

E -THEMATIC THEMATIC NETWORK ON E-FULFILMENT



BESTUFS
21 April 2005

Karel Vanroye





Introduction of E-Thematic project

Deliverables

Preliminary recommendations

Future outlook



Introduction of E-Thematic project

- Supply Chain background
- Description of E-Fulfilment
- E-Thematic project
- Strategic objectives
- Scope
- E-Thematic consortium



Supply Chain background (1)

Supply Chain Developments

1980's

Internal orientation

Main issues:
→ **WAR!!!!!!**

Paradigm: costs/lean and mean



End
1990's

Customer Satisfaction and Retention

Main issues
→ **PARTNERSHIP AND AGILITY**

Paradigm: win-win/customers first

2005

Role for E-Fulfilment!



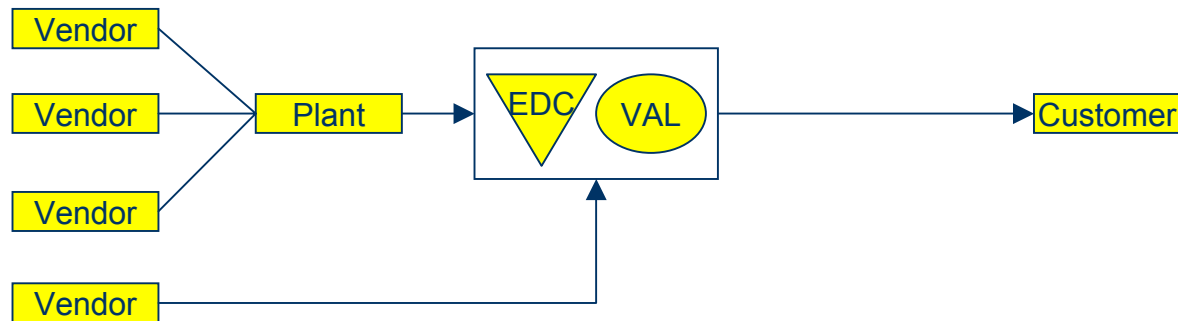
Supply Chain background (2)

New Supply Chain configuration

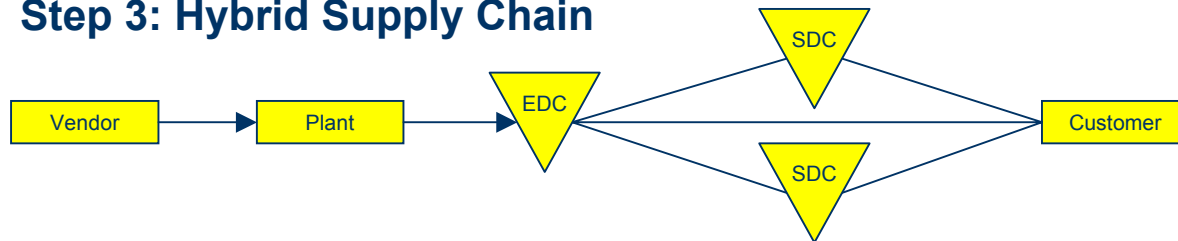
Step 1: Traditional Supply Chain



Step 2: Deferred customisation

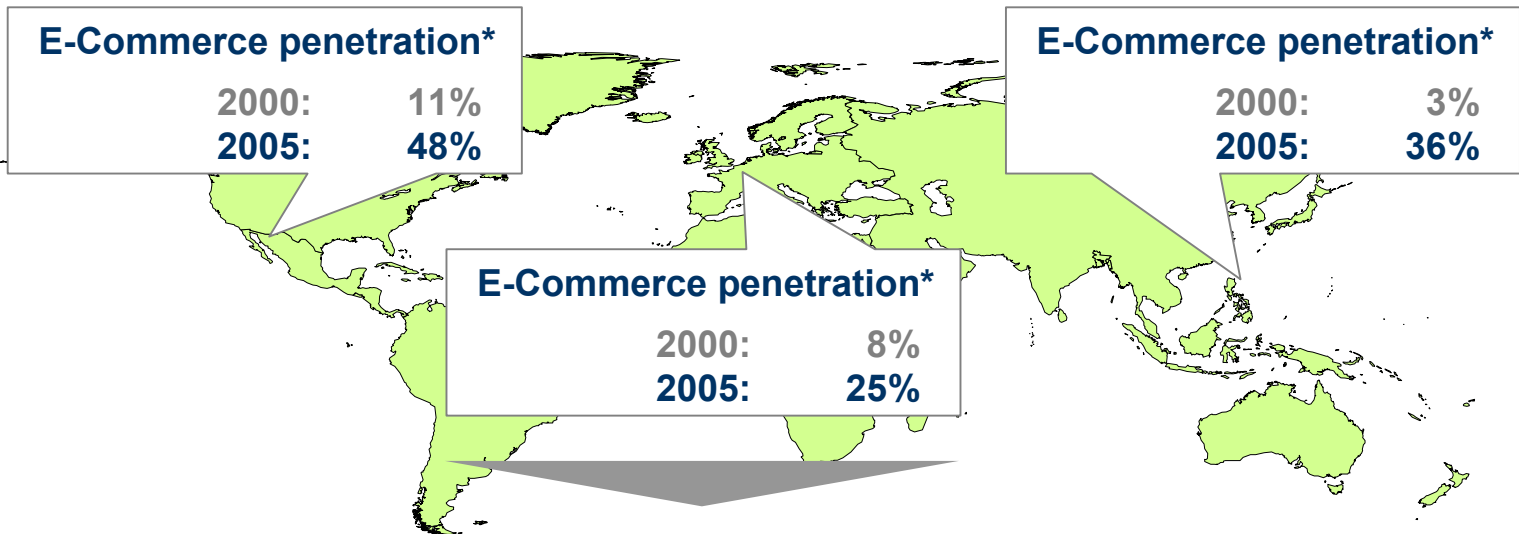


Step 3: Hybrid Supply Chain





Supply Chain background (3)



Europe is lagging behind?

Differences in
business culture?

Limited number of
implementations?

Country specific laws
and regulations?

'Lack' of development
velocity?



Description E-Fulfilment (1)

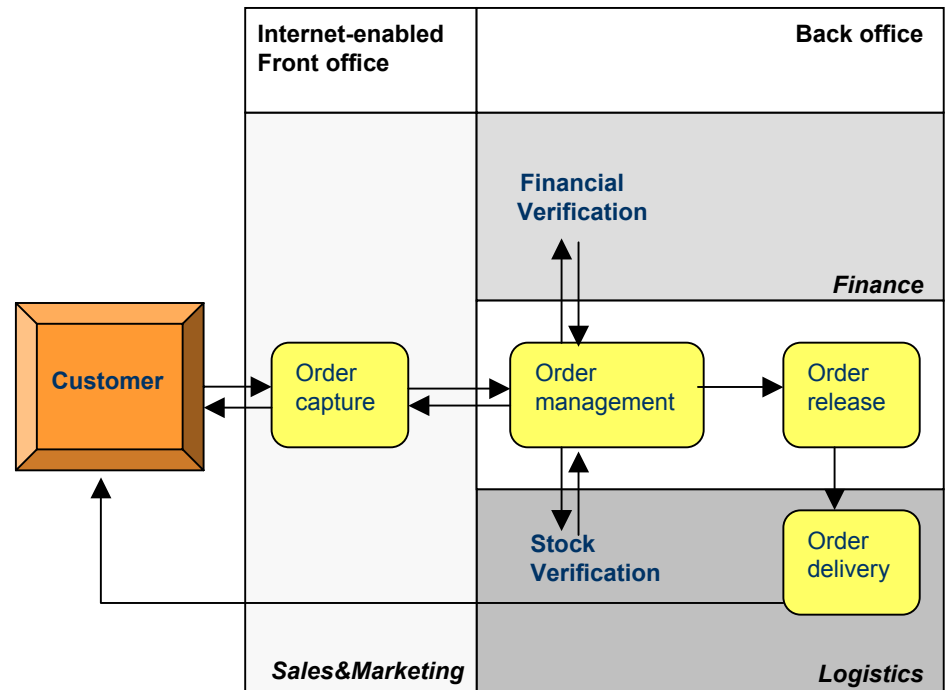
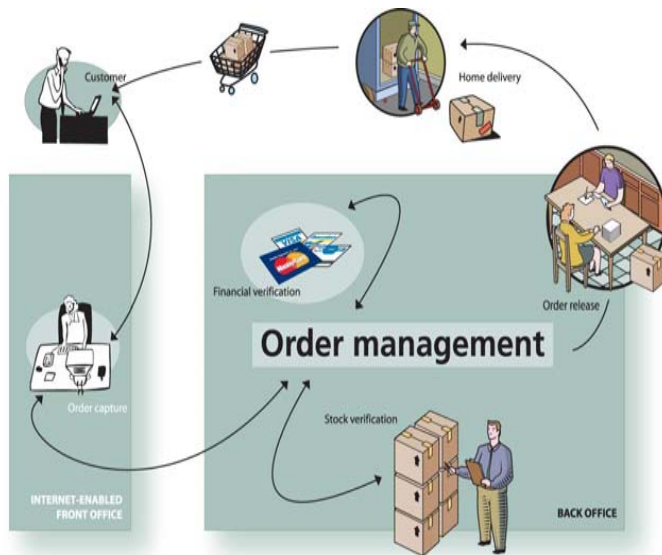
Definition

E-Fulfilment defines that part of e-Business, which aims at efficiently and effectively integrating a company's back-office processes, activities and functions, arising from order capture through to final delivery to the customer.



Description E-Fulfilment (2)

E-Fulfilment Process





E-Thematic project (1)

Description

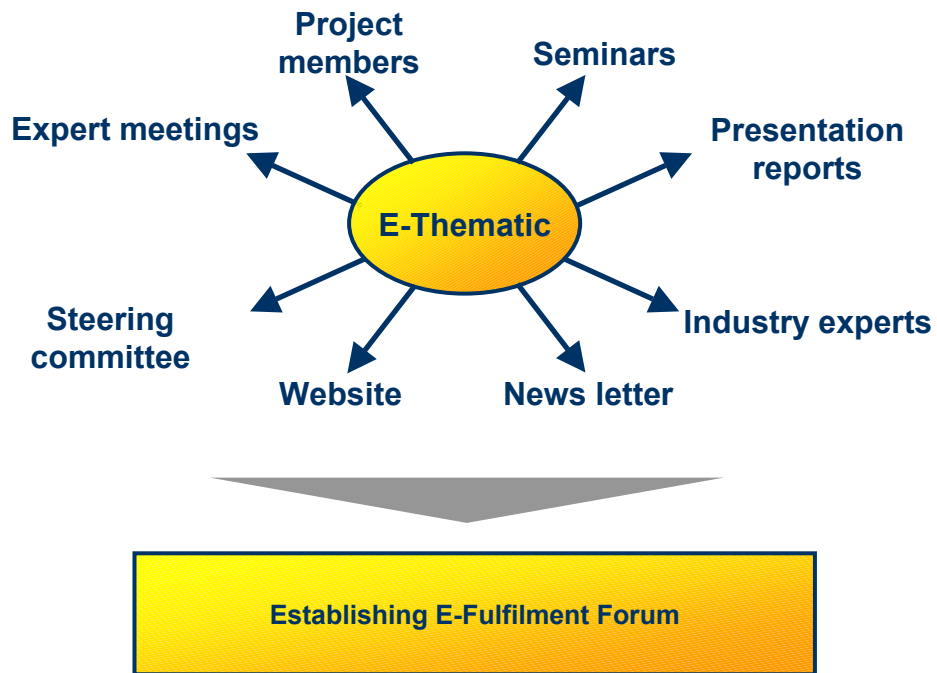
- A Thematic Network addressing the area of e-Fulfilment.
- Value in networking. No own research.
- 3-year project: July 2002 - December 2005
- Funded by European Commission Directorate General Information Society as part of the 5th Framework Programme for Information Society Technologies





E-Thematic project (2)

'Touch points' of E-Thematic Network





Strategic objectives

Objectives

- Exchange **knowledge and information**
- Identify **emerging applications and technologies**
- Identify **good practice** from the industry and the research sector
- Make **recommendations** regarding future European research in the area of e-Fulfilment
- Provide an **information base** regarding e-Fulfilment (www.e-thematic.org)



E-Thematic Consortium

Project Coordinator:



**Buck
Consultants
International**

Dissemination Coordinator:



Members:





Introduction of E-Thematic project

Deliverables

Preliminary recommendations

Future outlook



Tangible deliverables

- Clustering Reports
- Website Analysis
- State of the Art Report
- Best Practice Cases

Presented
today





Website Analysis (1)

Coverage

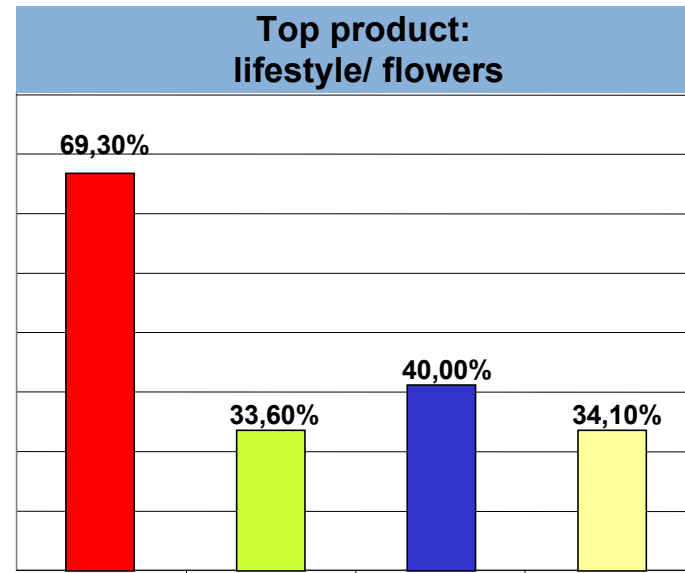
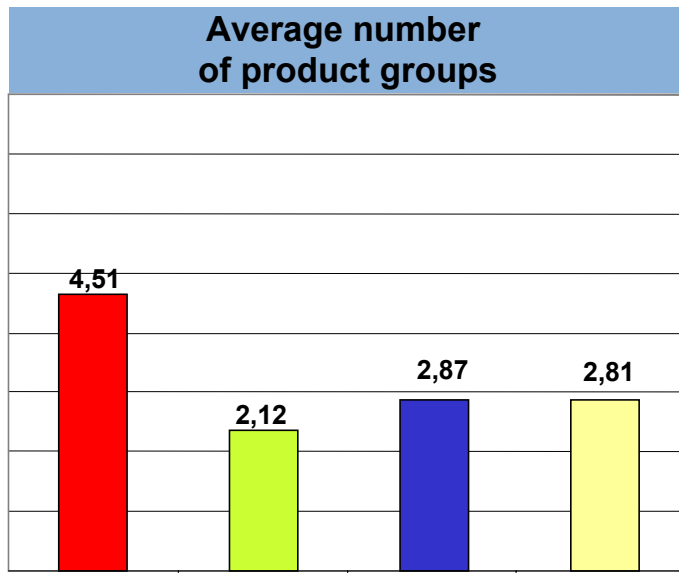
- Total website inputs: 592
- Variables: 79
- Countries covered: 48
- Regional coverage:
 - North-America: 191 websites
 - Europe: 193 websites
 - Asia: 114 websites
 - Other regions: 94 websites
- Type:
 - B2C (379 sites)
 - B2B (111 sites)
 - Logistic services (102 sites)

Country
Physical Region
Type
Products
Distribution Area
Payment Options
Delivery Time
Tracking
After Sale Services
Applications
Languages
Customer interface
Content of website
Used items
....



Website Analysis (2)

Products

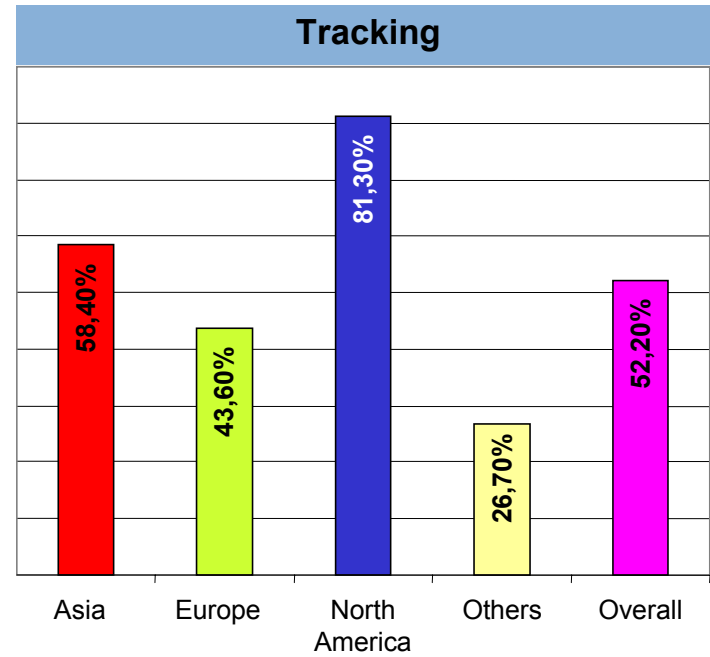
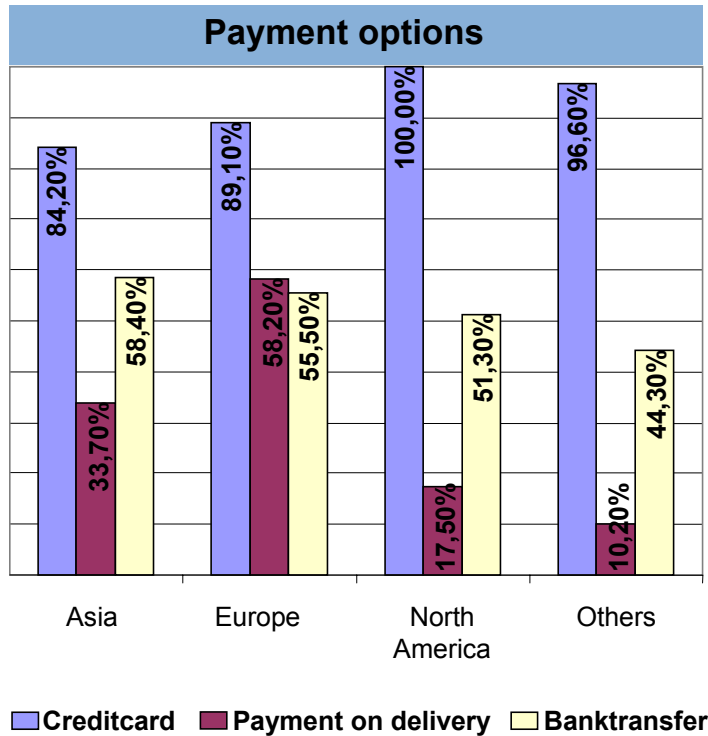


- Asia
- Europe
- North America
- Others



Website Analysis (3)

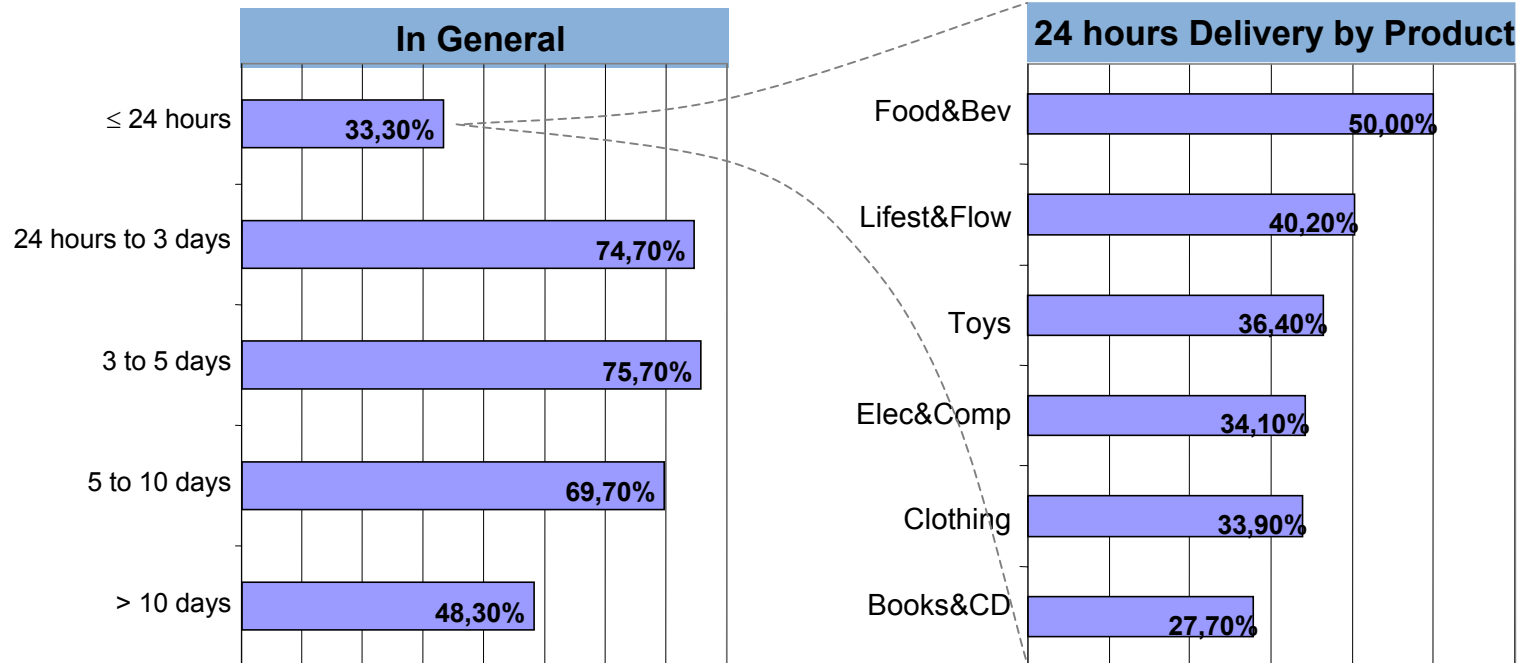
Services





Website Analysis (4)

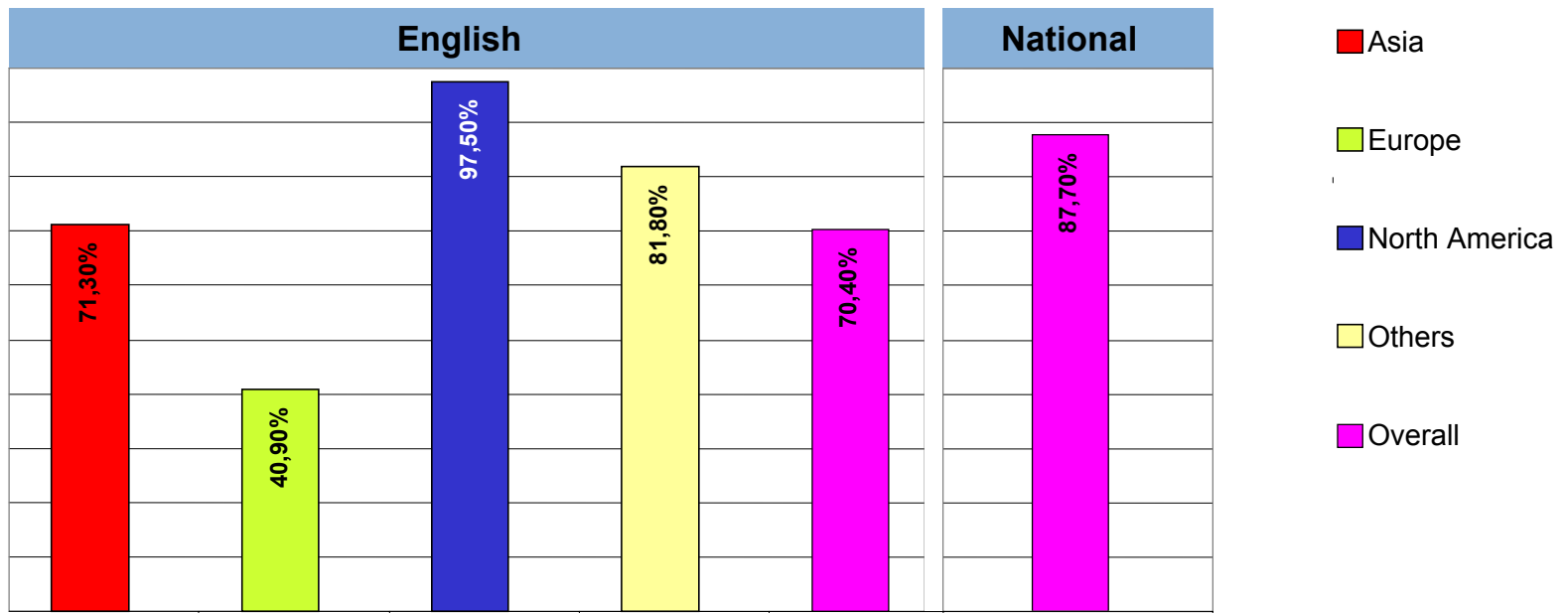
Delivery time





Website Analysis (5)

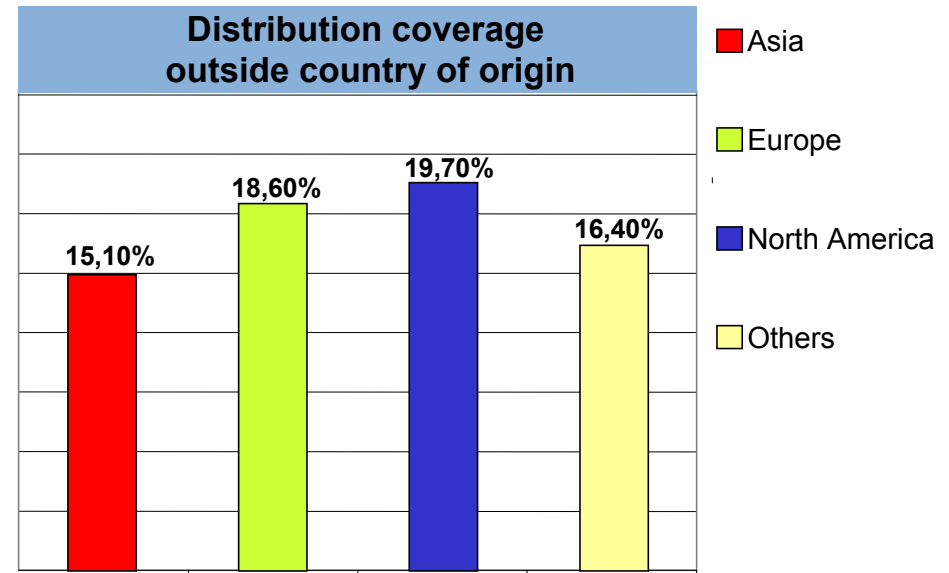
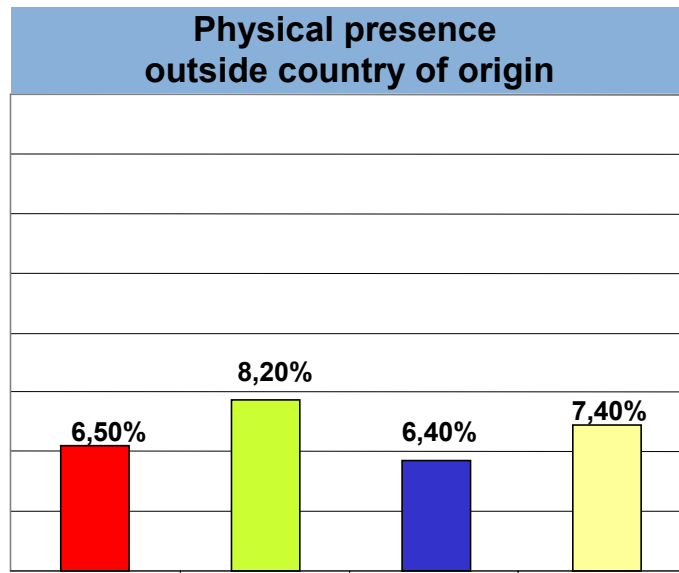
Languages





Website Analysis (6)

Region for region





Website Analysis (7)

Conclusions

- European websites are more specialised compared to other regions.
- Credit card payment option is offered in all regions but scores the highest in North America
- Payment on delivery is more common in Europe
- Delivery time is related to products, distance and customer request
- 60% of the European websites are targeting the local market (in national language mainly).



State of the Art Report (1)

Setting the stage

- Trends in Supply Chain Management:

- Demand driven SCM
- Supply Chain Integration
- Emergence of XML.

Need for end-to-end E-Fulfilment solutions

	Area	Improvement
Advantages of E-Fulfilment	Delivery performance	16-28%
	Inventory reduction	25-60%
	Fulfilment cycle time	30-50%
	Forecast accuracy	25-80%
	Overall productivity	10-16%
	Lower supply chain costs	25-50%
	Fill rates	20-30%
	Improved capacity realisation	10-20%

Source: 1997 PRTM ISC Benchmark Study



State of the Art Report (2)

Differences B2B and B2C markets

	B2B Orders	B2C Orders
Order size	Generally bigger, both in quantity and value	Generally smaller, both in quantity and in value
Participants	Multiple companies and employees	Consumer direct to merchant
Pricing	Negotiated long term contracts, auctions, catalogue purchases	Mainly catalogue, fixed price
Decision maker	Business rules govern; approvals needed	Single consumer
Procurement catalyst	Demand chain driven or replenishment	Impulse/casual purchase
Selection of e-market	Value, partnership, or equity driven; portal brand means less	Brand driven, word of mouth, price, or advertisement
Credit	Initially credit cards, but more complex payments systems on the way that tap bank credit lines	Consumer credit cards
Service time	Generally longer	Generally shorter
Return shipments	Technical reasons	Commercial reasons
Infrastructure	Larger infrastructure to update	Smaller infrastructure to update

Source: MorganStanley Dean Witter, adapted by BCI



State of the Art Report (3)

Software

Internet Enabled Front Office Software	Back-office management	Warehousing/ Inventory	Logistics/ Track and Trace
Actinic E-Lucid Epicor Intelisys			
	Ariba Commerce One Global Exchange Solutions Manugistics Microsoft Business Oracle SAP Sterling Commerce		
		Manhattan Associates EXE Technologies UPS OnLineTools	
			Descartes Systems Metapack Redberry Software

Standards

- EDI (e.g. EDIFACT, TRADACOMMS, X.12)
- XML
- Higher level XML-formats (e.g. ebXML, Rosetta, Bolero XML, CIDX, MTML)
- Web Services, lower level XML-formats (e.g. XMLRPC, WDSL,UDDI)



State of the Art Report (4)

Bottlenecks

	B2B	B2C (traditional vendor)	B2C (new entrants)
Organisational	<ul style="list-style-type: none"> - Level of change management - Internal skills - Chain integration - High investment - Unclear benefits 	<ul style="list-style-type: none"> - Internal skills 	<ul style="list-style-type: none"> - Customer relation management - Internal skills - Unclear ROI
Operational	<ul style="list-style-type: none"> - Internal management processes - Inter company co-operation - returns 	<ul style="list-style-type: none"> - Internal management process - Returns - Multiple calls home delivery 	<ul style="list-style-type: none"> - Connect to other required processes (e.g. transport) - Returns - Multiple calls home delivery
Safety and security	<ul style="list-style-type: none"> - Supply Chain Security - Legal and jurisdictional barriers 	<ul style="list-style-type: none"> - Legal and jurisdictional barriers 	<ul style="list-style-type: none"> - Payment validation - Legal and jurisdictional barriers
Infrastructure (IT)	<ul style="list-style-type: none"> - Fragmentation software - Standardisation (interfaces) 	<ul style="list-style-type: none"> - Many providers - Internal interfacing 	<ul style="list-style-type: none"> - Many providers - Internal interfacing
Infrastructure (other)	<ul style="list-style-type: none"> - Flexibility decrease - Quality of service in chain 	<ul style="list-style-type: none"> - No alternative distribution available 	<ul style="list-style-type: none"> - No fit with traditional logistics networks - High cost to distribute



Introduction of E-Thematic project
Deliverables

Preliminary recommendations

Future outlook



Preliminary recommendations (1)

Main lessons learned

- Law & Regulations
 - Privacy
- IT fragmentation and interfacing
 - More interfacing in EU compared with US
 - Standardisation
- Infrastructure
 - Home deliveries
- Business culture
 - Languages
 - Credit card adoption



Preliminary recommendations (2)

- Standardisation of connectivity
- Build-up of further information on good practices in e-Fulfilment (outside EU)
- Development of model SME-solution to lower barriers to entry
- Alignment of regulations within and outside EU
- Promote R&D and share technologies
- Address the issues of delivery (home, urban,...)
- Address customer expectations on speed of E-Fulfilment deliveries



- Introduction of E-Thematic project
- Deliverables
- Preliminary recommendations
- Future outlook**



Future work

- Business Cases in US, EU and Asia
(to identify regional differences and success factors)
- Compendium
- Future RTD roadmap
- Seminar Verona - 24 June 2005
- Establish E-Fulfilment forum

August/septem
ber 2005



Contact information

Project Coordinator

Karel Vanroye

Buck Consultants International

karel.vanroye@bciglobal.com

Tel: +32 (0)2 709 77 50

Dissemination Manager

Jacob Bangsgaard

ERTICO – ITS Europe

j.bangsgaard@mail.ertico.com

Tel: +32 (0)2 400 07 00

E -THEMATIC THEMATIC NETWORK ON E-FULFILMENT



Thank you for your attention!