



The case for Trading Exchanges to deliver electronic commerce between trading partners

Steve Robb
Sales Manager



id.ology.2006



- What is eCommerce?
- The Telephone Exchange?
- What is a Trading Exchange?
- The benefits of a Trading Exchange
- The alternatives
- Savings using electronic trading
- In summary

What is eCommerce?

- Enables facilitation of commercial transactions electronically
- Electronic (e) commerce originally started in the late 1970s
- Used Electronic Data Interchange (EDI) to send documents such as purchase orders & invoices electronically

What is eCommerce?

- Took off in late 1990's across the www using the Internet but then slumped
- Picked up again after the dot com crash of 2000/2001
- In 2003 eCommerce generated sales worth US\$12.2 billion (Forrester Research)

What is eCommerce?

- Enables companies to link internal/external data processing systems more efficiently and flexibly
- Can work more closely with suppliers and partners – better satisfy needs & expectations

Do we trust technology?



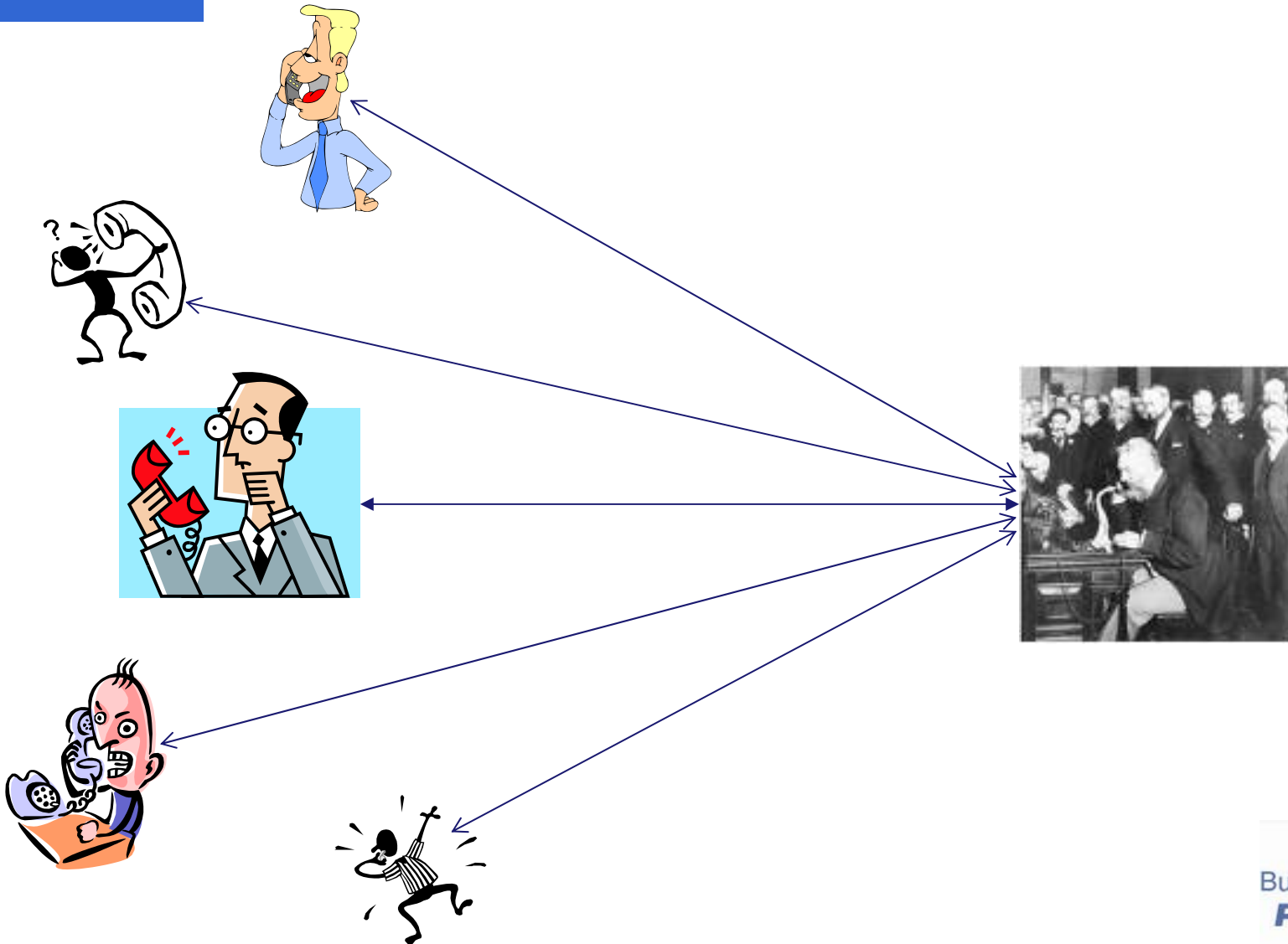
Analogy with the telephone exchange

The philosophy and development of the trading exchange is similar to that of a telephone exchange

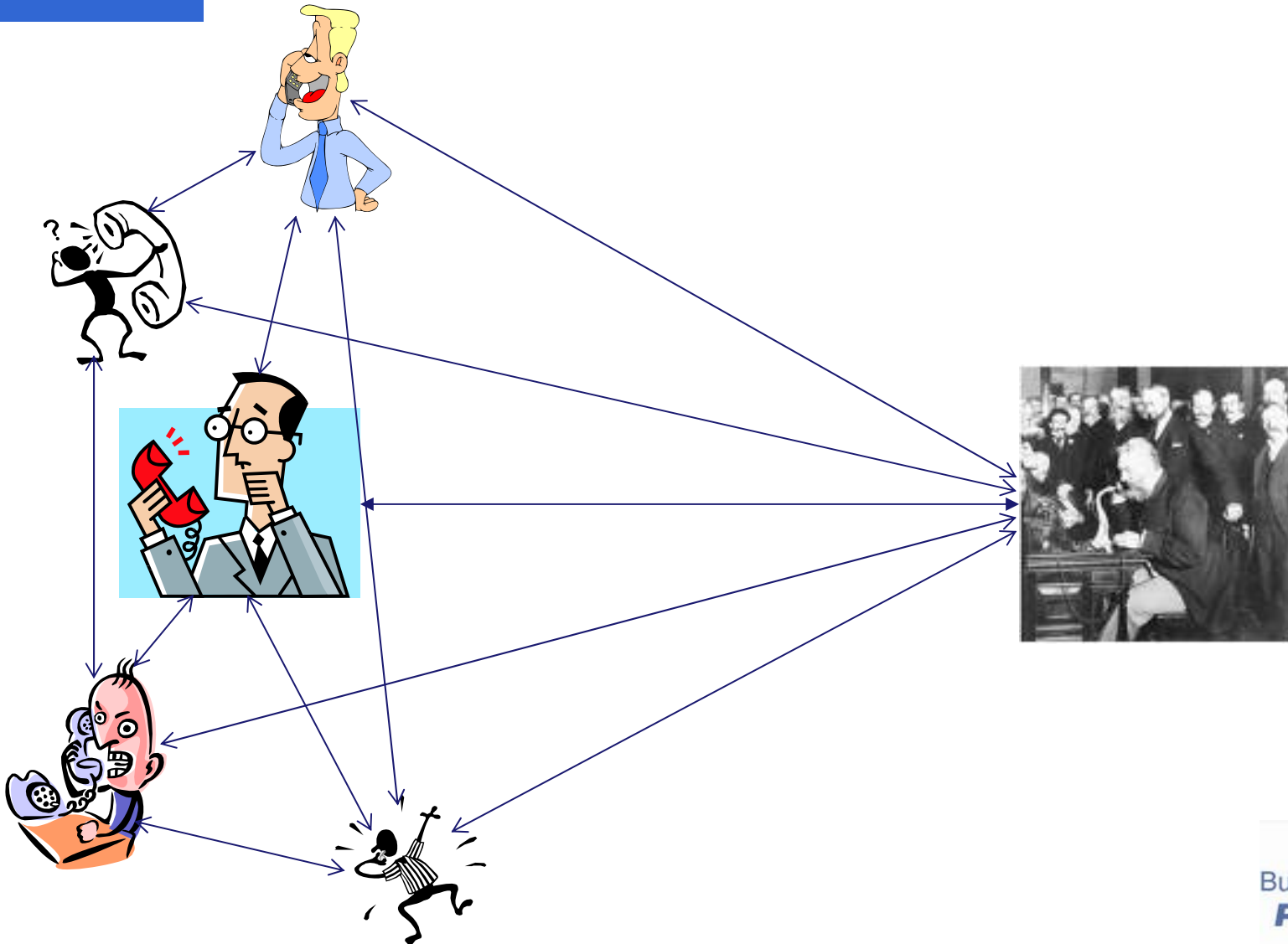
The first telephone network



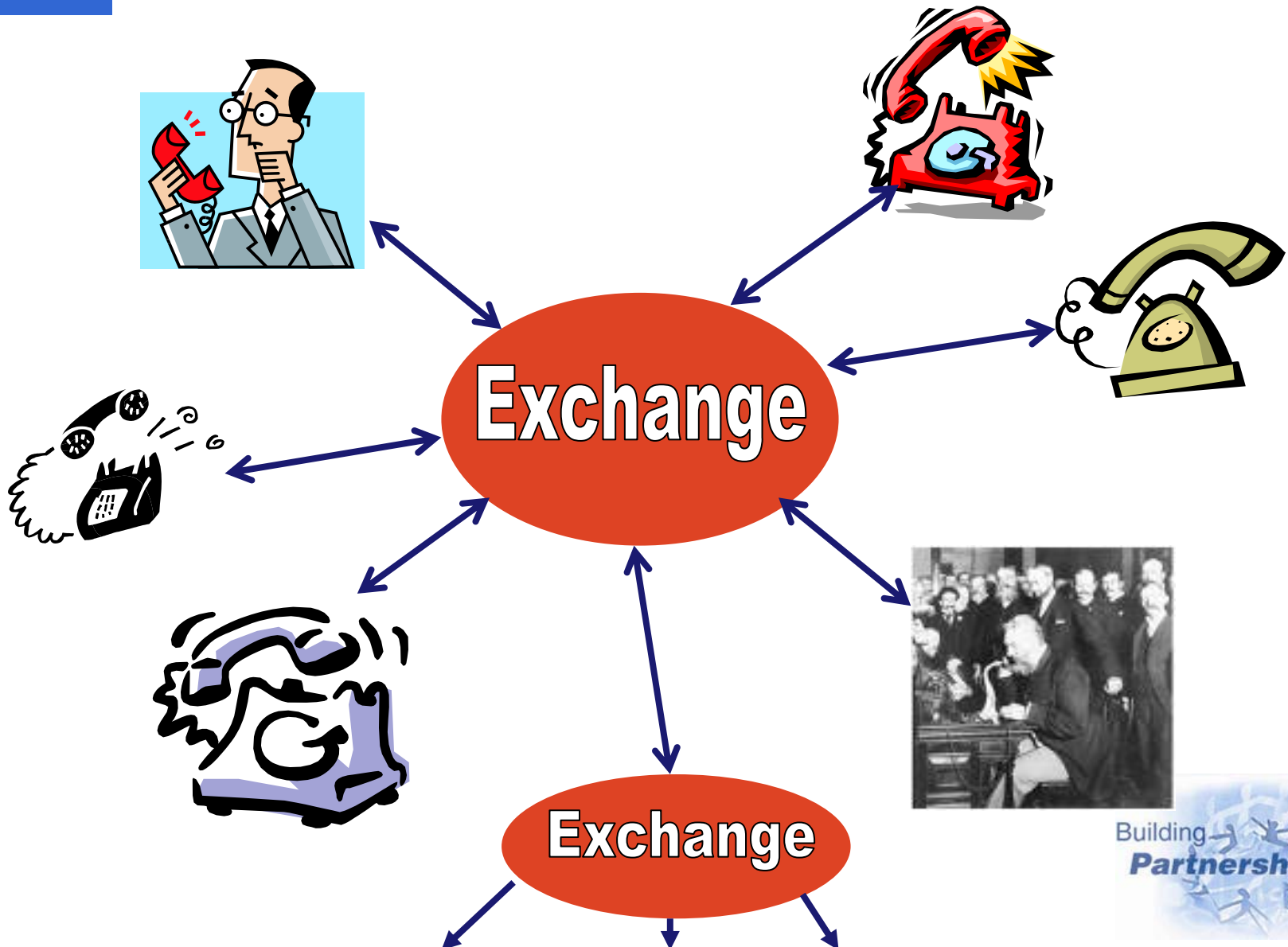
Point-to-point telephone network



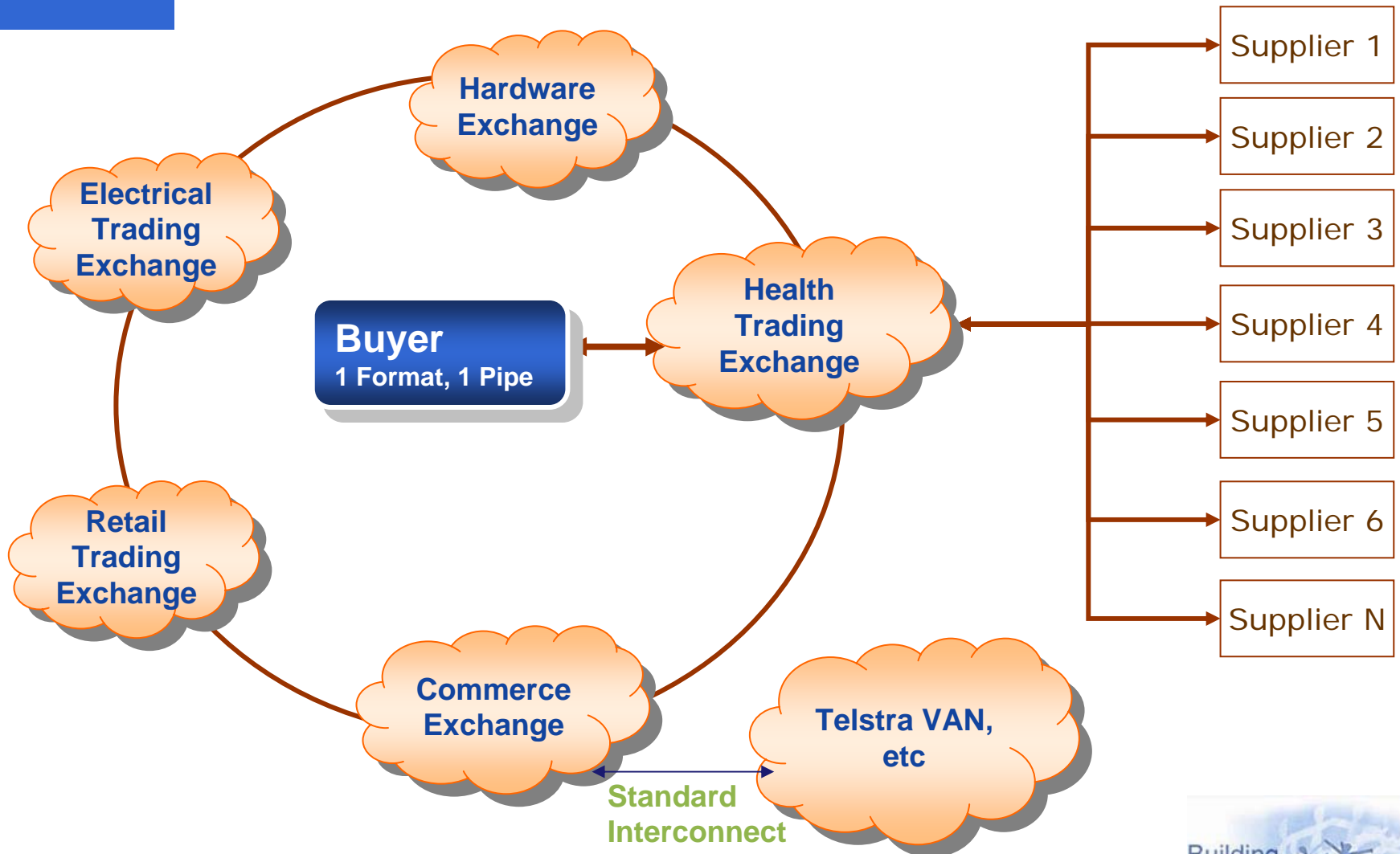
Point-to-point telephone network



The flexibility of an exchange



The Trading Exchange



What is a Trading Exchange?

- Enables the efficient sharing of electronic trading information between partners within a supply chain
- Provides a secure and reliable method of business-to-business electronic document exchange
- Open trading environment

What is a Trading Exchange?

- Typically comprises purchasers, suppliers and wholesalers (but can include the entire supply chain)
- Normally hosted
- Provides a single point of connectivity
- Often provides document tracking to enable searching for particular documents

The benefits of a Trading Exchange

- Flexible any-to-any translation – no need to standardise on business applications
- Support multiple communication methods (eg. HTTP/s, SecureFTP, AS2 etc)
- Independent of data formats – send & receive trade information in an electronic format independent of your partner's format (eg. XML, EDIFACT, IDoc, CSV, txt, etc)
- Significantly reduce the number of individual connections to separate suppliers that must be maintained

The benefits of a Trading Exchange

- Industry standards can be applied to vertical trading exchanges
- Business rules and formats can be developed alongside industry bodies
- Data is validated by the exchange (documents don't reach recipients unless compliant & have been validated)
- Data synchronisation between trading partners vital
- Exchanges enable trading partners to exchange product data or populate industry catalogues

The benefits of a Trading Exchange

- Exchanges provide the opportunity for partners to build closer ties with their trading communities
- Enable companies to focus on their core business
- Enables full audit trails to be created
- Trading business processes are automated and simplified to increase accuracy
- Data entry errors are reduced
- Re-keying of information is eliminated

- Traditional trading with paper – faxed or mailed
- Paper to document automation systems
- Electronic trading via email
- Electronic trading using point-to-point connections

Traditional trading with paper – faxed or mailed

❖ Pros

- No set up costs

❖ Cons

- Relatively high error rate (keying and lost documents)
- High running costs (labour)
- Slow (late payment fees possible, difficult to achieve early payment discounts)
- Difficult to track documents (hard to audit)
- Personnel issues can cause bottlenecks/delays
- No savings in scaling up
- Not secure

❖ Pros

- Scalable
- Good savings possible

❖ Cons

- High set up costs
- Can't handle all documents
- Accuracy of interpretation dependent upon quality of source document
- Still needs human intervention
- Relatively high running costs
- No automated response mechanism possible
- Not secure

❖ Pros

- Small savings possible

❖ Cons

- Still quite manual
- Reliant on personnel opening and reading emails
- Still requires data to be entered into ERP (hence still prone to error)
- Not easily scalable
- Not very secure

Electronic trading using point-to-point connections

❖ Pros

- Good savings possible
- Secure & Accurate
- Low set up costs

❖ Cons

- Multiple trading partners will require multiple connections to be maintained
- May have to deal with multiple document formats
- May have to deal with multiple communication protocols
- Trading partners also have to have skill and resources capable of maintaining individual links
- Difficult to scale up

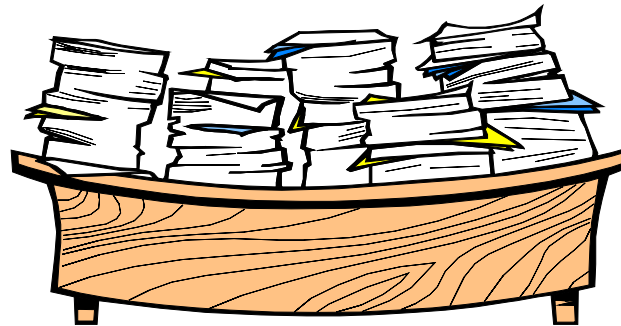
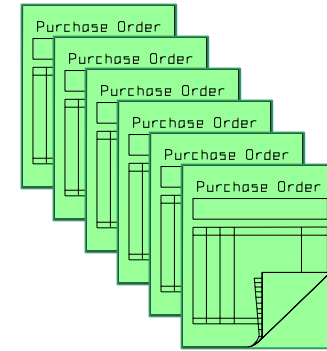
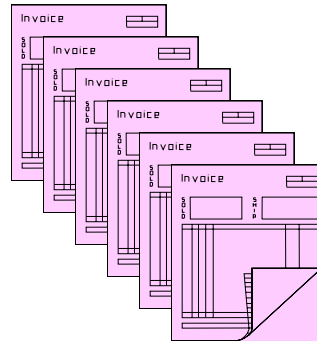
How do we realise savings through electronic trading?

The cost of paperwork/processing



How much does it cost you to raise, print, fax, post, data enter, process, file the following documents?

- Purchase Orders
- Delivery Dockets
- Invoices
- Credit Notes
- Remittance Advices
- Statements
- Cheques

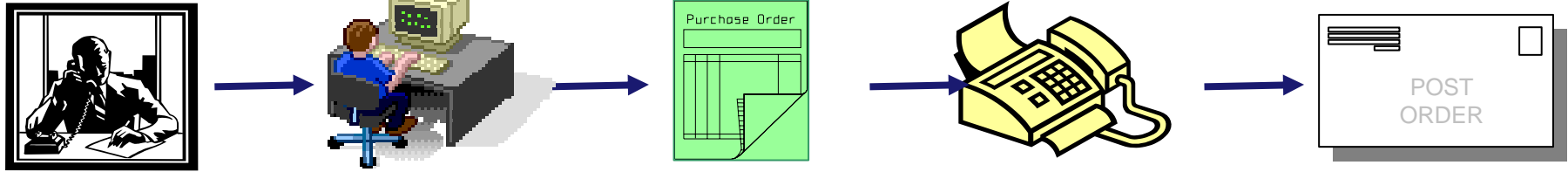


How much does it cost you to fix errors in these documents?

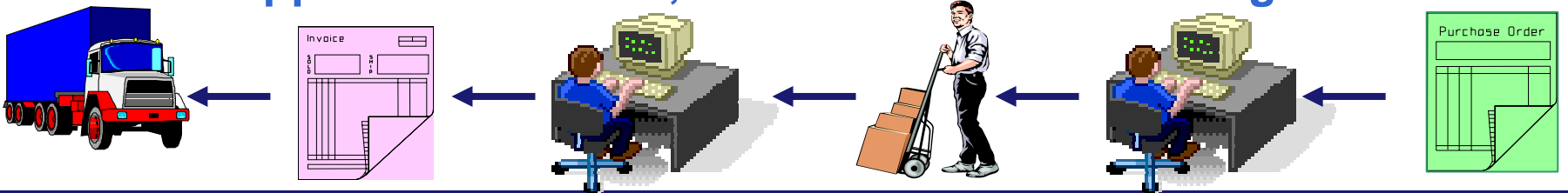


Traditional process

Customer - raises & sends PO



Supplier receives PO, raises Invoice & delivers goods

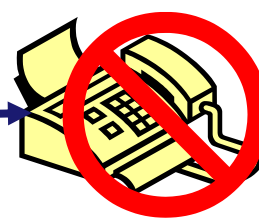
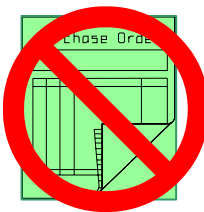


Customer receives & pays for goods

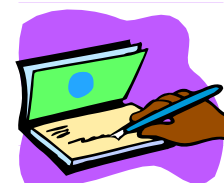
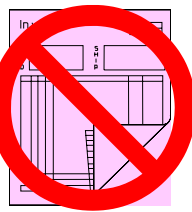
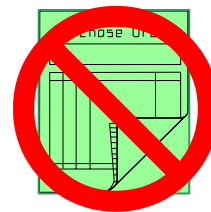
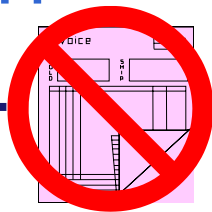


Administrative Savings through e-trading

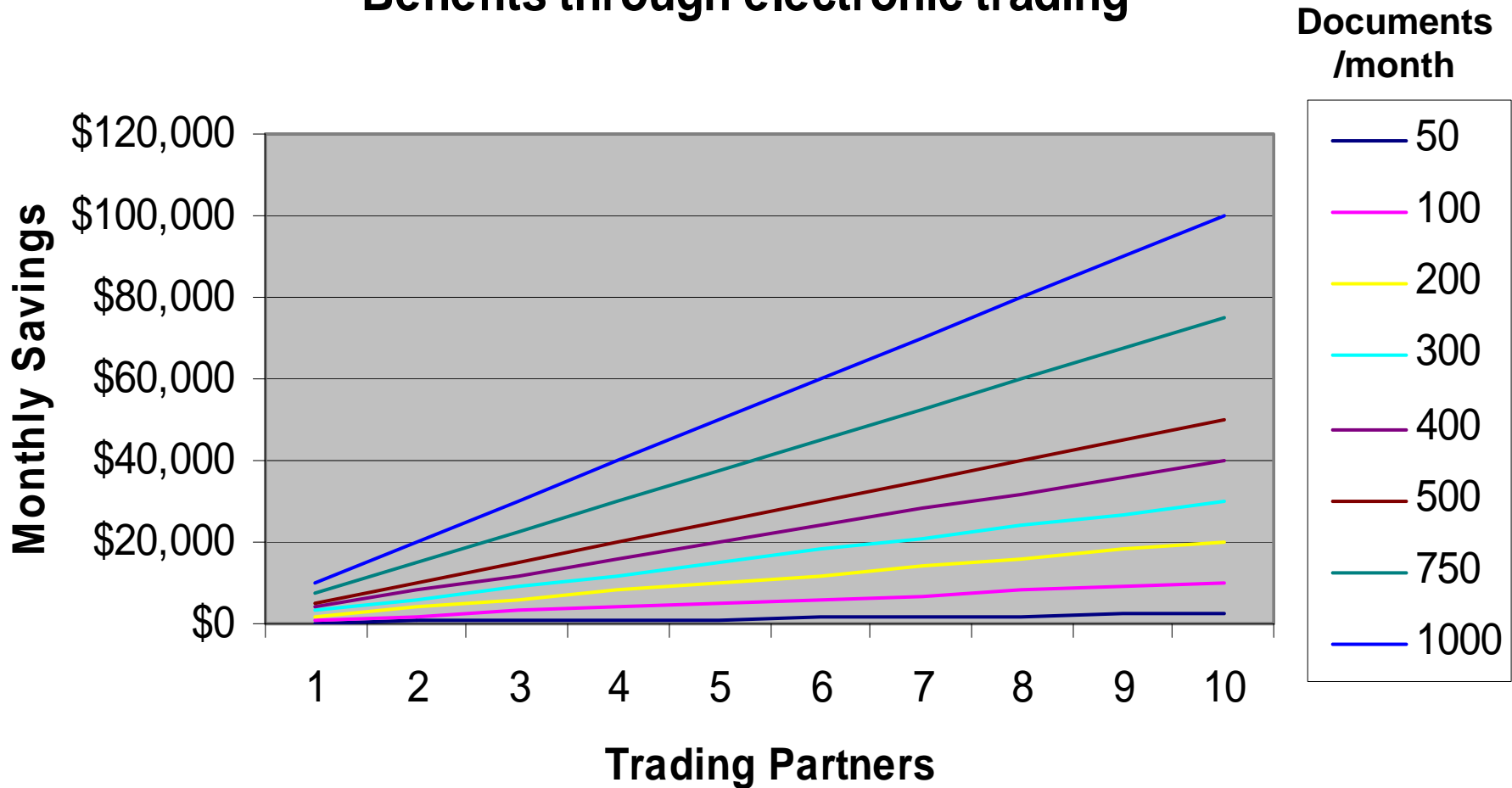
Customer - raises & sends PO



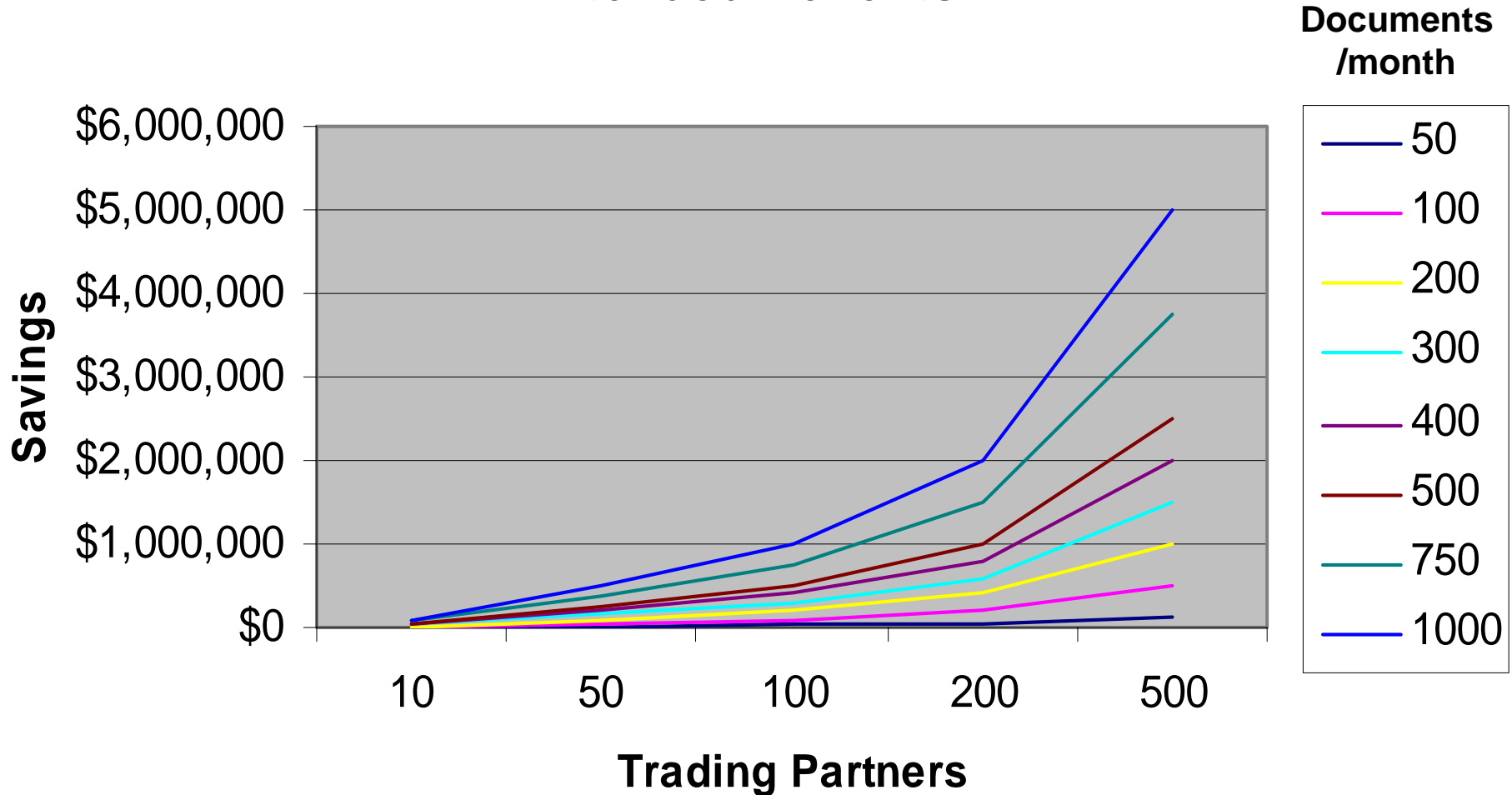
Supplier receives PO, raises Invoice & delivers goods



Benefits through electronic trading



Extended Benefits



Brad Mills (President, Base Metals) BHP Billiton

Paper-based systems \$50-\$100 per order - payment cycle

Internet-based system \$5-\$10 per order - payment cycle

(Business Review Weekly June 16th 2000)

“Total savings via better procurement practices has been \$480M pa, mostly from its steel businesses.....future goals are built on the savings it has already reaped from the use of earlier electronic data interchange technology.”

(AFR 6th July 2000)



Trading Exchange benefits – in summary

❖ Pros

- Can provide significant supply chain efficiencies
- Excellent savings possible
- Secure & Accurate
- Single connection to maintain
- Document format not an issue
- Low set up costs
- Low running costs (become relatively lower as number of trading partners increase)
- Highly scalable
- Trading partners do not need to maintain a high level of technical expertise in-house

❖ Cons

- Possible interconnect issues between ‘rival’ exchanges



Do we trust computers now?

Part of the inhumanity of the computer is that, once it is competently programmed and working smoothly, it is completely honest.

Isaac Asimov