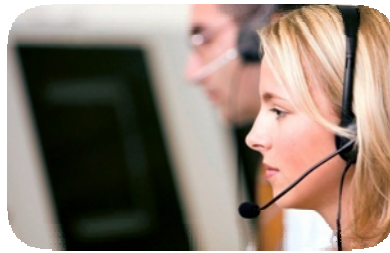
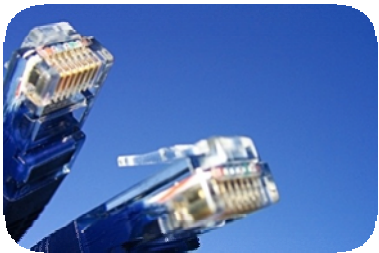


NTS

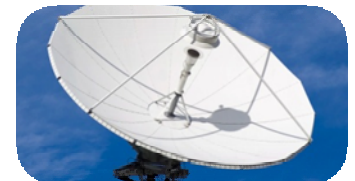
Operations Support System



Executive Briefing

Overview

- **About NTG**
- **Carrier service provider (CSP) industry trends**
 - ❖ **History and role of OSS systems**
 - ❖ **Key OSS drivers today**
- **NTS overview**
- **Making the right OSS decision**



About NTG

- Global technology solutions provider
- Established in 1992, serving telecommunications, IT, utilities, enterprise and government
- Offices and operations in Canada (Toronto, Montreal) USA, Egypt (Cairo, Aswan) Kuwait, Algeria and Saudi Arabia
- Over 150 Telecom, IT and Network professionals worldwide
- Substantial track record in designing, developing, and supporting advanced OSS and e-business solutions
- Listed on TSX Venture

NTG Core Business



- **Software Development**
 - ❖ NTS OSS
 - ❖ Smart2Go E-Business System

- **Professional Services**
 - ❖ Network Services
 - ❖ System Integration
 - ❖ Industry Staffing



- **Training Services**
 - ❖ Networking
 - ❖ Security



Our Clients Include



Key Trends in the Carrier Service Provider Industry and Their Impact on OSS Systems



CSP Industry Trends

- Deregulation, strengthening competitive environment
- Convergence of network technologies around IP
- Emergence of new services crossing traditional silo boundaries (e.g., IPTV, voice mail to email, VOIP)
- Accelerated development and launch of niche services
- Customer expectations for customized, reliable services
- Investment in next generation OSS, movement away from legacy systems



CSP Perspective on OSS' has Shifted

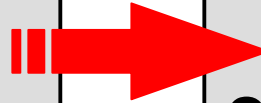
Historical

Monopoly

- ❖ Guaranteed rate of return
- ❖ Government bureaucracy
- ❖ Inefficiency is rewarded

OSS Perspective

- ❖ Isolated databases
- ❖ Asset management
- ❖ Work flow management
- ❖ Support services
- ❖ Cost centre



Today

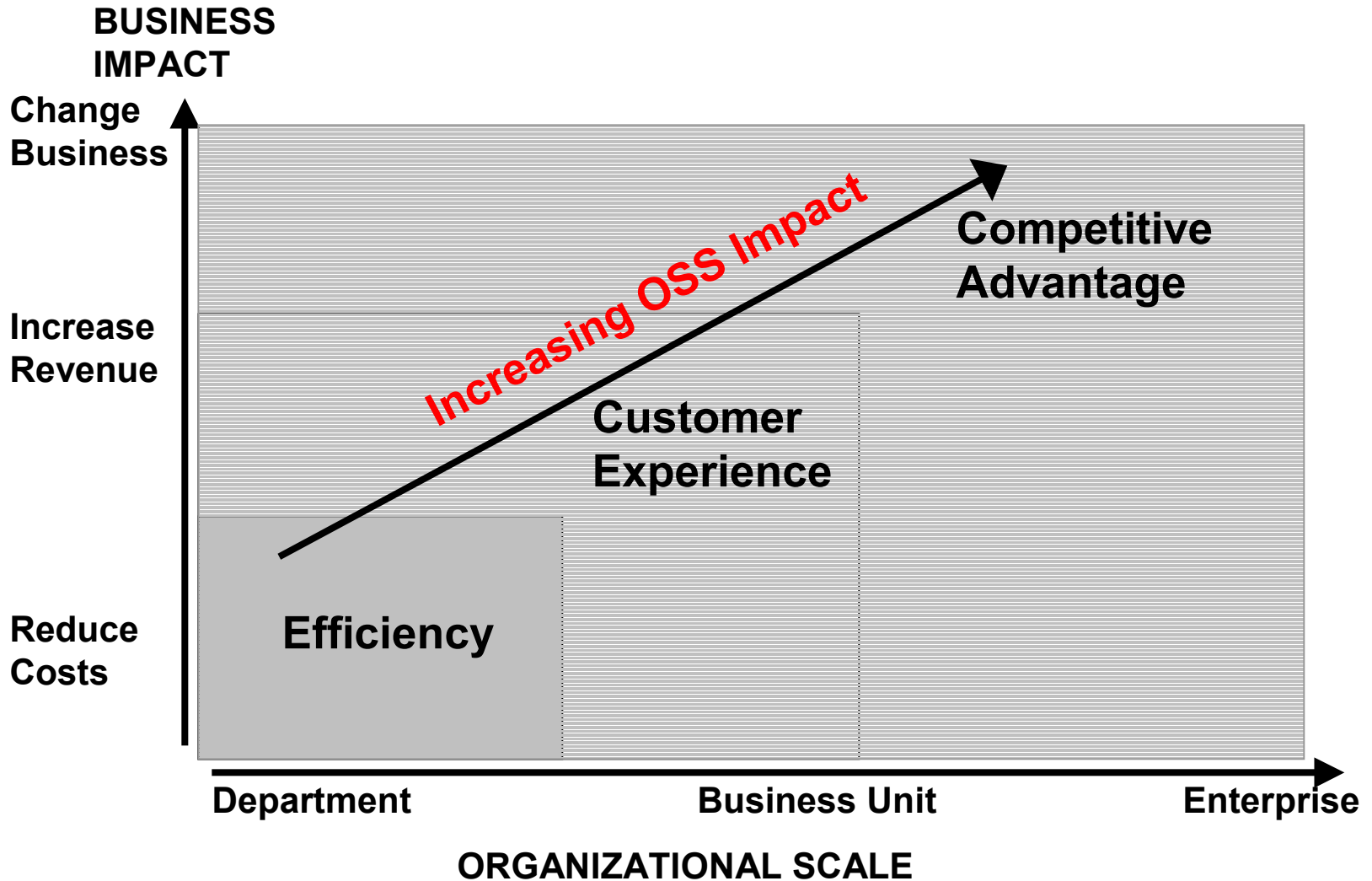
Open Market

- ❖ No financial guarantees
- ❖ Fight for market share
- ❖ Efficiency yields profits

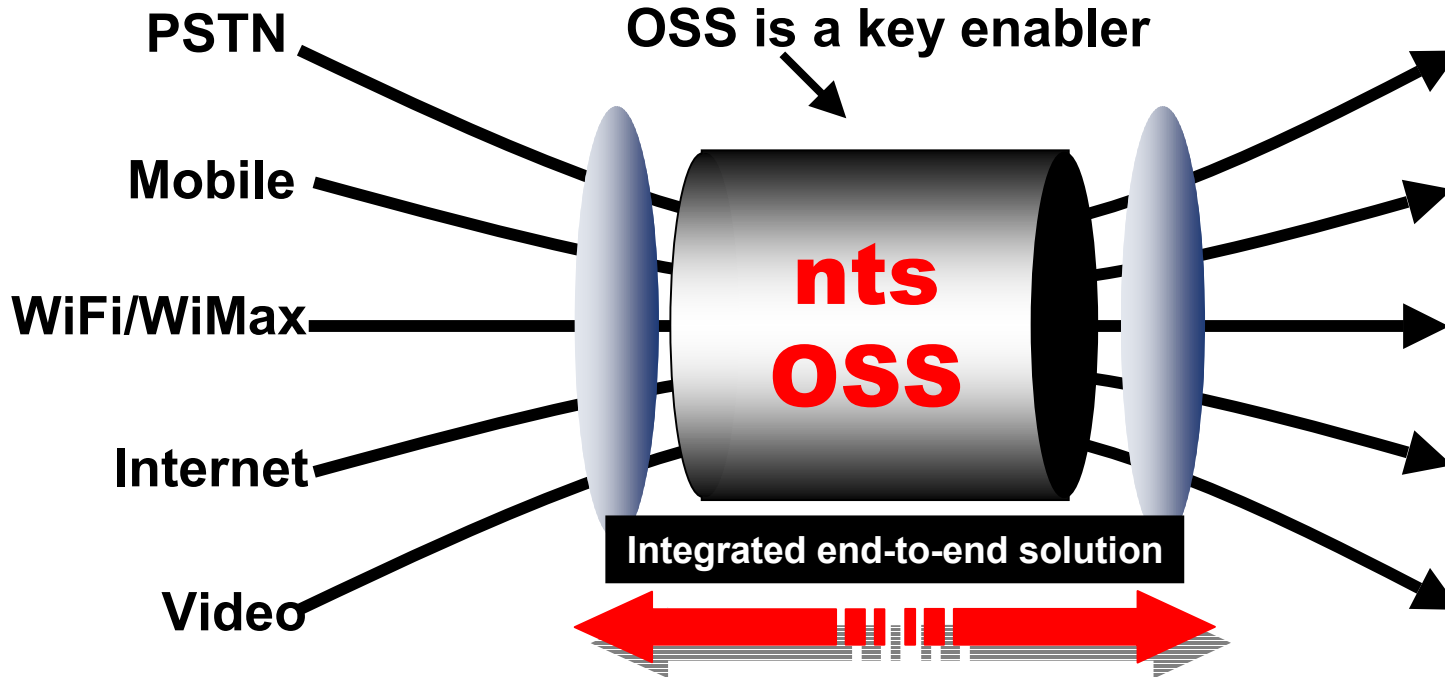
OSS Perspective

- ❖ Integrated ERP system
- ❖ Asset optimization
- ❖ Enhanced Customer Experience
- ❖ Enables and supports services
- ❖ Strategic investment

Quantum Leaps in OSS Transformation



Convergence and Divergence



Service Management Middleware

**Network
Elements**



**Customized
Individual
Services**

NTS

– A FULLY INTEGRATED GUARANTEED FIXED COST OSS



NTS Overview

NTS – A Fully Integrated Guaranteed Fixed Cost OSS

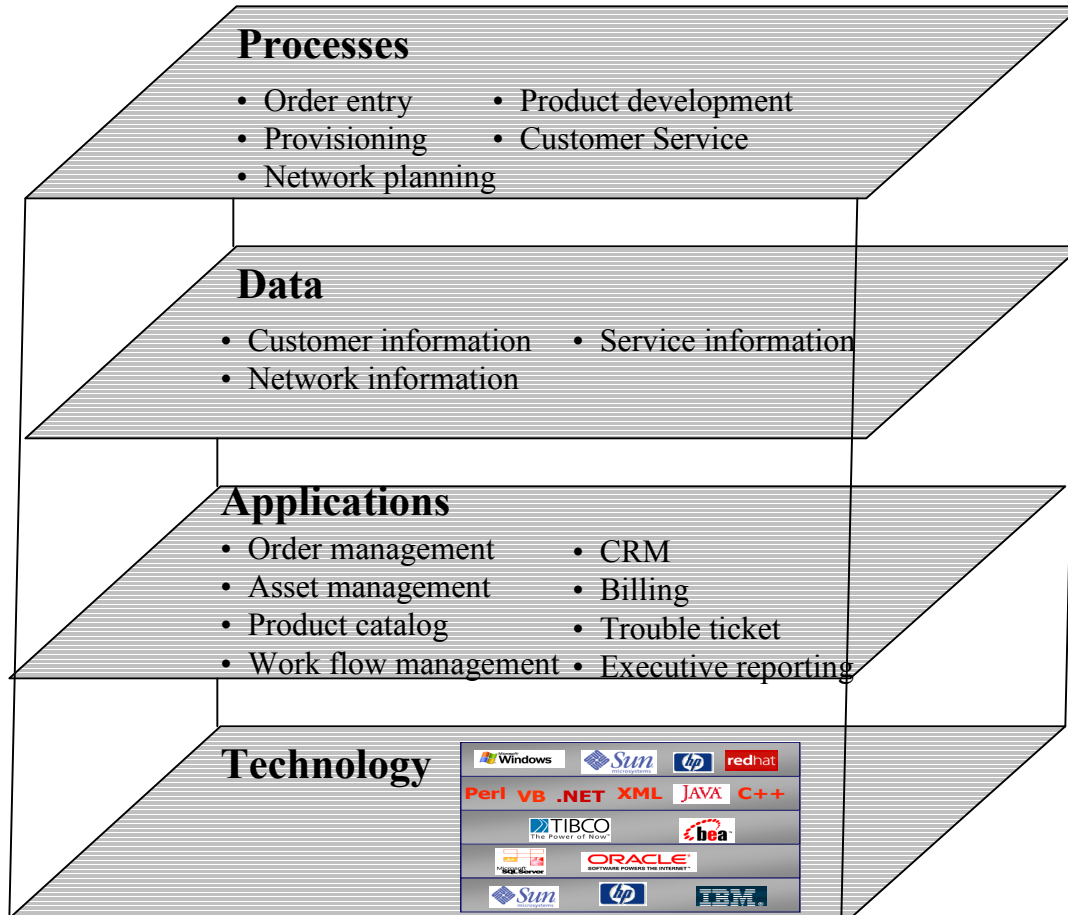


Key Features of NTS

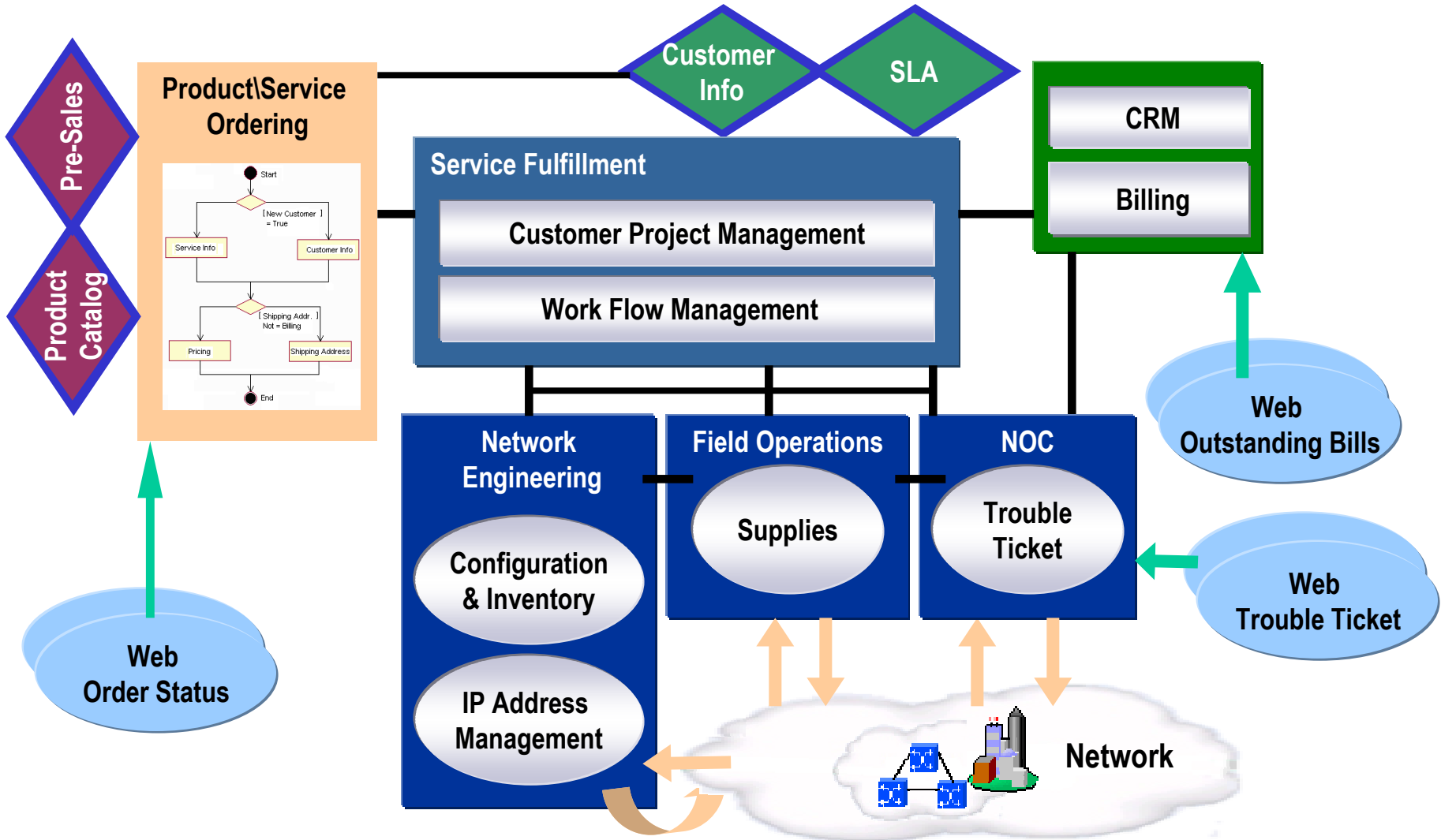
- NTS is an enterprise-wide OSS solution that seamlessly integrates CSP's operations and networks, enabling the delivery and support of next generation services to customers
- Designed by Telecom Engineers specifically for Telecom Companies
- GIS (Geographic Information System) add-on opens new horizons
- Flexible and scalable architecture
- User friendly, self explanatory screens
- Easily configured to match desired CSP processes
- Enables complex, bundled service offerings
- Integrated management and executive reporting
- Modular – can be integrated with existing systems
- Built on robust, proven technology platform

NTS Business Level Architecture

NTS encompasses four integrated elements:

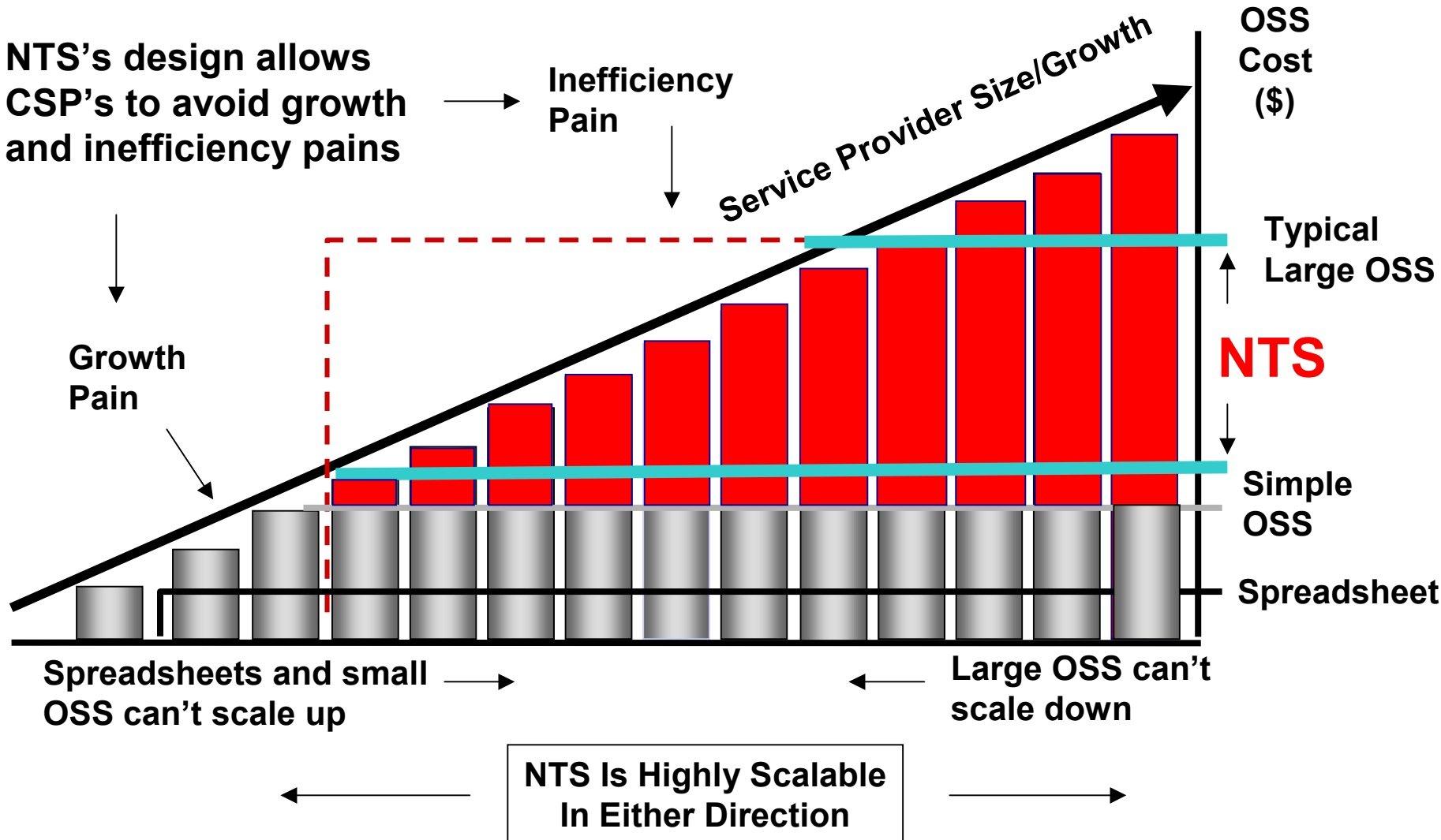


NTS Data Flow Architecture



Highly Scalable Design

NTS's design allows CSP's to avoid growth and inefficiency pains



NTS- Building Blocks

NTS can be implemented as an 'Integrated OSS' or 'Discretely' with interfaces to existing client systems.

1. Order Entry and Workflow Management
2. Product and Services Catalogue
3. Customer Relationship Management
4. Network Inventory and Configuration
5. Customer Project Management
6. Network Project Management
7. Trouble Ticket Management



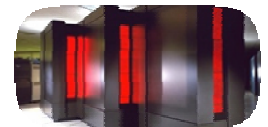
NTS- Building Blocks

8. IP Address Management
9. Warehouse Management
10. Bandwidth On Demand
11. Billing (including VoIP, WiFi and usage based)
12. Workflow Provisioning
13. Executive Views (for Corporate control and reports)
14. Auto Discovery and Network Reconciliation



Technical Information

- J2EE Technology, Multi-Tier Architecture
- Application Server: JBoss 4.0 with Tomcat 5.0
- Support Web-Sphere, Bea WebLogic
- Oracle Database Server
- Support other Databases: SQL Server, DB2, Informix
- Crystal Reports Enterprise: Web-based Reporting
- Web Access to the System (ISP/Reseller, Customers)
- ADSL, WiFi, Wi Max support
- Bandwidth On Demand
- Multi-Payment Support
- VoIP
- Loyalty Program Support



Implementation Services

NTG provides a full range of professional services to ensure timely and efficient NTS implementations.

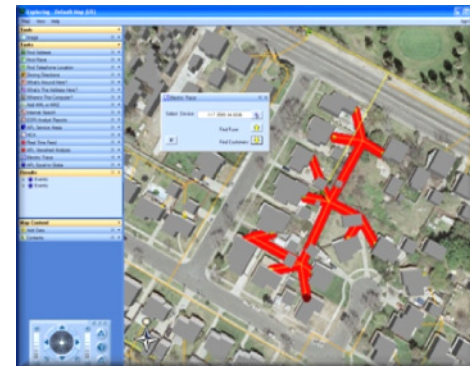
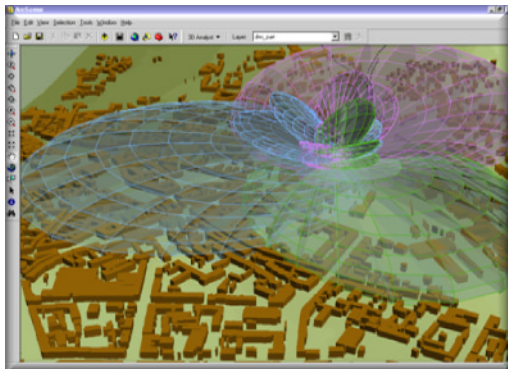
- Project Management
- Installation & Configuration
- Database migration and population
- Integration with other systems
- Customization to accommodate
 - ❖ Service offerings
 - ❖ Processes
 - ❖ Reporting requirements



Adding Geography to NTS

NTG offers an easy to use, fully customizable GIS (Geographic Information System) solution as an add-on to NTS. The power of GIS has opened new horizons in the Telecom world.

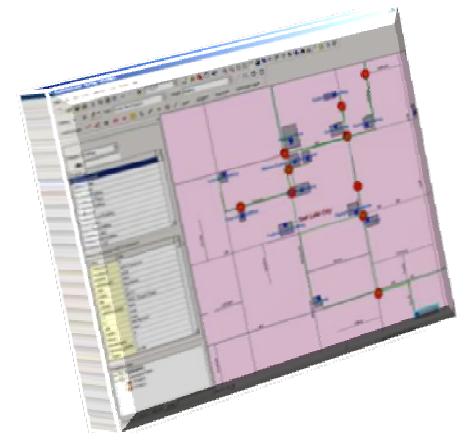
Our GIS solution interfaces and communicates with Customer Relations, Network Operations, Planning, Asset Management, and Field Operations.



Adding Geography to NTS

Some of the functions our GIS solution provides are:

- Locating and responding to area coverage queries
- Asset Management
- Identifying closest retail outlets
- Forecasting growth and targeting capital expenditures
- Identifying and prioritizing known problem areas
- Identifying infrastructure at/near capacity
- Graphically monitoring network performance
- Positioning cell towers (line of sight analysis)
- Dispatching / routing / tracking service vehicles



The Future – Ongoing NTS Development

- Implementation guided by:
 - ❖ Customers
 - ❖ Industry trends & standards
 - eTOM, IMS, Prosspero
 - ❖ Advisory board of senior CSP executives
- Product roots are based on field experience
- NTG relationship allows for open window to field expertise
- No 'Ivory Tower' development mentality
- Existing lead customers provide excellent supporting environment for new enhancements

Current Customers

The system is used fully or partially (specific modules) by:



Making the right OSS decision

Factors to consider:

- **Flexibility**
 - ❖ Can the OSS meet your current requirements?
 - ❖ Is it capable of giving you a strategic advantage by enabling innovative service offerings?
- **Scalability**
 - ❖ Can it support projected growth in terms of customers, services, and network resources?
 - ❖ What processes does the OSS supplier follow to ensure the system is continually enhanced to meet the changing requirements of the CSP business?



Making the right OSS decision

- **Efficiency (cost to operate)**
 - ❖ Is the system user friendly?
 - ❖ What effort is required to add new services and/or make changes to the system to accommodate new processes or new reporting requirements?
- **Cost to buy and implement**
 - ❖ What are the license fees and associated professional service fees to implement the system?
 - ❖ What internal resources will be required during the implementation phase?
- **Ongoing support and maintenance**
 - ❖ How will the OSS vendor provide ongoing support (onsite/offsite, dedicated support personnel, etc.)?

Summary

- **NTS has been designed to enhance the competitive posture of its CSP clients by**
 - ❖ Enabling new revenue streams
 - ❖ Enhancing customer service levels
 - ❖ Improving operational efficiency
- **NTS can scale up or down to meet the specific requirements of a CSP**
 - ❖ Avoids inefficiency of buying a system that is too big
 - ❖ Avoids growth pain by scaling to match requirements

NTG will continue to invest in ongoing development and enhancements to NTS to ensure that its CSP clients sustain an advantage over their competitors.



International Projects

Thank You

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