



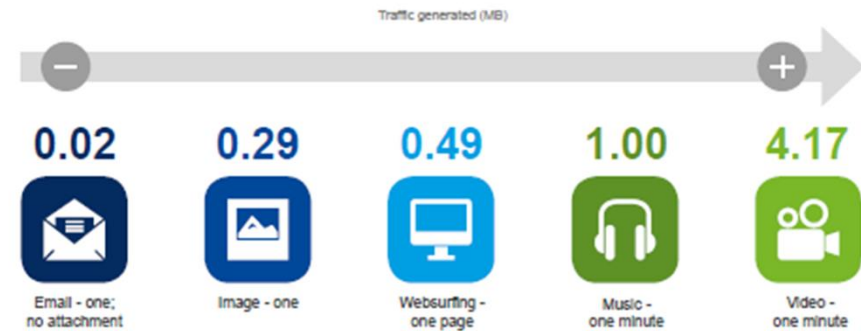
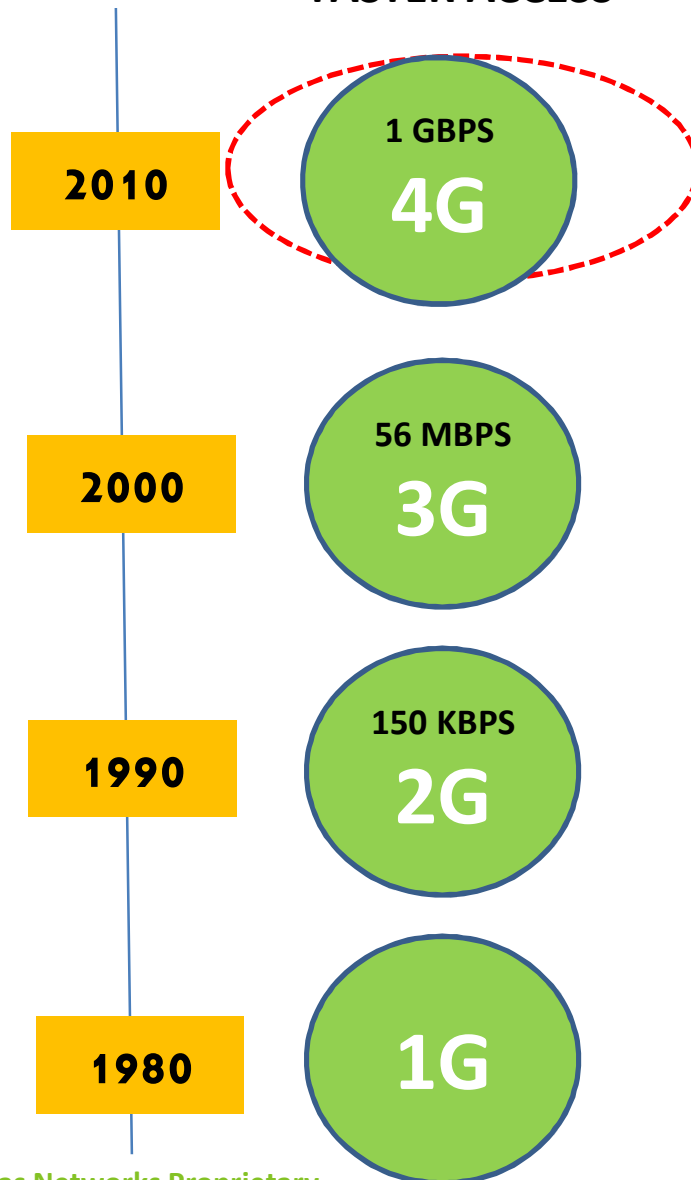
Trends in Mobile Broadband Networks

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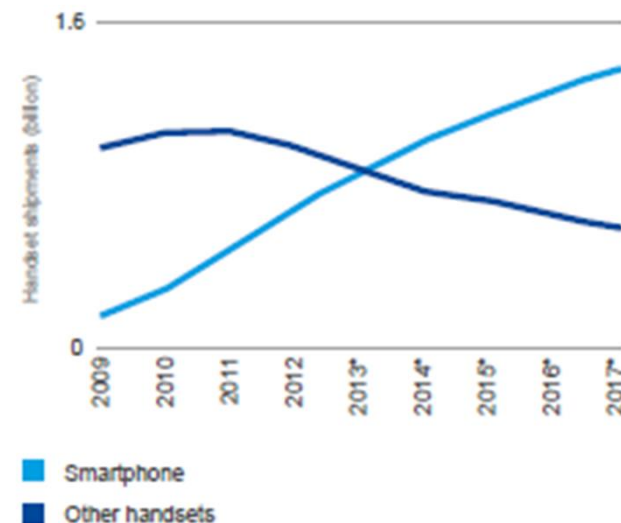
Evolution of Mobile Broadband

FASTER ACCESS



HEAVIER CONTENT

Source: Sprint Traffic Analysis, 2013



SUPERIOR PROCESSORS

Source: Analysis Mason, 2014

Key Trends in Carrier Infrastructure



1. “IP-ification”

- “All Packet” networks to support growing IP-ification of traffic and OTT(over-the-top)
- Hybrid Packet (POTP) and Pure-Packet Platforms (PTN) have become the norm

2. Capacity Crunch

- Insatiable appetite for bandwidth in all parts of the network – Backbones, Metros and Access
- Growing fiberization closer to customer

3. Intelligent Networks

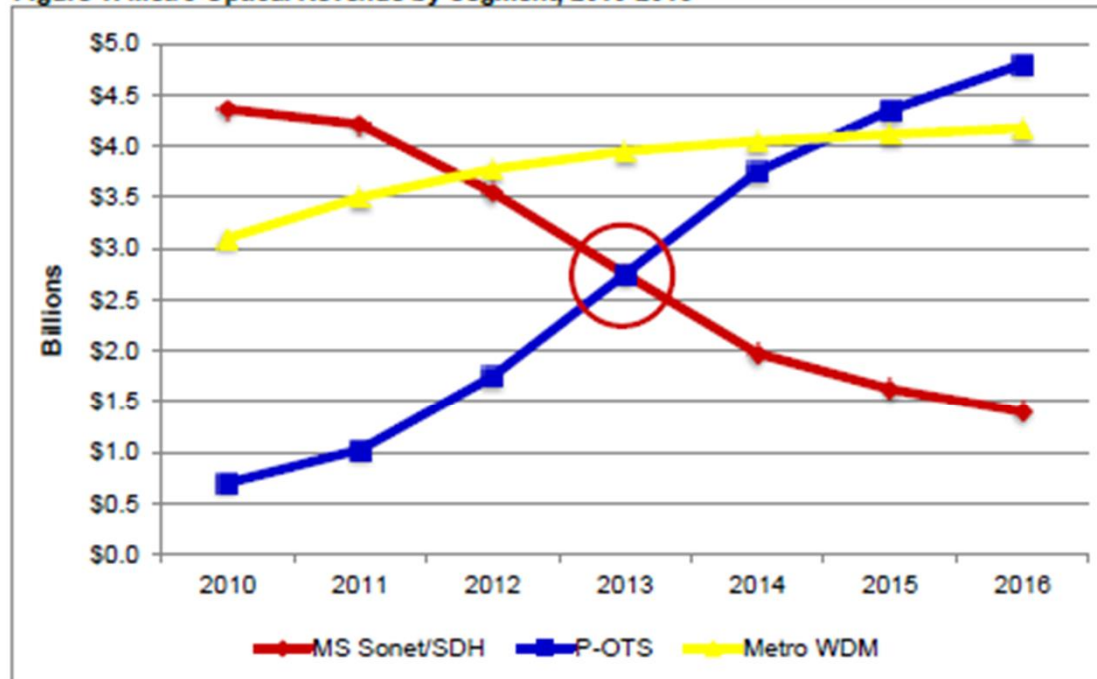
- SDN (Software Defined Networks) is the latest buzzword in carrier networking
- Defining networks that can accelerate service velocity and time-to-revenue

Carrier Networks Entering Pure-Packet Era



Heavy Reading believes that we are entering a new era of P-OTS, which we'll call P-OTS 2.0, which seeks to build on the packet shortcomings of the first generation. Figure 1 shows that, as we enter this new phase, P-OTS is finally poised to make the crossover and unseat Sonet/SDH as the dominant form optical transport and metro and aggregation networks.

Figure 1: Metro Optical Revenue by Segment, 2010-2016

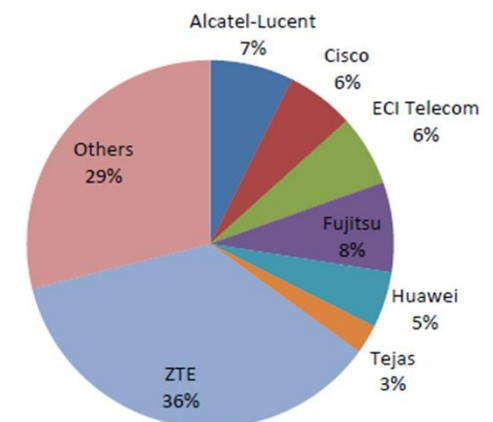


Source: Heavy Reading

In this new era, we expect to see the following:

- The focus of packet-optical shifts from TDM functions to packet functions
- Pure packet implementations of P-OTS begin to ramp and, ultimately, dominate
- Switched OTN enters the metro, removing the need for Sonet/SDH fabrics in new elements
- 100Gbit/s (100G) takes hold in the metro

Global POTP Aggregation Market Market Size: \$1.5 Billion

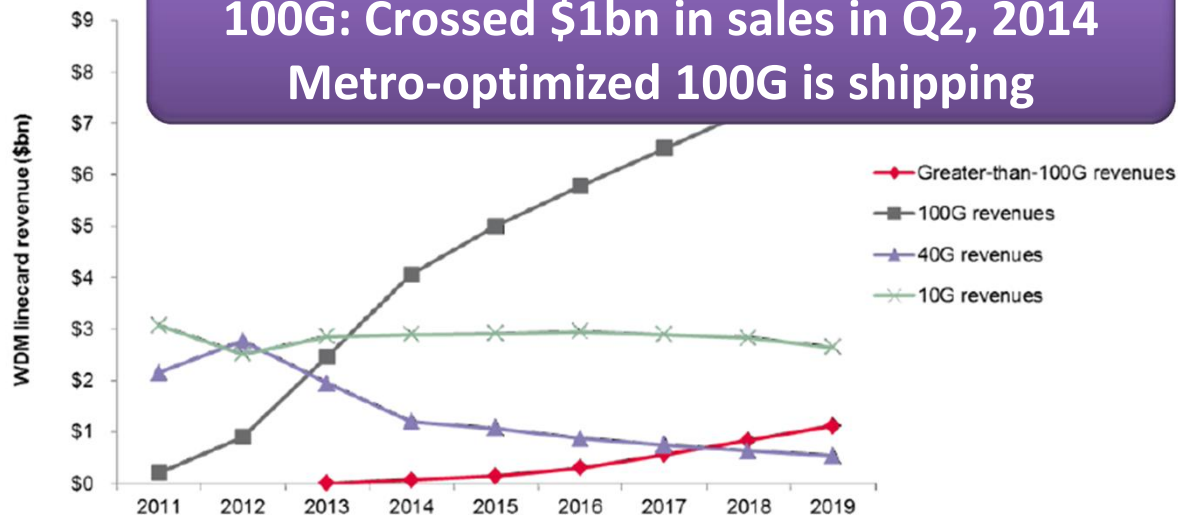


Tejas breaks into Top-10 in
Global POTP Aggregation
market (source: Ovum)

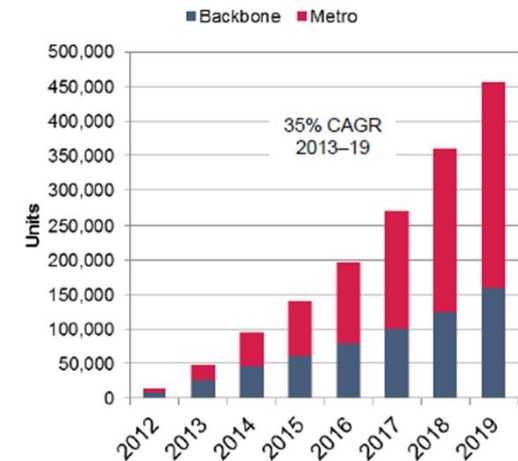
Capacity is King: 100G & Terabit Switching



100G: Crossed \$1bn in sales in Q2, 2014
Metro-optimized 100G is shipping

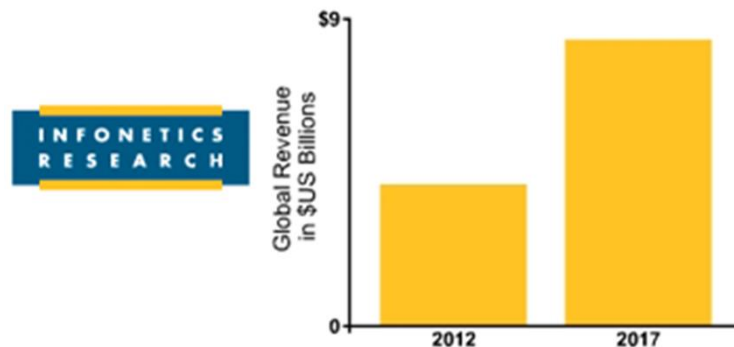


100G unit volume forecast, 2012–19



Source: Ovum

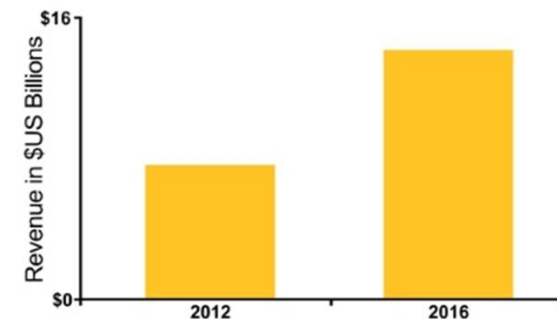
ROADM: Flexible and Dynamic Photonic Layer



© Infonetics Research, ROADM Components
 Biannual Market Share, Size, and Forecasts, May 2013

OTN: Terabit-scale Sub-Lambda Grooming

The OTN transport and switching market is forecast to hit \$14 billion by 2016



© Infonetics Research, OTN and Packet Optical Hardware
 Biannual Market Share, Size and Forecasts, June 2012

SDN: “App-driven” Networks

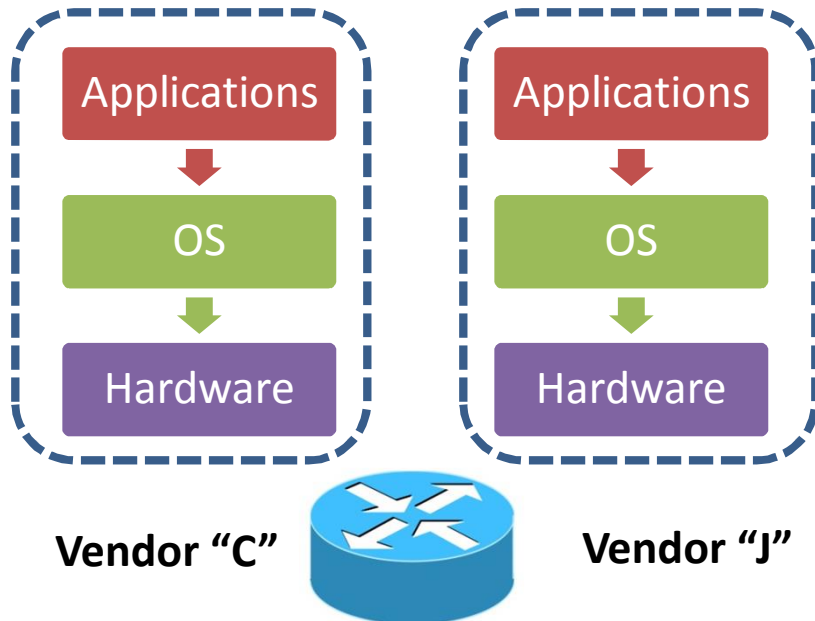


One Android OS

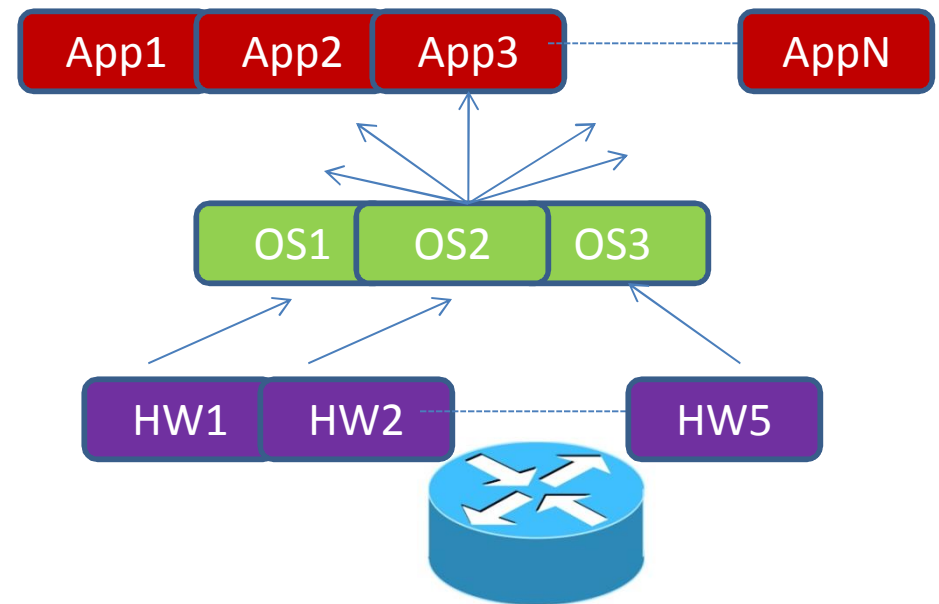


Millions of Apps

Hundreds of Models



Networks Today



Future Networks

Optimizing Mobile Networks for India



Multi-generational Support

- Uncertain network trajectory. 2G still abundant, 3G/4G arriving in quick succession unlike in the west.
- A POTP platform should be able to work as a full-featured PTN in future.

Diverse Redundancy Options

- Greater sensitivity to potential field issues – fiber cuts, card and node failures
- Dual Power Supply modules on 1U/2U platforms. Redundancy at hand-offs.

Advanced Multi-level Quality of Service features

- Granular control of network traffic in terms of better service-level bandwidth assurance, performance monitoring and operational fault management features
- User-friendly graphical features simplifying configuration, provisioning and management of networks

Integrated Solutions for Fronthaul and Backhaul

- Unified platforms for broadband access (GPON, LTE) and optical backhaul

Tejas Networks: A Snapshot



Who we are

- Ç India's pioneering telecom product company
- Ç Headquartered in Bangalore; Offices in 8 countries
- Ç Professional founding team with global experience in high-tech products
- Ç Blue-chip investors- Dr. Gururaj Deshpande, Goldman Sachs, Intel, Mayfield, Sandstone
- Ç 590 member team- 60% in R&D; Majority from top universities in India and abroad

What we do

- Ç Design & Manufacturing of Fiber optic transmission
- Ç Our customers are telecom service providers, utility cos. and defense
- Ç We are ranked in Top-10 Packet Optical Transmission (POTP) vendor globally and are #2 in India for FY14 (source: Ovum)
- Ç We are TL9000 certified; World-class quality- over 99.9999% field uptime
- Ç Shipped over 300,000 systems to customers in over 60 countries, including US, EU, Japan
- Ç OEM supplier to global equipment leaders
- Ç R&D/IPR edge; filed >200 patents;





Thanks