Risk-Reward-Ratio
Security in mobile Networks

Brühl den 24.09.2014
Agenda

24.09.2014

1. m2m Tailors
2. Initial Situation / Challenges
3. ECO-System
4. Solution Statement
5. Q & A
m2m-Tailors
The Solution Network for mobile payment
Initial Situation / Challenges
M2M is going to change the economy

Initial Situation

• The Internet of Things becomes reality.
• The Ecosystem is in transformation
• Concerns in data-protection and security impedes improvement
• Competitors becomes Partners

Challenge:

• Change from discrete thinking to connected Processes
• Development of trusted platforms
• Secure Infrastructure
• Secure payment solutions
The enemy is inside
Scenarios of Intrusion

EXTERNAL

WAN service provider (ATM, frame relay, MPLS, leased lines)

Internet access, IP-VPN, remote access, VoIP

INTERNAL

Employees, visitors, trainees, external and temporary employees

IP phone

Private notebook

Wireless access point
The enemy is inside
Scenarios of Intrusion

EXTERNAL

WAN service provider (ATM, frame relay, MPLS, leased lines)

Internet access, IP-VPN, remote access, VoIP

30%

INTERNAL

Employees, visitors, trainees, external and temporary employees

IP phone

Private notebook

Wireless access point

70%
ECO-System
The m2m Eco-System
All participants are served by a central data platform

- Open Loop
  - Amex
  - Master
  - Visa
  - JCB
  - ELV
  - PayPal
  - ...
- Closed Loop
  - Gutscheine
  - Loyalty

- Identifikation
- Verififikation
- Scoring
- Billing
- Fraud detection

- Partner
  - Online
  - Offline

- Grafik / Layout
- Abrechnung
- API’s
- Logistik

- Mineralöl
- Automotive
- Landmaschinen
- Maschinenbau
- ...

- Full Service
  - DPDHL
  - Amazon
  - Hermes
  - ...
- Kundenlogistik

- Online
- Offline

Payment
Clearing
Webstore
B2B Connector
Industrie
Logistik
Endkunde
The complexity of m2m-Solutions

User

Secure Data Provider

Service Partner

Subscription Management

Provider

SIM Manufacturer

Modem Manufacturer

Data-Source

Service-Layer (App-Store)

Mail
Billing
SMS
Payment

IBM
Tivoli software

HP OpenView

WEB HMI

TRANSLATOR & Collector

Secure Data Provider

Service Partner

Subscription Management

Provider

SIM Manufacturer

Modem Manufacturer

Data-Source
Different Users are calling for different Solutions

The 7 Internet milieus

1. Internet Newcomer and unsettled
2. Layperson, calling for structure
3. Establishment
4. Doubters
5. Unheedings
6. Performers
7. Digital Sovereign

Digital Outsiders

Digital Immigrants

Digital Natives
Solution Statement
Segmentation of the big picture
In 7 steps to a working solution
The m2m Infrastructure
Security from End to End

Solution

Mobile Network

MNO Network

Public APN

Customer APN

Internet

Customer IT

IP-Sec

Active Directory
5 Q & A