Personalised customer self-services in a multichannel environment

Presentation Mobile Voice Conference
Dr. Lupo Pape, CEO, Co-founder
March 14th, San Francisco 2012
Personalized Self Service Solutions SemanticEdge

Mobile -Apps  Voice Portals

Copyright SemanticEdge 2012
Company Overview SemanticEdge

Products:
- Development of personalized mobile apps and natural language Voice Portals
- Advanced Interaction Management Technology for mobile apps and natural language dialogs

Customers (e.g.):

[Logos of various customers]

Copyright SemanticEdge 2012
Focus Industries of SemanticEdge`s Selfservice Solutions

Finance  Telecom  Logistics
Utilities  Public Transport  Media

Copyright SemanticEdge 2012
The Personalization Principle

Who?  When?  Where?

Which Treatment  Which Services  Where to route

Copyright SemanticEdge 2012
CONTENT

- Personalised Voice Portals
- Personalised Mobile Apps
Anticipation of Calls

Insurance 100%

Utilities 100%

Telcos 100%

Service desires that can be anticipated
- Status Information
- End of contract
- Recent marketing campaign
- Payments due
- Change in billing mode
- ...

Copyright SemanticEdge 2012
Freenet: Personalized Dialog Management

Authentification

Personalization Checks
- Current order
- Last contact
- Pend.cancellation
- Contract details
- Network problems
- Log-in failures
- Bill status
- Missing email

Order Status
- Information on current order

Tariffs & Contracts
- Tariff adjustment
- Contract info
- HW info
- Moving
- Notice of cancellation
- Other changes

Technical Support
- New password
- HW switching
- Interferences
- Support

Bills & Reminders
- Account Info
  - Outstanding items
  - Itemized bill
- Unblocking
- Reminders
- Missing bills

Internet Team
Support Team
Billing Team

Copyright SemanticEdge 2012
Automation rates Freenet DSL Technical Support

- Not replied email: 10% Automated Calls, 55% Anticipated Calls
- Network problem: 26% Automated Calls, 45% Anticipated Calls
- Locked account: 13% Automated Calls, 12% Anticipated Calls
- Trouble Ticket: 4% Automated Calls, 4% Anticipated Calls
- Never online/new password: 4% Automated Calls, 45% Anticipated Calls
- Personalized tech-support dialog DSL: 6% Automated Calls, 40% Anticipated Calls
- Total: 37% Automated Calls, 100% Anticipated Calls
Approach personalized NLU-Portal Mobile Carrier

**Identification** (ident. and/or recognition of calling no.)

Personalised prequalification

- How-may-I-help-you?
- Options
- ..

Contract&Tariffs
- Options
- ..

Mobile Phones
- New Smartphone
- Block SIM-Card
- ..

Technical Support
- Pers. FAQ
- Configurations
- ..

Customer Data
- Change Bankdata

Billing

Anticipation
- Events-/statusinformation
- Payments due
- Blocked Customer
- End of contract period
- Prepaid account without credit
- Recently bought HW
- Vain login attempts
- ..

~50%

Differentiated skill-based-routing

VIP-Customers

Service-Team 1

Service-Team 2

Service-Team 3

..
Advanced Interaction Management Framework

- Configuration
- Deployment
- Reporting
- Administration

Management Cockpit

- Development of new Modules
- Testing

Eclipse IDE

- Content Management

Quality Analysis

- Rules Engine

Dialog Manager

- Modular & configurable Industry solutions

Integration Layer

- Appl. Templates
- Appl. Instances
- Reference Tables
- Output Objects
- Rules
- ...

Copyright SemanticEdge 2012
CONTENT

- Personalised Voice Portals

- Personalised Mobile Apps
Traditional Gym as an analogy for today's content crammed websites...
... compared to the App as a Personal Trainer who know the Weaknesses and Desires of a Customer
Paradigme shift through Mobile Apps

Desktop-Internet Paradigm

App-Paradigm

- Fantastic HW with more & more sensors
- Ever-faster internet access anywhere anytime
- „Snacky“-apps
- Use-case-oriented
- Unified look & feel
- Personalised content

Massive App-Trend!!

Copyright SemanticEdge 2012
„The Web is dead!“ - Apps are becoming the digital Lead-Channel

Quelle: comScore, Alexa, Flurry Analytics

Copyright SemanticEdge 2012
Smartphones and Apps – Chances for Customer Service

- Chance for an efficient, proactive and personalized customer service
- Amazing marketing platform where the customer may be addressed anywhere and anytime with a personalized offering
- Always On / Online
- ~50 interactions/day
- Apps seen as a mean for a more efficient and enriched life

„Mobile first“
Restricted Service Spectrum in the 1st Generation Carrier Apps

Copyright SemanticEdge 2012
Status Quo Vodafone-Customer Service-/Upselling Apps

Copyright SemanticEdge 2012
Dimensions of potential Manifestations of Vodafone-Apps

- Vodafone Brands
- Wholesale Brands
- Retail Brands

- Operating Systems
- Formats: Smartphone, Tablett-PC

- My Vodafone
- My Callya
- Ultracard...

- Marketing-Content
- Customer Service Content

- Personalization requirements
- Configuration-requirements

Copyright SemanticEdge 2012
Driven by the high Potential as Customer Service and Marketing Channel the Functionality of the Apps will be drastically expanded

Drivers

Functionality/ Upselling via Apps

- Status informationen
- Customer service processes
- Personalized tariff- and option-offers
- Upselling of new smartphones, tablett-PCs and accessories
- Community
- ...

1st Gen. today
2nd Gen. 2012-13

Copyright SemanticEdge 2012
More than 100 different Services are currently offered on the Websites of Mobile Carriers

<table>
<thead>
<tr>
<th>Potential customers</th>
<th>Marketing</th>
<th>Customer Service</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperatur</td>
<td>Service</td>
<td>Service</td>
<td>Service</td>
</tr>
<tr>
<td>Tarife für Neukunden</td>
<td>Tarife</td>
<td>Tarife</td>
<td>Tarife</td>
</tr>
<tr>
<td>Handy Aufladen</td>
<td>Handy Auflad</td>
<td>Handy Auflad</td>
<td>Handy Auflad</td>
</tr>
<tr>
<td>Verwenden in der Übersicht</td>
<td>Verwenden in der Übersicht</td>
<td>Verwenden in der Übersicht</td>
<td>Verwenden in der Übersicht</td>
</tr>
<tr>
<td>Terminieren</td>
<td>Terminieren</td>
<td>Terminieren</td>
<td>Terminieren</td>
</tr>
<tr>
<td>Live-Chat</td>
<td>Live-Chat</td>
<td>Live-Chat</td>
<td>Live-Chat</td>
</tr>
<tr>
<td>Tarife für Neukunden</td>
<td>Tarife für Neukunden</td>
<td>Tarife für Neukunden</td>
<td>Tarife für Neukunden</td>
</tr>
<tr>
<td>Tarife/Optionenbuch</td>
<td>Tarife/Optionenbuch</td>
<td>Tarife/Optionenbuch</td>
<td>Tarife/Optionenbuch</td>
</tr>
<tr>
<td>Handyanruf</td>
<td>Handyanruf</td>
<td>Handyanruf</td>
<td>Handyanruf</td>
</tr>
<tr>
<td>Bestellungen für</td>
<td>Bestellungen für</td>
<td>Bestellungen für</td>
<td>Bestellungen für</td>
</tr>
<tr>
<td>Kunde</td>
<td>Kunde</td>
<td>Kunde</td>
<td>Kunde</td>
</tr>
<tr>
<td>SMS/News/FAQ</td>
<td>SMS/News/FAQ</td>
<td>SMS/News/FAQ</td>
<td>SMS/News/FAQ</td>
</tr>
<tr>
<td>Kundeinformation</td>
<td>Kundeinformation</td>
<td>Kundeinformation</td>
<td>Kundeinformation</td>
</tr>
<tr>
<td>telefonieren</td>
<td>telefonieren</td>
<td>telefonieren</td>
<td>telefonieren</td>
</tr>
<tr>
<td>Texte</td>
<td>Texte</td>
<td>Texte</td>
<td>Texte</td>
</tr>
<tr>
<td>Zubehör</td>
<td>Zubehör</td>
<td>Zubehör</td>
<td>Zubehör</td>
</tr>
<tr>
<td>Micro SIM</td>
<td>Micro SIM</td>
<td>Micro SIM</td>
<td>Micro SIM</td>
</tr>
<tr>
<td>Nummern</td>
<td>Nummern</td>
<td>Nummern</td>
<td>Nummern</td>
</tr>
<tr>
<td>Ratenkalkulator</td>
<td>Ratenkalkulator</td>
<td>Ratenkalkulator</td>
<td>Ratenkalkulator</td>
</tr>
<tr>
<td>Kunde/Bezücker</td>
<td>Kunde/Bezücker</td>
<td>Kunde/Bezücker</td>
<td>Kunde/Bezücker</td>
</tr>
<tr>
<td>Kundenkündung</td>
<td>Kundenkündung</td>
<td>Kundenkündung</td>
<td>Kundenkündung</td>
</tr>
<tr>
<td>Kaufordnungen</td>
<td>Kaufordnungen</td>
<td>Kaufordnungen</td>
<td>Kaufordnungen</td>
</tr>
<tr>
<td>Kontakt</td>
<td>Kontakt</td>
<td>Kontakt</td>
<td>Kontakt</td>
</tr>
<tr>
<td>Chat</td>
<td>Chat</td>
<td>Chat</td>
<td>Chat</td>
</tr>
<tr>
<td>Blog</td>
<td>Blog</td>
<td>Blog</td>
<td>Blog</td>
</tr>
<tr>
<td>Content/Unterhaltung</td>
<td>Content/Unterhaltung</td>
<td>Content/Unterhaltung</td>
<td>Content/Unterhaltung</td>
</tr>
<tr>
<td>Mobile Services/Pause-on-Demand</td>
<td>Mobile Services/Pause-on-Demand</td>
<td>Mobile Services/Pause-on-Demand</td>
<td>Mobile Services/Pause-on-Demand</td>
</tr>
</tbody>
</table>

>100 Services

Copyright SemanticEdge 2012
Filterfunction of Personalization

Personalization Dimensions:

- Subscribed services and service usage
- Customer segment
- Lifecycle status of customer
- Events
- Channel events
- Current promotions
- Individual customer settings

e.g. ~ 300 Service processes are differentiated in the customer service of a carrier

Personalization is key for:
- Up-Selling success
- Wide service range offering
- Call avoidance in customer service
- Customer retention
- Differentiation

Copyright SemanticEdge 2012
SemanticEdge myTelco App

Personized service menus with several views

Personalized service-configuration and preferences

Personalized status-Info

Personalized news

Personalized dialog interactions

Copyright SemanticEdge 2012
Services SE-Telco-App

Configuration Parameters

- **Customer-Segment**
  - Fixed network
  - Postpaid
  - Prepaid

- **Customer Segment(2)**
  - Business
  - Age of Customer

- **Life-Cycle-Phase**
  - Potential Cust.
  - New Customer
  - End of Contract
  - Longtime Cust.

- **Value-segment**
  - $
  - $$
  - $$$
  - $$$$  

- **Events**
  - Payment remind.
  - Blocked customer
  - Technical Pb.
  - Cancellation
  - Dissatisfied Cust.

Copyright SemanticEdge 2012
Seperation of Design and Functionality

Design

Service Skins

Model

Functionality

Copyright SemanticEdge 2012
Centralized Configuration/Personalization of the App-Content

Die App-Content can be personalized and configured via webinterfaces

Meta-Model

One model controls the content over various mobile OS and formats

Copyright SemanticEdge 2012
SemanticEdge Interaction Management Middleware

- Voice Portal
  - VXML Platform
- Mobile App/Widget
  - Mobile Client
- Other Contact Channels
  - SemanticEdge AIM-Framework
    - Interaction/Dialog
    - Formatting
    - Personalisation

Billing
CRM
...

Copyright SemanticEdge 2012
Advantages Interaction Management Technology

**Direct value-add of the developed apps**
- Significantly higher automation degrees due to:
  - Personalized app-content
  - Broadening the included service spectrum
- Higher customer bonding
- Higher cross-upselling rates due to:
  - Personalized offerings
  - Configurable marketing-platform

**Advantages App development and maintenance**
- Consistent und efficient development
- More teams with different skills envolved
- Development of configurable reusable modules
- Less update-cycles of the app
- Integrated app-reporting

**Advantages SW-architectur**
- Encapsulation of backend-connections
- Separate layer for interaction management
- Multichannel capability

Copyright SemanticEdge 2012
Thank you!

Dr. Lupo Pape, CEO, Co-founder

+49-30-34507710

lupo.pape@semanticedge.com