## Some Other Topics

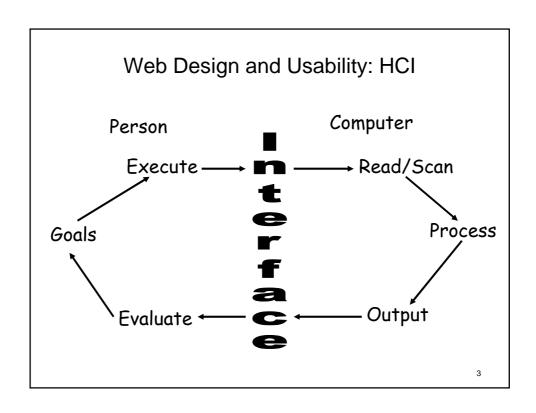
(just mention other interesting topics; besides many others)

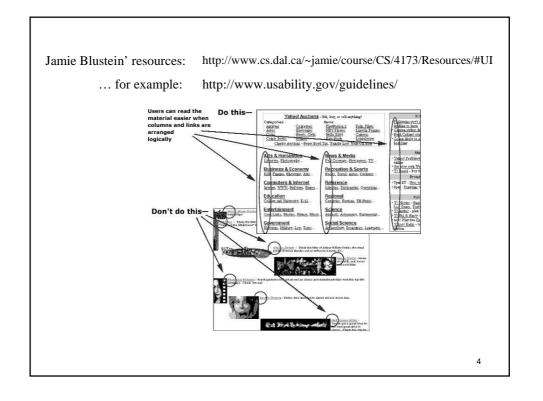
1

## **Payment Systems**

- Credit card works → restricted liability
  - !!! Never use debit card on the web !!!
- Centralized payment systems
  - PayPal and co
- Electronic Cash
  - Great application of cryptographic systems
  - See for example DigiCash (David Chaum)
  - Micropayment systems possible
- Electronic Checks
- SET (Secure Electronic Transactions)

2





## (Ro)bots, agents, spiders, search engines

Program that 'travel the web' to gather information

- → Static argents
- → Mobile agents

For example, search engines, web tools such as inactive-link alert, news agents, e-mail harvesting for spamming, ...

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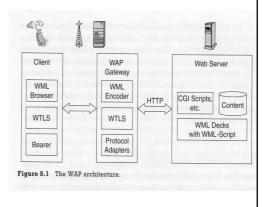
## M(obile)-commerce

Global number of mobile phone users

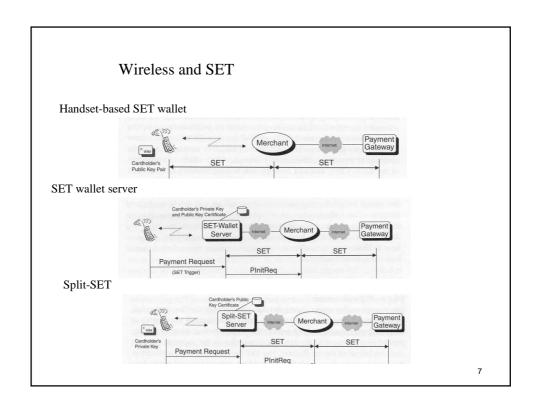
2000 2002/3\* 2010\* 570 million 1 billion 1.6 billion

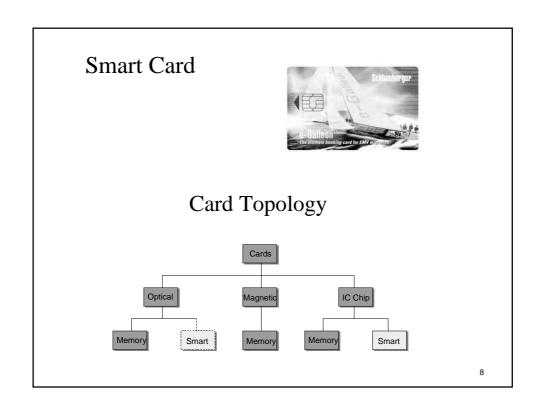
Global m-commerce revenues

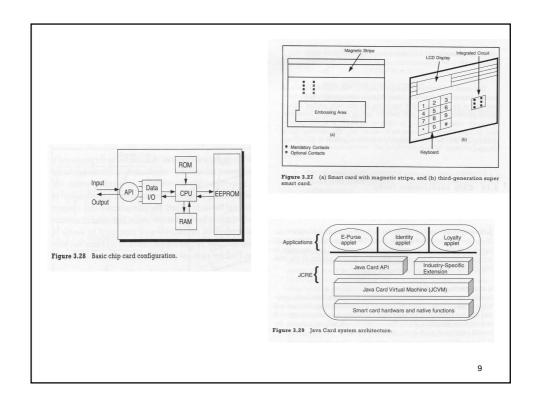
1999 2003\* 201 3 billion 13 billion 270 billion



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Advanced Card Technology Association of Canada

http://www.scia.org/



(January 2002):

http://www.ct-ctst.com/CT/

"There will be nearly 30 million chip-based credit cards circulating in the United States by the end of the year, up from 17.5 million at the end of 2001"

"... the cost of a Visa smart card dropping from \$3.50 two years ago to \$1.62 today. He says smart card prices will soon approach the under-50 cent cost of a mag-stripe card, as volumes increase."

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