



GE Information Services

A satellite image of Europe with a glowing orange and yellow line tracing a path across the continent, starting from the west coast, curving north, and then heading east. The text 'Advanced Trading Services' is overlaid on this image.

Advanced Trading Services



GE Information Services



TPNPost

from...

TPN  Register

A GE/Thomas Publishing Joint Venture



Thomas Publishing

- **Up-to-date Product Information**
- **95 Years in Business**
- **Publish:**
 - 24 Major Buying Guides
 - 29 Product News Magazines
 - Two Product Information Exchange Services
 - Factory Automation Magazine
 - 3 Software Comparison Guides
 - Publication for Selecting Cost-efficient Inbound Transportation



Thomas Register



On the Internet...

- 155,000 US and Canadian Companies
- World's largest online industrial buying source
- 57,000 product and service headings
- 3,100 online supplier catalogs
- 44,000 pages of detailed buying and specifying information.

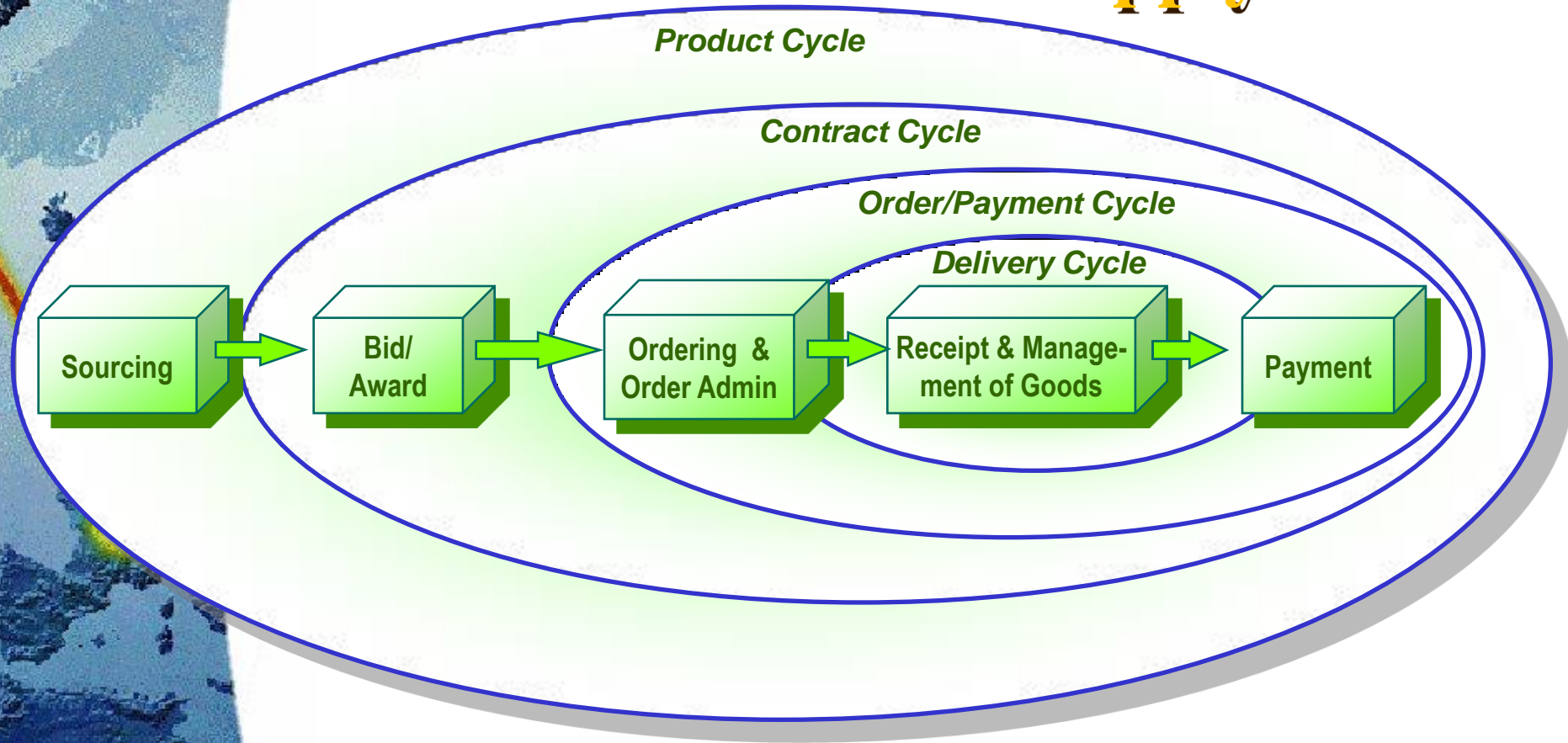


What is the Trading Process Network?

- **Internet Technologies-based service.**
 - A standard platform, enabling organizations to distribute and receive information (data, documents, messaging, content) from their Trading Partners
- **Efficient inter-enterprise material management**
 - A shared service model based on Internet technologies, lowering the cost & complexity of participation while enhancing the user experience
- **Increased productivity**
- **Significant cycle time reduction**
 - Specific content and services based on Industry Standards and Requirements
- **Improved profitability**
for the entire trading community



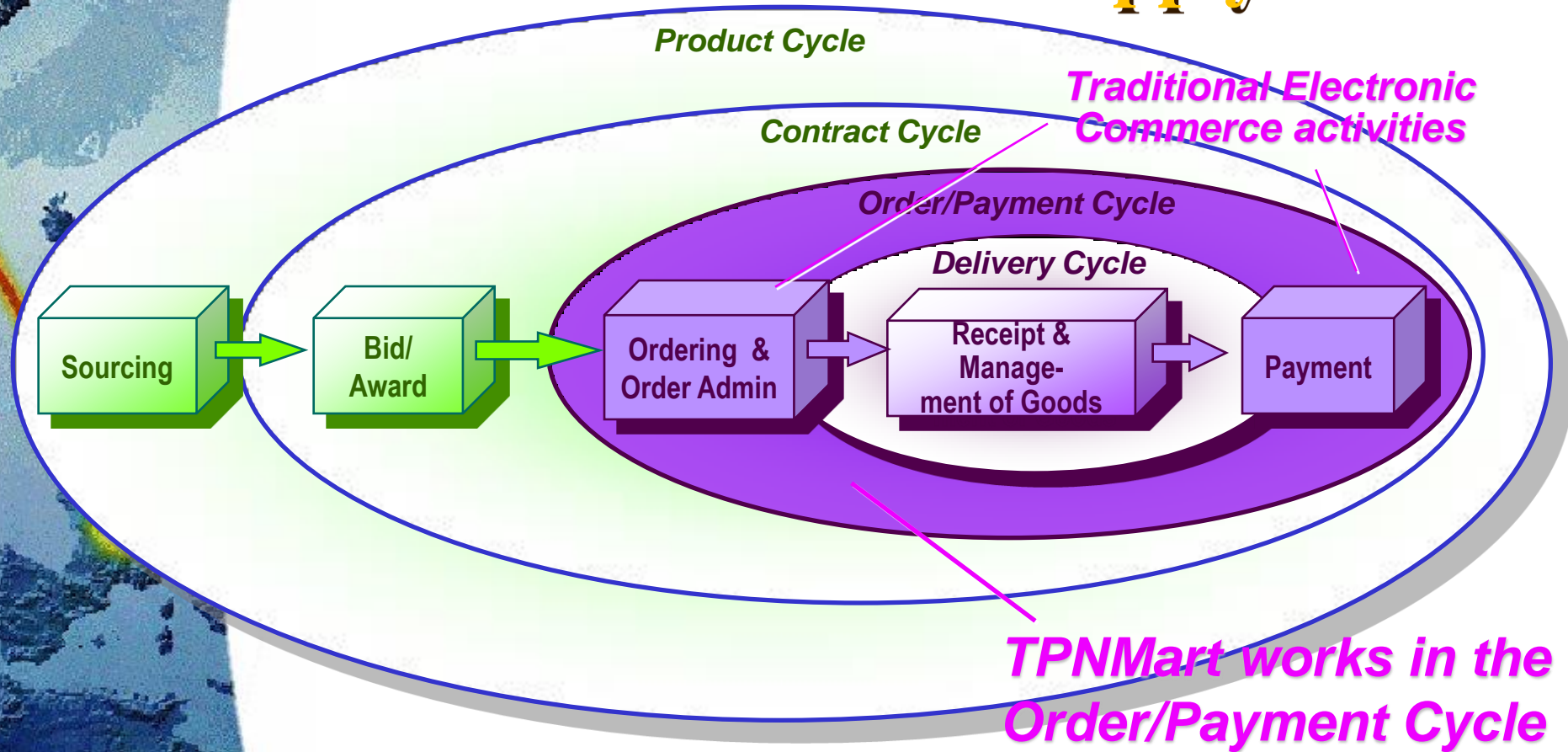
Purchasing/Supplier Management Activities in the Supply Chain



The Main Purchasing Processes



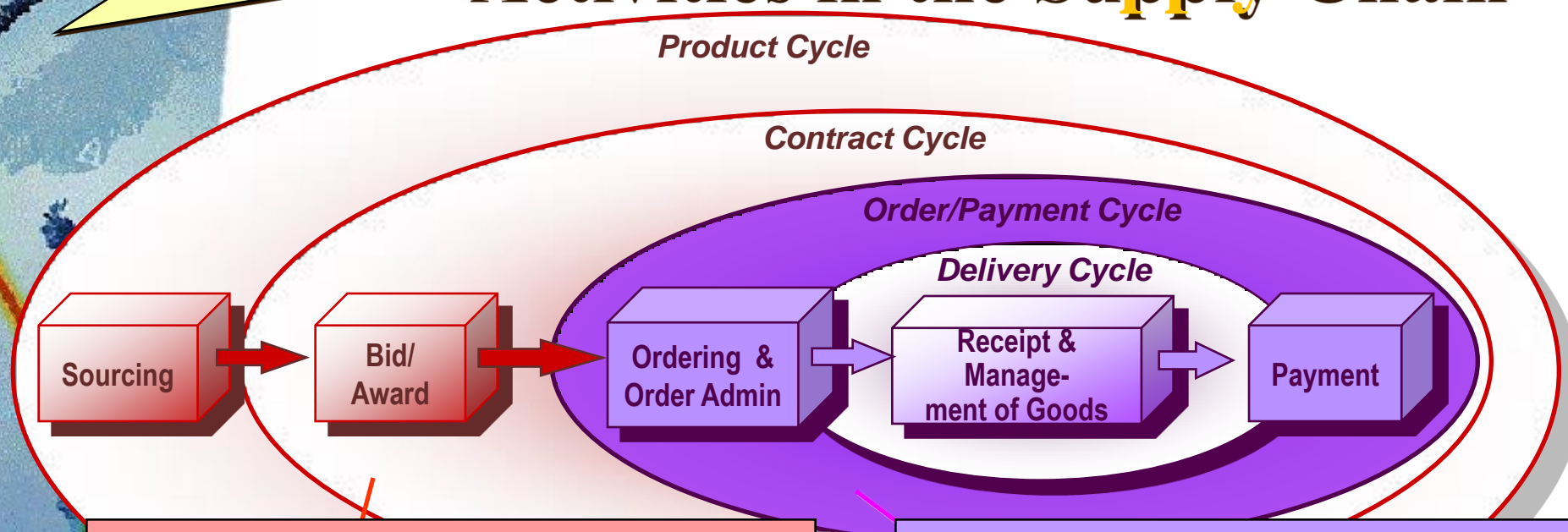
Purchasing/Supplier Management Activities in the Supply Chain



And...

TPN Business Services
Supporting the TPN Community

Supplier Management in the Supply Chain



TPNPost

- **Internet-Based Service**
- **Secure Document Distribution**
- **Secure Messaging**
- **Business Profile Database**
- **RFI's, RFQ's & Negotiations**
- **Support Services**

TPNMart

- **Internet-Based Service**
- **Electronic Product Content**
- **Supplier/Content Management**
- **Rules Based Requisitioning**
- **EDI & Purchasing Card**
- **Support Services**



Trading Process Network

- **Trading**
 - Business to Business
- **Process**
 - Sourcing, Purchasing, Supplying
- **Network**
 - Many-to-Many Trading Communities



Trading

—*Business to Business*

- **Manufacturing Companies**
 - Automotive, Domestic Goods, Electronics, High Tech
- **Retail Chains**
 - Food, Housewares, Clothing
- **Service Companies**
 - Banks, Utilities
- **Public Bodies**
 - Health Care, Defence

... and their suppliers!



Process

—Sourcing, Purchasing, Supplying

- **Sourcing**
 - Establishing Requirements, Soliciting Suppliers, Bidding and Selection
- **Purchasing**
 - Viewing, Choosing, Authorising, Ordering, Paying
- **Supplying**
 - Placing Bids, Accepting Orders, Dispatching Goods, Sending Invoices.

... Making buying simply better



Network —*Trading Communities*

- **More than “Hub and Spoke”**
 - Service encourages open trade between many Suppliers and many Buyers
- **Increased Opportunities**
 - Suppliers not limited to one Buyer
 - Buyers not limited to only “their” Suppliers
- **Critical Mass important**
 - Concentration on particular sectors

... more control, more choice!



Types of Purchase

There are three main types of purchase:

- **Direct Materials**

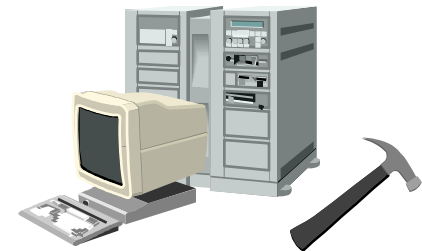
- These become part of the product
- Examples: Components, raw materials, contract production labour

- **Plant and Equipment**

- These are used for making the product or for running the company, but are still there at the end of the day.
- Examples: Milling machines, computers

- **Indirect Materials**

- These are necessary to keep the company running but do not become part of the product although they are consumed.
- Examples: Office consumables, contract cleaning





Types of Purchase

High

Strategic

Strategy

- Integrated supplier
- Long-term agreement
- Technical relationship

Technology, Quality, Price, Cycle Time

Leveraged

Strategy

- “Home Base” supplier
- Create competition

Balance of Price & Quality

Niche

Strategy

- Develop new sources
- Strategic negotiation with local source

Caution Required

Commodity

Strategy

- Multiple sources
- Quote business
- Low risk/cost to move

Pure Price Play

Value to Buyer

Low

Number of Capable Suppliers

High

Working with TPNPost

Item: Sky Hooks Type 3

Supplier	Price	Status
Dwarf	20	Closed
Old I		Open
Work		Open
Your		Closed

SH1
red: 30000
250
Sky Blue

SkyHookType 1

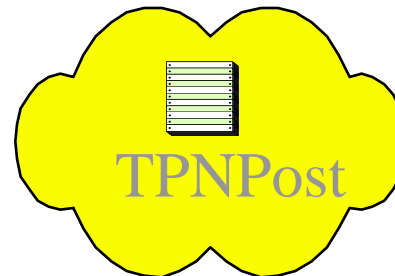
... or ask some suppliers to make another bid

er..... that's it!

oi



Pre-Ordering Process with TPNPost



Supplier

Internet

Buyer

Yes, but why use the internet?

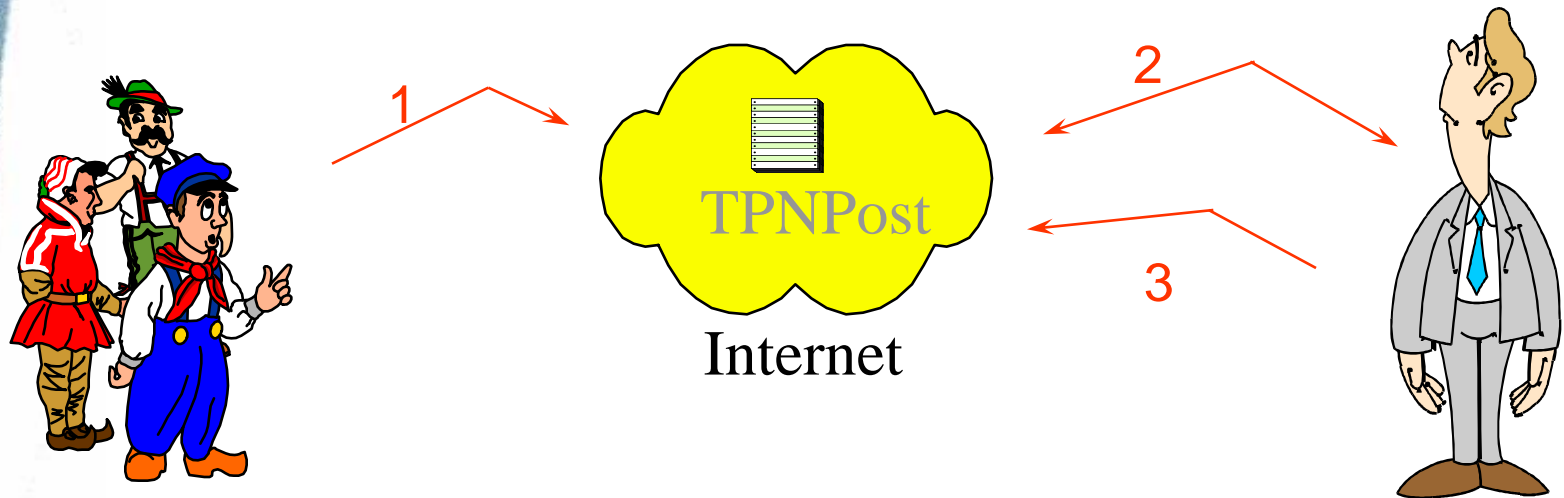


Why use the internet?

- **Longer reach**
 - Truly global communications medium
- **Deeper reach**
 - Most prevalent computer-based capability
- **Future reach**
 - Standards-based with world-wide development
- **Matches user needs**
 - Techniques and style lend themselves to inter-company person-to-person transactions



Pre-Ordering Process with TPNPost



- 1) Suppliers register for TPNPost by completing prequalification form on TPNPost Home Page**
- 2) Buyer searches in TPNPost supplier database and selects suppliers (list of suppliers downloaded)**
- 3) Buyer prepares and uploads RFQs and supplier list.**

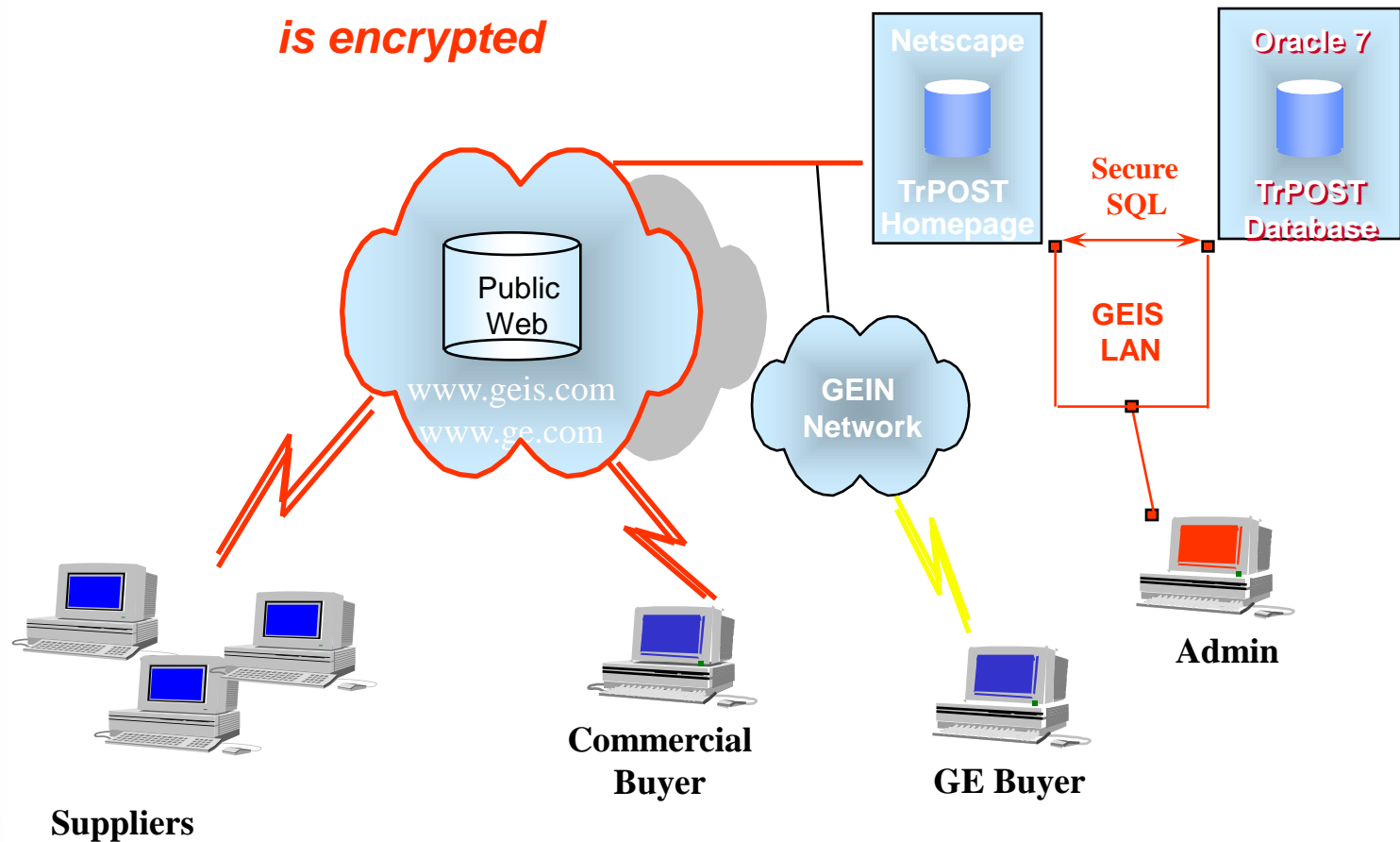
Pre-Ordering Process with TPNPost



- 4) Based on buyer's selection, suppliers are notified via fax of the upcoming project that they have been invited to bid on.
- 5) Suppliers search database, select and download RFQs, fill in response and submit quote.
- 6) Buyer evaluates suppliers' responses, invites suppliers back for additional rounds and makes final selection.

TPNPost Topology

*All commercial information
is encrypted*





GE Information Services

TPNPost - A Full Service Offering...

A vertical strip on the left side of the slide showing a satellite map of a coastline. A red line highlights a specific path or boundary along the shore.

GE Experience and Best Practice

Software

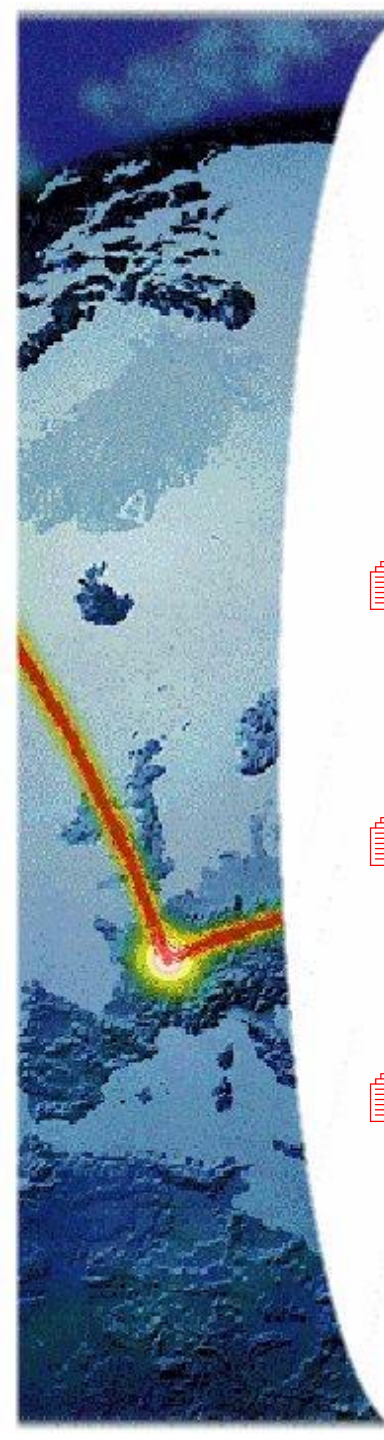
Ongoing Transactions

Supplier Database Access

Consulting

Support Services

The GE Trading Process Network (TPN) is designed to... *enhance a Company's Inter-Enterprise communications capabilities...*

- 
- Provides a standard platform, enabling organizations to distribute and receive information (data, documents, messaging, content) from their Trading Partners
 - Uses a shared service model based on Internet technologies, lowering the cost & complexity of participation while enhancing the user experience
 - Provides specific content and services based on Industry Standards and Requirements



Benefits

- **Reduced Cycle Time**
 - *Critical to New Product Introduction*
- **Increased Buyer Productivity**
 - *Critical to Product Quality*
- **Improved Price performance**
 - *Critical for Profitability of every unit made.*



Who Will Buy TPNPost?

Companies who:

- Buy large quantities or high value items
- Want to buy > \$20m per year through TPN
- Have the following *minimum annual turnovers*:
 - Manufacturer buying direct materials \$200m
 - Other company buying plant & equipment \$1000m
 - Company buying indirect materials \$1000m
- Want to involve several to many potential suppliers
- Preferably looking for some global suppliers
- Are constantly updating their product ranges
- Are in a competitive market



Production & Non-Production Procurement Needs.

Production (Direct Material)

Definition:

- Raw materials, sub-assemblies or component parts
- Physically become part of a finished product.
- *Mainly large, repetitive orders against negotiated contracts managed by purchasing function.*

Electronic Commerce Market View:

- EC solutions focused on DM due to greater dollar value
- DM solutions must become more sophisticated, extending EC benefits to all types of supplier relationships
- *Currently 130B of DM ordered via EDI*

Non-Production (Indirect/MRO)

Definition:

- Factory or office supplies and other overhead items
- Not easily traced to specific units of production.
- *Characterized by single orders of off-the-shelf items driven by end-user demand.*

Electronic Commerce Market View:

- Emerging Elec Commerce market
- EC penetration will (over time) drive greater transaction volume than DM.
- Up to 85% of volume, 10% of value
- *Internet-based solution for IND/MRO ordering forecast to account for 70% of traded value by 2000 (Source: Input)*



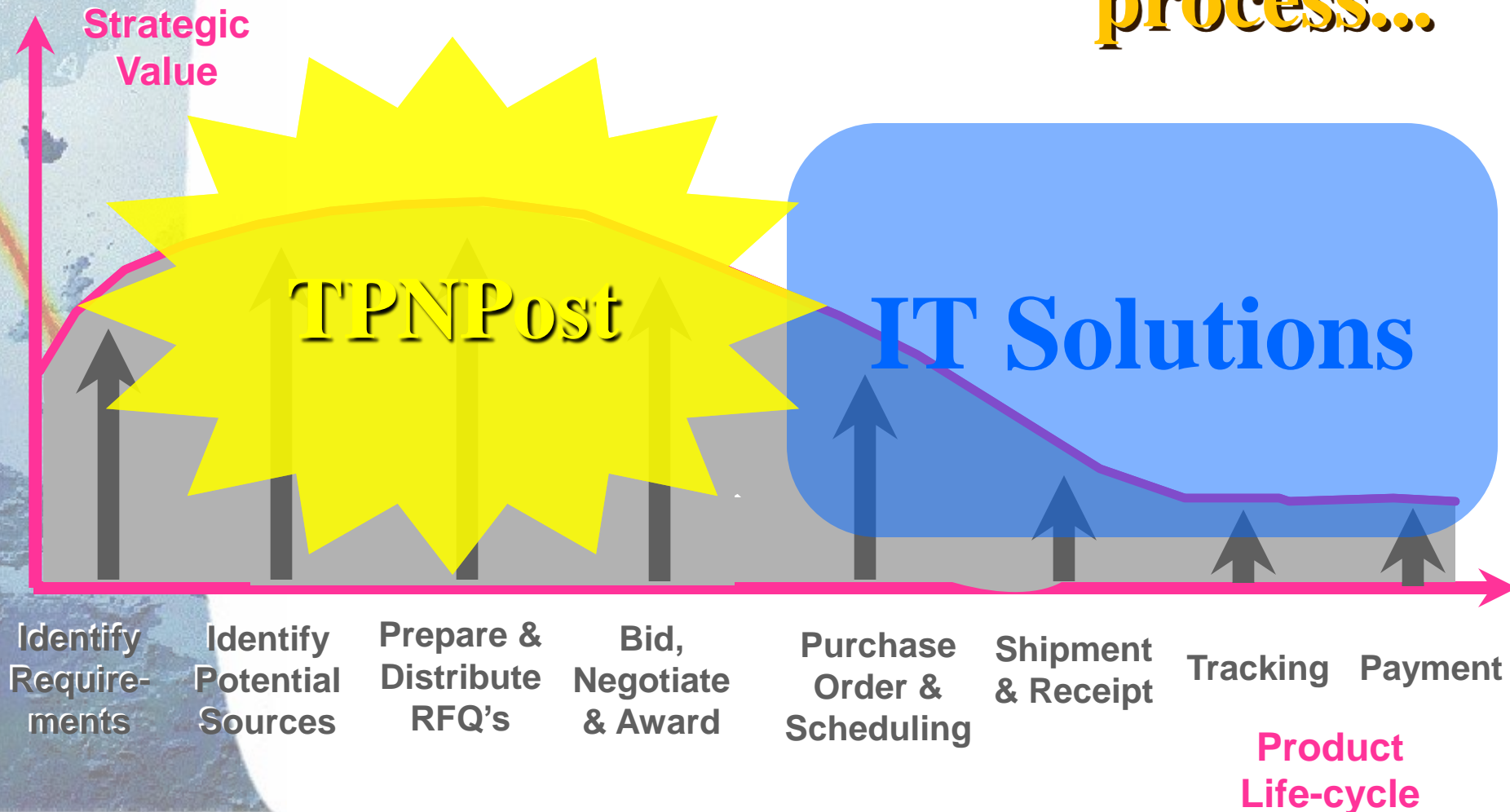
“Strategic” Sourcing Process Issues & Problems!

- Production Materials —largest single expense for most manufacturers, *often >50% of sales*
- Buyer needs *significant Supplier Management activity* to Qualify, Negotiate, Select, Contract, Order and Track
- *Inefficient methods* of communicating with suppliers — *long cycle times* and non-strategic buyer activities (mailing, faxing, phoning)
- *Traditional EDI* used to Automate DM ordering but has not addressed majority of process activities.

DM/Production Sourcing Solutions must streamline time-consuming, low-value tasks to improve supplier management



IT based Solutions have had little impact on the “Strategic” Sourcing process...





Strategic Activity focus —

TPNPost streamlines existing processes.

Key Activities

Current Process

TPN-Enabled Process

Identification &
Qualification of
Sources

Paper catalogs, Yellow
Pages, On-line DB (Prop/
Internet), Internal Systems

TPNCommunity DB, Audit
Services, On-line Catalogs,
Industry Classifications

RFQ Preparation
& Distribution

Collate, Mail (Std or
Overnight), E-mail, Fax, Copy

Secure Document & Data
Distribution via the Internet

Bid & Negotiation

Travel, Phone, Mail (Std. or
Overnight), E-mail, FAX

Secure, multi-round, private
offer electronic bidding and
decision supported award

Trading Partner
Communication &
Collaboration

Phone, Mail (Std or
Overnight), E-mail, Fax

Secure Messaging, Document
& Data Distribution via the
Internet

*TPNPost provides the tools for more effective Supplier
Management*



Substantial Business Impact

Issue/Problem

Industry Benchmark

Improvement

Cost

50% of Sales

10% Savings

Cycle Time

88 Days

50% Reduction

- Requirements Planning (12)
- Contract Negotiation (56)
- Order Placement (20)

**Strategic Sourcing
vs
Low Value Activity**

50% of Buyer Time spent on
Non-Strategic Activities

33% more time spent on
Strategic Sourcing

**Supplier
Communication**

\$8 to \$10 Overnight
Mail charges per package

100% Removal Paper &
Mail Charges

***TPNPost targets payback in less than 12 months -
High ROI through process improvement & cost leverage***

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GE Information Services



TPN - The Future of Trading



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A satellite image of the Earth showing the Americas. A red and yellow line, representing an orbital path, starts in the lower right, curves upwards and to the left, and then curves back down towards the bottom right. The text 'TPN - The Future of Trading' is overlaid in yellow on the left side of the image.

TPN - The Future of Trading