User Requirements for Electronic Commerce

Ingo Saleck

Head of Department “New Media”

Otto Versand · Hamburg · Germany

User Requirements for Electronic Commerce

- What is Otto Versand
  - Existing services
  - Existing digital services
- Requirements from Otto Versand
  - Existing security threats from a service providers point of view
  - Existing additional security threats from a customers point of view
  - Additional requirements from a service providers point of view
- Additional requirements from EUROCOM & FOGRA
- Additional requirements from expert survey and general surveys

What is Otto Versand

- The Corporation
  - 24.8 Billion Marks worldwide turnover
  - 38 Companies
  - present in 16 Countries
  - 56.000 Employees
  - 600 different Catalogues issued twice a year
  - 120.000 different articles on offer
- Otto Versand is the largest mail-order business worldwide

What is Otto Versand

- Existing Services
  - Ordering via telephone can be done 24 hours a day
  - When ordering until 12 o´clock, goods can be delivered the next day
  - On selected goods same day delivery is offered
  - Goods can be returned within 2 weeks after delivery (no charge)
  - Payment is invoice based
  - Delivery is done via the Otto owned Hermes Parcel Service

What is Otto Versand

- Existing digital services (New Media Department)
  - Catalogue on CD-ROM (including order functionality via modem)
  - BTX (German Mitel)
  - Internet: http://www.otto.de
  - POS Activities
  - Partnership in several I-TV Projects

Requirements on Electronic Commerce from Mail Order Companies

- **Threats from a service providers point of view**
  - Fake orders from fake customers
  - Loss of reputation by fake Otto Versand Server
  - Customer data could be collected by dishonest competitor
  - Revealing confidential customer data to a third person
  - Delivery situation could be retrieved by competitor/supplier
  - Loss of security in the central system (intruder, virus)

Requirements on Electronic Commerce from Mail Order Companies

- **Threats from a customers point of view**
  - Impersonator ordering goods for a third person could imply
    - severe inconveniences returning the goods
    - loss of reputation of third person
    - finally a denial of service for third person
  - Loss of privacy if eavesdropper learns about customers preferences and behaviour
  - Loss of confidentiality if eavesdropper obtains secret data
  - Unauthorized access to credit information of third person

Additional Requirements from Otto Versand's Point of View

- Ease of use
- Low requirements for the hardware, software and know-how on the customer side
- Broad potential customer base
- Broad universal availability of the software on different platforms
- Easy access for new customers who want to join the electronic marketplace
- Easy access for new merchants who want to join the electronic marketplace

Additional Threats identified by EUROCOM & FOGRA

- Collection and re-use of electronic material by dishonest competitor (i.e. course material, surveys)
- Customer pays without getting the ordered online services
- Online service is performed but the customer claims that he did not receive anything
- Revealing confidential information in business or private about area of interest/research
- Customers loose their incentive to pay for special services or information if outsiders (illegally) get these information for free

Additional Concerns identified in the Expert Survey and General Surveys

- One single individual uses different computers and one computer is used by different individuals
- Half of users access the internet from work
- Firewalls sometimes block protokolls
- Users need simple automated security procedures

Additional Concerns identified in the Expert Survey and General Surveys (continued)

- Management of multiple passwords/phrases is becoming a problem for customers
- Businesses want strong encryption to protect data transmission and for secure eMails
- Different levels of authentification are required for different purposes
- Individuals are generally concerned about downloading information/software

Summary

- SEMPER is currently dealing with an major subset of the requirements and threats mentioned
- As the electronic marketplace evolves, more requirements and threats will be identified which have to be dealt with in subsequent steps
- Every risk eliminated will make the electronic marketplace more attractive and will therefore attract more players to it
- There will never be a completely secure electronic marketplace, but there is no completely secure conventional marketplace either