

Making

Networks



**M
O
R
E**

Competitive



The Next Step in Networking

Eitan Efron

Marketing Director, Network Systems

Network
Systems



**More
More
for Less**

**Capacity
Connectivity
Cost**





Operator's Needs

CONNECTIVITY
(NB-WB-BB-Optical)

CAPACITY
(Terabit networks)

SCALABILITY
(One platform serves all)

Fast ROI
(Platform's PRICE
Performance &
efficiency)

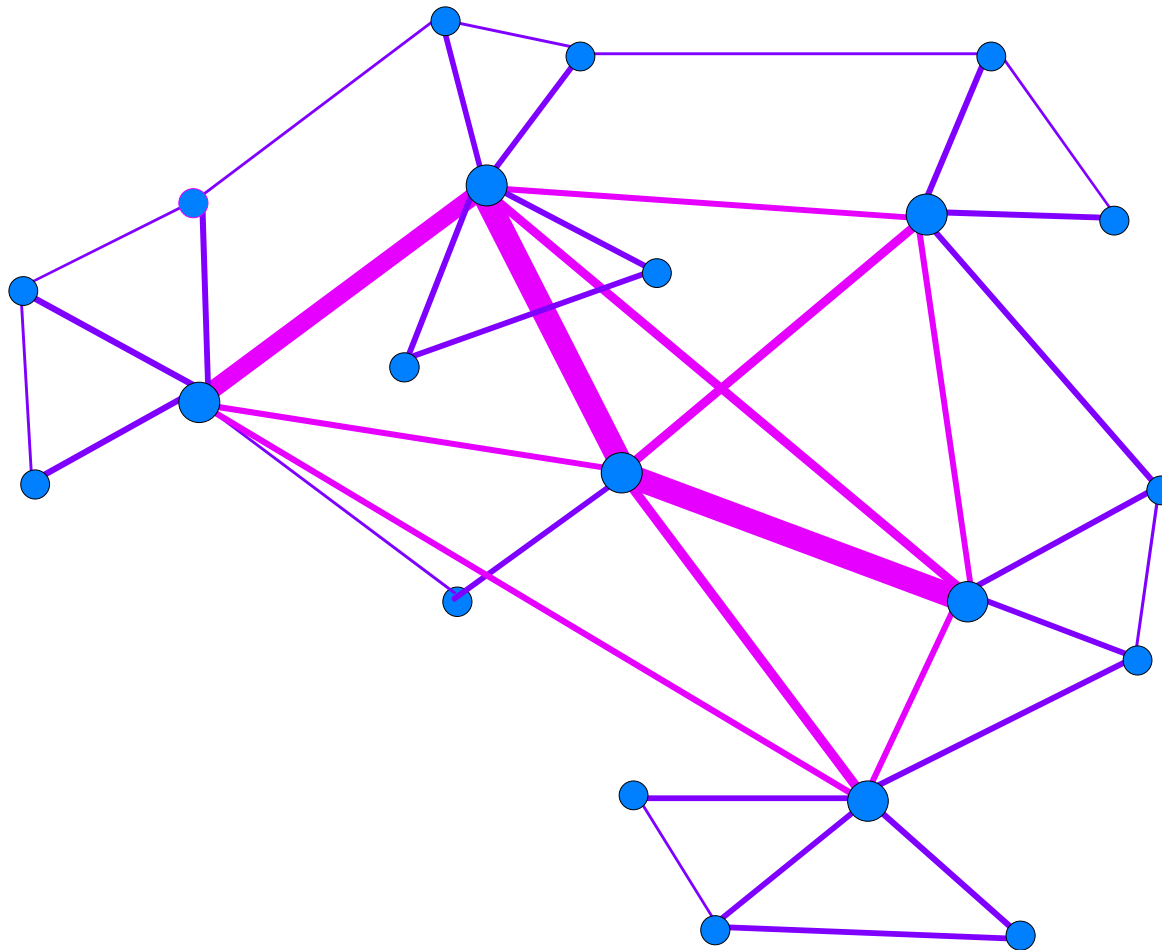
RELIABILITY
(Reduce cabling,
avoid SPOF)

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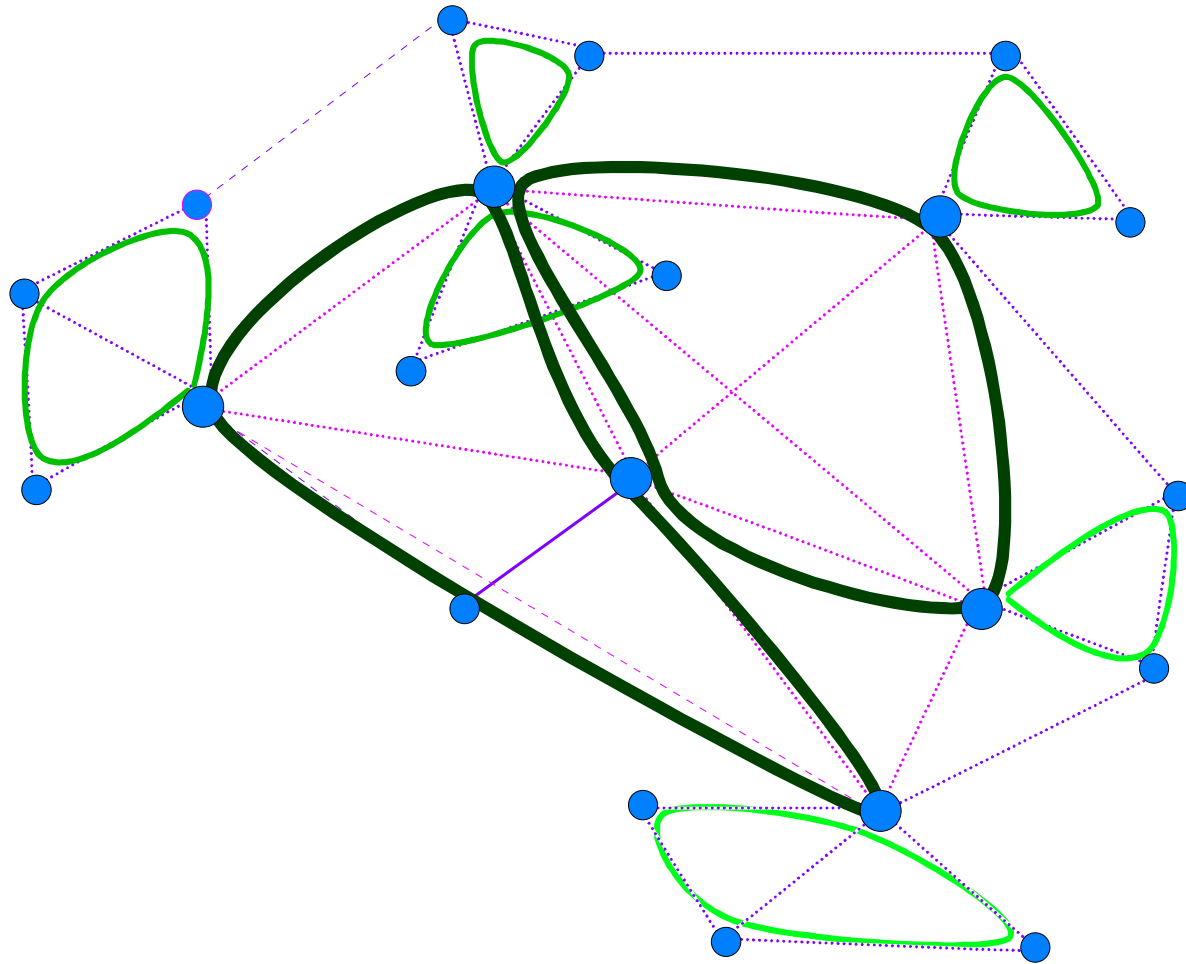
Typical Cable Plant



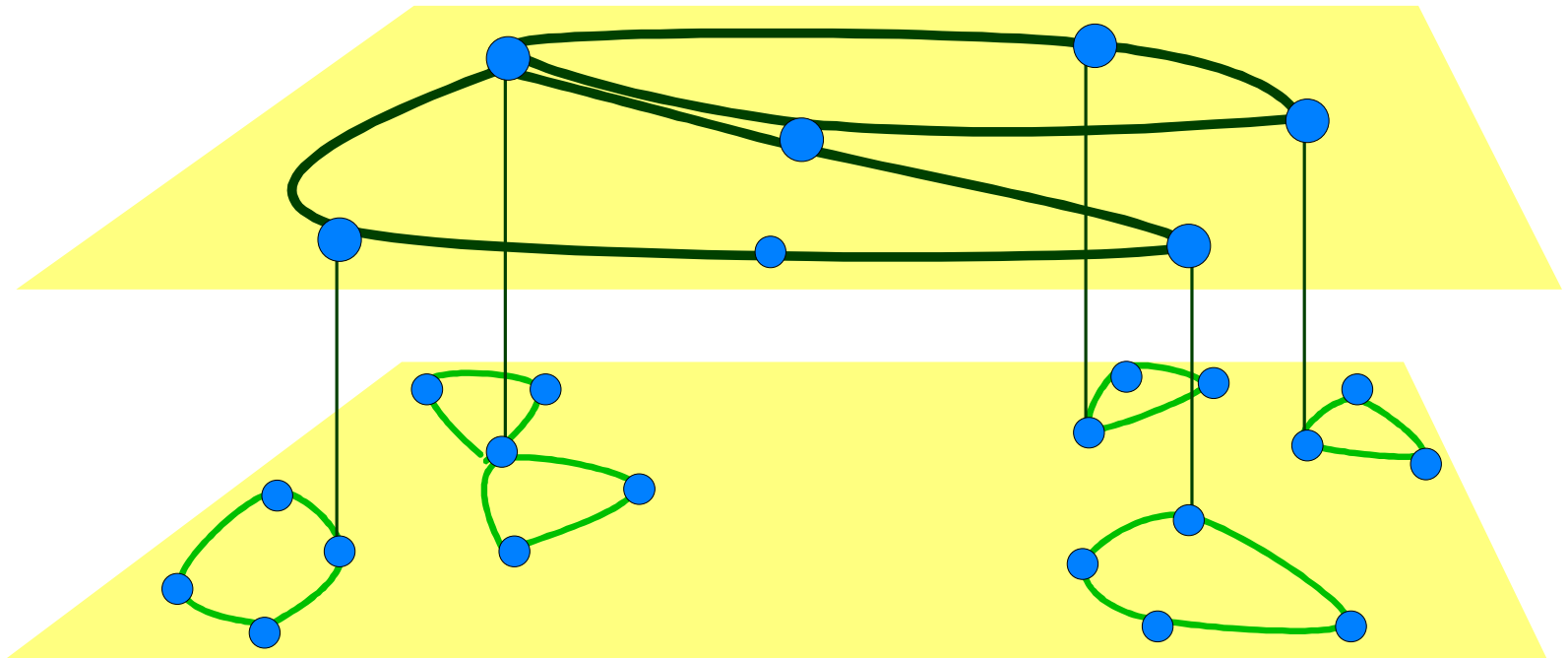
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Possible ring/mesh planning



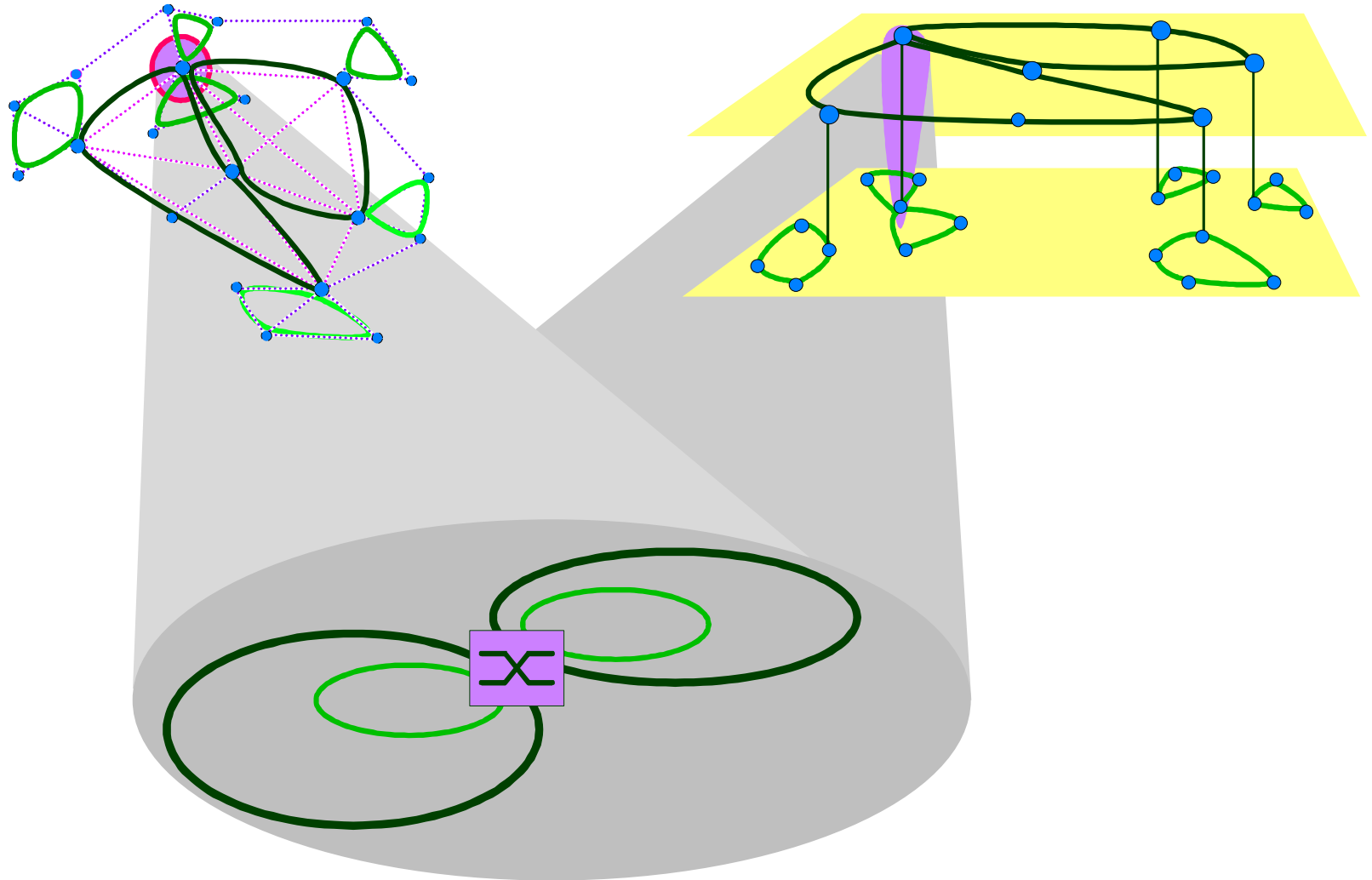
Hierarchical View

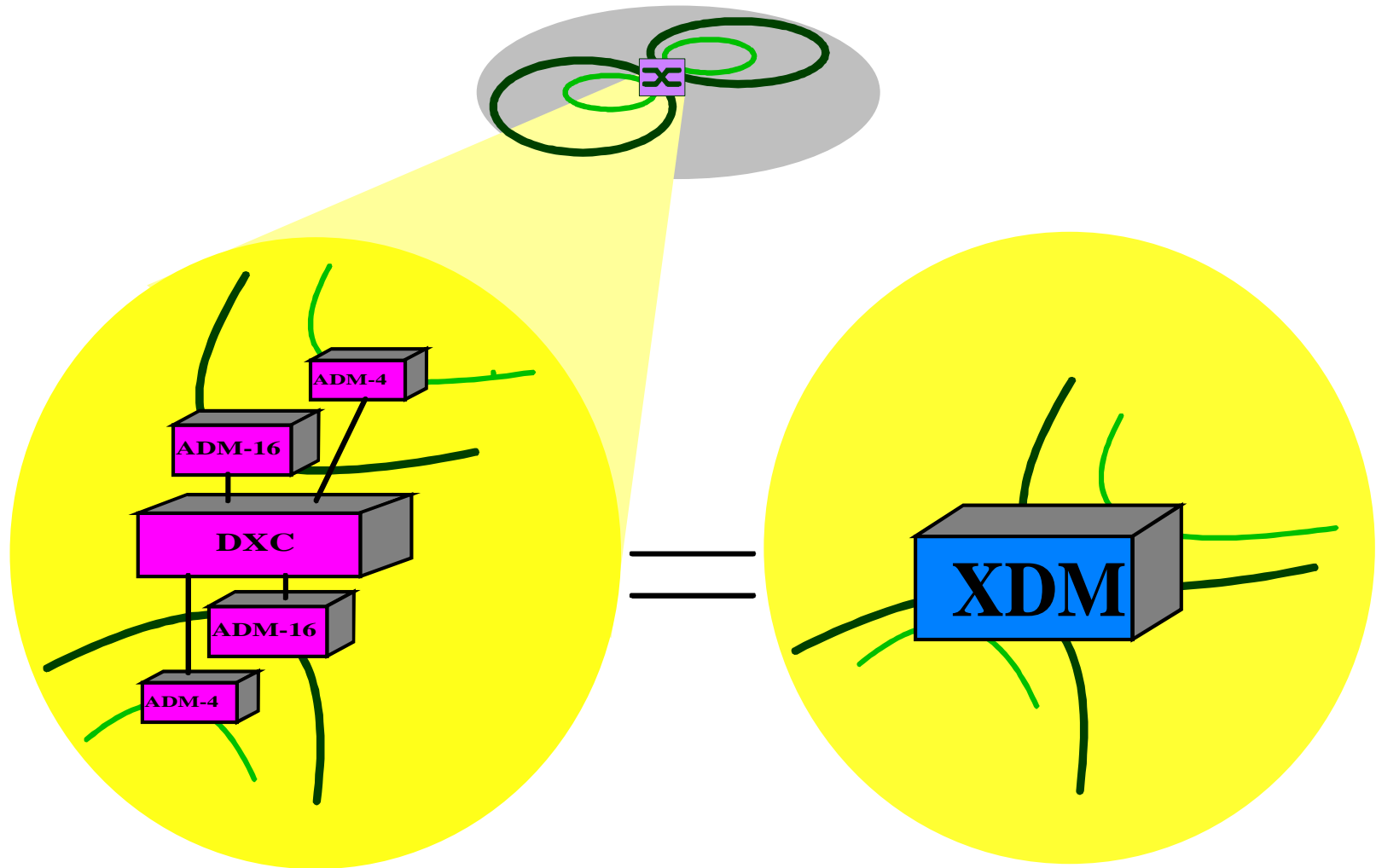


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Node Functionality





XDM Basic Functionality

- Multi ADM

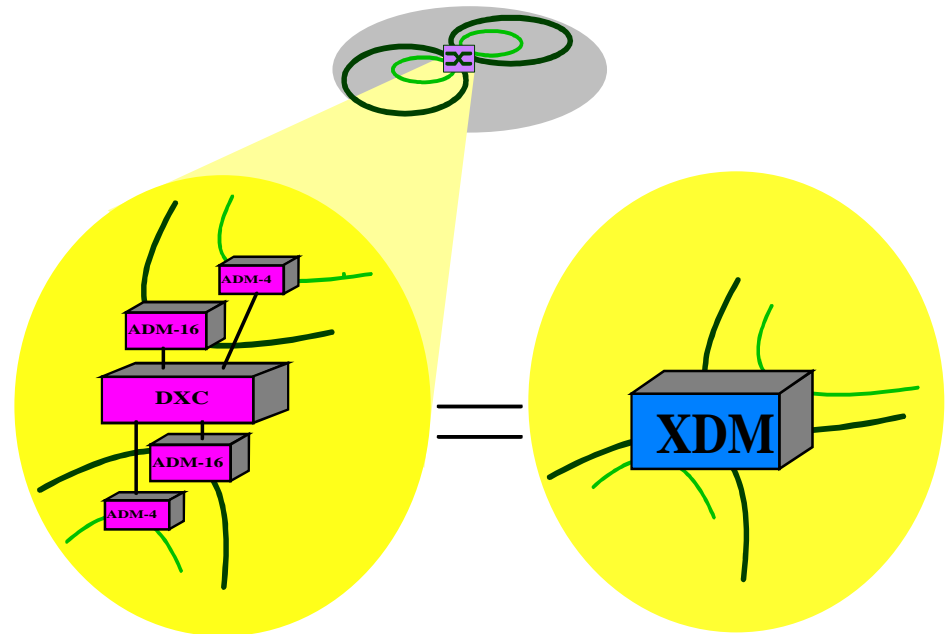
- Manageability
- Fast Protection
- Ring Topology

- DXC

- Capacity
- Connectivity
- Availability

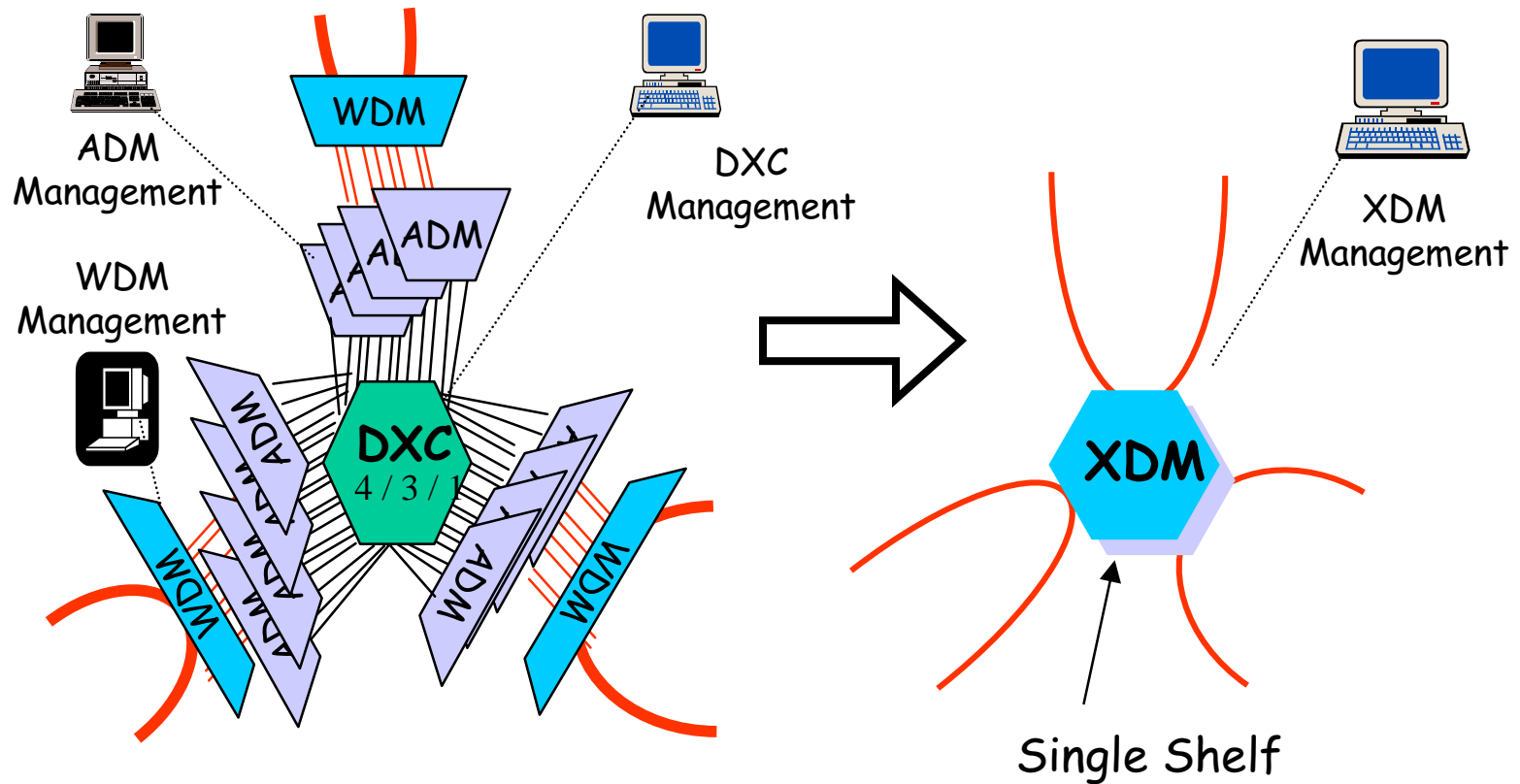
- WDM

- Capacity





XDM = A Single Managed Entity



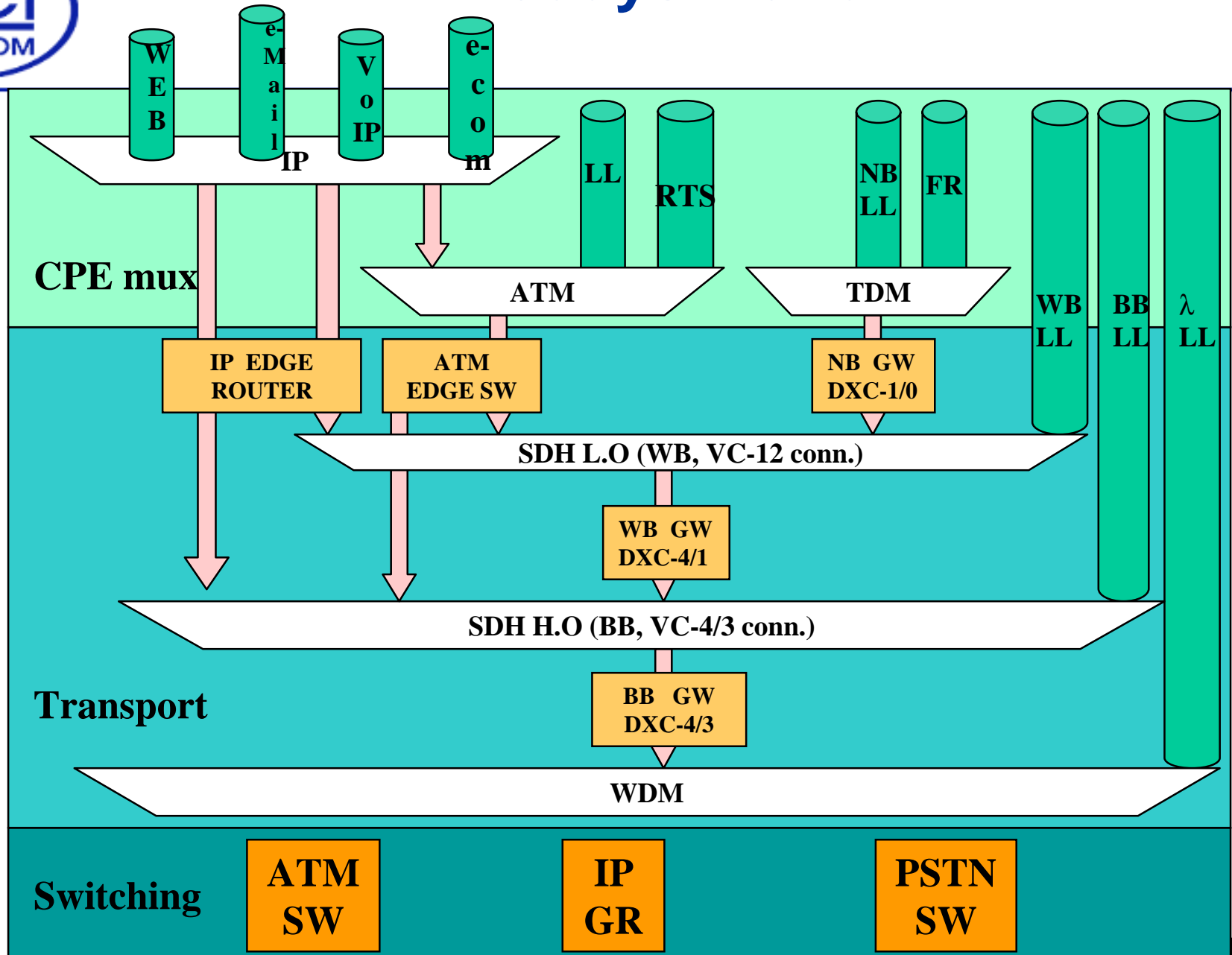
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The CURRENT Structure

The NEW Structure



Today's world

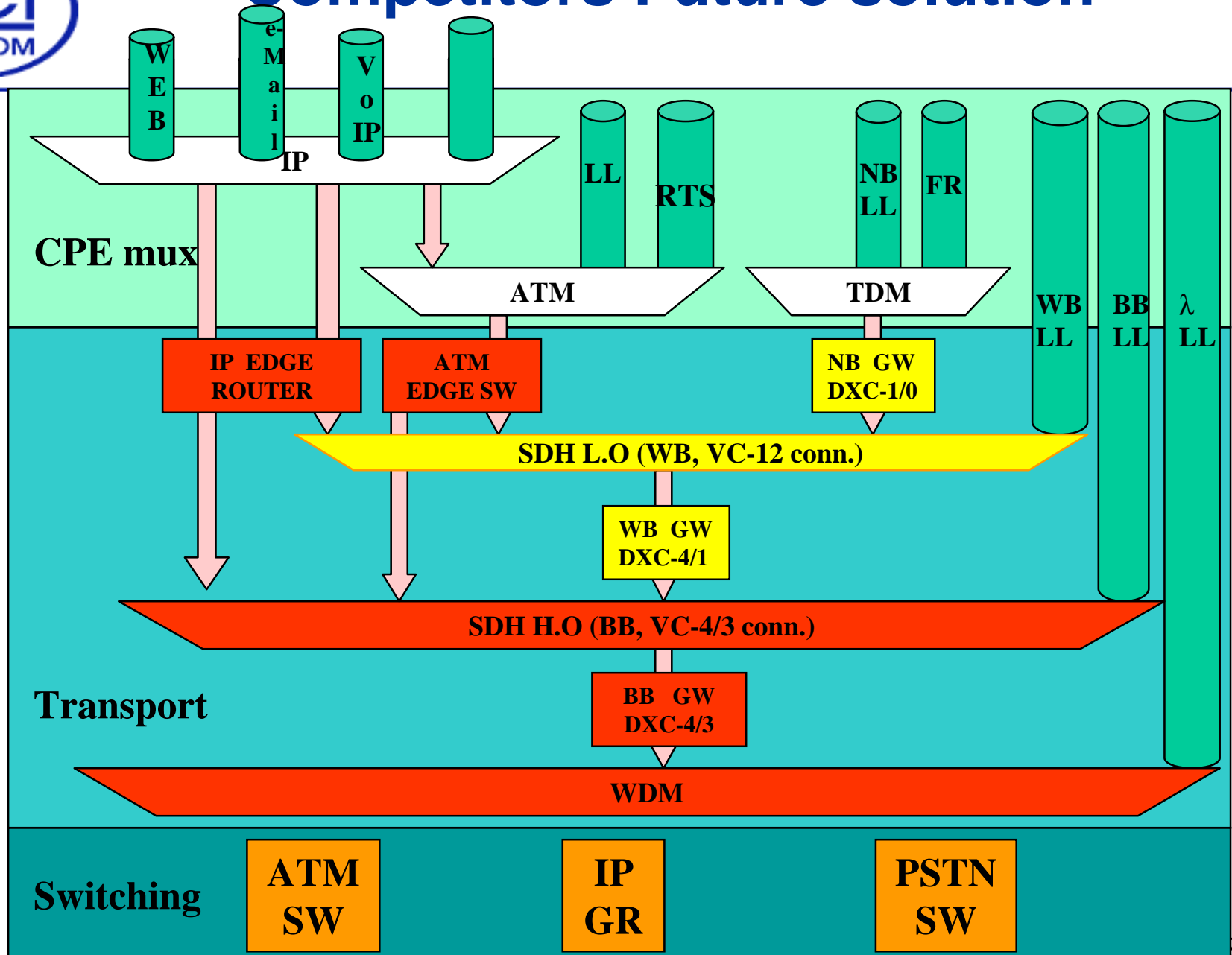


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Competitors Future solution

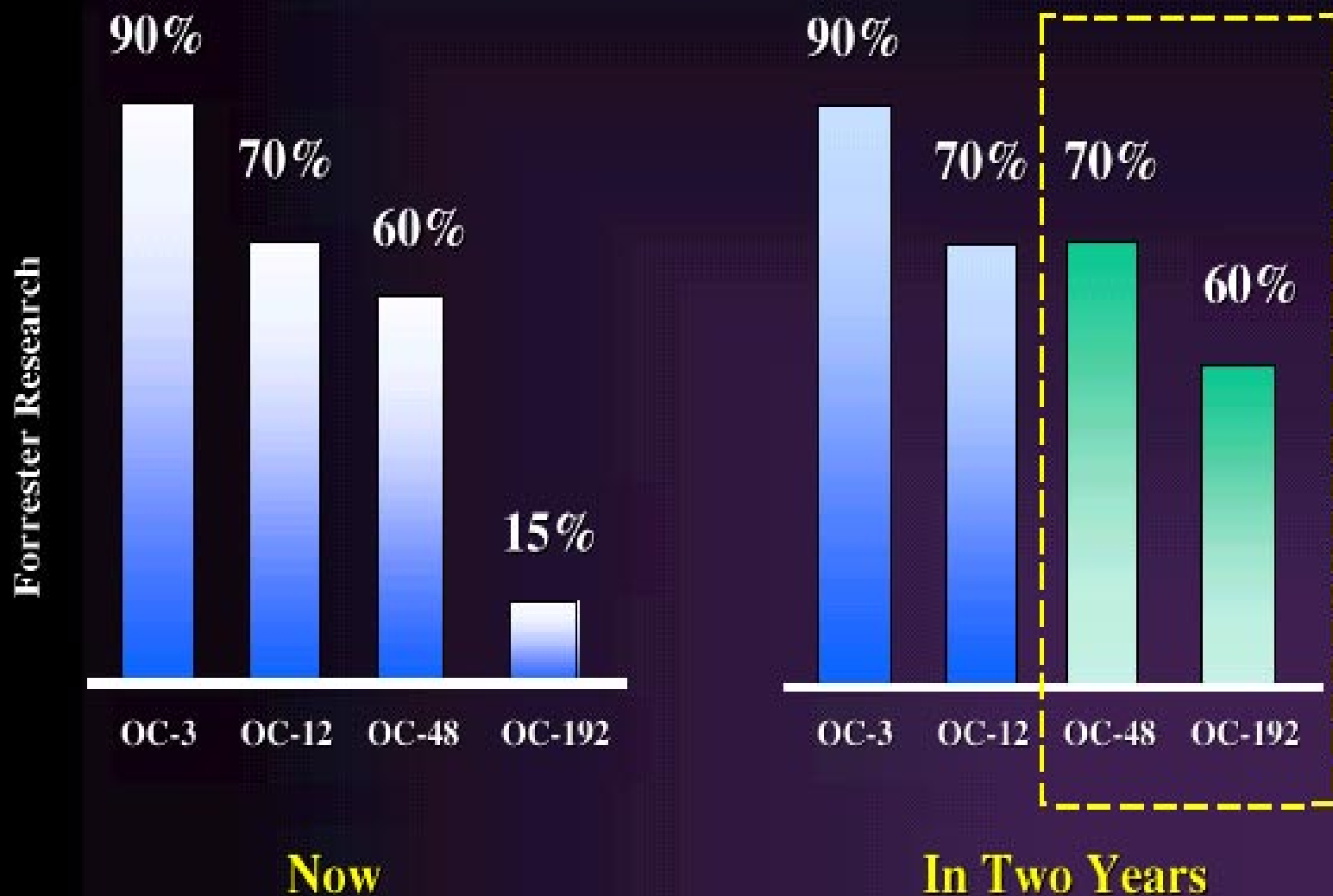


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Drivers

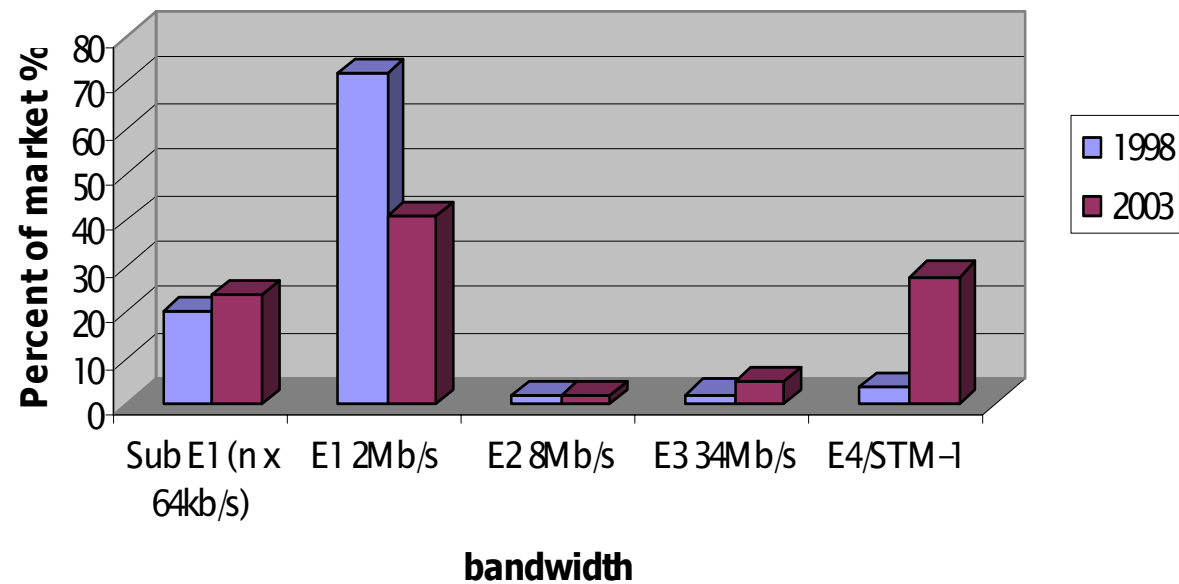
What access speeds do you plan to offer?





Service Bandwidth Distribution

Leased Lines segmentation (Dataquest 99)



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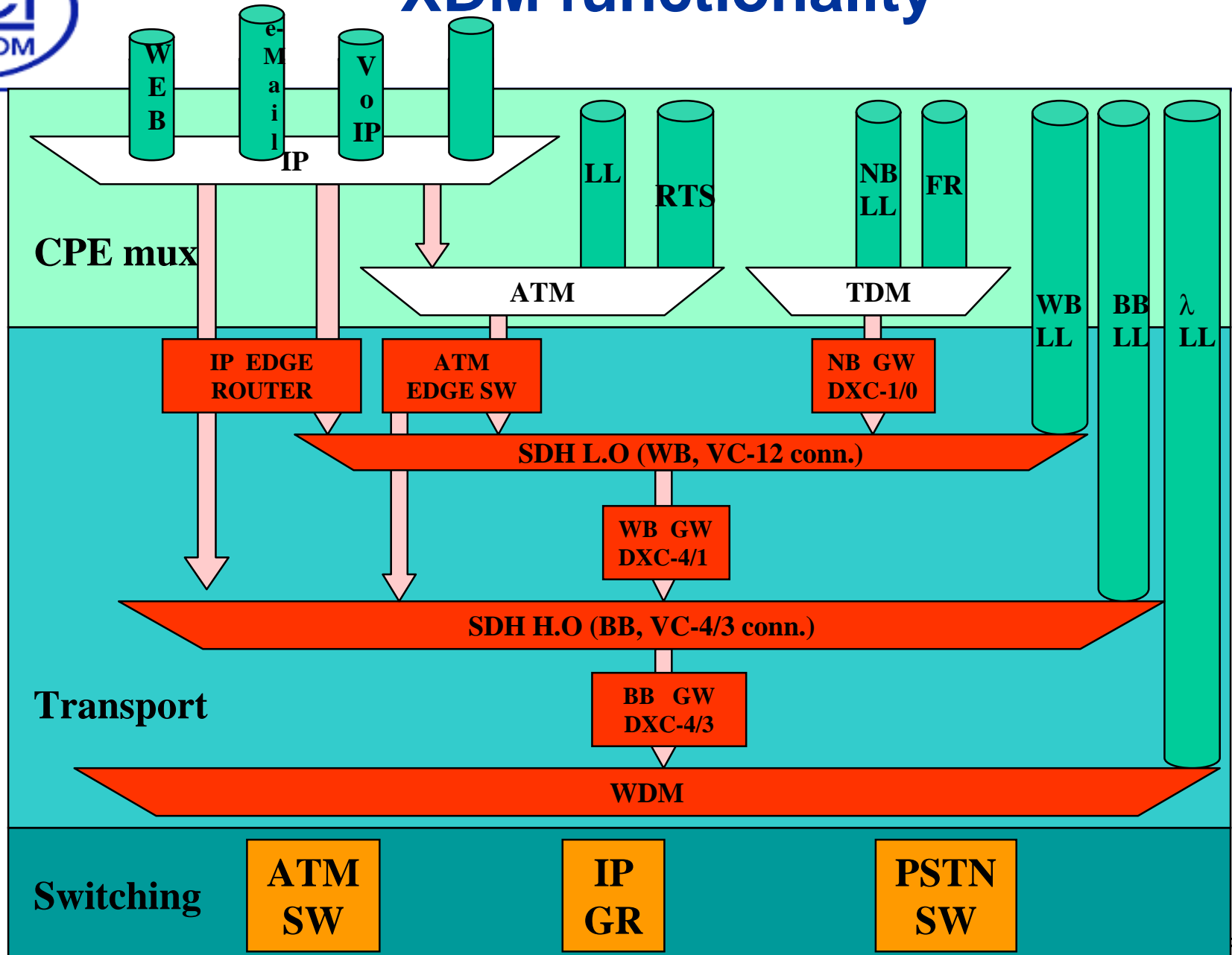
Is everybody going for BB & Optical?

- 95% of services today are still E1 and lower.
- BB is growing fast (25% in 2003) but still 90% of revenues come from the 75% NB



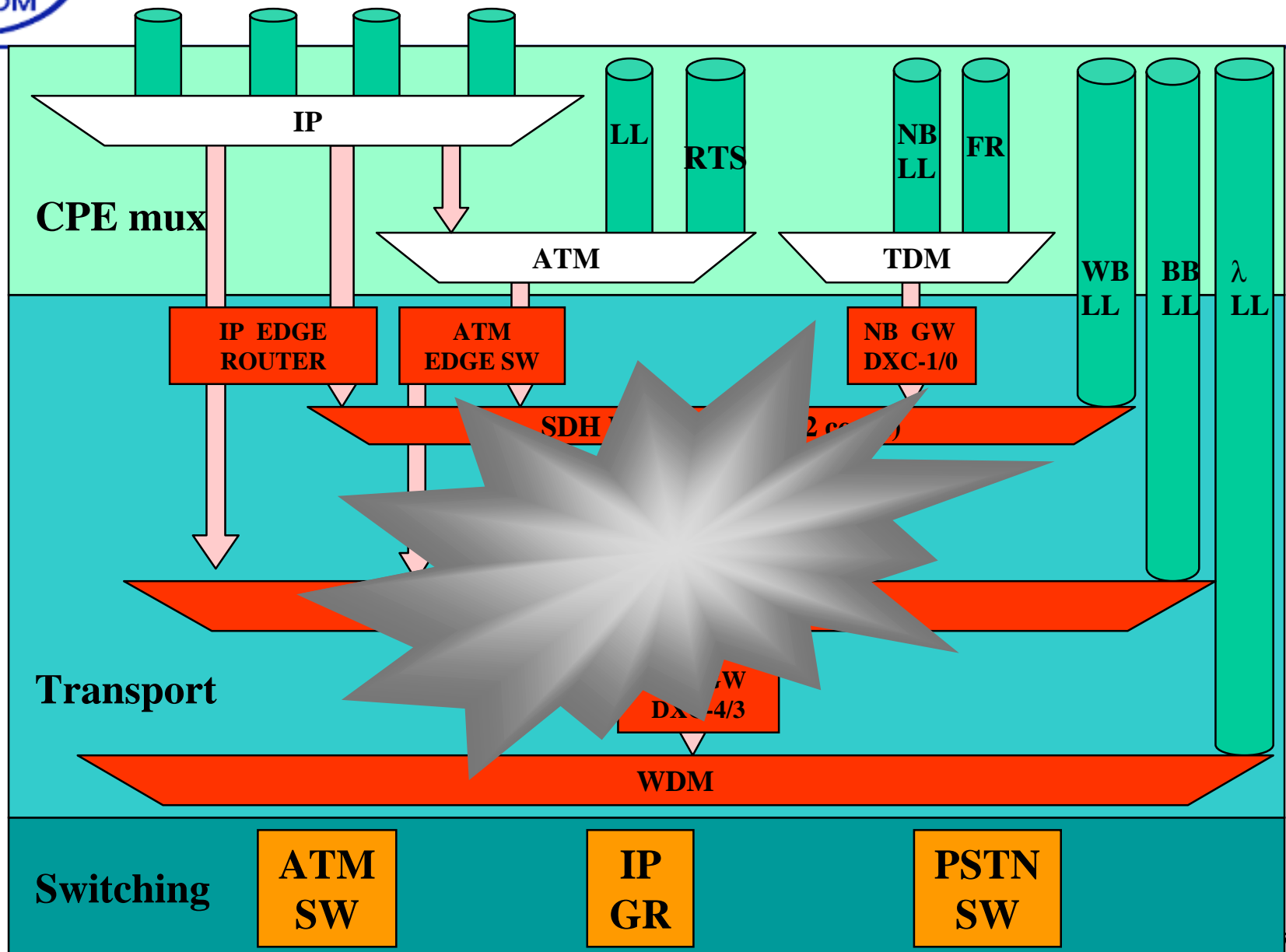


XDM functionality





XDM functionality

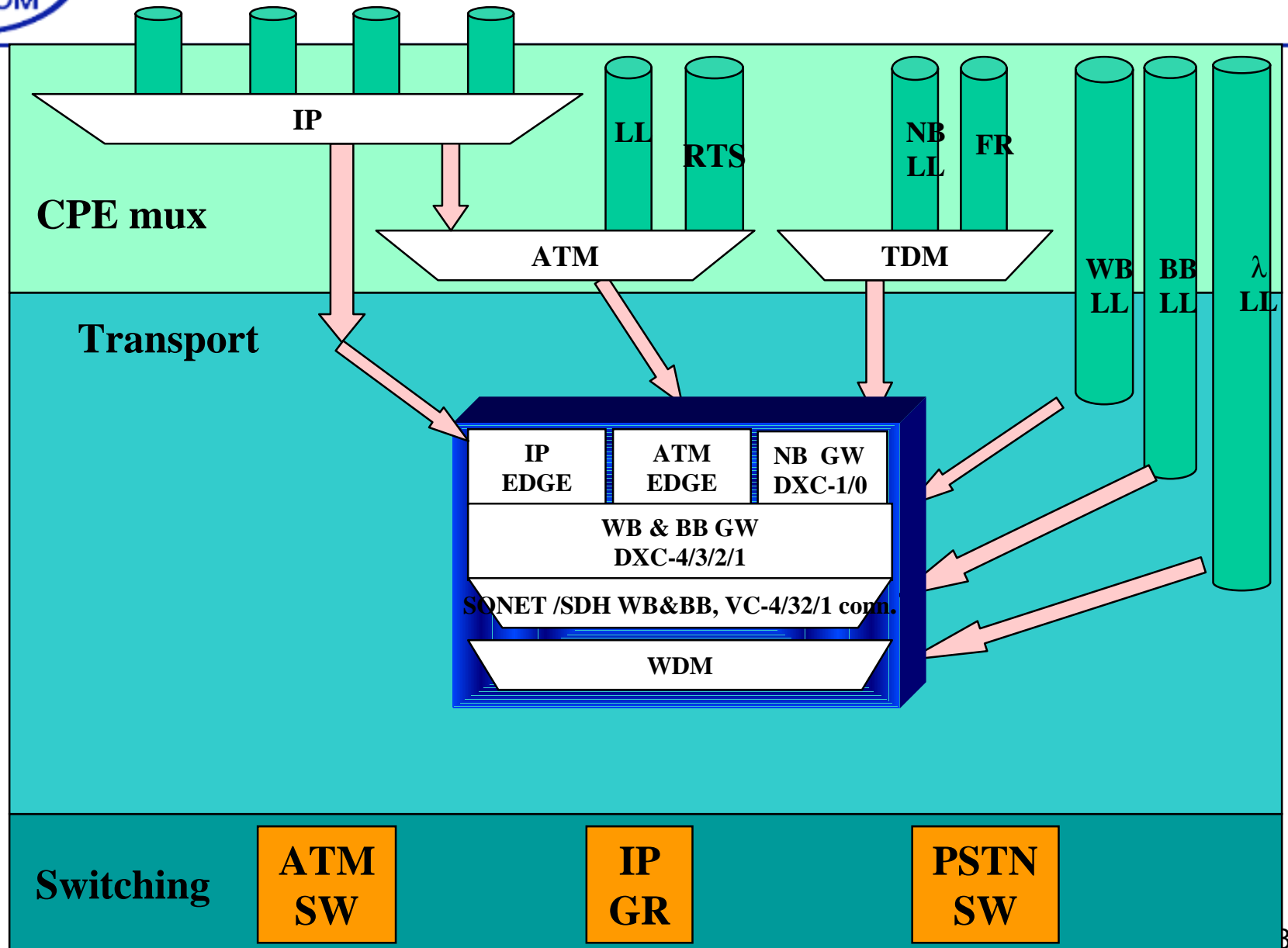


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XDM



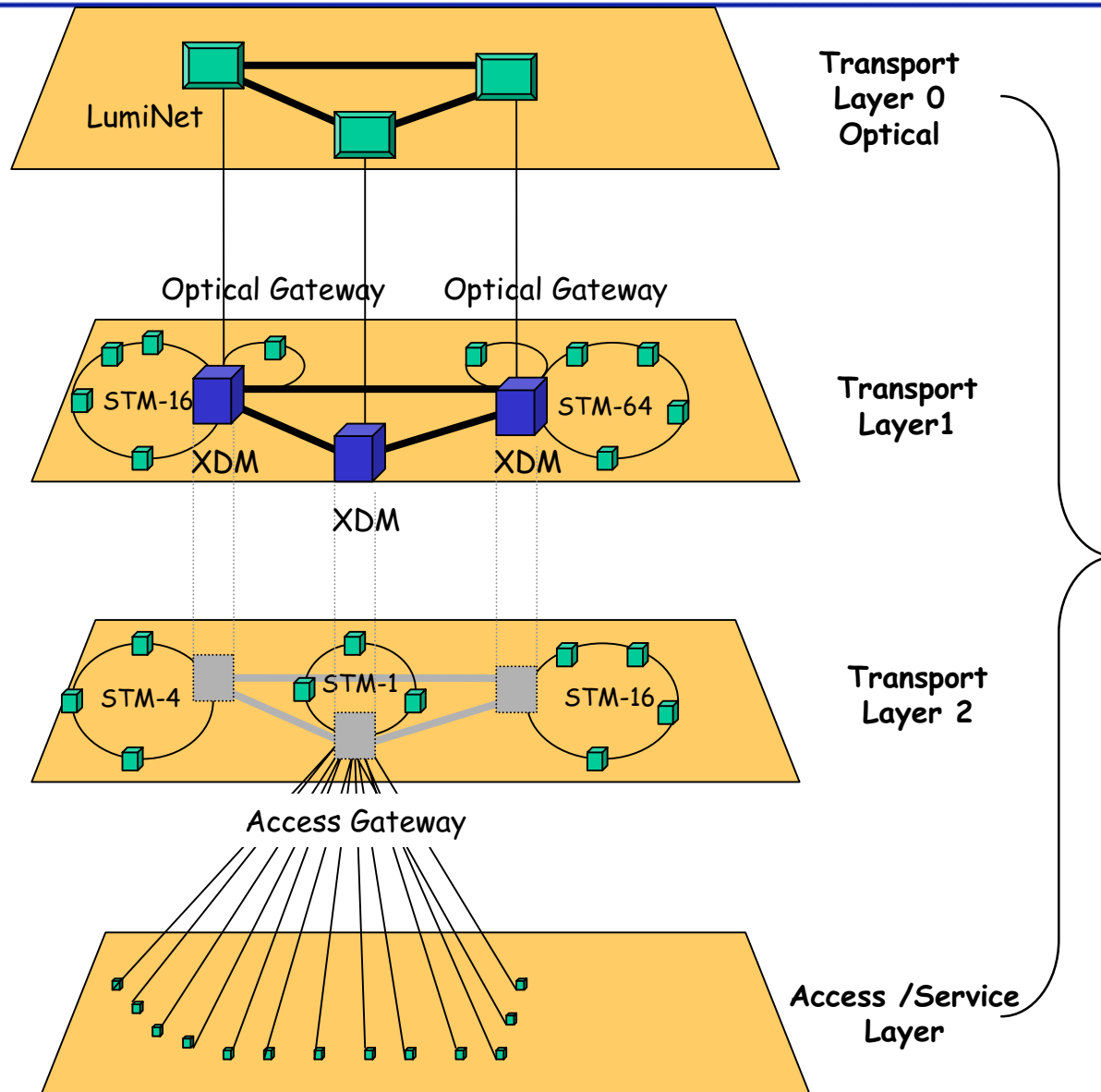
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Existing Network Solution

Seamless
Integration
with
legacy
equipment

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The Babylon Tower

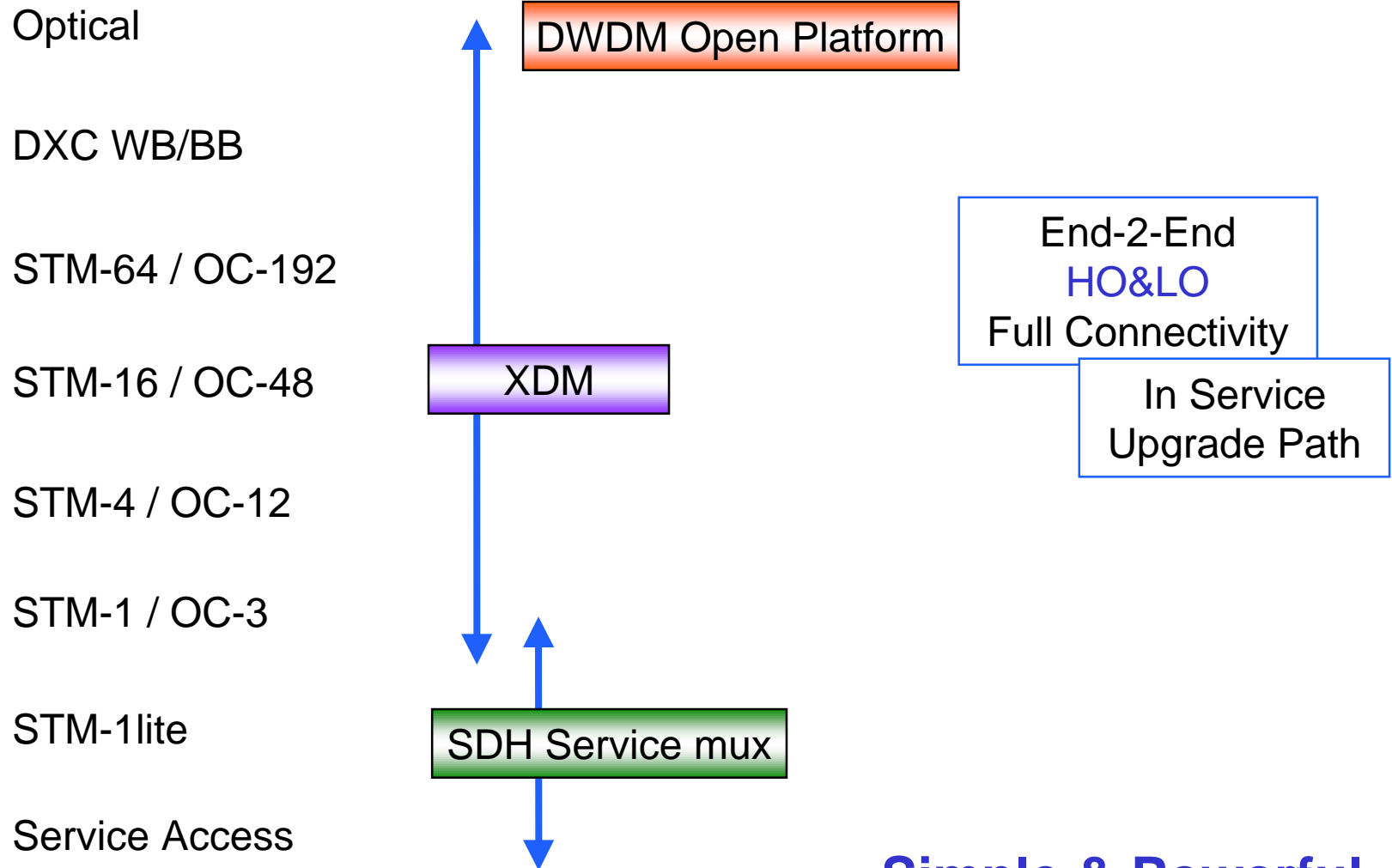
Optical	DWDM	OADM		
DXC	DXC 4/1	DXC 4/4		
STM-64	ADM64 HO	—		
STM-16	ADM16 HO	ADM16 LO	ADM16 TM	ADM16 REG
STM-4	ADM4	ADM4/16		
STM-1	ADM1	ADM1/4		
STM-1 lite	Mini ADM1			
Service Access	—			

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The New Operator-Friendly Approach



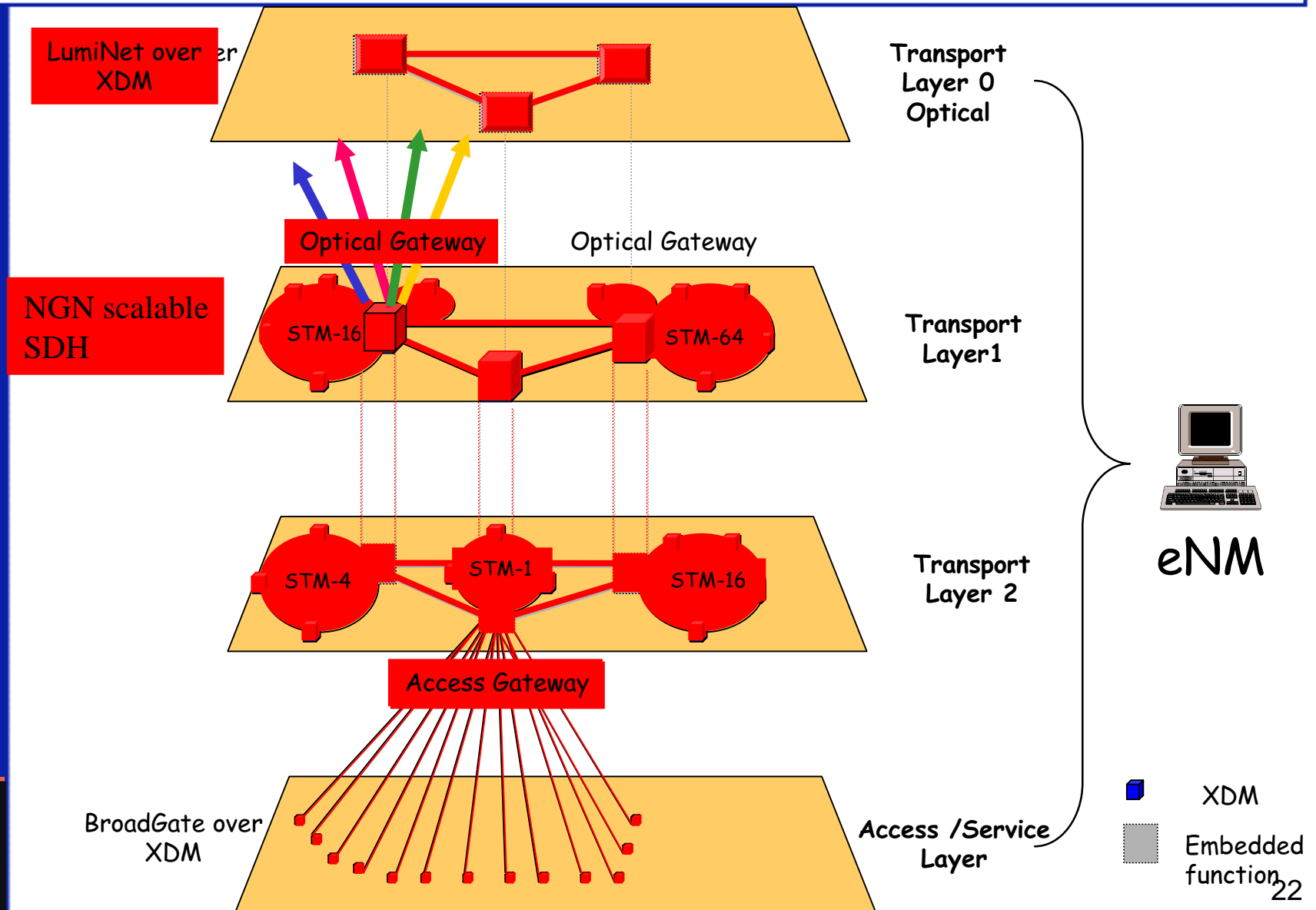
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Simple & Powerful



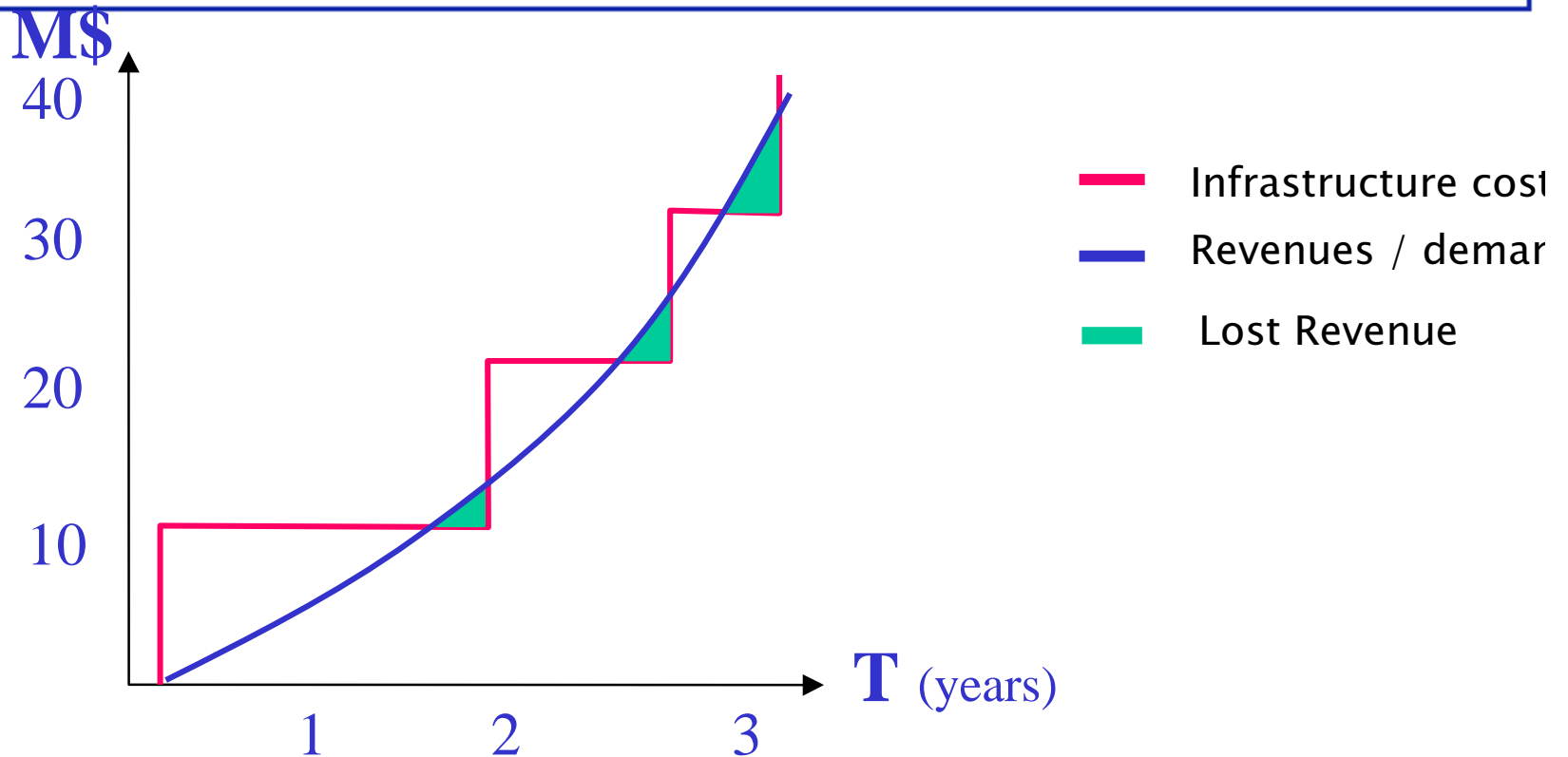
XDM - A Single Platform NetSolution Fusing Access to Core



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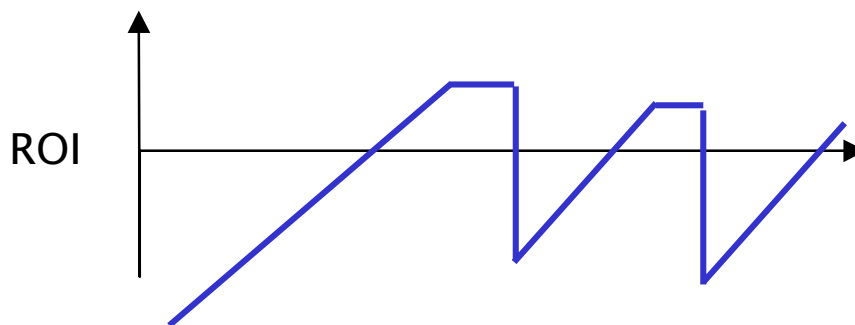


ROI - traditional network

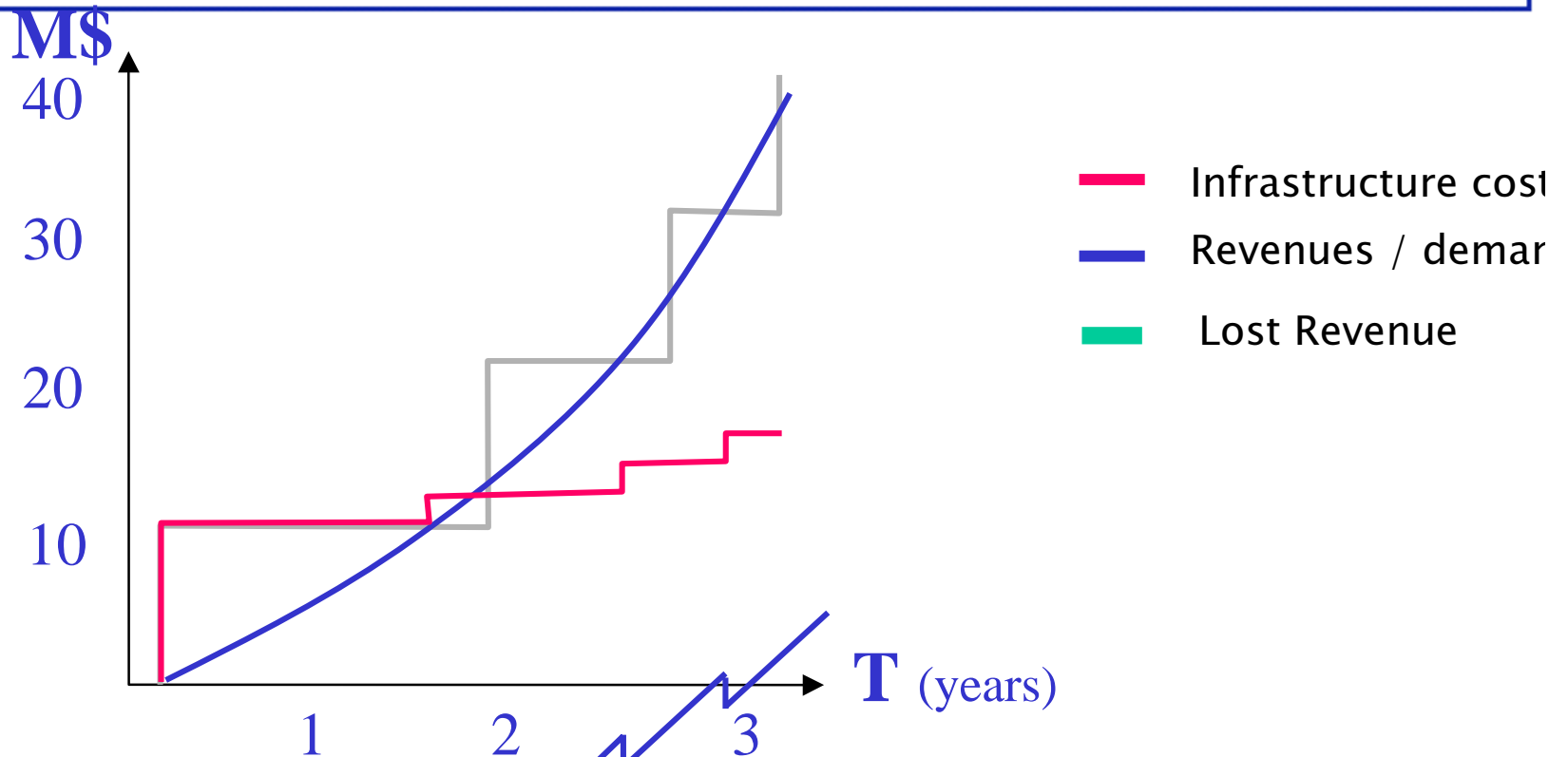


- Shorter Upgrade Cycles
- Dropping Prices

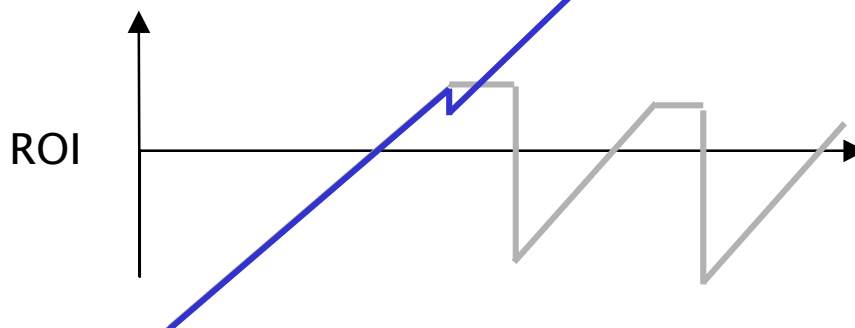
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ROI - The XDM network

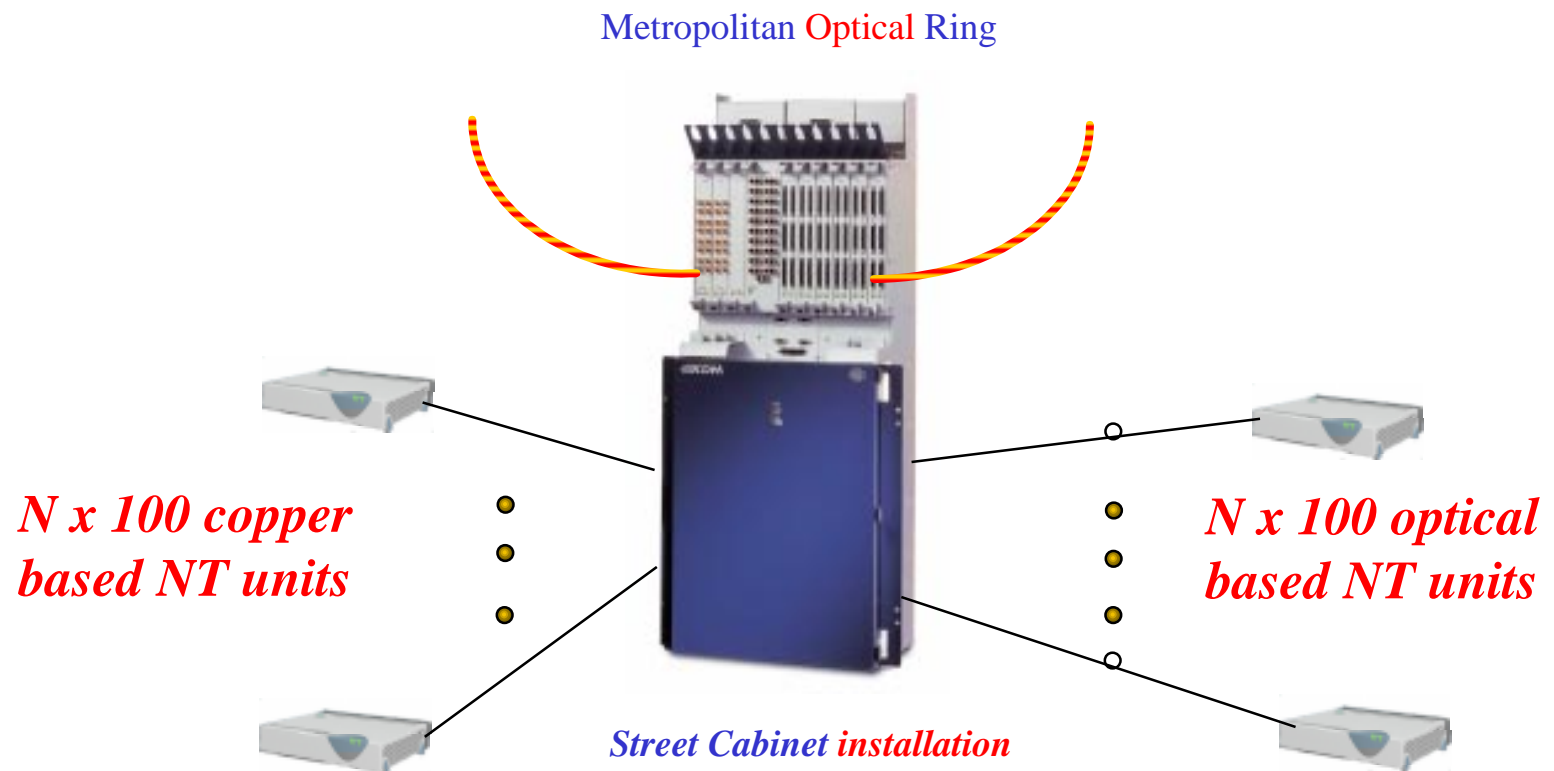


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- New networks established within days
- No Lost Revenues

XDM - Access Gateway



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All-band Integrated Service consolidation: XC 1/0, IP, ATM
Lower Cost per link

Optical gateway

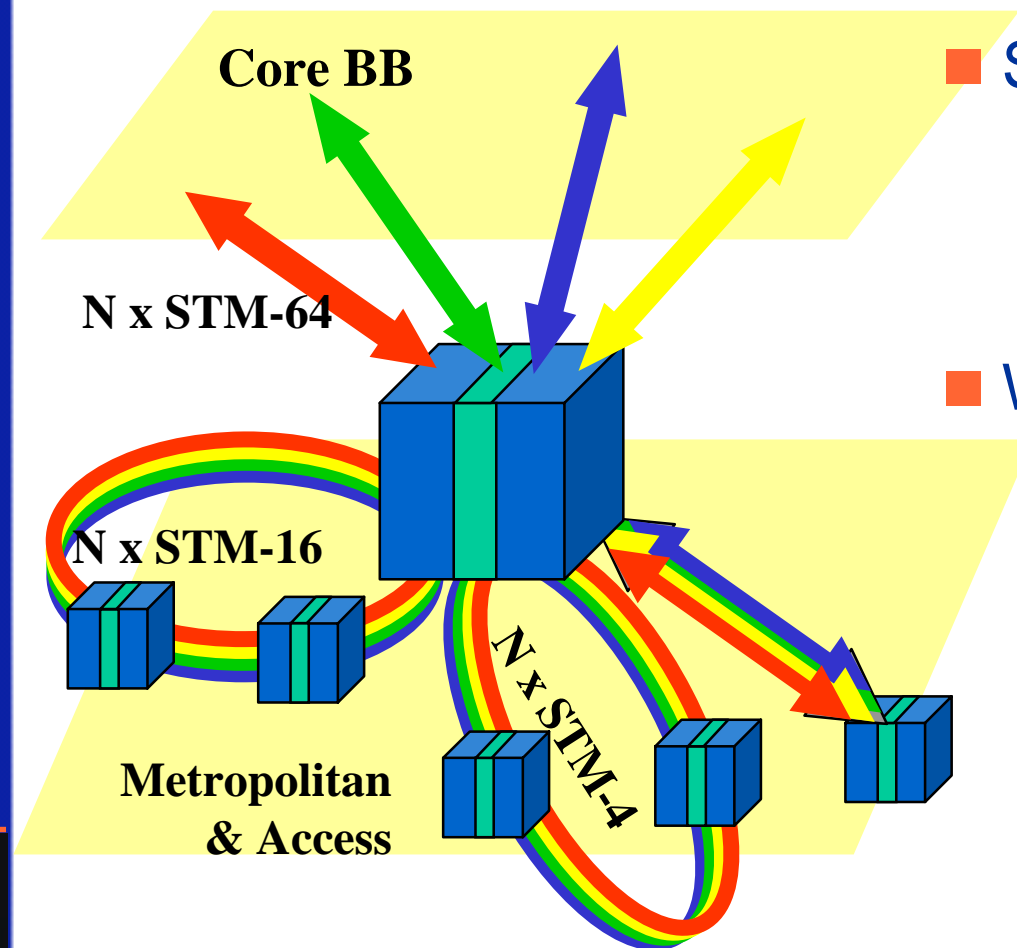
- Bandwidth management

- Service

- IP
- ATM
- TDM NB to BB

- Wavelength

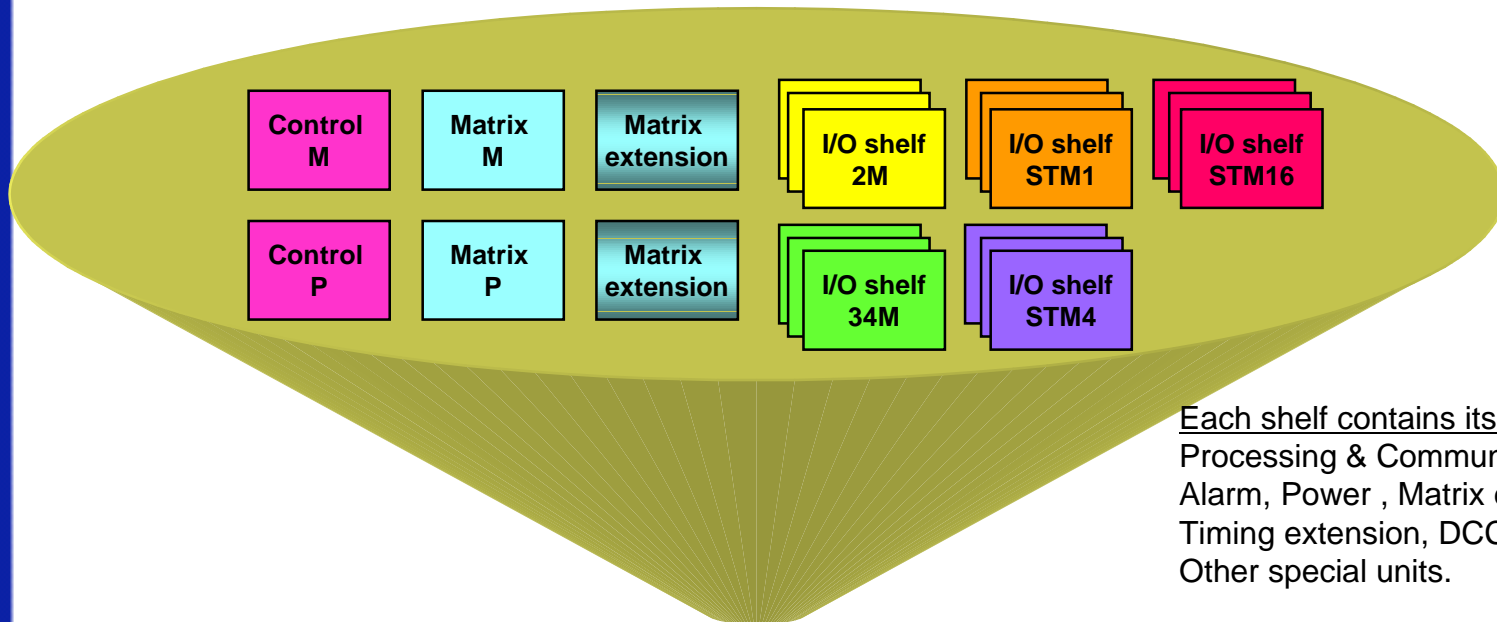
- Rate
- Conversion
- Optical Management
- 3R



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Comparison with WB DXCs

Typical DXC systems:



Each shelf contains its own cards:
Processing & Communication ,
Alarm, Power , Matrix extension,
Timing extension, DCC & OH,
Other special units.

XDM:



High capacity **single** shelf
e.g. 192 x STM1

Plus:

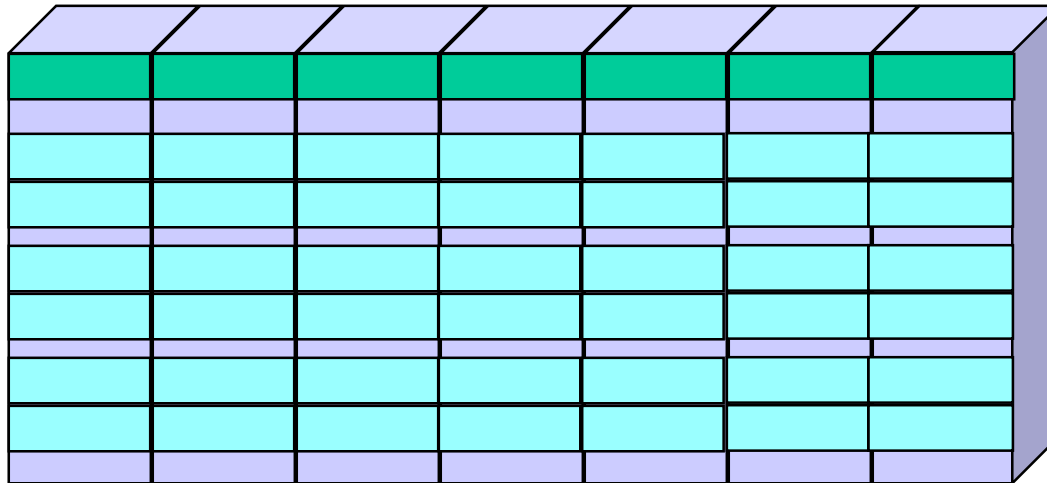
- Multi-rings
- STM64
- Optical rings support





Comparison with WB DXCs

VendorB :



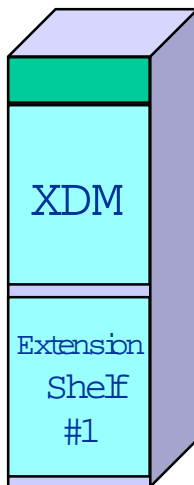
Configuration

Example :

Shelves: 35

Shelves type: 8

Racks: 7



ECI's XDM

- Saves 85% Floor Space
- Over 50% Cost savings ...
- Power Consumption
- Maintenance
- Same cards as for ADMs

Shelves: 2

Shelves type: 1

Racks: 1

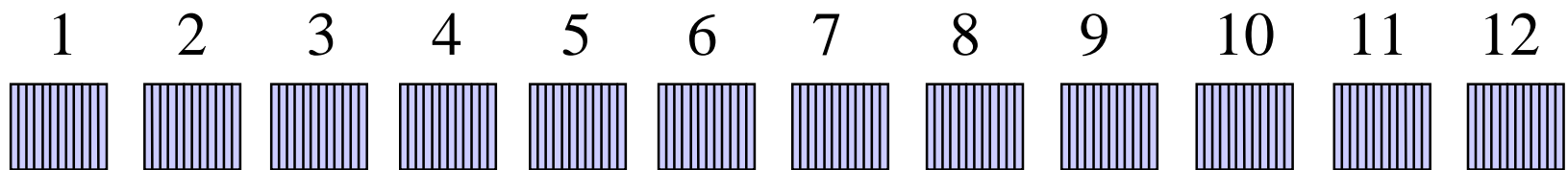
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Comparison with multi- ADMs

ADM-16s per site / STM16 Rings



Competitor

12



XDM

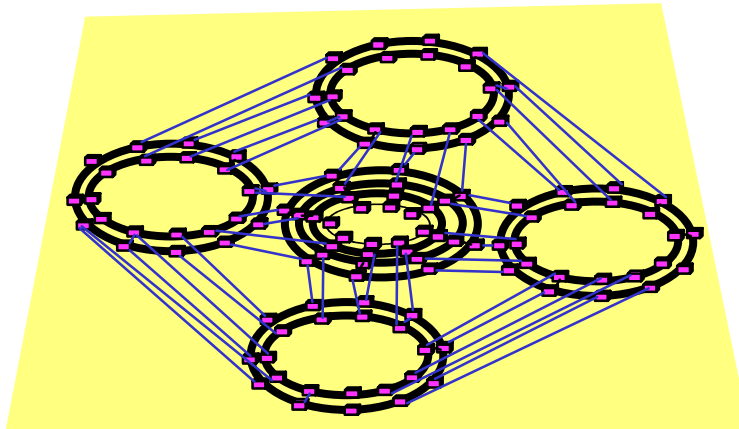
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12:1 Network Savings !!!!

Simplicity.. Space..Power..Cost..Operation..Maintenance..Reliability



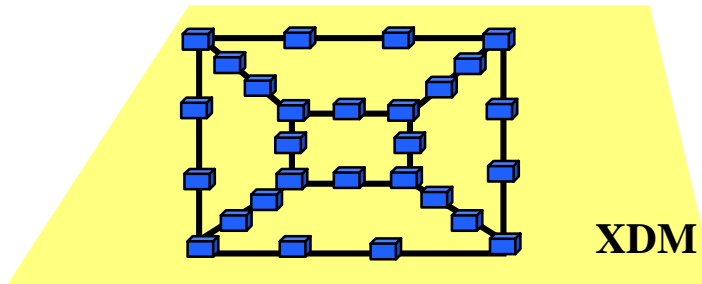
Network Example - The Web



120 x ADM16 Shelves

Connectivity limitation

Complex service provisioning



28 x XDM Shelves

Full Connectivity

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4:1 Network Savings !

Simplicity.. Space..Power..Cost..Operation..Maintenance..Reliability..



XDM Capabilities

- **Multi ADM**

E1 / T1
to
STM-1 / OC-3
to
N x (STM-64 / OC-192)

- **All Band DXC 4c/4/3/2/1**

- 192 STM-1 / 576 STS-1
Up to
3072 STM-1 / 9216 STS-1

- **Integrated Optics**

- Long haul optics
- Wavelength management
- DWDM
- OADM

- **Statistical Multiplexing & Grooming**

- IP edge router
- ATM edge switch
- TDM DXC 1/0

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Summary

● Network Element

- 30-60% equipment saving
- 70-80% space reduction
- 60-80% reliability improvement
- 50-80% maintenance cost reduction
- Scalable
- Flexible
- Future proof

● Full Network

- 50-70% network cost savings
- Service Aware Network
- Scalable
- Flexible
- Future proof





XDM = Tera-POP in a BOX

The only NB to BB to Optical migration Platform

40/80 ch. (STM-64, OC-192)

OADM-40

ADM-64

ADM-16

ADM-4

Channelized
IP Router
ATM SW

DXC 4/3/2/1/0

SDH/Sonet ADM

DWDM ADM

ADM-16

ADM-4

ADM-16

ADM-4

WDM-16

WDM-16

STM-16

STM-4

N x STM-16

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{ E1 , E3 , E4 } , DS3 , Video , Ethernet
{ STM-1 , 4c , 16c , 64c } ,
{ OC-1 , 3 , 12c , 48c , 192c }



Thank You !

Eitan Efron

Marketing Director

+972-3-9268083

efron@ecitele.com

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