Fondation internet nouvelle génération
70 rue amelot 75011 paris
t (33) 1 4338 6262 f (33) 1 4338 7378
mél infos@fing.org http://www.fing.org

INTERNET 2002-2005
A PROSPECTIVE VIEW OF TRENDS

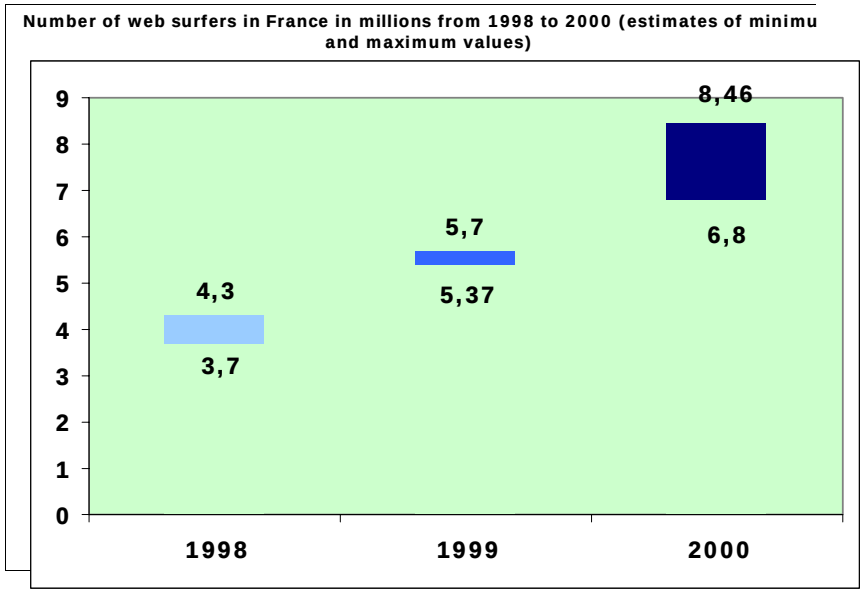
DANIEL KAPLAN
Managing Director of FING

February 2002

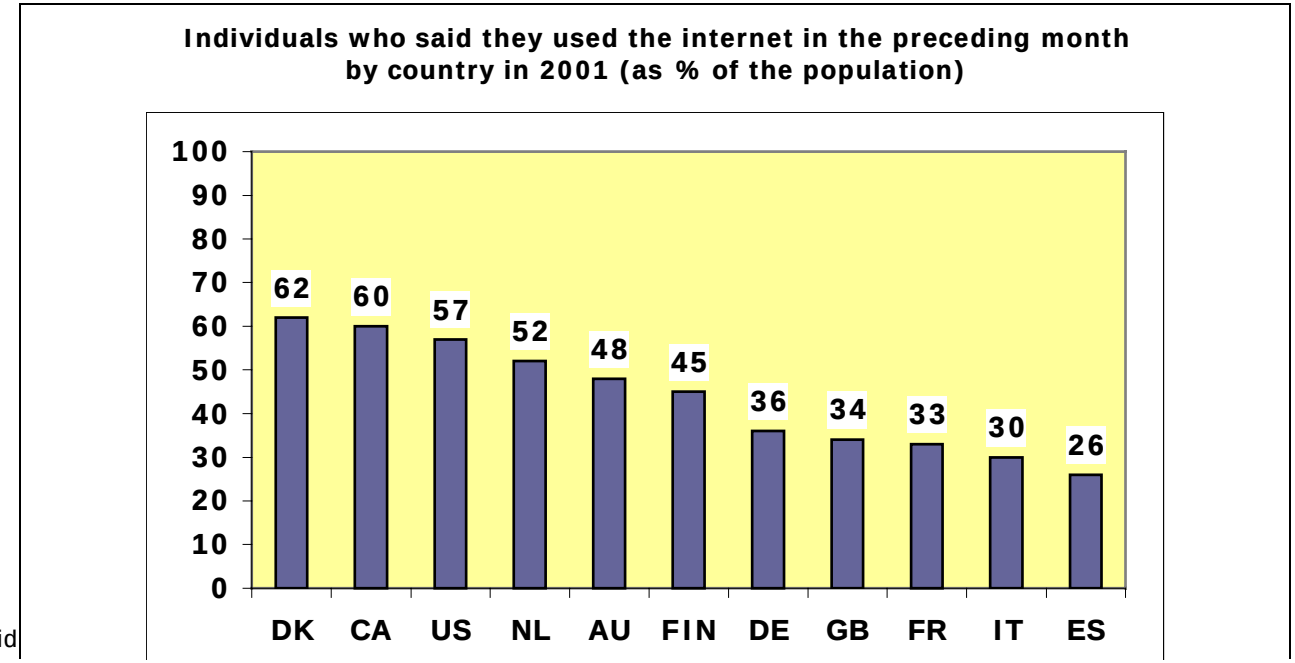
Internet 2002-2005

- Internet: trends
- Technology thresholds and bricks
- Uses of technology X
- Appropriation dynamics
- Fondation Internet Nouvelle Génération

Use of the internet has been growing...



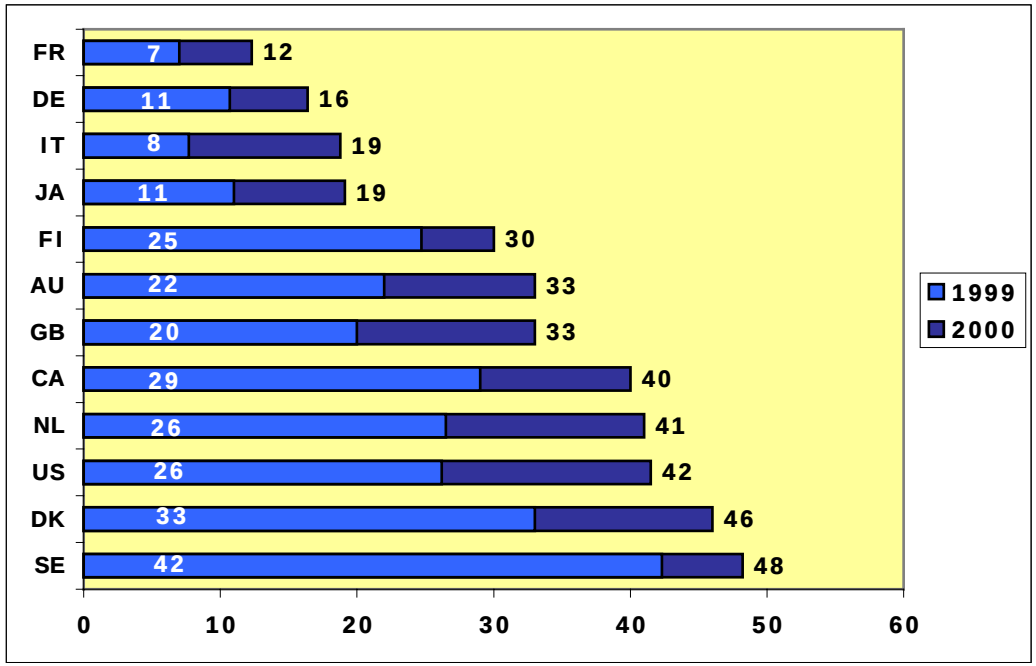
- 10-16m web surfers at the end of 2001 (depending on the definition)
- Professional use included, the gap relative to the EU average has declined



But the PC penetration rate remains low

- Although rising faster than elsewhere, the percentage of French households equipped with PC/Internet remains low (PC: 30-35%; Internet: 18-21%)
- The impact of the success of the Minitel teletext terminal is still considerable in France

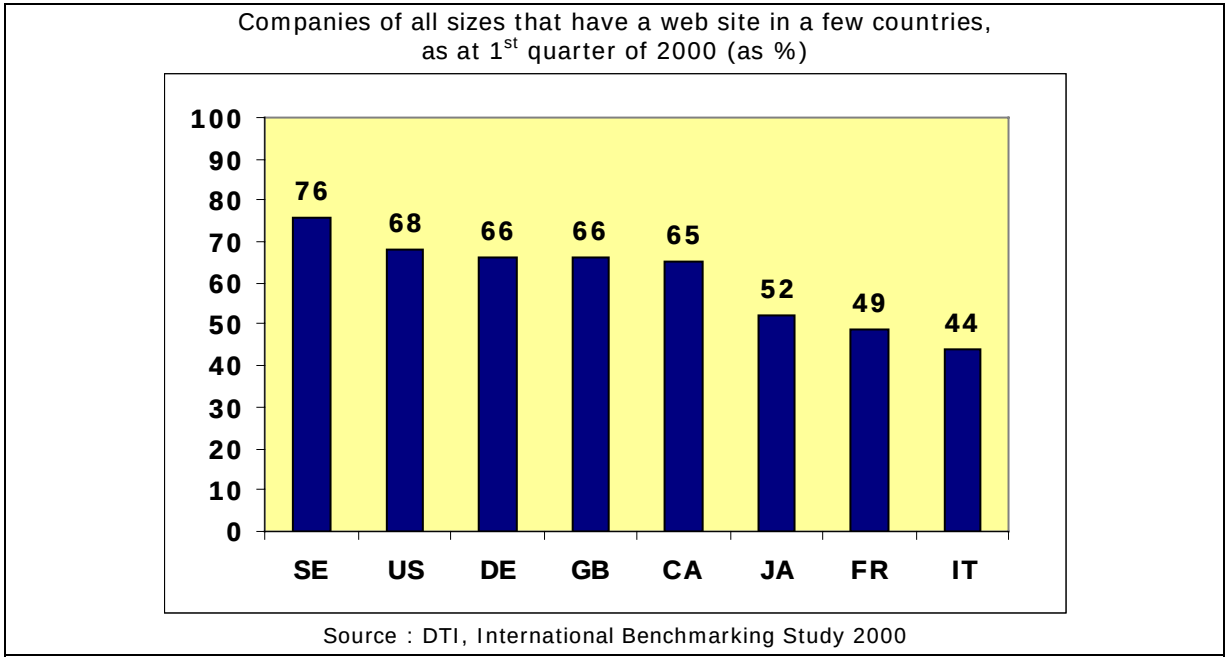
Households with access to the internet in a few countries in 1999 and 2000 (as %)



Source: OECD, STI indicators, TIC database, July 2001

The corporate internet utilisation rate is still low

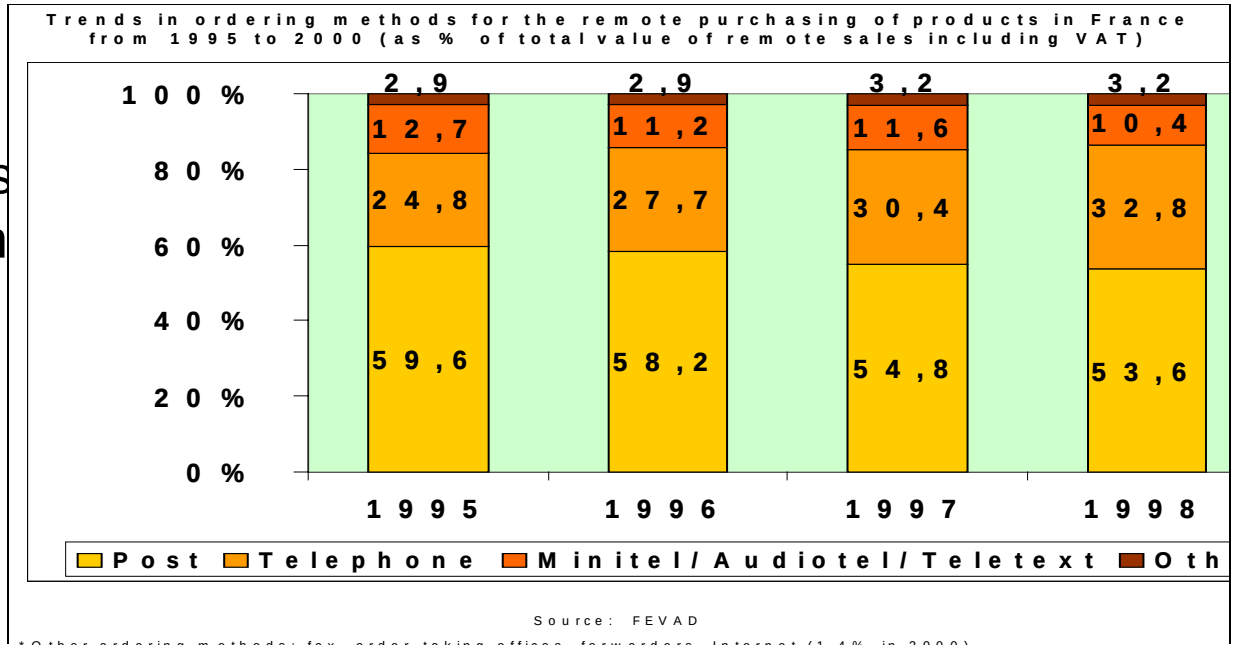
- 88% of French SMEs with 5+ employees are "connected"
- But the utilisation rate (e.g. web sites, time spent by business leaders on the net, etc.) is lower than elsewhere



“B2C” electronic commerce is still in its infancy

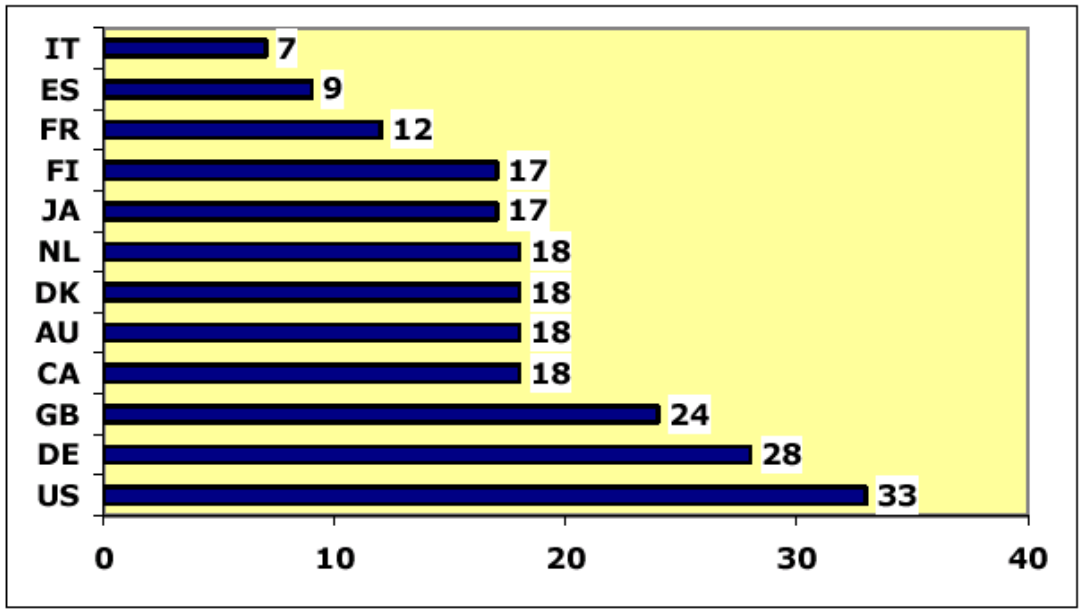
- Exceeds 0.5% of consumer spending in only a very few countries

- Inclusion of the Minitel changes Franceís rankin considerably



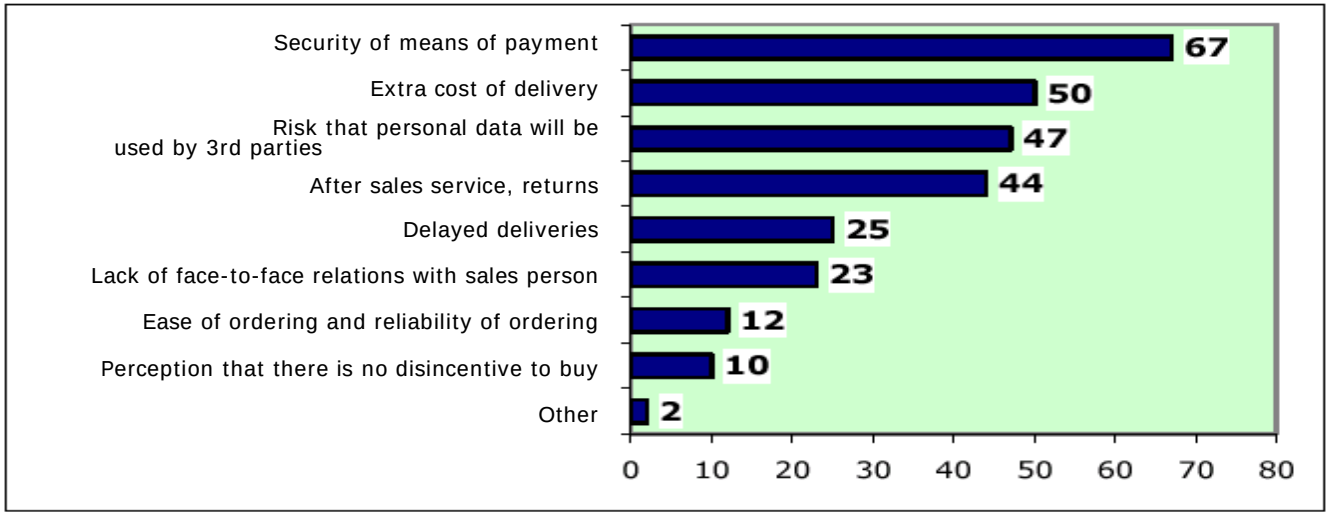
Confidence needs to be built up

Internautes ayant effectué des achats en ligne au cours du dernier mois par pays en mars-avril 2001 (en % des internautes)



Source : TaylorNelson Sofres

Question: among the following factors, which ones are likely to have a negative impact today on your decisionto shop online? (as % of web surfers willing to buy online or who have already done so, with several possible answers) - September 2000



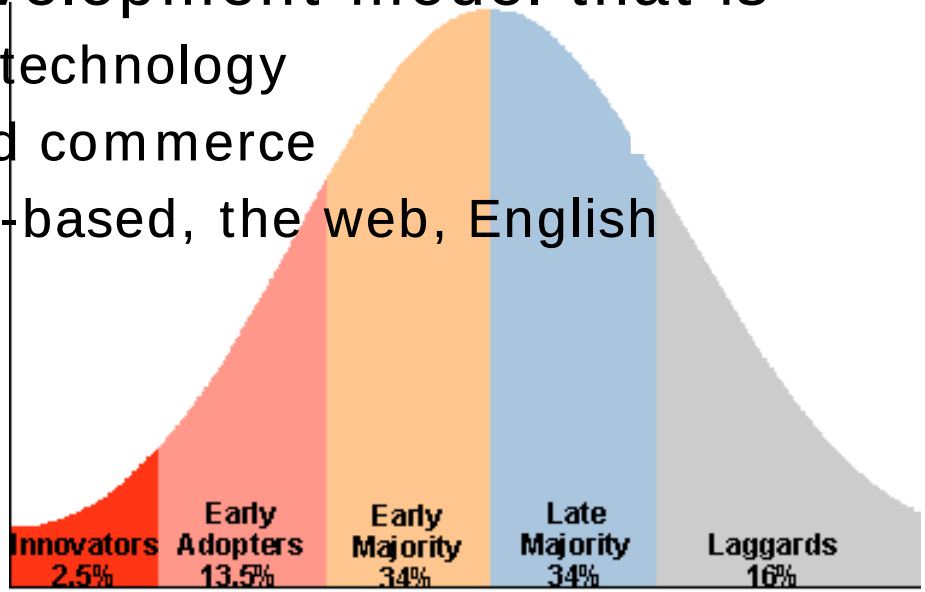
Source : Credoc/Cabinet Raffour Interactif

Real growth problems

- Stock markets – plus corporate and project financing
- Slower growth, even negative growth in USA
  - in terms of the number of web surfers
  - in terms of “B2C” electronic commerce
- Lack of “rate-of-growth drivers” (temporary?)
  - WAP, Web-TV
- Slowdown in sales of PCs

Why the growth problems?

- Bursting of speculative bubble in high-tech
- Return to rational economic values (end of “free sales”)
- End of an internet development model that is
  - over-dependent on technology
  - centred on work and commerce
  - a unifying force (PC-based, the web, English language, etc.)



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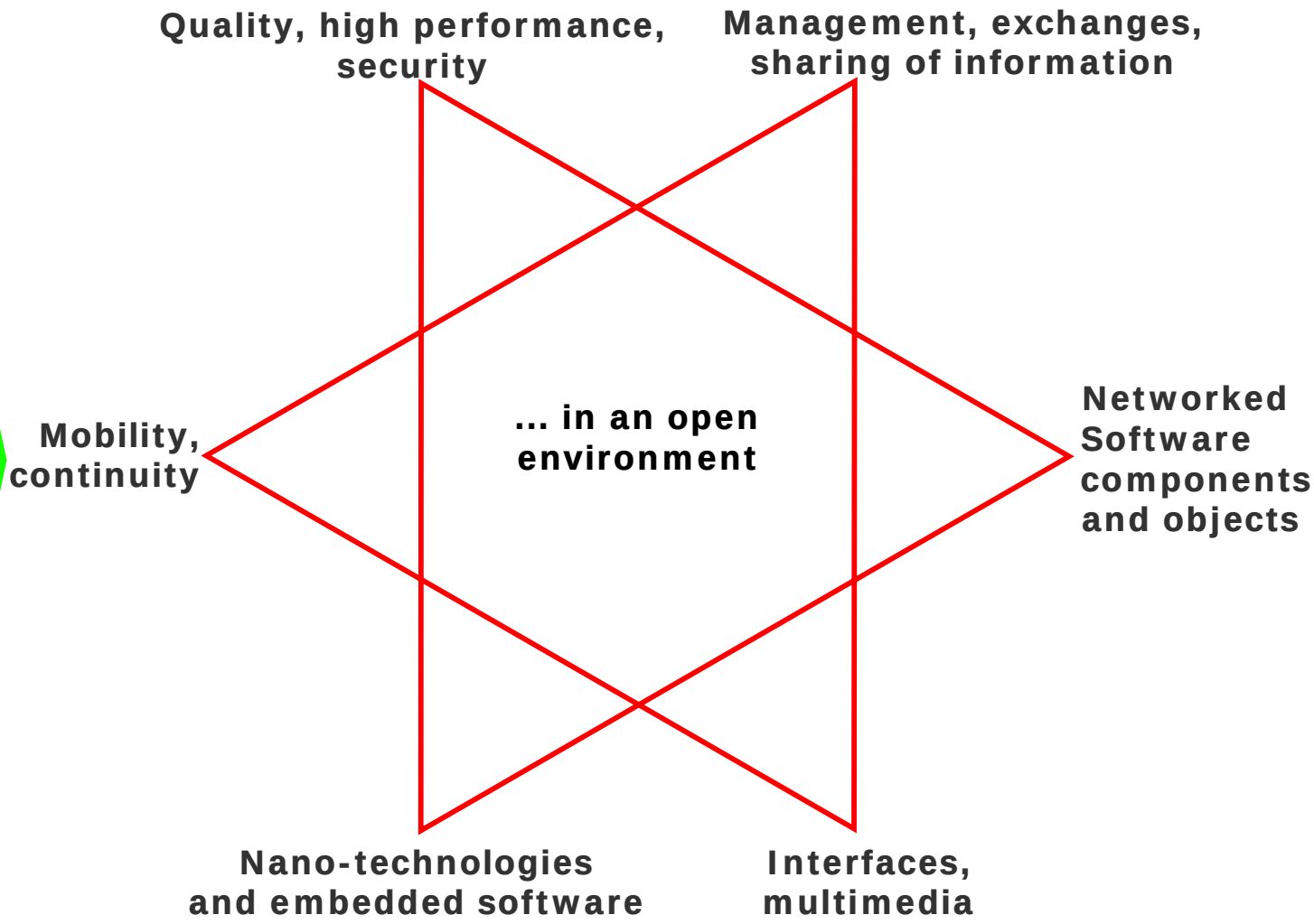
Several technology thresholds need to be crossed

Changes that are unco-ordinated, but which feed on each other



The internet that is “dying out”

~~Connection~~ → Can be taken for granted. If it ’s active, it ’s connected.

~~Bandwidth~~ → Is no longer a constraint.

~~Mobility~~ → Continuity of communication, adaptation to individuals and different contexts.

(Terminals, browsers) → Diversification, disappearance or splitting / expansion of terminals and browsers: all interfaces communicate with each other.

A new internet is emerging!

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Considerable scope for new uses

- When not constrained, demand quickly saturates bandwidth in the “final mile”
  - See Napster and university networks
- Use of the internet is still very limited
  - to white collar work
  - to some very small communities

Distance and proximity

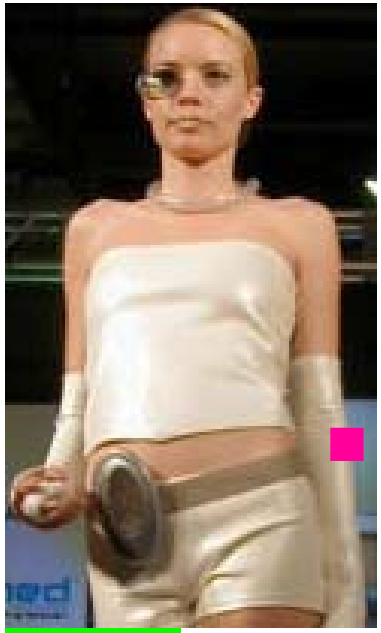
- The distinction between local-distant is disappearing
  - The location of programs and data is no longer important (except for security reasons…)
  - The nature of distance between people is changing
- Corporate barriers are being broken down (even more)
  - A new approach to outsourcing
  - Increase in the networking of value chains

Men and women

- The need to appeal to men and women who are not interested in the internet
- More human interaction
  - Telephony, video telephony... on their own or combined with interactive, synchronous or asynchronous uses
- Collecting and sharing information and knowledge
  - Through formal exchanges as well as informal co-operation and exchanges of knowledge
- Growing importance of multilingualism

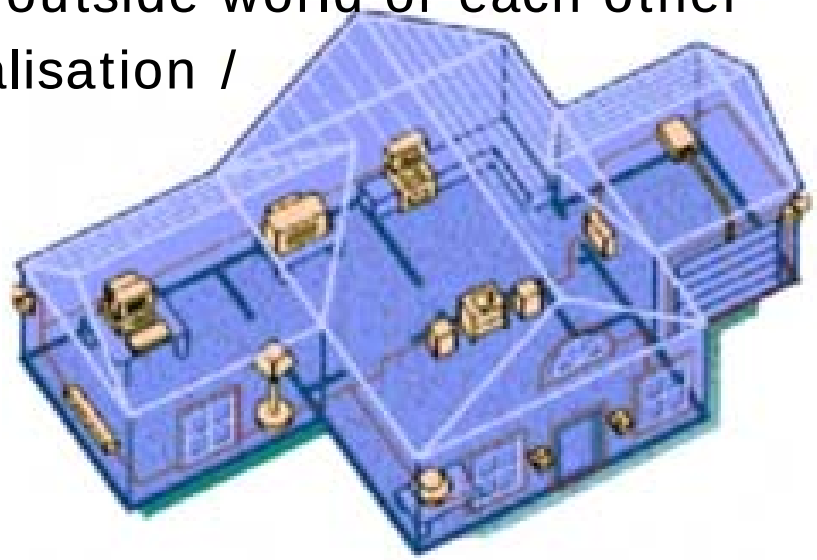
Machines and machines

- Peer to peer (P2P)
  - Cooperative or group processing and storage
  - Services without servers
    - From file exchange…
    - … to online collaboration…
    - … to search engines…
    - … to payments…
  - Extending to applications the architectural principles of the internet



Universality and diversity

- Increasingly diversified devices, which are interconnected and networked
  - Devices that are mobile (ranging from telephones to fashion accessories and implants) ou not (domestic, corporate, industrial networks, etc.)
  - Networked with the outside world or each other
  - Increasing personnalisation / diversification: very individualised forms of “communication ecologies”



Continuity and control

- Interconnection and synchronisation of fixed and mobile devices
  - Take your “network world” with you everywhere
- Adapt services and functions to the context
  - Localisation, contextualisation
- The corollary: demand for control over
  - personal security
  - ability to be reached or contacted
  - personal data

Actual quality versus perceived quality

- More secure systems, exchanges and people
- Ever-increasing "service quality"
  - Deadlines kept, less waiting, reliable exchanges...
  - Professionnalisation of architecture, processes and players

➲ The internet as the ideal medium for “mission critical” communication

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What do people do with high bandwidths?

Surveys by Jupiter MediaMetrix and Vividence for McKinsey show the trends in the behaviour of US web surfers who have switched to high bandwidths

- Time spent online over 1 month: +27%, from 16.9 to 21.5 hrs
- Communication functions (e-mail, instant messaging) have increased the most: from 4.5 to 8.6 hrs
- Next come the downloading of music and networked games
- The webís relative share has been diminishing.
- Use of media web sites has risen from 2.1 to 2.7 hrs/month
- Use of commercial sites has risen from 15 mins to 1.4 hours/month only!

Disappointment has turned into a crisis of confidence

The motivations of US online shoppers

Convenience	71%
Freedom (no sales people)	65%
Saving time	65%
Lower prices	55%
More choice	39%
Quicker delivery	36%

(source: Deloitte & Touche)

Brakes and factors of concern that adversely affect online shopping (% of web surfers)

United States	
Extra costs (products, delivery, etc.)	77%
Fear of not being able to return a product	67%
Security of means of payment	65%
Possible use by third parties of personal data	58%
Badly organised web sites	48%
Longer or uncertain delivery times	28%

(source: Intermarket Group)

France	
Security of means of payment	67%
Extra cost of delivery	50%
Possible use by third parties of personal data	47%
After-sales service, returns	44%
Longer or uncertain delivery times	25%
Ease of ordering and compliance with orders	12%

(source: Credoc / Raffour Interactif)

Consumers' expectations: better control

- Consumer confidence needs to be (re)gained
  - "Systemic" problems: securing payments, personal data
  - ... and other problems relating to retailers' attitude: service quality, even respect for consumers
  - Technical, legal... and commercial solutions

- Demand for good sales relationships and control
  - Divesting "customer-centric" models of their mythical quality
  - Reviving systems that foster man-machine dialogue
  - Reintroducing the human factor into relationships
  - Monitoring orders, returns, after-sales service, etc.

Digital identity



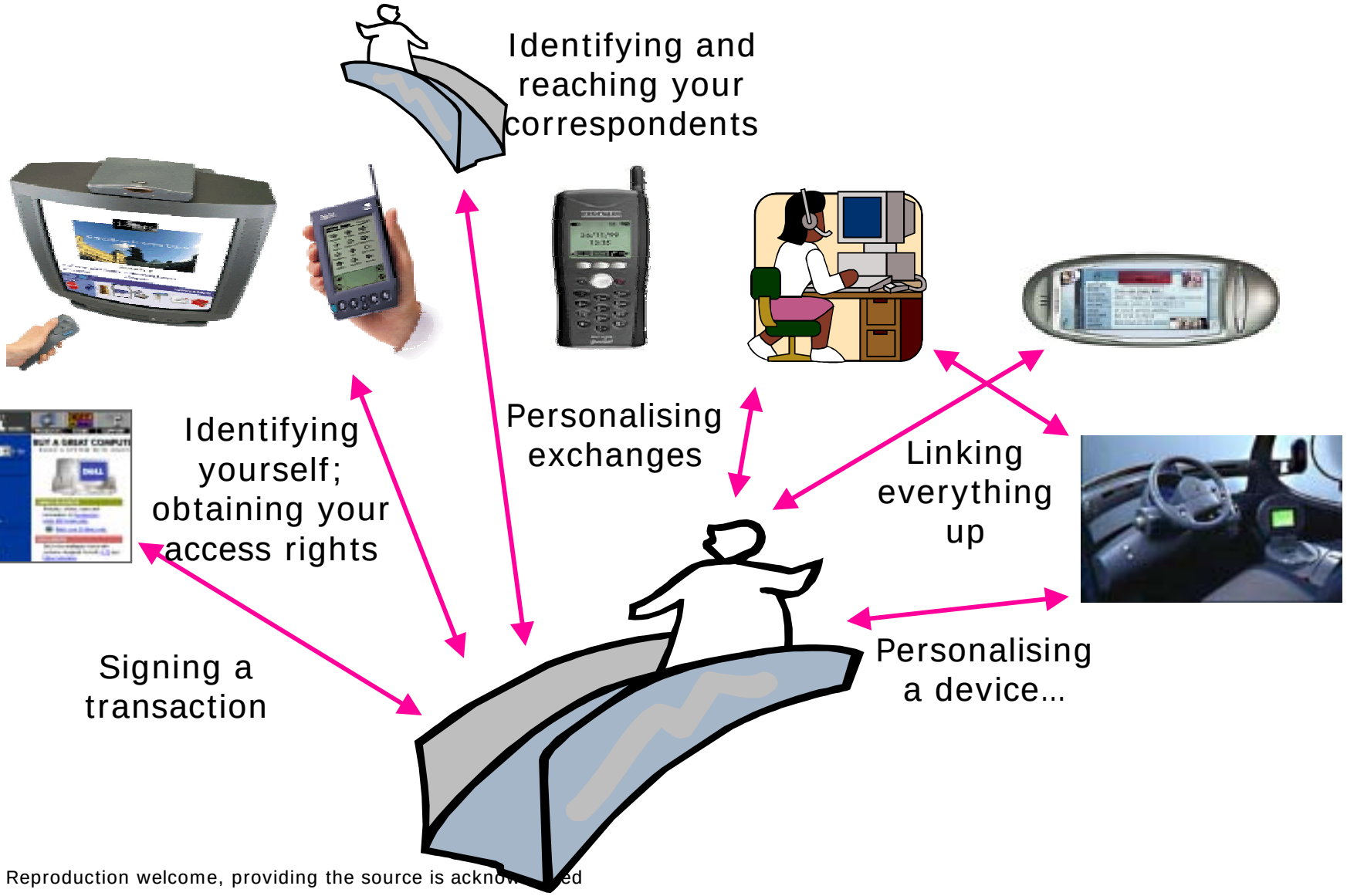


There are more and more...

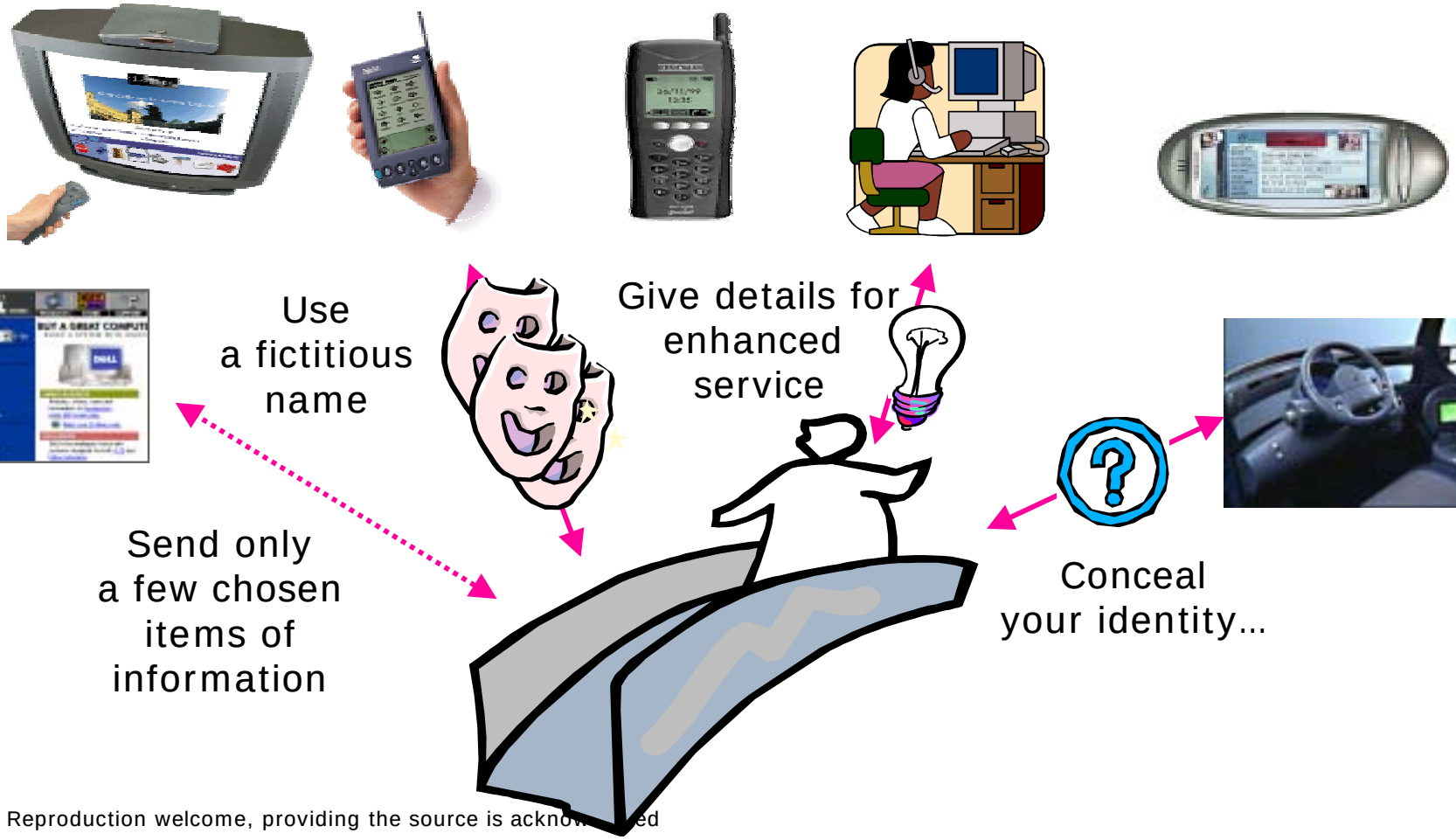
... devices, connection opportunities, networks...

... digital correspondents and transactions (administration/company, work/consoles/citizenship...)

Functional needs



Mastering the use of your personal data

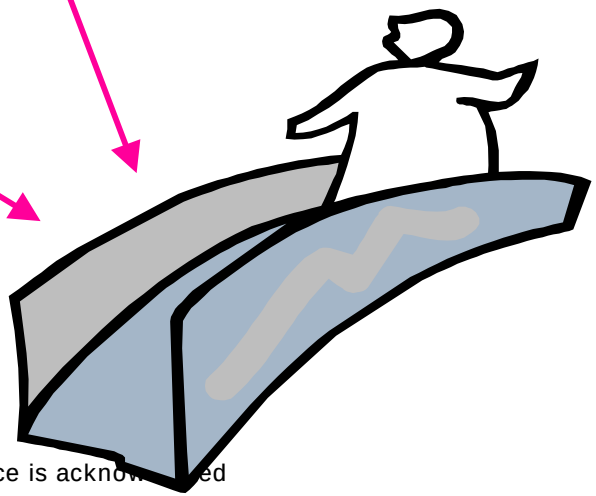


Control your online presence, your “accessibility”

I’m accessible only to my family

I’m accessible to nobody

I indicate that I’m connected



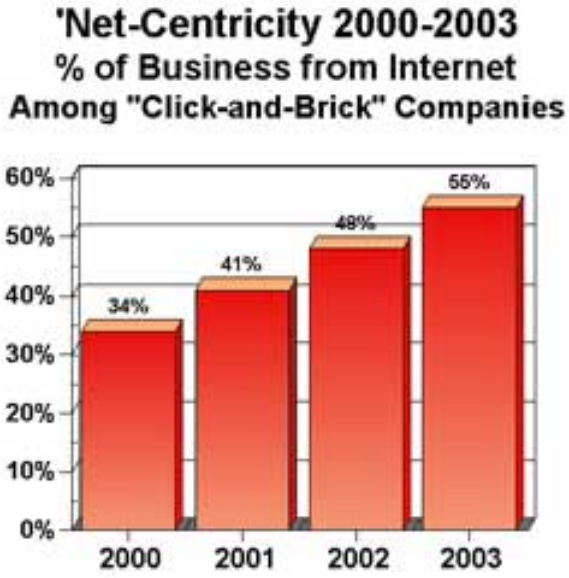
I’m accessible only for emergencies

E-Business: the characteristics of a loser

- False consumer knowledge
  - There's more to a consumer than a consumer
  - Customer Relationship Micro-Management
- Contempt for consumers
  - Forced use of virtual modes of communication
  - Contempt for both paying consumers...
  - ... and consumers with access to free services
- Ignorance of the cost function
  - Because it's digital doesn't mean its costs are all fixed: customer service, logistics, returns, administration...

Today's winners combine clicks with bricks & mortar

- Out of the 20% of profitable major websites in 2000, 80% belonged to established brands (*McKinsey*)
- Multi-channel shoppers buy more both online and at retail outlets (*Shop.org*)
- The "net-centricity" of "click and brick" companies has been increasing steadily (source: *Activmedia – includes B2B commerce*).



Source : Activmedia Research

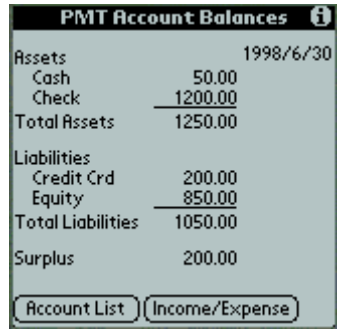
Distribution channels and customer relationships

- Winning new customers
- Making them loyal
- Cross-selling

} Increasing each customer ís "portfolio share"

- Management of costs per customer

- Customers don't want to choose!
- The internet is one component of a multi-channel strategy



A few ingredients of success

- The importance of customer relationships
  - Systems are necessary, but so is the human factor
  - Integrate relationships across all channels
  - Create sales evaluation measures and indicators
- Service quality and operational efficiency
  - Reduce the costs and risks of inefficiency
  - Optimise the supply chain
  - Provide a top quality buying experience
- Sell a product, not a revolution
  - Seek out value and simplicity
  - Don’t force customers to change their habits

A few ingredients of success

- Be capable of dealing with unforeseen events
  - Respond to slower growth (eg the impact of Sept 11)
  - Respond to unexpected changes of demand (eg ringers, SMS): adopt the “gardening” method
    - A broad range, constant evaluation of sales
    - Make good use of customer returns, the “community”
    - Experiment cost effectively
    - Keep an eye on what competitors are doing
    - Continually keep track of customer expectations
    - Be prepared to respond very quickly to new trends
  - A flexible supply chain: B2B commerce conditions the future of B2C commerce...

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Our mission

- A joint technology-watch project focused on research & development and experimentation
- Our aims are to stimulate, identify and publicise innovative solutions for future internet services, applications and uses.
- To prepare the ground for new questions and give the players the theoretical and practical tools they need to operate more effectively.
- To make all players more aware of the challenges of the internet of the future

Major issues

- The three drivers
  - Innovation
  - Production et distribution (economic models)
  - Appropriation and use
- Vision of and prospects for convergence
  - Broad bandwidths
  - Fixed line-mobile telephony
  - “Smart” information on many different media...
- How the open internet model can switch to an “industrial” scale and stage of development

Structuring projects

- "Carrefour des Possibles"
  - Informal monthly presentations of innovative projects
- "Mobile Internet Show" (22 –24 March)
  - The latest most impressive concepts in mobile telephony
- RIAM-RNRT-RNTL group dedicated to "Nomadism"
  - Mobile multimedia services and uses
- "Cahiers de l'Internet"
  - A publication with in-depth articles on subjects addressed by the FING, some written by non-FING authors
- The Autumn University
  - An annual event on the internet of the future
- "Autrans 2003" (with the Internet Society)
  - Annual meetings of the French networked internet society

Stimulating, identifying and highlighting innovation

- Technology watch and the website
  - Weekly newsletter
  - “Portail de l’innovation” (Innovation Portal)
- Networking
  - Tests & Scenarios: visits to companies and labs
  - Trips: Canada, Scandinavia, the Benelux, etc.
  - “Carrefour des possibles” (monthly meetings)
- Partnerships: conferences, studies, competitions
- Publications and Events
- Relations with the public authorities

Communities and working groups

- Communities
  - Regional and local government authorities
  - R&D
- Active working groups
  - Education / e-learning
  - Digital identity
  - Mobile uses and services
  - B2B electronic commerce (with ACSEL)
  - E-business, customer relationships
  - Mutu-XML
  - Security and domestic networks

Thank you!

DANIEL KAPLAN
dkaplan@fing.org

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fondation internet nouvelle génération
70 rue amelot 75011 paris
t (33) 1 4338 6262 f (33) 1 4338 7378
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Presentation of the FING

The aim of the Fondation Internet Nouvelle Génération (FING) is to stimulate, identify and publicise innovative solutions in the field of the internet services, applications and uses of the future. FING is a joint technology watch project focused on research & development and experimentation, in which your organisation is invited to participate.

> Find out about the FING

Join the FING and
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. benefit from joint intelligence
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