



Power Over Ethernet Customer Requirements



Customer Expectations

- ◆ Customer demand Investment protection
 - Simple, Reliable and Cost Effective Solutions
 - Long Term Useful life
 - ◆ **NOT** Planned Obsolescence
 - ◆ 5 year expected life on most Communication systems
 - Backward Compatibility- NO Fork Lifts
 - ◆ 802.3 support has extended the useful life of numerous products
 - ◆ NICs supporting Hubs now supported on Switches
 - ◆ Hubs are not obsolete with introduction of Switches
 - ◆ Routers
 - ◆ Physical plant- CAT3/CAT5 support 10, 10S, 100,1K
 - No Re-engineering my Network
- ◆ Safe- non Hostile environments
 - ◆ Ranging from NICs, Phones and Children to next gen devices



3 Step Process Examples of Success

- ◆ Interface- support legacy implementations, e.g.
 - VoIP Gateways- circuit switch connections
 - Switches- support Cat3/5 and NICs
 - Voice Messaging and Voice Response Systems-
 - ◆ circuit switch connections with common Control link (e.g.SMDI)
- ◆ Integrate- enhance operations, preserving investment while going beyond “Interfacing”
 - CTI services-
 - ◆ TSAPI, CSTA, CT Connect for 3rd Party Call Center Apps
 - DHCP, LDAP,
- ◆ Migrate
 - Next Generation, Integrated offers for Evergreen and Upgrade site



Forklift Failure

◆ SCSA- TAO

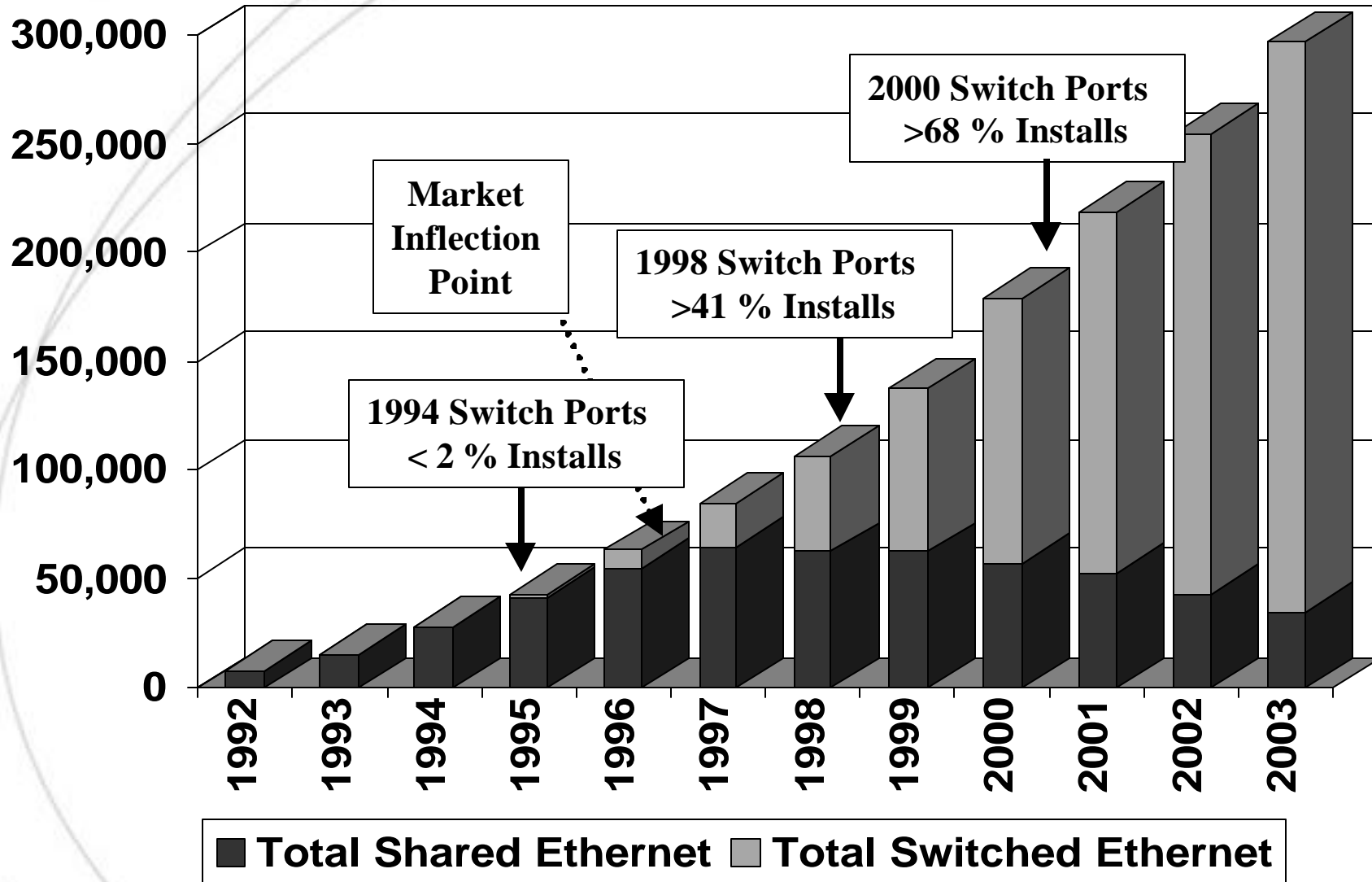
- Proposed suite of API's for 3rd part application support.
- Initial release offer no SPI for integrating installed base of IVR systems from IBM, Syntellect, AT&T, Periphonics, etc.
- Results- Major customer and Application developer would NOT support program without a mechanism for supporting the installed base.
 - ◆ Committee caved in and agree to develop SPI layer for existing services
 - ◆ SCSA-TAO is now S.100/S.200 and has receive wide industry support

◆ Exchange 1.0-3.0 for Unified Messaging

- One way- message exchange lead to limited support of MS Exchange for Unified Messaging. Release 4.5 + offer bi-directional support



Shared Vs Switched Port Installations (000's)





Conclusion

- ◆ Customer requirements support using Pair 3 & 4 for Powering Devices over Ethernet
 - Backward Compatible to 300M Ethernet ports
 - ◆ IEEE has always recommended four pairs to support "future enhancements"-
 - ◆ Customer control of migration timeline
 - ◆ Gradual Upgrades
 - ◆ Mixed New and Old will actually accelerate adoption
 - Least Hostile approach- Safety issues
 - Doesn't require a wholesale replacement of infrastructure
 - Impacts the smallest number of customers
 - ◆ More have Cat3/Cat5 (4 pair) than 2-3 pair
 - ◆ Everyone with Hub/Switch port can participate- under their terms