple Passports positioned in the backbone enabled the efficient consolidation of multimedia traffic, limiting the number of separate networks, making effective use of bandwidth, and allowing for new multimedia services to be introduced
- High product reliability via DPN-100 and Passport redundancy features support application availability
- Accessible technical support team available on-site to ensure smooth network deployment

Impact:

- Each enterprise is competitively positioned; whether in the business of providing passenger and freight rail service; exploring, distributing or selling oil and gas worldwide; or providing multimedia banking services
- All experienced reduced networking costs via network consolidation and bandwidth savings via Passport's frame/cell trunking
- Each is able to meet the application demands of today cost-effectively and have available leading-edge technology to meet new application demands



ATM enterprise network switch enhancements - Passport:

- In '95 we made significant progress in the implementation of our multimedia consolidation vision with the rollout of InterLAN Switching and Passport ATM. The only remaining item is in the final stages of testing—complete interworking of all the services. In addition, the application of Passport, by our 130 Passport customers will likely lead to new opportunities in voice, video, and ATM. Today, almost half of you use three or more services underscoring the value of Passport as an ENS providing bandwidth and network consolidation.

Flexible connectivity to meet array of application needs:

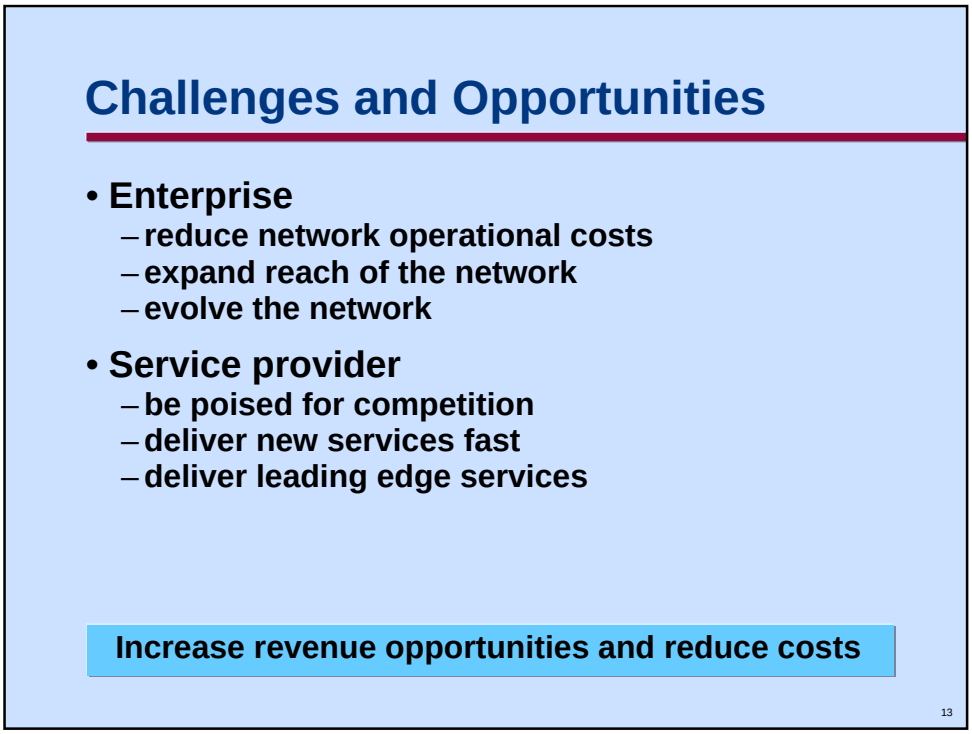
- We will continue to expand the wide area connectivity options of Passport to meet narrowband, wideband and broadband needs. Passport's connectivity options enables the optimum use of dedicated facilities and public network services, a key differentiator over ATM-only network architectures.

Complete network management:

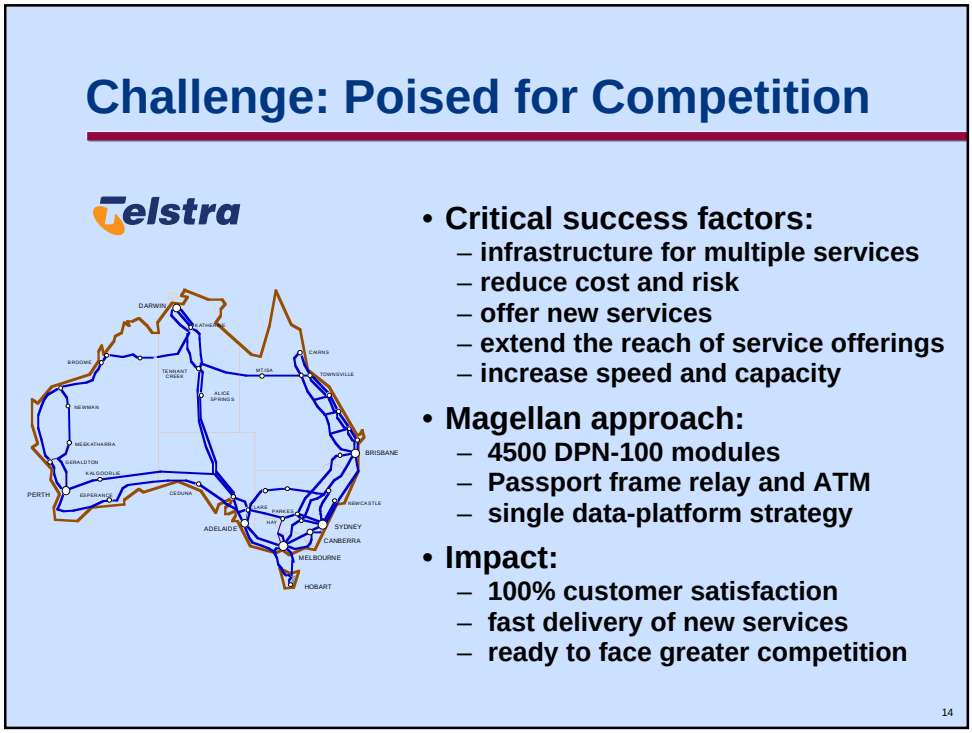
- Our management strategy is based on making the transition from multiple separate networks with multiple management systems to a single network, using standards-based management protocols and industry standard management platforms. In '96 Magellan OMS will be delivered to enable customers to manage their networks using an industry standard open platform. Passport networks will support three different platforms—HP OpenView, Cabletron Spectrum on Windows NT and IBM NetView/ AIX. OMS will complement NMS—our industrial strength management system for complex data networks. Value-added tools (i.e. API's, network reporting, planning and analysis tools) will be available in both OMS and NMS environments. Our management strategy has also evolved to provide end users and service providers with a 'service' view of the network. More details of our management strategy will be provided in several workshops.

Application-ready ATM:

- With the introduction of ATM on Passport, enterprises will be able to deploy ATM based on market demand. Frame relay to ATM service interworking will facilitate the co-existence of the two services in the network and protect the existing investment in frame relay, as well as make optimum use of bandwidth resources.
- We will continue to play a leadership role in the frame relay and ATM forums.



Now, lets review some of the key challenges and opportunities that service providers are confronted with in delivering enterprise networking services.



With deregulation on the horizon in many markets, national service providers are strategizing to be poised for aggressive competition from new entrants. Telstra, the leading Australian service provider is positioning to meet this challenge.

Critical success factors:

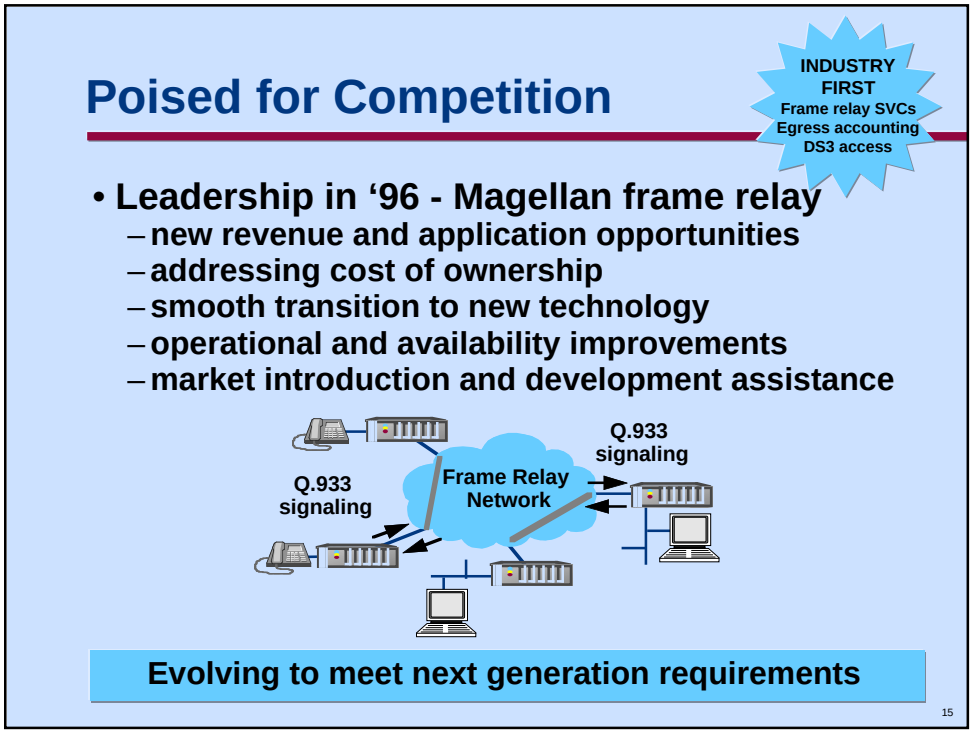
- Delivering data services throughout the vast and remote country of Australia, capable of evolving to higher speeds and capacity to meet market demands
- Meeting increasing customer demand for LAN interconnection and SNA modernization
- Being prepared to deliver new services as the market demands

Magellan approach:

- Recognizing the multi-service capability of Passport, Telstra adopted a single data-platform strategy to deliver reliable multi-protocol data services at lower cost. Working as partners, Telstra and Nortel modernized the AUSTPAC X.25 network using Magellan Passport, DPN-100 and over 4,000 Magellan DPN-100/1s. The AUSTPAC network's national coverage gives Telstra an advantage to new entrants who may only have limited coverage.
- To meet the demand for higher speed trunking and greater switching capacity, 16 Magellan Passport were deployed in a six month period of 1995. During this same period the frame relay service was launched on Telstra's Magellan platform to meet Australian business needs for LAN interconnection and SNA modernization. With 21 Passports now in the network for AUSTPAC and frame relay, Telstra is preparing to further grow this Magellan platform to deliver national ATM services. Following customers trials, the ATM service will be officially launched in late 1996.
- The integration of Magellan products into Telstra's management system for configuration, fault management, security and billing, and the service interworking between frame relay and ATM enables Telstra to offer a national ATM service in less time and at less cost than others will take to offer only limited coverage.

Impact:

- Telstra received 100% customer satisfaction rating during the major network upgrade in 1995, emphasizing what the Telstra/Nortel partnership is capable of achieving.
- Poised to offer new services quickly, cost effectively and at reduced risk as new competitors enter the marketplace
- Lower cost structure due to its single data platform for packet, frame and cell based services
- Both Telstra and Nortel employees were recognized for their efforts on the successful deployment of new services in record time by receiving awards from each organization.



In '95, we saw significant deployment of Magellan frame relay, with over 100% growth by Magellan service providers and implementation by approximately half of our enterprise customers. Passport frame relay has been deployed in every region. Most recently, NewTel, announced the introduction of its frame relay service, under the banner of NEWREACH, in Newfoundland and Labrador, Canada. Passport was selected as the technology for the NEWREACH service because of its flexible architecture to support multiple services, including ATM, and it high availability.

With the global acceptance of frame relay, competition among service provider offerings is intensifying. Service providers are looking to differentiate their services. To meet this need Magellan offers:

New revenue and application opportunities

- With the industry's first frame relay SVCs service providers are able to offer bandwidth on demand, making more effective use of network resources.
- With the introduction of frame relay traffic classes, new traffic types such as voice may be transported over the frame relay network.

Reduction in the cost of ownership

- High fan-in – the number of T1/E1 ports per Passport shelf is doubling

Smooth transition to new technology

- Frame relay to ATM service interworking is being added to provide a graceful transition to an ATM infrastructure and to allow the service providers to extend their service reach.

Operational and availability improvements

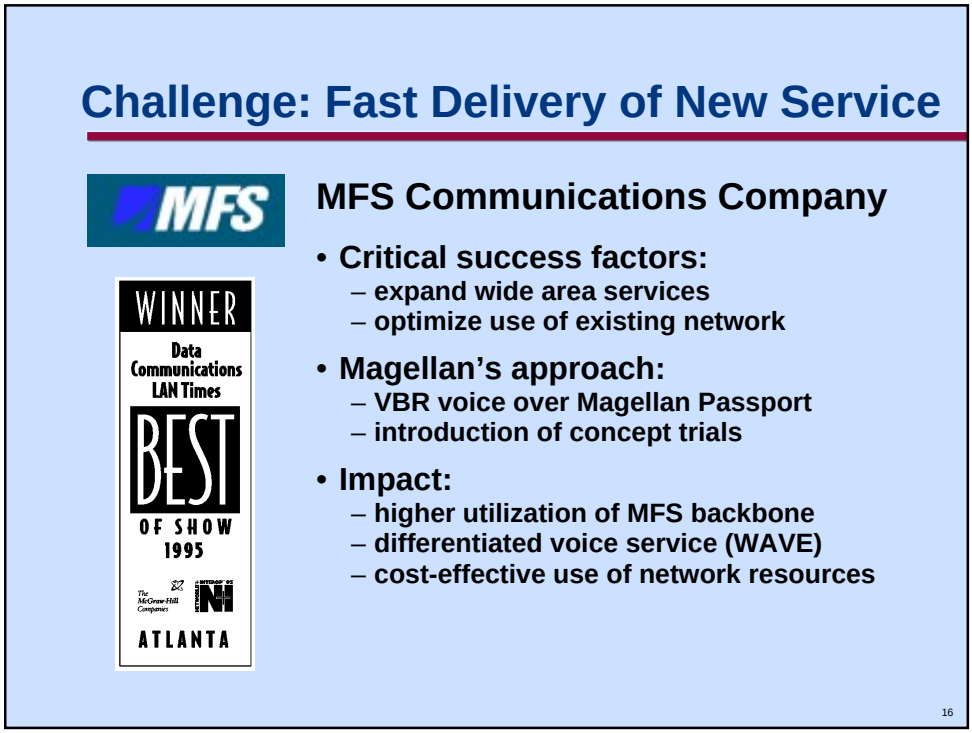
- Automatic UNI and NNI backup via alternate facilities either dedicated or dial-up are being added—with the goal of improving network reliability.

Scalability and growth planning

- Passport model 50 and 160 flexible interfaces and common cards allow service providers to offer both low and high speed frame relay service to suit applications demanded by the users

Market introduction and development assistance

- Nortel continues to take a leadership role in the Frame Relay Forum and ITU-T (formerly CCITT) with active participation in the development of many standards, i.e. UNI and NNI, method for encapsulation of multiple protocols over frame relay, SVC implementation, X.36 and X.76. We are also chairing the Market Development and Education Committee of the Frame Relay Forum. In addition, Magellan has introduced a 'Frame Relay Service Development Guide' to assist in the market introduction of the service. This week we also offer three workshops to communicate the details of service enhancements, as well as, service strategies, and service engineering.



MFS Datanet, an operating company of MFS Communications Company, was looking to expand their market share by offering new wide area networking services using their existing network.

Critical success factors:

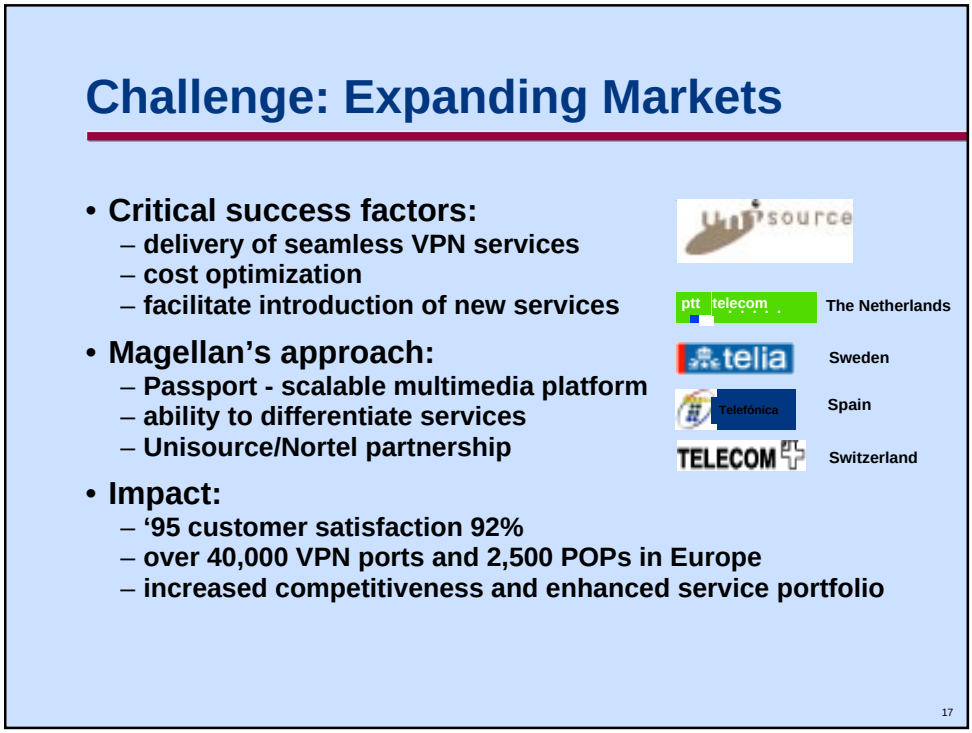
- They faced the challenge of having to determine the best technology (i.e. frame relay, time division multiplexing, SMDS, ATM) and switching products to deliver cost-effective world-wide voice services to complement core LAN connectivity services. Recognizing the competitiveness of the marketplace and wanting to maintain their leadership position in the deployment of ATM services, fast delivery of new services was critical.

Magellan's approach:

- Use of Magellan Passport - the first ATM switch to transport voice as variable bit rate (VBR) traffic, using pre-standard AAL (ATM adaptation layer) developed by Nortel. VBR voice traffic can use the same WAN pipe as VBR data traffic, eliminating the need for network managers to set aside bandwidth for voice alone.
- To meet MFS' needs for fast delivery of this service 'concept trials' with ATM were introduced. This process facilitated aggressive ATM trial activity to in service deployment. The MFS team was fully engaged throughout the development of the services to ensure responsive action to their requirements. Open dialogue, including "warts and hot spots" was fundamental to doing business. The concept trial process was extended globally, resulting in 27 customer trials and 4 in-service networks prior to general availability of Passport ATM.

Impact:

- Using Magellan Passport's bandwidth-saving schemes, MFS is able to achieve higher utilization of existing bandwidth across its backbone, and pass these savings onto its end users.
- Now available in five U.S. cities, MFS' WAVE service (Wide Areas Voice Exchange) lowers the cost of voice calls by as much as 25% compared with tariffs for conventional telecom service. MFS is also able to offer attractive managed bundled services to its customers.
- As a result of MFS' deployment of the first Voice over ATM service, MFS Datanet won the award for Service Innovation at Fall InterOP. MFS Datanet Inc. - "wasted no time in putting leading-edge technology to good use".



Unisource is an alliance created by: PTT Telecom Netherlands, Telia of Sweden, Swiss PTT Telecom, and Telefonica of Spain. Across Europe they have points of presence in over 170 cities. Unisource's mission is to become a leading supplier of telecommunications services to European multi-national customers based in Europe. Relationships with Infonet and AT&T World Partners provides for global extension of services.

Challenge:
Unisource faced the challenge of how to deliver to its large customers seamless, cost-effective, VPN services across Europe, on a one customer, one contract basis.

Critical success factors:
Critical to Unisource was that the networking solutions provided to its customers: have single source provisioning with end-to-end commitments; flexible, guaranteed service and service delivery times; offer high capacity services; and allow for customization of solutions. Unisource's long term goals are to: optimize costs, improve productivity, ensure service reliability, drive service improvements and the introduction of new services (frame relay, voice, ATM).

Magellan's approach:
Unisource and Nortel worked together in partnership to consolidate the separate Magellan networks into one in 1995. Passports have been deployed to provide seamless connectivity across Europe and to allow for network growth. Deploying Passport as the high speed backbone device enables:

- a reduction in the number of RID's;
- increased line speed and performance;
- reduced networking costs; and
- longer term network evolution for voice, voice and data integration, and the introduction of ATM.

Nortel assisted Unisource with the network design and introduction of new network functionality by using local, on-site and research and development support. ServiceMonitor is planned to be introduced in 1996 to facilitate cost-effective service management by customers.

Impact:
The Unisource Group has achieved aggressive coverage within just a few years. It is the first truly Pan-European telecoms company and offers a full spectrum of services including managed bandwidth services, X.25, frame relay, SNA, LAN interconnect, and Internet access. The Magellan network has experienced:

- improved availability, throughput and reduced delays;
- reduced operational costs; and
- service differentiation with the ability to offer managed network offerings and customer network management capability.

Whether offering a single domestic service or multiple services across continents, Magellan will continue to meet your requirements for fast service delivery by:

Involving customers in the design and development process

- Further use of concept trials (pre-gate 2 trials), i.e. frame relay to ATM interworking, particularly with new technologies and strategic features where understanding customer applications is critical to ensuring new products meet specific customer requirements in a timely manner.
- Market trials, such as those completed on ServiceMonitor, is another mechanism used to gain customer input. To improve service management, ServiceMonitor was developed and extensively trialed by several European service providers. This process of strong customer engagement throughout the development process will be continued.

Offering Standards-based solutions

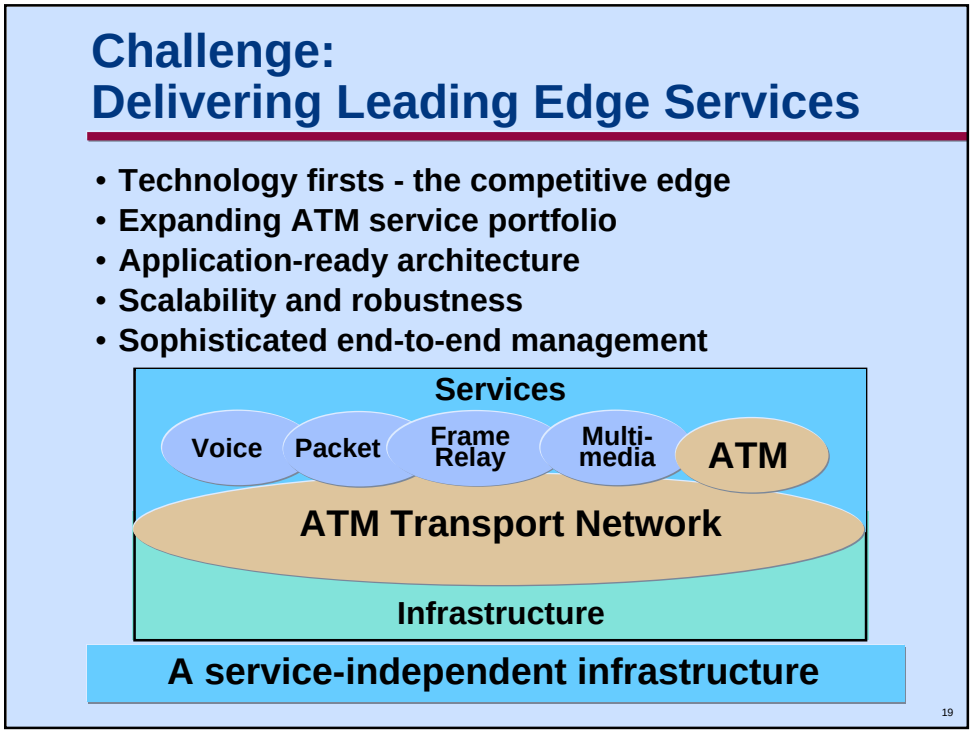
- Given the multi-vendor environment of end users and service providers, Magellan aims for standards-based solutions and complete interoperability testing.
- We continue to play an active role in setting standards – most recently network interworking, frame relay SVCs, and ATM.

Ensuring a rapid deployment capability

- We have the ability to manufacture and deploy large volumes of products. As of April 1996, over 2500 Passports were shipped to over 130 customers.
- We are moving to generic type releases, one new base generic per year, first priority in 1996 has been the complete merge of the two feature sets. Ongoing enhancements to Passport release 3, available this summer, will yield higher performance, fuller functionality and new feature content.

Providing consulting expertise to facilitate technology understanding

- To assist service providers in understanding new technologies and selling services to end customers, Magellan will continue to produce a variety of white papers and work with service providers to produce new service descriptions.



1995 was a year of technology firsts in ATM for many of our customers and Magellan. Since mid 1995, 86 Vector and Concorde systems have been deployed/trialed by twenty-five customers around the world. Those publicly announced include: Sprint, TR Labs, MIT, Argonne, NBTel, Japan Telecom, Worldcom. The move by many service providers to deploy signifies ATM's recognized value as an effective technology to offer multimedia services to enterprises cost-effectively. Nortel recognizes the challenges in delivering leading edge services and has developed a portfolio of ATM products and services to maximize revenue opportunities and minimize costs.

Technology Firsts - offering you the competitive edge through rapid service delivery

- Nortel Magellan offers the most complete ATM product portfolio in the industry for service providers. In the past year we have taken the lead in the marketplace with our partner FORE Systems with several firsts: first VBR Voice over ATM on Passport, first ATM SVCs, several firsts in traffic management - first early packet discard, first smart buffers, first soft PVCs, first LAN CPE integration, first ATM/SONET integration on Concorde. These technology and industry firsts demonstrate our ability to innovate.

Expanding ATM service portfolio for revenue opportunities

- Magellan offers an expanding set of services which now include voice over frame relay and ATM, ATM LAN, and high quality video over ATM to meet your customers' application needs.

Application ready architecture to minimize investment and reduce risk

- Passport's service adaptation capabilities allow new services to be readily deployed.
- Frame relay to ATM interworking (industry compliant) provides a graceful evolution to ATM based on market and application demand, it also allows the continued support of existing investment in frame relay.

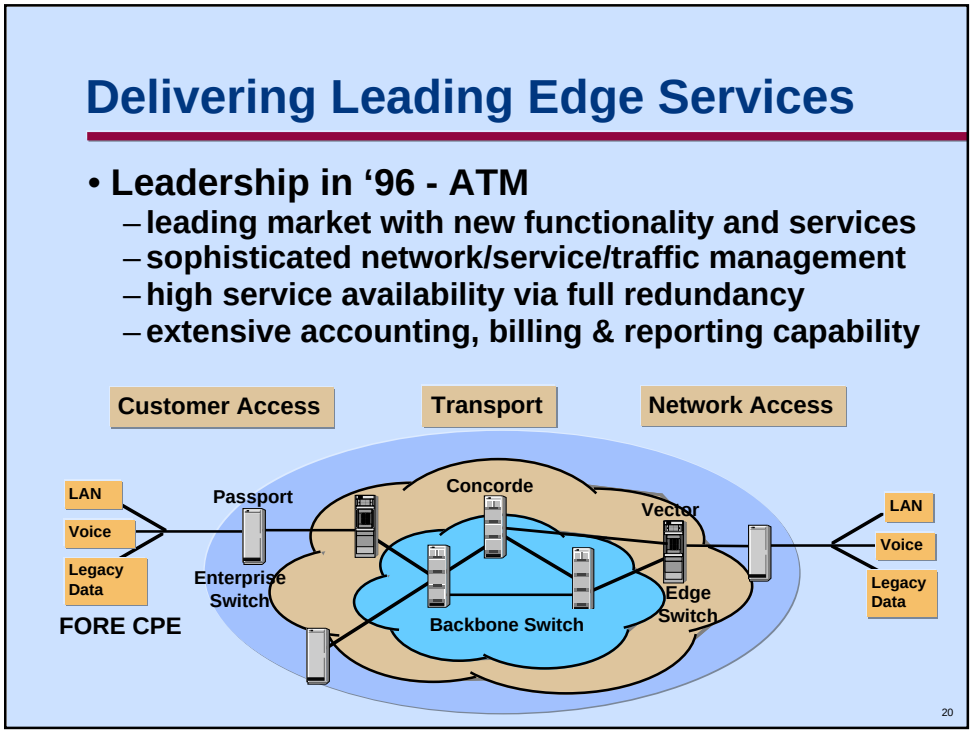
Scalability and robustness to meet service and network demand

- The portfolio is designed to meet a capacity range of up to 80 Gbits/s, accommodate 1000's of network nodes, and ensure the highest availability of 99.998% for services across network - access, edge and backbone. Interworking with FORE Systems industry leading LAN ATM products enables the provision of end-to-end ATM services.

Sophisticated end-to-end management to minimize operational costs

- A unified ATM traffic management capability across Passport, Vector and Concorde allows for service differentiation.

Our vision of providing services is based on a service independent infrastructure using ATM and SONET/SDH technologies as the base infrastructure of the network, enabling end-user deployment of an array of services based on voice, packet, frame relay, video services, and native ATM. This architecture is based on the business fundamental of enabling the service provider to grow revenues through competitive differentiation.



Given the multitude of service specific overlay networks existing today, service providers will be transitioning to or building a network environment where ATM acts as a service-independent layer supporting other services. The integration and management of ATM as an infrastructure technology with SONET/SDH equipment will enable the reduction of operational costs.

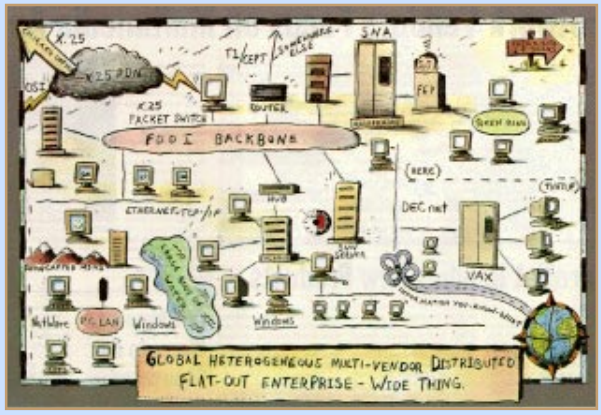
Network Function	ATM Network Elements		
	Enterprise Switch	Access Switch	Backbone Switch
Adaptation Concentration Switching			
Magellan Product	Passport	Vector Passport	Concorde Vector

To accomplish this, Magellan continues to address the adaptation, concentration and switching functions across the layers of the network with its ATM portfolio by:

- **Leading the market with new functionality and services that comply to industry standards and ensure multi-vendor interoperability.** These include: on Passport - the new ATM adaptation circuit emulation service, based on AAL-1 to allow transport of TDM traffic over an ATM network; new ATM cell relay services including soft PVC & SVC ATM-UNI services. On Vector - FUNI and circuit emulation services are being developed. On Concorde - European interfaces and SVC capability will be available this year. Other workshops will review new ATM functionality and services available across Passport, Vector and Concorde.
- **Sophisticated network/service/traffic management to ensure service quality and manageability via Magellan OMS.** It is planned to offer end-to-end provisioning and integrated network display via Magellan OMS. Based on TINA-C standards, Nortel has initiated the Integrated Network Management (INM) project. This program will demonstrate integrated SONET/ATM fault management applications by the end of 1996.
- **Ensuring high service availability via full redundancy of Passport, Vector and Concorde switches.** Full redundancy capability will be available on Passport and Vector this year.
- **Extensive accounting, billing & reporting capability for innovative pricing and customer specific reports.**

The Future Network

- **An Enterprise Network is....**
  "The sum of applications, services and equipment required to meet an organization's communication needs (voice, data, video and image)."
  Or....



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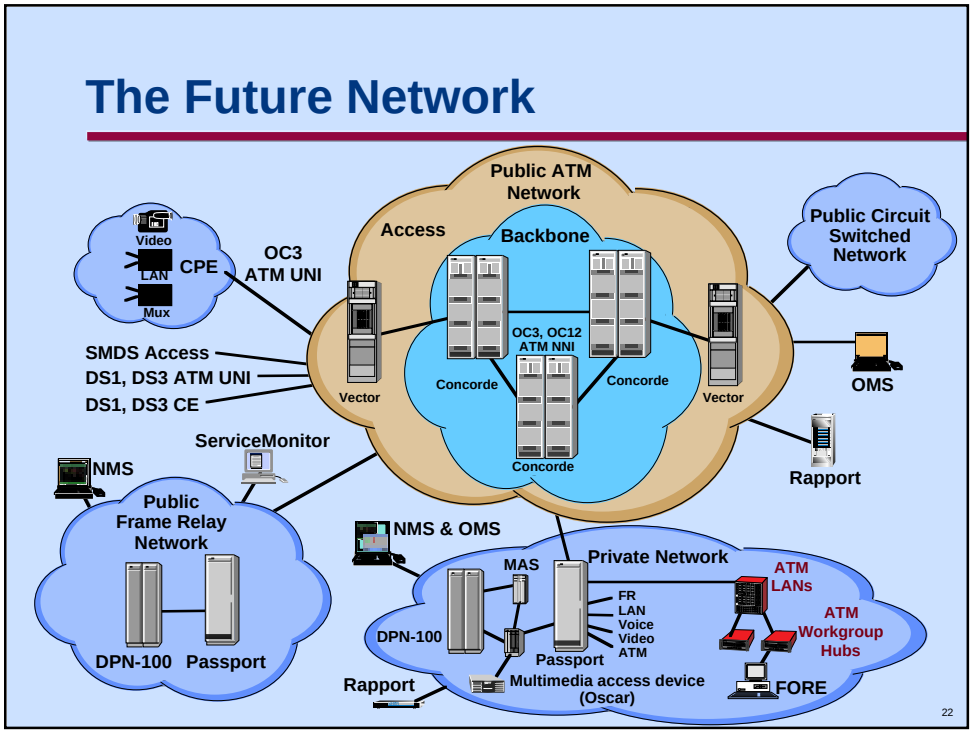
As we look forward into the next millennium we can envision some of the possible results of the ongoing churn driven by continuing rapid technology and market discontinuities in our industry.

Regulated monopolies and oligopolies will have given way to intensely competitive fully open markets. Electronic commerce will be a reality in all industrialized countries with rapidly increasing shares of all business-business and business-consumer transactions. Access technologies will no longer be tied to specific media or services. Electronic addresses will be assigned to users rather than equipment. The terms private and public networks will have more relevance in a virtual rather than a physical sense. All connections will be multimedia and as simple to set up as a telephone call is today.

With today's communications still being carried over a variety of disparate networks, including public, private and hybrid options, the challenges and opportunities facing enterprises are numerous. The enterprise network may be defined as "the sum of applications, services and equipment required to meet an organization's communication needs (voice, data, video and image) or as ... a global heterogeneous multi-vendor distributed flat-out enterprise-wide thing. Our role is to anticipate the business and technology changes and assist you in evolving your network to meet your customers' demands.



The future of networking with Magellan is based on a plan of evolving the sometimes disparate enterprise networks into a "network of networks" based on principles of:

- service-independent backbone network;
- decoupled service and network infrastructure; and
- distributed, open services architecture.

Using these principles, the Magellan portfolio will continue to evolve to meet business and networking requirements.

DPN-100 will continue to provide a platform for the consolidation of multi-protocol data services, such as X.25, X.28, asynchronous terminal, X.31 ISDN, frame relay, Point-of-Sale, and SNA at speeds up to DS1 (1.544 Mbit/s) or E1 (2.048 Mbit/s). These products will migrate over time to the periphery of the network acting as access devices, utilizing Passport to perform the backbone and ATM adaptation layer functions.

Access products including Passport model 50 with CFP1, the new access integrator and the new access PAD meet a range of data and multimedia applications, fanout, and performance and economic requirements. Accompanying the Magellan access portfolio is Rapport. Jointly developed with Shiva, Rapport offers a range of high performance dial-up switches for remote LAN access and Internet access.

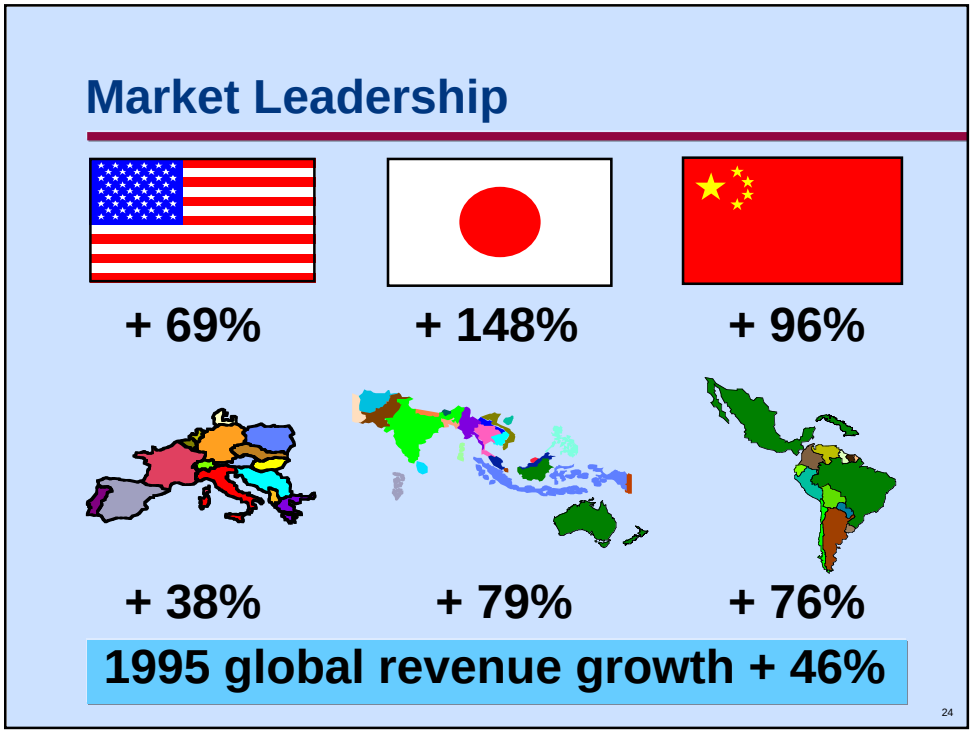
Passport, our ATM enterprise network switch facilitates network consolidation in the enterprise and the delivery of multiple services by a service provider. It may act as a high capacity backbone switching device in a private network, provider of high speed frame relay services, or CPE device into a public ATM network. As a multi-service ATM adaptation device, Passport can interface native LANs (ENET, token ring and FDDI), frame relay and voice to ATM. It also offer both native ATM service interfaces and ATM circuit emulation.

Vector provides ATM network access concentration and backbone switching in smaller ATM networks. Developed in partnership with FORE Systems, Vector can support differentiated ATM service offerings and manage networking costs with its mature SVCs and superior traffic management capabilities.

Concorde is our high performance, high capacity backbone ATM switch for data transport and SONET/SDH integration in large broadband multimedia networks. Concorde and Vector are pure ATM cell products that will evolve to meet all ATM access, concentrator and backbone requirements.

Magellan management will continue to encompass both network, service and traffic management capabilities. Its components, NMS, OMS, ServiceMonitor and Tools will be used to simplify and unify the network. Magellan is working to providing a smooth migration to TINA-C standards for service provider applications.

As we look forward into the future of networking, it is apparent that not only will change bring challenges, it will also bring success. Since Inform ’95 we have experienced a 43% increase in the number of new customers (86) using Magellan as a basis for their multimedia wide area networking requirements. We will continue to work with all of our customers on networking challenges to ensure their business success.



Your success has transpired into ours. In 1995 we experienced global revenue growth of almost 50% over 1994. This represents more than double the growth rate of our addressed market. This growth is primarily attributable to significant customer deployment of Magellan products across the six regions depicted, and market recognition of the 'best-in-class' multimedia WAN capabilities of the Magellan portfolio. Thank you.

Our top priority is to maximize the value you derive from the Magellan portfolio of multimedia WAN products and services. We are focused on understanding both your business and networking needs to ensure we deliver a portfolio of switching products, network management, tools and support infrastructure that will enable your network to continue to increase its role as a strategic resource for your organization. The series of workshops, plenary sessions and demonstrations over the next few days will offer you the opportunity to convey your business challenges, express your networking requirements, and engage our team on the future evolution of the Magellan portfolio.