Managing A Global IT Infrastructure – Challenges and Successes

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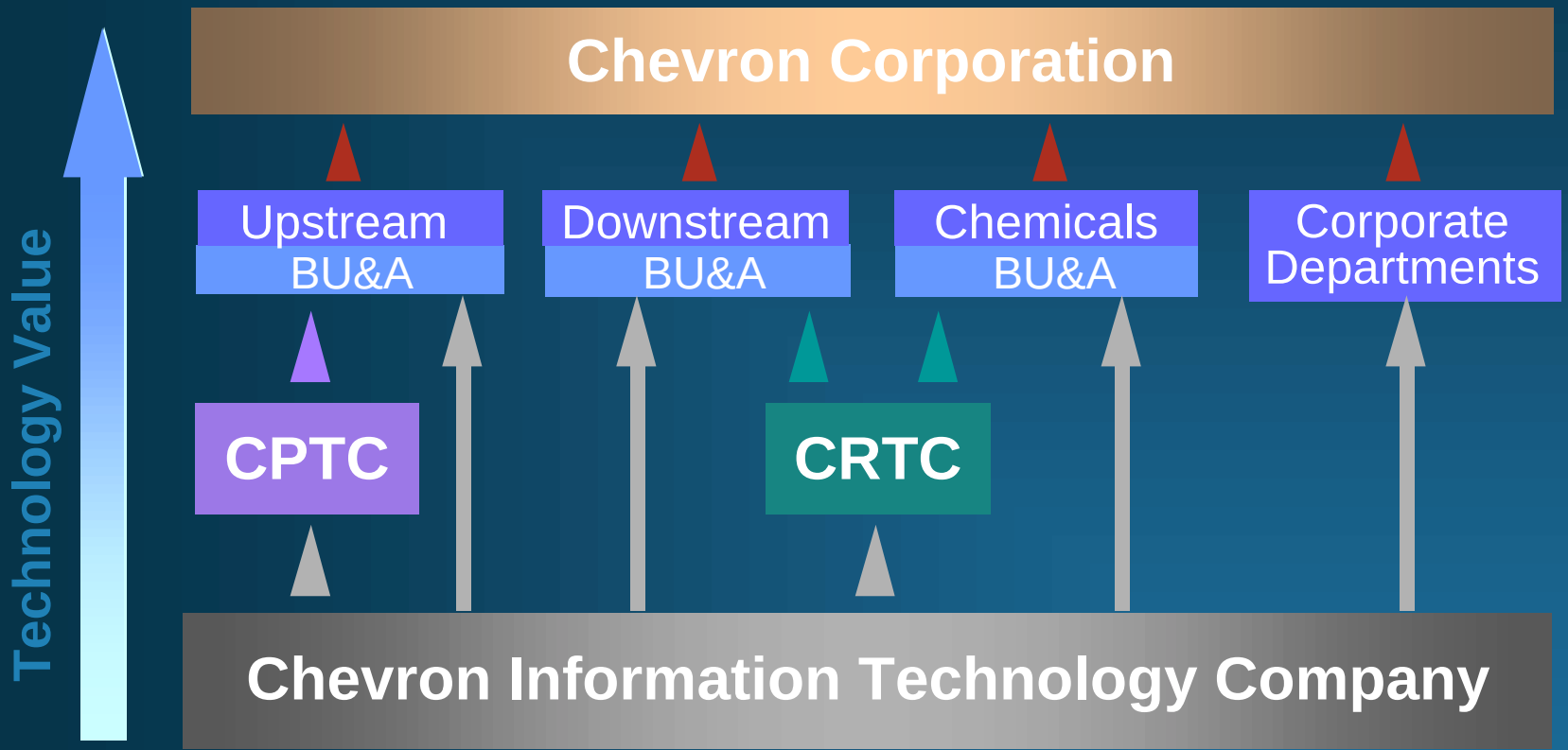
Creating Shareholder Value through Enabling Technology



BU&A = Business Units & Affiliates
CPTC = Upstream Technology Business Unit
CRTC = Downstream Technology Business Unit

The Road to a Common Infrastructure

- Disparate systems
- Local optimization
- No governance
- Difficulty in sharing data
- High cost

- Common global platform
- Global s/w distribution
- Control of application integration
- Defined decision process for IT Infrastructure
- Well documented, component cost model

- Web-enabled
- Modular
- 'E'cosystem (partners, JVs, suppliers, etc.)
- Global governance
- Anything from anywhere

Before GIL - The Beginnings

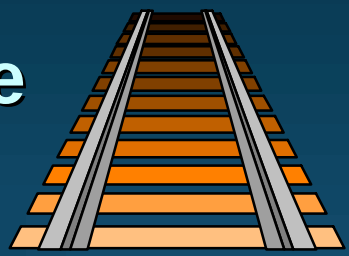
- Common Operating Environment (COE) 1991-1997
  - Decisions by department or business unit
  - Disparate systems; Local optimization
  - No governing process
- Drivers for Change
  - Difficulty in sharing data - software versions
  - Difficult in sharing PCs
  - Duplicate efforts; Redundant problem solving
  - Multiple competing technology solutions
  - Lack of buying leverage
  - Lost productivity
  - High cost

Chevron's IT Vision

- I997 IT Vision Goals:
  - Better align IT with business requirements and position it to deliver on current and future needs.
  - Reduce the overall cost of network computing by at least $50 million/year.
- Key Strategies
  - Leverage business value by having business management own all IT decisions other than the common infrastructure
  - Optimize the common infrastructure by only including services:
    - That are used by the vast majority of Chevron
    - Where there is strong business value in having commonality across the corporation
  - Keep all strategic services in house and pursue outsourcing as the preferred strategy on all others

Chevron's IT Vision

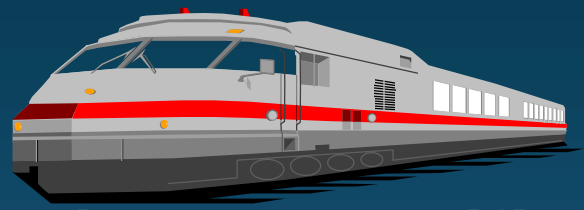
IT Infrastructure



A common, global IT infrastructure with a universal set of products and services that are used by all of Chevron

- Network computing
- Telecommunications
- Mainframe Computing

Managed for operational excellence: reliability, service excellence and low cost.



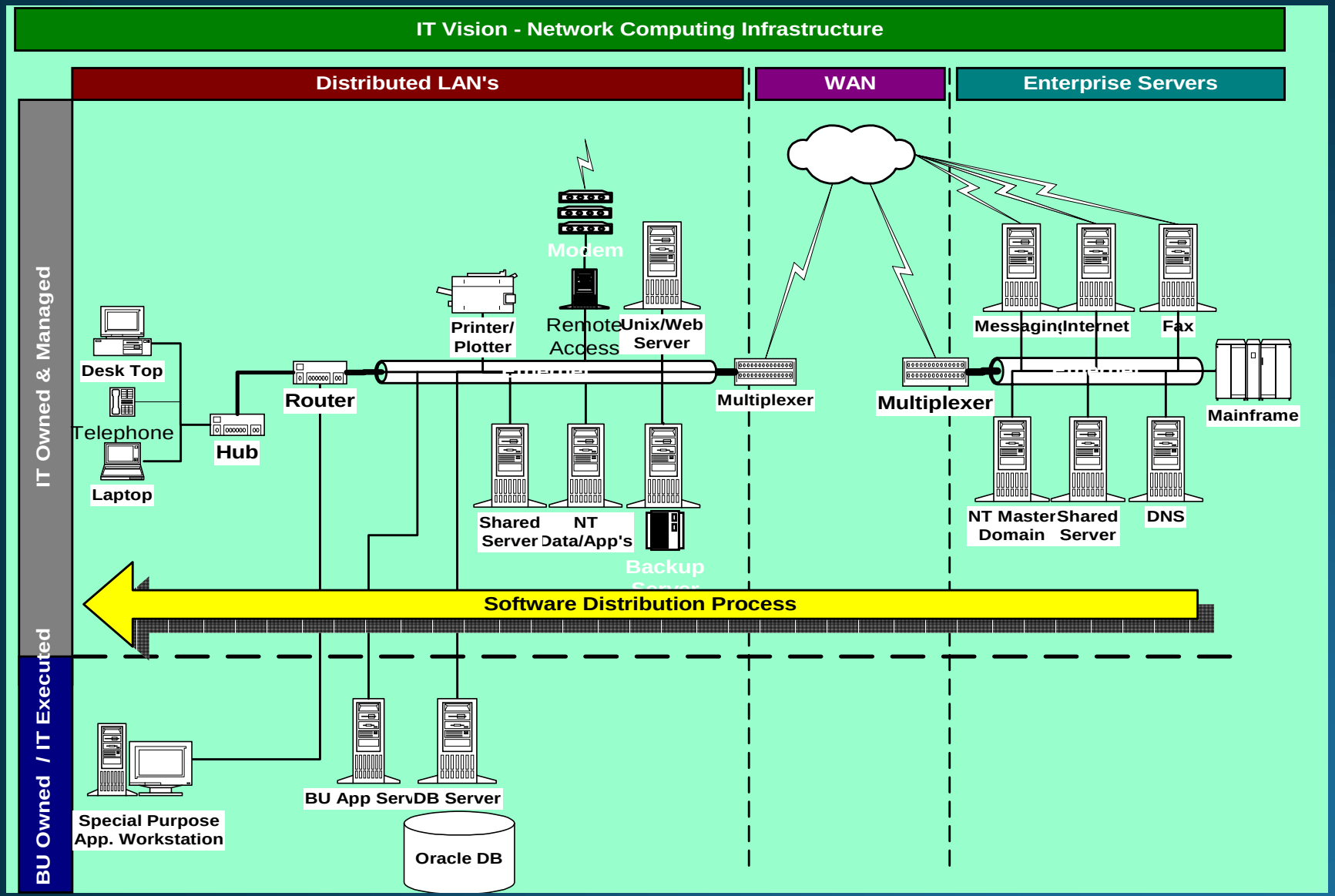
Business Specific IT Services

Differentiated products and services

- Business Applications
- IT Consulting

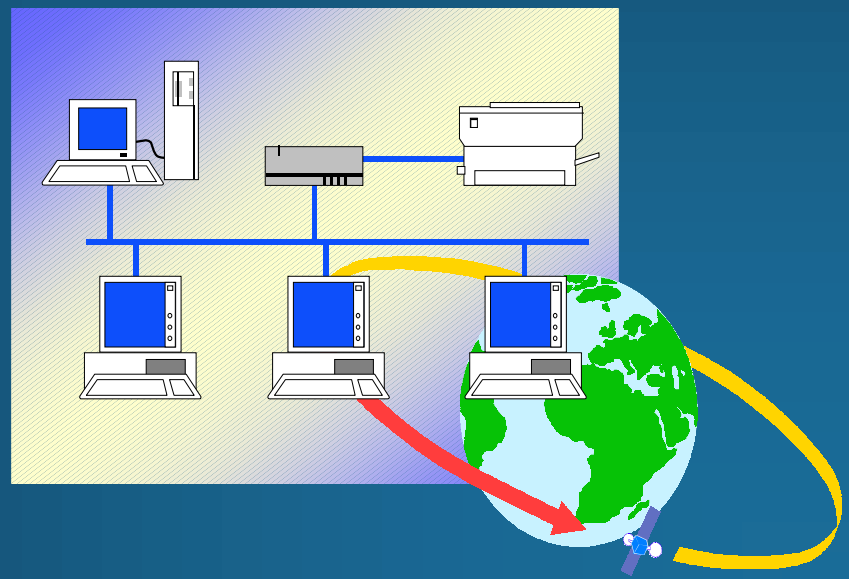
Managed for strategic and competitive advantage

IT Vision - Network Diagram



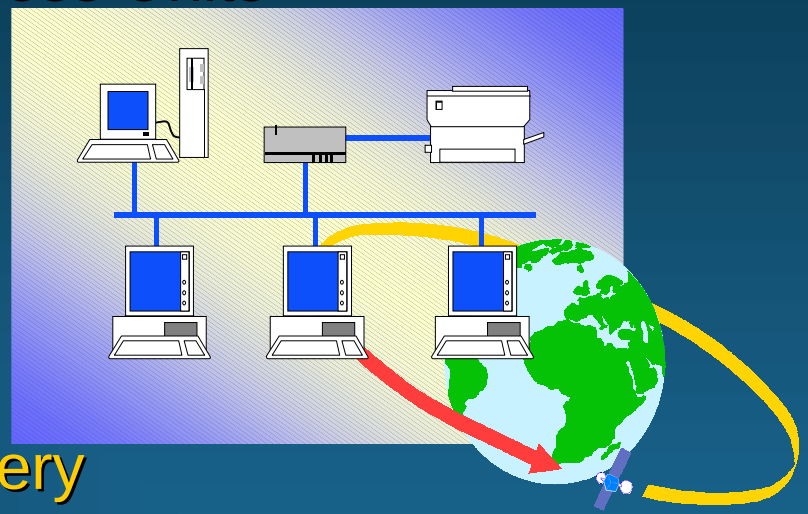
Global Information Link Project

- **Business drivers**
  - Significant cost reduction through standardization
  - Improved reliability, responsiveness and user access
  - Faster, cheaper applications deployment
  - Improved communications
- **A project to implement a common network computing infrastructure worldwide**
  - One network and protocol
  - One PC operating system
  - One brand of PC
  - One e-mail system

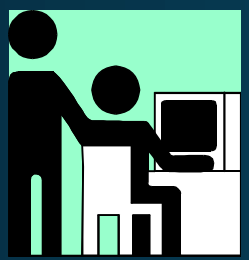


GIL Project Scope

- 40+ Chevron major Business Units
  - 30+ countries
  - 660+ sites world-wide
- Standard Hardware
  - 24,000 desktops
  - 5,000 notebooks
- Automated software delivery
  - Standard image and 4,000 business applications
- Common Maintenance and Support Processes
- Standard NT Server Infrastructure
- Standard Local Area and Wide Area Networks



GIL Bundled Services



Access Points (PC,NT)

Maintenance Functions: managed client, software integration and delivery, back-up, virus response, software/hardware asset mgt.

Common Business Function: MS/Office, E-mail

NT Infrastructure: security , flexible access, naming

Common Shared Service: Standardized file & print sharing

Information Access & Collaboration: Internet, Intranet, NetMeeting, NetShow

Connectivity: Local (LAN), World-wide (WAN), Remote Access,via Internet (VPN)

Support (Hardware Break/fix, Help desk, Support Web Site)

GIL Project: Key Success Factors

- Partnership of central and local IT staffs is a requirement for success
- Design must meet diverse business requirements
  - Added delivery models during development and rollout
    - Non-US, Plants, Small Offices, Non-English
- Evergreen policies and processes are required before deployment
- Schedule to allow time to respond to lessons learned during early deployment
- Standard project management process
- Executive business sponsorship
- Independent project audit process to focus efforts

GIL Management Principles

- GIL is business driven
  - Infrastructure changes are made at the pace of business – when they generate business value
- GIL provides a common infrastructure across a diverse set of customer business requirements
  - GIL is a global IT Infrastructure
  - Special market segments require cost effective solutions
  - Standards are maintained to provide inter-operability between Chevron business units and partners
- Minimized GIL costs will maximize discretionary IT/Technology funding for value added opportunities
- GIL pricing will be practical and reflect actual costs
  - Pricing models will be based on total cost of ownership
  - Services will be organized around areas that deliver value

GIL Met the Business Goals

- Better alignment with the business
- Improved communication
  - E-mail everywhere
  - NetMeeting, NetShow
  - Avoid conflicts with software versions
- Improved productivity
  - Reduced support activity by 20%-70%
  - Work on any GIL PC
  - Improved ability to deploy applications
- Accurate asset management
- IT cost savings vs. 1996: $60 MM

Ongoing Value to Business

- Reliability, availability and support
  - Documented processes and problem resolutions (SPG)
  - Centrally managed application integration process
  - Fast response to correct hardware and software problems
  - Reduced help desk calls and local support
  - Ability to leverage support across business units and locations
- Ability to meet IP requirements
  - Quick and effective response to virus attacks
- Standard platform and business functionality
  - Simplifies application delivery
  - Improved communications and data sharing
  - Ability to work at any GIL machine in any location

Ongoing Value to Business (2)

- Distributed infrastructure
  - Application deployment using GIL infrastructure (SMS and options panel)
  - Potential to roll out new products (e.g. media streaming) for low costs
- Increased functionality (e.g NetMeeting)
- Ability to respond quickly and effectively in the event of a disaster (e.g. Pascagoula Refinery)
  - Hardware and software can be configured and staged at another location
- Fast and easy implementation of new offices
  - Standard PC and server hardware and software image

Business challenges in a changing world

- Support changing business models
  - Joint ventures
  - Business partners
  - Globalization
- e-Commerce
- Business anytime, anywhere
- Web-centric services
- Explosion of new IT services
- Increasing requirements for security, directory services

What is GIL 2.001?

- A delivery system for business services that
  - Facilitates communication, collaboration, application use, and secure access to information
  - Stimulates high organization capability
  - Enables efficient interoperation among Chevron business units and partners

  And

- ...GIL 2.001 is NOT just a new desktop

GIL 2.001 compared with GIL

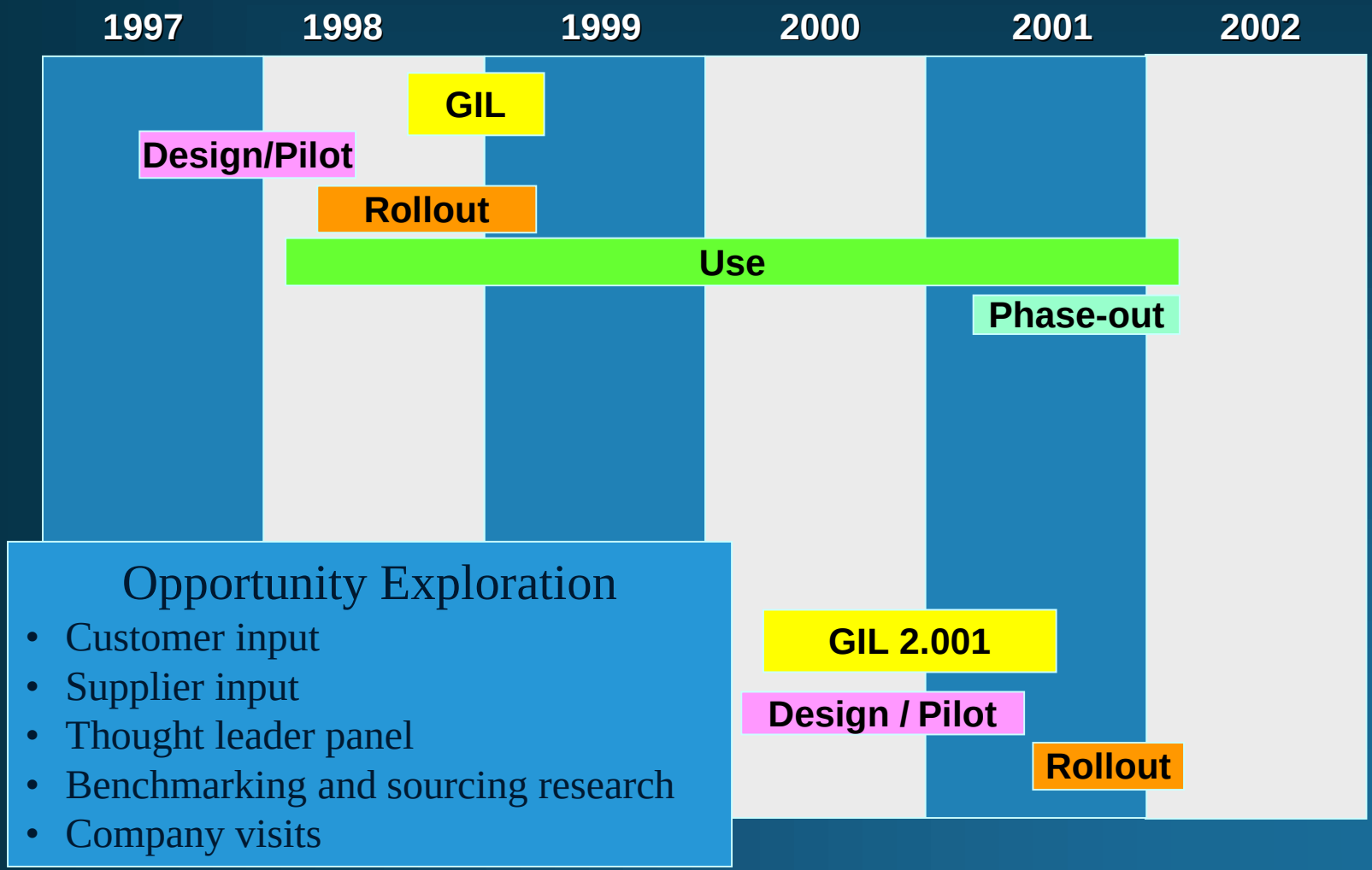
GIL 1

- Chevron Internal
- Lower costs
- Meet overall needs
- Monolithic
- Focus on hardware asset
- Transition all software
- Windows & Servers
- Remote connectivity needed
- Synchronize and slow change

GIL 2.001

- Chevron ecosystem
- Manage Cost to Value
- Fit BU needs better
- Modular (Add Flexibility)
- Focus on enabling functionality
- Manage software
- Web centric
- Remote access improved
- Maintain software currency

GIL Timeline



Opportunities for GIL 2.001

- Support the “business e-cosystem”
  - Leverage Web for access, connectivity and tools
  - Provide capability to interface with other companies
  - “If you can get to the Web, you can get to Chevron!”
- Offer low cost option
  - Provide low cost, lower functionality alternative
  - Interest from plants, field locations, and others
- Organizational capability
  - Provide technologies / services that promote collaboration and sharing standards
  - Benefits jump when everyone has access to tools

Opportunities for GIL 2.001

- Lifecycle management
  - Manage change and investment by component
  - Continuous level of investment
  - Reduced cycle time for critical improvements
  - Increased customer choice
- Sourcing alternatives
  - Potential to reduce costs and improve service
  - Focus on utility services
  - Avoid getting locked into technology or service in quickly changing areas
- Product offering and technical improvements
  - Ergonomics, software management, security
  - Improve customer knowledge and usage
  - Non-English support

Key Implications for GIL 2.001

- The Web is where...
  - Our partners & customers will expect to work
  - E-business and new work processes can be leveraged
  - A whole world of services can be leveraged
  - Business is open anytime, anywhere
  - Deployment cycles and software delivery costs are reduced
- A more open infrastructure supports new business models
  - Effective partnering requires sharing of data and resource
- Security and Directory Services are essential
  - Protect interests & intellectual capital by securing data
  - Enable access to Informational Assets as needed
  - Handle increased threats from viruses and DOS attacks

Continuing Challenges

- Find business opportunities to make step change in return on GIL investment
- Manage costs and investment to affordable levels
- Focus efforts and resources to address highest priority requirements
- Develop supplier relationships to lower cost and improve deliverables
- Maintain open planning and development processes

Keys to Success

- Customer Focus
  - Solve the customers' business problems
  - Understand customer value as well as costs
- Decision processes
  - Assessing impact is critical
    - Understand how customers use systems
  - Develop contingencies
  - Balance all customers' requirements
  - CITC "owns" the IT Infrastructure but customers must agree on decisions

Keys to Success

- Develop specific process to interface with customer decision makers
  - Business IT Forum
    - Key IT people from business units
    - Meets twice a year consistent with annual planning process
  - IT Partnership Forum
    - Business Unit IT manager
    - Meet bimonthly - main decision board
  - IT Guidance Committee
    - Heads of Operating Companies
    - Major decisions

Keys to Success (2)

- Manage by Principles
  - Agreement on how early saves arguments later
  - Focus staff on how we do business
  - Focus customer decision process and avoid who benefits arguments
  - Exceptions explained and understood in context of principles
- Standards Must Be Inclusive
  - Standards must apply to all business situations
  - Infrastructure must change as requirements change
  - Clear exception processes when standards won't meet business needs
  - Solutions can be standard, ubiquitous, optional, diverse - know where each one fits
- Develop effective evergreen processes

Closing Thoughts

- GIL is not just a desktop project - it covers the whole infrastructure and positions Chevron for the net-enabled world
- GIL has provided the leverage to increase reliability and functionality while reducing costs
- GIL remains dynamic
  - Continuous learning and improvement
  - Developing business strategies and requirements
- Business sponsorship, governance processes and effective standards established around GIL have allowed Chevron to begin addressing IT issues as an enterprise