Cyber-economies and the Real World

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vfridge and aQtive

Three real and virtual people who have shaped my vision of:

- what will be
- what may be
- what might be if we make it so.
close encounters

a 16th-century Venetian Monk

Mrs Goggins at the electronic village shop

a Birmingham prostitute
close encounters 1

a 16th Century Venetian Monk
one man’s journey

• “A Mapmaker’s Dream” (James Cowen, 1996)
  – Fra Mauro, 16th-century Venitian monk
  – cartographer
  – explorer within an island monastery

• the world
  – not just rivers and mountains
  – ideas, imagination, culture
four ages
four ages of information

- Age of Proximity — 40,000-60,000 years
  - control and information by physical contact
four ages of information

• Age of Proximity
• Age of Bureaucracy — 4000-6000 years
  – long-distance remote contact
  – physical messages
  – early cyberspace
four ages of information

- Age of Proximity
- Age of Bureaucracy
- Age of Money — 400-600 years
  - freemarket economies:
  - exchange of value
  - exchange of information
four ages of information

- Age of Proximity
- Age of Bureaucracy
- Age of Money
- Age of Information — 40-60 years
  - electronic messages
  - information objects
  - challenges power structures
  - remolds economics
the 4th age

human-computer interface changes and trends
increasing multiplicity

- 1980s - personal computers
  - one man and his machine
  - and they were men!
increasing multiplicity

- 1980s - personal computers
- late 1980’s & 1990s - CSCW
  - lots of people
  - geographically remote
  - but ...
  - one person per machine
increasing multiplicity

• 1980s - personal computers
• late 1980’s & 1990s - CSCW
• family use ... ?
families and friends
lots of people, together and remote
work and fun

- traditional HCI methods
  - tasks, goals, work, work, work
  - and the odd game
- now
  - e-shopping
  - communities
  - experience
virtual crackers

- real crackers
  - cheap and cheerful!
  - bad joke, plastic toy, paper hat
  - pull and bang
virtual crackers

- cheap and cheerful
- bad joke, web toy, cut-out mask
- click and bang
virtual crackers

- cheap and cheerful
- bad joke, web toy, cut-out mask
- click and bang
close encounters 2
Mrs Goggins
understanding the e-Market
understanding the e-Market

- market ecology
  - interconnections and dynamics
- market engineering
  - making the market
- market evolution
  - what may happen
market ecology
traditional market

- isolated market groups
  - identify market group
  - identify need
  - identify channels

- product
  (possibly) redesign for need
Internet market

- interconnected web pages, email, news groups, ICQ

- space on a web page in China customers in Brazil

- the eButterfly effect
market engineering
• understand the market groups and interconnections model and parameters

• design products to exploit the dynamics of the market change the dynamics of the market
the market
is the medium
vfridge and crackers
market evolution
eShopping or eBuying
everyone’s talking about
dis-intermediation
look out for

re-intermediation
Welcome to Ottakar's in Kendal...

Manager: Stuart Lees
7 Westmorland Centre
Kendal

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Literary Birthdays
a dream
the electronic village shop

• short in-store stocks
• large available range
• just-in-time ordering
• delivery point
• personal service
Mrs Goggins becomes an information scientist
buying shoes of different sizes

business organisation

ordering, distribution, information

reforming for the Internet

transformation of the high street
diversity density

kitchen

cupboard

high diversity
density
diversity density

supermarket shelf

lower diversity density
traditional markets

producer
    factory
    warehouse
    lorry
    supermarket

consumer

diversity
    density

information

volume
internet market

producer
factory
warehouse
lorry
supermarket
consumer

information
volume
close
encounters
3
a Birmingham
prostitute
• little things do matter
• but ...
  – one woman ... one night ... one trick
• what else is there to offer?
unskilled/semi-skilled work?

• jobs for the boys
  – UK manufacturing - decline 70s and 80s

• jobs for the girls
  – UK textiles - ditto
  – clerical?
    ➣ IT replaces
    ➣ Internet exports
but ...  
real economy revolution

- mass market customisation
  - today - cars to order
  - tomorrow - next day fitted clothes

.erb just-in-time manufacture
  - components imported
  - final assembly locally
diversity density on the supply side

central organisation
central distribution

£$

information
who wants what
c consumer

goods
who has what
 supplier

who wants what

who has what
recentralisation

central network

who wants what

consumer

who has what

goods

supplier
cyber-economies

- interconnected groups
- market ecology
- designing experience

the real world

- money is information
- diversity density
- real shops, real jobs, real lives
visions

• what will be
• what may be
• what might be if we make it so.