

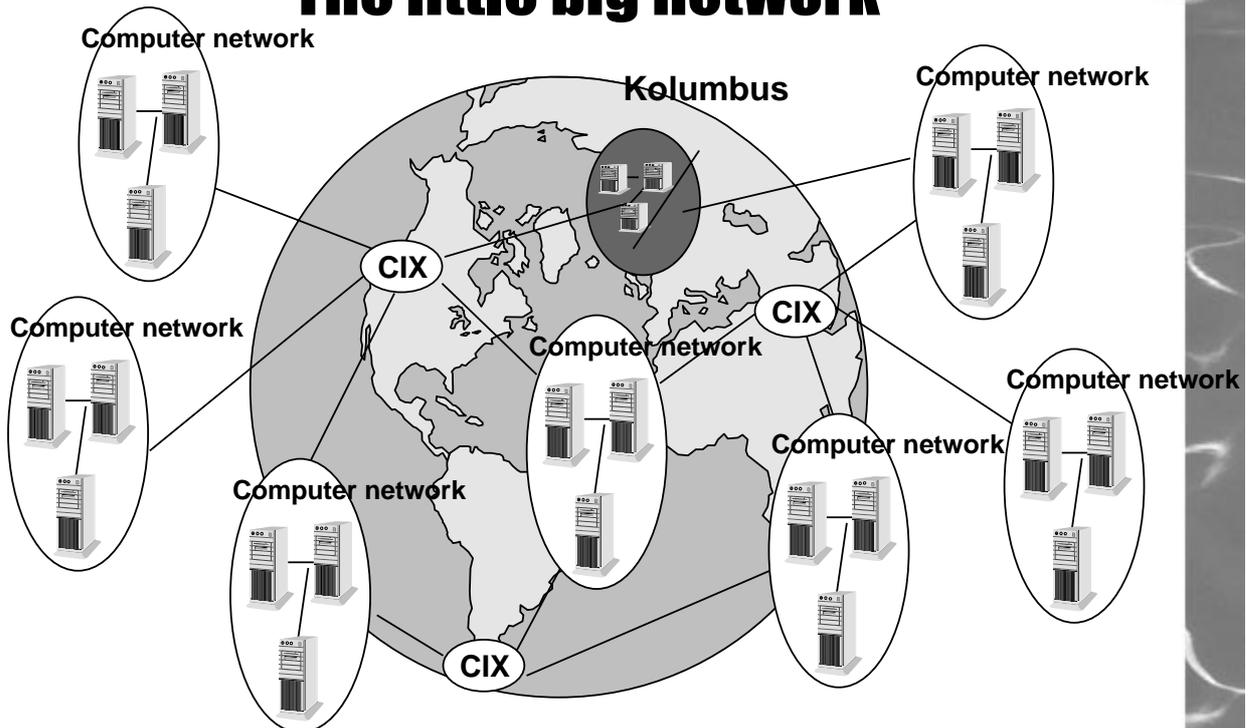
The Impact of Internet on Telecommunications Networks

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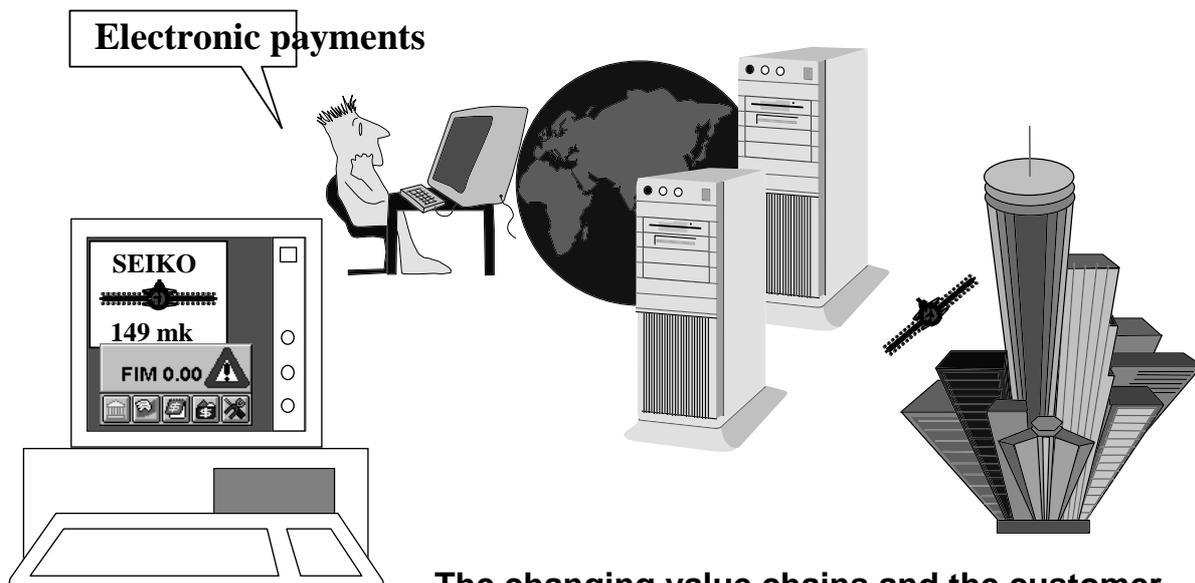
The little big network



The world is shrinking: - a vision on the future of communications

- 'There will be a road. It will not connect two points. It will connect all points. Its speed limit will be the speed of the light. It will not go from here to there. There will be no more there. We will all only be here...'
(Anna Paquin - 11 year old)

The impact of Internet on basic structures in the society



Internet-commerce ... the new world order?

What's happening, estimates of changes in cost structures?

| | | |
|------------------|----------------------|--------------------|
| Flight ticket | 43,50 mk printed | 5,40 mk in the net |
| Bank transaction | 5,80 mk in office | 0,05 mk in the net |
| Sending a bill | 12,30 mk in envelope | 1,30 mk in the net |

(Wired-magazine)

...businesses and consumers seem to like it

... "easy to compare, often cheaper, saves time and is available when I want!"

@ Does my company need to take this into account?

@ New customers or existing customers?

@ What about telephony services, physical stores and offices?

Mass- and micromarketing, customer relationship marketing

- Marketing doctrines from customer acquisition to customer relationship
- A new customer 4-10 x more costly than keeping an existing customer (to buy more)
- Multiple channels: Internet one of the many tools: TV, radio, magazines, direct mail, telemarketing, helpdesk, CDs, exhibitions, fairs, customer visits etc.
- New media emerging which we don't know of yet
- Internet: both customer acquisition AND customer relationship

Internet as service & contact channel

- www.company.fi/services
- **Advertisements:** customers are continuously being attacked from various directions
- **Internet:** How to make your customer find and (continuously) choose you and your service (brand) instead of all others (which are a mouse-click away)?
- How to build a service which creates value to the customer more than the alternatives (which are many)
- The pioneers may have the advantage, hurricane growth possible, in some businesses there is perhaps no second place ("winner takes it all")

Internet and CallCenters

- Both increase the usage and advantages of the other... Internet services rise questions to which there should be the possibility of a personal contact
- Simultaneous session with the web are coming... the customer and service person have the same information on the screen
- Standard things can be automated with the web, also frequently asked questions

Internet and telephone networks 1(2)

- Internet/IP traffic to become dominant mode in fixed telephone networks, while "talk" more in mobile networks.
- Mobile data: SMS, WAP - bandwidth scarcity.
- ISDN will prevail long beyond 2000, because it's there, reliable, at good price/advantage performance, fixed telephone is still often desired
- dsl, cable and others emerge. The local loop not the challenge but... networks, services, service levels, administration - at cost for mass residential market
- Services often have to take into account that there are different access methods amongst customers

Internet and telephone networks 2(2)

- The dimensioning of telephone networks needs restructuring - IP-traffic to be separated at local level. Numbering, switch architectures, trunk networks impacted
- The bandwidth hungry content brought/adapted locally. The bandwidth and bandwidth management always a challenge. (All bandwidth offered will be used up.)
- IP (voice/video) telephony - services will be the big thing, not tariffs. Corporate networks, combinations of services and chats/games will be the drivers
- Access related/independent services development

Internet. electronic commerce, advantages, and where is the business in Internet?

- **Competitive advantages are changing
... the size and location are not so important,
knowledge, skills and customer service are**
- **The changing values and lifestyles, individualism
... as employees and customers (no more 9 to 5)**
- **Adopting Internet and EC in business processes
brings about the needs to develop the processes
and IT systems**
- **The real business of Internet is the customers
using Internet to do their business in a better way**