

# CRM 2.0 – Service Delivery and Value Chain of an Interactive Media Broadcast Platform

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## KEYWORDS

Customer Binding, Semantic Web, Innovative Advertising, Value Chain, Customer Profiling, WebTV, Click-through Rate, Semantic Zoom

## ABSTRACT

Interactive and collaborative elements are well established in the Internet community. For the Internet trading industry the impact of marketing which reflects an interactive customer approach is not yet established with mayor business relevance.

Although the media industry started multiple activities to launch IP-TV services a commercial success is still outstanding.

The proposed Interactive Media Platform integrates proven interactive communication aspects with semantic search technologies and an effective transaction behavior. This platform can easily be integrated in existing ecommerce platforms to attract social networkers, to enable a higher customer binding.

The customer is provided with an effective search algorithm which focuses supplier and demand aspects. The supplier can link his product and service world via a semantic web to the customer demand context and serve these demands with optimized One-to-One marketing activities.

## MOTIVATION

**Customer binding** is a central challenge of Internet trading platforms. To attract a new customer traditional advertising via print, Internet or TV has limited success and is very expensive. New channels to the customer are established via online-communities and affiliate marketing. To add value to the customer the supplier has

- to deliver effective and pragmatically ergonomics and the transaction behaviour.
- to relay on personalised content to be able to present only products of interest

- to offer appealing product and service information to fulfil the demand of the customer for advisory service
- to incorporate recommendations of other customers and instances

Interactive communities are established on a broad scale. Nearly one third of al Internet users joined one of the existing platforms. From user research it is known, that the **social networker** has a 20% higher income than average /Zattoo 2007/ and has a higher online spending than average (**Figure 1**). These communities can be attracted by various marketing strategies like customer review and ratings, online customer forums, peer-to-peer transactions, product focused blogs and community related products.

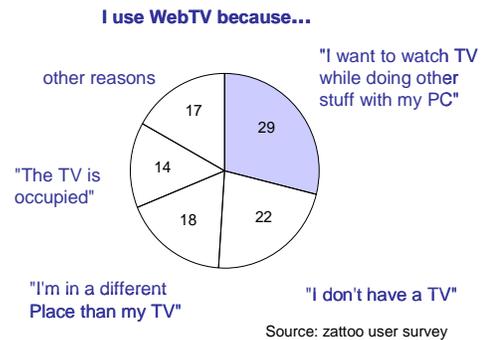
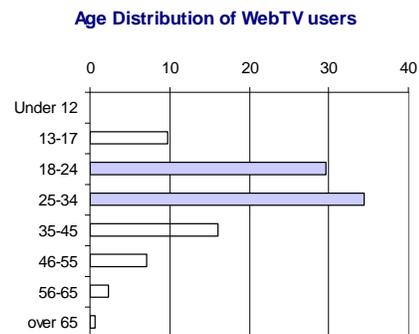


Figure 1: Online spending – Social Networker

In the TV-industry plenty of special interest channels have been established. The business model of these channels mainly rely on marketing revenues. Due to the limited range of coverage these revenues are limited. To leverage the technical infrastructure new hubs are created and offered as a package by various service providers. These offerings are available on the Internet with reasonable bandwidth. As a result for the German market 75% of all DSL customers are able to receive **WebTV** offerings on their local PCs.

Additionally the accessibility of advertising is depending on the advertising-dose, thus the pressure of advertising. Thereby is the contact-dose of a defined target group responsible for the recall performance, further the after deduction coverage express calculative fundamental contact-prospects.

### STIMULATED CUSTOMER BINDING

Stimulation of customer loyalty is a challenge. To support attractive customers and to integrate their multiplication power into a effective marketing strategy proactive emails for new products, customer self service, follow up activities and bonus programs are well established. The incorporation of social networkers is the most effective way to support existing loyal customers and to generate new loyal customers to the supplier. The introduction of a managed community platform into an existing eCommerce portal attracts the social networker and their multiplication power can be used to increase customer loyalty.

### Advertising with moving images

Due to information overflow in most of the Internet portals online advertising click-through Rates (CTR) are falling. Click-through Rates of existing banners like Popup layers, skyscraper, wide skyscraper, medium-, full size rectangles and leader boards vary between 0.6% and 0,11% . Only video ads have a higher rate of 4,6 % (**Figure 2**). Effective product advertising has to reflect this customer behavior and to use this type of product placement. The introduction of moving images to boost attraction combined with high quality TV-content related to the product is the only way to fulfill the requirements of an appealing product presentation in an Internet portal.

### Reflecting product and customer context

The product catalogue of an Internet portal is normally structured via a fixed keyword based product hierarchy. The navigation in this product catalogue is often ineffective from the customers perspective. To solve this problem, a search string is offered in most the Internet portals. Because the customer does not know the internal

product hierarchy, the results of his individual product search are ineffective, unless the correct semantic phrase is used, or the portal owner has introduced a full text search. After 3-5 tries the customers leaves the portal and the customer is lost. The introduction of a semantic web on both sides, the customers context derived from former visits or current navigation behavior and product context derived from an semantic import process which covers all relevant product descriptions solves this information gap. Thus the 'puma' can be identified clearly as an animal or as a brand for sportive clothes. To enable semantic search capabilities in a portal, a new platform has to be introduced to existing Internet

Click-through rates by IAB format and country:

	Average	DE	UK	F	Italy	DK	FI
Pop-ups/ Layer	0,68	0,69	0,69	2,39	0,16	0,13	0,04
Video Ads	4,64	4,79	5,31	3,92	5,12	3,51	3,72
Button 2	0,05	0,42	0,13	0,38	0,07	0,02	0,08
Skyscraper	0,11	0,10	0,16	0,07	1,00	0,12	0,02
Wide Skyscraper	0,15	0,11	0,16	0,11	0,19	0,10	0,20
Medium Rectangle	0,20	0,20	0,25	0,09	0,19	0,12	0,14
Fullsize	0,20	0,14	0,08	0,19	0,38	0,17	0,08
Leaderboard	0,12	0,14	0,32	0,13	0,24	0,11	1,00
Ø	0,18	0,17	0,20	0,24	0,23	0,11	0,09

The table below shows the click-through trends of the last three years:

Nov. 2004	March 2005	June 2005	Nov. 2005	June 2006	Sept. 2006	Nov. 2006	Dec. 2006
0,33	0,24	0,27	0,23	0,35	0,20	0,19	0,22

Source : [www.adtech.info/en/pr\\_07-10.html](http://www.adtech.info/en/pr_07-10.html)

Figure 2: Click-Through Rates

### VALUE CHAIN

The value chain of the eCommerce portal consists of various parts (**Figure 3**).

- **Access:** This is the first layer which grants the technical access of a customer to a portal solution. The access via Internet is to be realized by existing service providers. This layer is not focus of the described platform. To enhance reaches via additional channels the TV content can be delivered via broadcast services via cable or SAT and HTV later on.

- **Solution:** This layer represents the suppliers portal in the web. This solution is to be enhanced with community services as described above and standard capabilities to serve affiliates and video on demand services. The deployment of these services will be supported by the platform.

- **Products/Content:** This layer represent all items to be sold via the portal. The existing product base is enhanced with video content from third party suppliers and user generated from the community. These items are linked via semantic

annotation to the a semantic web and made available to the customer context using fuzzy set technologies. This is the core of the Interactive media platform.

- **Fulfillment:** The media platform can integrate existing fulfillment services. CRM, billing, payment and logistic services will be incorporated from the supplier.

To support the market entry the technical platform will be offered as a managed service and accompanied with a consulting and marketing service to optimize the effort of product indexing and support the marketing strategies of the supplier.

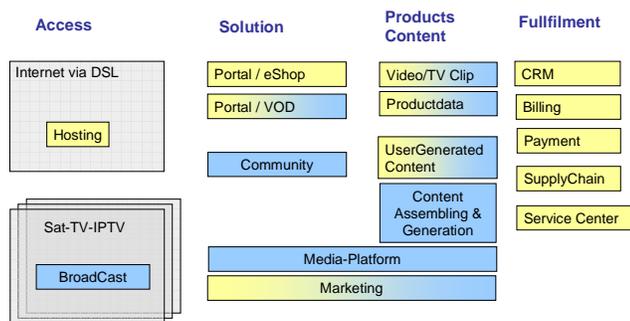


Figure 3: Value Chain and Fullfillment

## SYSTEM ARCHITECTUE

The proposed Interactive Media Platform /Nern 2008-1, Nern 2008-2,/ consists of three layers:

- A backend layer which builds the interface to the content owners (B2B). Via standardized interfaces using web services, the moving images and the TV-content, which is associated with semantic values of their domain are imported to a **semantic annotation** module. This module generates a fuzzy set based organizational memory of the product domain. A semantic indexing is performed for every introduced product. The backend layer has an administrator console to maintain and control the semantic indexing.

- A frontend layer for the end user (B2C) which covers a **semantic zoom** functionality to guide the customer from a TV spot to the related products of his personal context, community services like chat, forums and an upload portal to collect the user generated content which is passed through a semantic filter for quality assurance.

- A technical infrastructure layer which consists of web-servers, streaming servers, load balancers etc.

## MARKET OFFERING

As a consequence the proposed Interactive Media Platform enables a complete new service offering. Beside the existing product placements this platform can combine multiple service offerings to a combined service world. Within this service world products of various partners can be arranged around a predefined context (e.g. wellness, leisure, adventure, health) and enriched with high value video content. This service offering can be enriched with user generated content to increase new revenue and enhance customer binding. The context based match of products of various partners to the domain of interest of the customers via semantic fit gives a new service focus. In this sense it is a contemporary CRM 2.0 service offering.

## AUTHOR BIOGRAPHY

Wolfgang Rothe was born in 1954 in Bochum., Germany. He studied Nuclear Physics at the University of Applied Physics in Bonn and conferred to doctorate in Metal Science at RWTH Aachen, Germany. After his research activities at the Max-Planck Institute for Iron Research in Düsseldorf, Germany he worked as an IT-Consultant for Industrial Automation and was later on responsible for Marketing and Consulting in the Telecommunication, Media and Internet Industry. He is currently active as a Principal Consultant in the TIME industry.

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