



Education and Culture

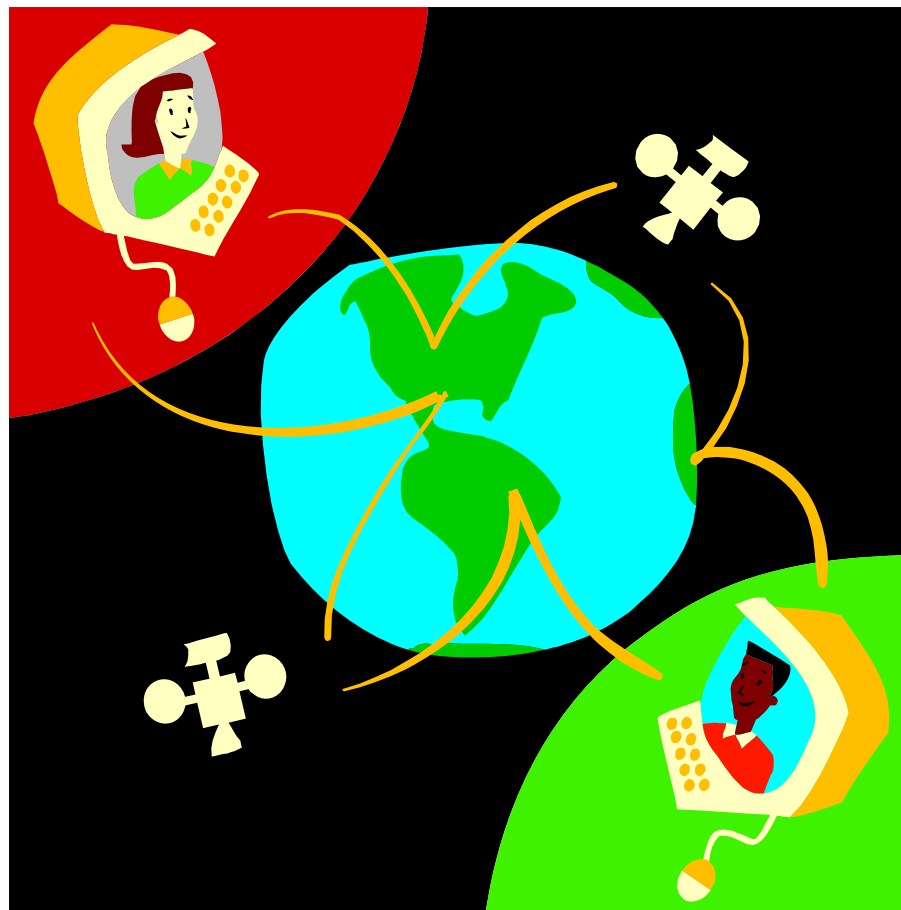
Leonardo da Vinci






eBCM VET

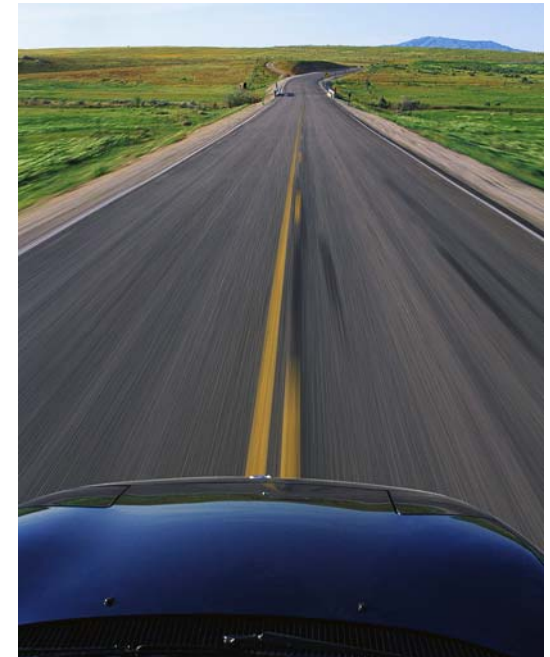
LO/04

## eBusiness infrastructure






## What to know and why ...

-  To understand what eBusiness infrastructure is
-  To understand why eBusiness infrastructure is important
-  To understand to use eBusiness infrastructure



## Outline

-  The nature of eBusiness infrastructures
-  The benefits of a proper infrastructure
-  How to utilise infrastructure in an enterprise

## The nature of eBusiness infrastructure

Infrastructure is generally a set of interconnected structural elements that provide the framework supporting an entire structure

It is most widely understood to refer to roads, airports and utilities







eBusiness infrastructure is a set of interconnected basic eBusiness elements that help in implementing individual eBusiness cases

The real content depends on the community in question, like an enterprise, industry or a country



## The nature of eBusiness infrastructure... cont.

eBusiness infrastructure elements:

-  Specific eBusiness legal issues
-  Telecommunications networks
-  Message mediating services
-  Cyber identity
-  Generally solutions and resources that are not case or individual system specific
-  Traditional infrastructure like logistics

## TASK

1. Name eBusiness or ICT (computer) infrastructure elements you have used either at work or home
2. List alternative ways to do same jobs without those infrastructure elements



## The nature of eBusiness infrastructure... cont.

Specific eBusiness legal issues:

Too often legislation is based on traditional ways to do business and as such can be a barrier to eBusiness

Although eBusiness is international, legislation is still national

There are international measures to harmonize regulations in different countries (in EU, WTO, UN etc)

In cross border eBusiness, it can be difficult for parties to figure out which laws apply

Specific eBusiness laws are studied in another Learning Object



## The nature of eBusiness infrastructure... cont.

### Telecommunications networks:

Telecommunications enables businesses to instantly access information from almost anywhere in the world. By including telecommunications in their operations, businesses can provide better services and products to their customers

Internet has been a major step in implementation of global telecommunications network for eBusiness

Intranet is an enterprise or value net specific telecom network

Compared to fixed networks, wireless networks offer mobility but they are at the same time more vulnerable

Digital divide, both nationally and globally, is still a challenge



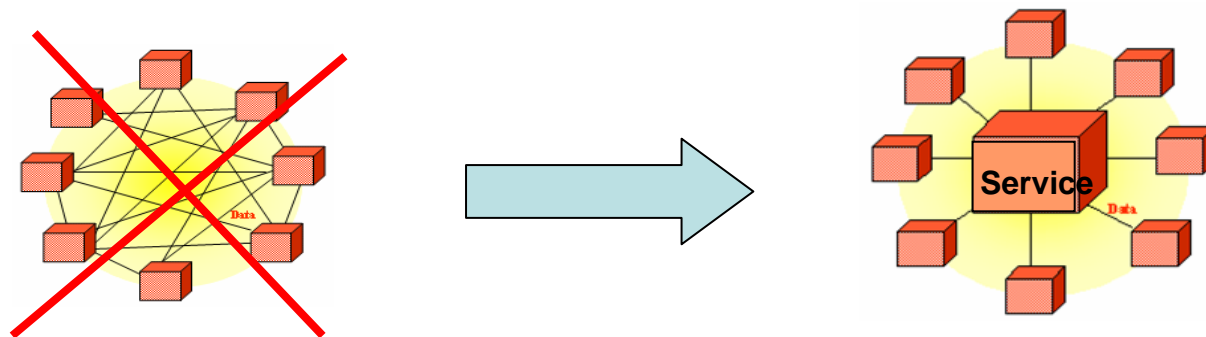
## The nature of eBusiness infrastructure... cont.

Message mediating services (for cross-company communication):

A solution to open networked eBusiness with a variety of standards, business processes and technologies

The service provides connectivity between all parties, transmissions, necessary conversations, intermediary archiving etc

Practices are quite inconsistent in different countries, so international solutions are few



## The nature of eBusiness infrastructure... cont.

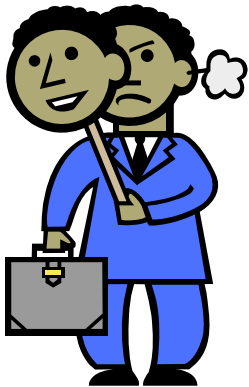
### Cyber identities:

Trust in eBusiness is dependent on the ability to recognize identities of business partners, individuals, institutions, services etc in a virtual business environment.

An entity has one identity, consisting of a number of attributes that may not be unique for that entity. Examples of such attributes for a person include name, date and place of birth, address, the identity of parents, etc

Confirming identities requires the entities to present, for validation, credentials coded e.g. in an application or smart-card.

Models and principals in implementing cyber identities for persons differ a lot even within EU although the legislation has been harmonized. Thus, solutions so far are mostly national.



## The nature of eBusiness infrastructure... cont.

Other solutions and resources that are not case specific:

Solutions for electronic payments including “micro payments”  
(efficient way to pay small amounts in the web) is also needed












## The nature of eBusiness infrastructure... cont.

Traditional infrastructure like logistics:

Traditional physical infrastructure like logistics is needed also for eBusiness.



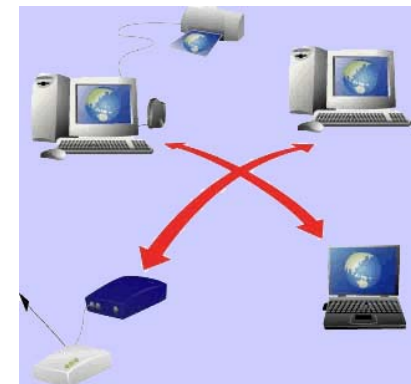
## The benefits of a proper infrastructure

-  Decrease the total cost of ownership
-  Decrease development time and cost in individual cases
-  Increase operational quality and safety
-  Decrease market risks
-  Increase efficiency
-  Decrease number of mistakes in eBusiness systems
-  Increase manageability and decrease complexity
-  Remove barriers to countrywide and international initiatives
-  Make information flow and security better

## An eBusiness infrastructure in an enterprise

For an advanced company an integrated suite of infrastructure products:

-  Supports application integration
-  Supports business process management
-  Supports collaboration with partners
-  Supports communication and high-volume transactions with high enough security and availability, built preferably on open standards



## TASK

1. List available eBusiness infrastructure solutions in your country
2. Discuss with the person next to you how your companies can use them

