Case Study

M-Commerce at Helsana Health Insurance: Mobile Premium Calculator

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Abstract:

The advancement of Information and Telecommunication Technologies allows new types of interaction between companies and customers. Companies face the question which potentials can be exploited using new communication and transaction channels and which challenges must be overcome in doing so. The design of the interaction between customer and company is of crucial importance. Depending on the process requirements different alternatives of communication can be chosen.

The following case study describes a project and the implemented solution integrating a mobile channel into the acquisition process of a health insurance provider. It gives insight into a way of using mobile channels and what aspects a company needs to take into account when implementing solutions using mobile technology.

1. Introduction

This case study describes a practice example of applying widely available mobile technology in the customer acquisition process of a health insurance provider. The goal is to supply decision makers and project leaders with supporting information concerning the following questions:

- How can m-commerce be embedded in a corporate (marketing) strategy?
- What are potentials of m-commerce and what can m-commerce not achieve?
- What is a reasonable project setup?
- What are prerequisites for the existing IS architecture to allow for an affordable m-commerce deployment?
- How can an optimal cost-benefit ratio be achieved?
- What are critical success factors for m-commerce projects?

1.1. M-Commerce and Multi Channel Management

M-commerce can be defined as the option to use mobile devices to access information, services as well as order goods and the delivery thereof if they are digital goods ([4], p.76). M-commerce combines internet functionality with the location independence of cellular technology ([6], p.10). The implementation of m-commerce requires the integration of multiple parties. Cellular operators and device manufacturers provide the infrastructure, content and service providers supply the applications and service providers support the technical implementation. Thus, a value chain in Porter's sense which spans multiple companies and multiple sectors of business is established ([4], p.79).

M-commerce is usually understood as an additional channel within a multi channel management (MCM) architecture. MCM deals with questions concerning the interaction between businesses and their customers. Thus, it is an activity within customer relationship management (CRM) [5]. The goal of MCM is to provide customer oriented means of interaction and an active support for the entire communication process ([3], p.18ff). MCM is the holistic and coordinated development, design and conduct of communication, product and knowledge flows across multiple distribution and service channels. The goal is to increase customer loyalty and to decrease distribution and service costs ([1], p.98-119; [9], p.48-53).

The communication between companies and customers happens via multiple channels and media. From the companies point of view channels are organizational units such as a field service organization or a call center ([2], p.3). These can be distinguished from access media such as telephone, PC or PDA (personal digital assistant). This logical separation leads to two areas of MCM:

- *Interaction management* deals with the question which means of communication provides the best possible support for several customer processes

- *Channel management* is concerned with the internal design and the coordination of multiple channels

1.2. Methodology

This case study is based on structured interviews with the project manager and the project initiator. The applied methodology is based on a case study methodology derived from research on transformation projects ([9], [10]). Basis of this methodology is the business engineering method, a comprehensive management approach focusing on the transformation from the industrial to the information age and considering the information technology a central utility for extension and sustenance of competitiveness of companies [7, p.61ff]. It aims at the description of the transformation from traditional business solutions (considering the business engineering layers strategy, processes and systems) towards new business models of the information age and their concretion through processes and systems support [8, p.8ff]. Accordingly core areas of interest are:
- The previous solution (initial situation) on the layers of strategy, processes and systems,
- The (transformation) project with initiators and their goals, the course of the project (implementation) and the critical success factors
- The new solution (of the information age) on all layers of the business engineering model including a discussion of cost-benefit aspects and planned advancements.

1.3. Swiss Health Insurance Scheme

According to Swiss legal regulations a basic standard health insurance plan is compulsory for every resident in Switzerland. Health insurance providers are legally obligated to accept every applicant for insurance. This obligatory insurance offers comprehensive insurance coverage. Whatever provider an insurant chooses, the basic plan covers exactly the same services. Nevertheless premiums may differ, as they are calculated according to a legally fixed method based on the risk structure of the customer base. Additionally premiums vary from canton to canton. Thus insurance providers cannot set their premiums for this basic insurance plan by themselves.

In Switzerland insurants have to pay a fixed cost share. This cost share consists of an annual fixed franchise of usually CHF 230 (US$ 168) and an additional 10 percent franchise. Patients pay the first CHF 230 of treatment expenses in each year by themselves. Additional costs are covered by the health insurance provider, except for the 10% franchise which insurants pay to an annual maximum of CHF 600 (US$ 438). In consequence the cost share is limited to CHF 830 (US$ 606) per year.

Voluntarily insurants can choose to pay a higher fixed franchise, in return receiving lower monthly premiums. Likewise voluntary additional insurance plans are available, offering more comfort such as hospitalization insurance or broader services such as dental treatment insurance.

2. Company background and challenge

Company. The *Helsana Insurances* (Helsana) is the largest health insurance provider in Switzerland with more than 1.4 million customers and 2,335 employees. It offers various kinds of health insurance services. The yearly premium yield sums up to CHF 3.8 billion (US$ 2.5 billion) (2002).

Progrès Caisse Maladie (*Progrès*) is a cooperation partner of Helsana specializing on basic standard plans covering the mandatory requirements by Swiss legal regulations. Since 2001 Progrès offers its countrywide customers to sign up for insurance plans through the company's homepage. Progrès was able to extend its customer base from 37,500 customers in 2000 to 53,000 in 2001 and to over 104,000 customers in late 2002. With its young and modern image and offerings Progrès mainly addresses young customers. The average age of the customer base in 2001 was 29.9 years. The premium yield in 2001 was CHF 60.2 million (US$ 43.2 million).

Challenge. In Switzerland insurants can switch their health insurance provider only with an effective date of December 31st and have to cancel their contract by November 30th. Thus the willingness of switching and the interest in offerings and premium calculation rises rapidly in fall. Hence providers conduct heavy marketing activities. They try to keep existing and acquire new customers.

Progrès offers very affordable standard insurance plans, emphasizes the use of internet technologies and a customer call center in communication and transactions with its customers. The young target group has a high affinity to technology and appreciates the simple location and time independent communication via new technologies such as the Internet and cellular technologies. These technologies promise to have a large potential as innovative and outstanding marketing measure.

3. Initial Situation

Strategy. The Progrès brand stands for affordable offerings for young people while the Helsana brand symbolizes safety, reliability and tradition.

Progrès' strategy consists of using modern technology for addressing customers and for customer interaction. By offering self-service options processes are outsourced to the customer, reducing acquisition und service costs. Young insurants generally are hardly interested in insur-

ance coverage but wish to have the lowest insurance premium possible. The main selection criterion is the price. A decisive factor can also be a very convenient and uncomplicated way of contract closure, such as self service via the internet.

Process. Progrès uses multiple channels in the customer acquisition process, mainly call center and internet. Customers use the web-based premium calculator module to compute individual rates by entering required personal data. In a second step the customer can choose certain options available for the selected plans. If the basic standard plan is desired, the individual premium can be computed with year of birth and zip code only. This is frequently used for sweepstakes. If a customer takes part in a sweepstake, he or she receives individual premium information before submitting participation data.

Systems. Core component is the web-based premium calculator module which is embedded in the Progrès homepage.

Trigger. The success of the brand Progrès since the introduction of the new homepage in 2001 has proven the potential of the internet channel. Helsana has not yet gained any experiences with a mobile channel, but is willing to explore the possible applications and potentials. This innovation was planned to be used by the Progrès brand first in order to achieve a further differentiation of the brands Helsana and Progrès. Also, a higher response rate was expected from the target group of Progrès as compared to the Helsana customers.

4. Project

Goals. Customers must be able to request an individual premium offering at any time from any location by triggering the web-based premium calculator using a cellular phone. The primary goals of the project have been:

- *Innovation*. Gain experiences with mobile technologies and evaluate the potentials of the mobile channel by creating an application simple in handling for both the company and the customers.
- *Support of the acquisition process*. The mobile channel must be integrated in marketing activities during the peak season of switching health insurance. The new technology was supposed to create attention and raise customers' interest in the Progrès brand. Once this goal is achieved the customers follow the already existing acquisition process. The existing sales infrastructure should be extended by the mobile channel.
- *Low costs*. In order to realize the project in an efficient and timely manner, existing resources were supposed to be used wherever possible.

Implementation. The project was launched in June 2002 and had to be finished for the marketing campaigns during the peak season in October through December. Eight team members were assigned part time to the four months project. The fields of technical issues, process design and marketing each required one person week.

Following the advice of the external project manager, Helsana chose GSM/SMS as the base technology. Reasons for this decision were operational availability, general availability of appliances on customers' side and simplicity of the SMS technology. SMS is a standard feature of GSM based cellular phones and members of the target group are very familiar with the use of SMS. A major strength of SMS is its performance and reliability. SMS messages are limited to 160 characters, which both limits the content of delivered messages and also leads to simple data input.

In order to be able to make use of the web-based premium calculator module, incoming SMS requests need to be translated into web requests. In return, the resulting premium needs to be formatted and sent to the requestor as an SMS message. The entire transformation process was outsourced to Mobile Solutions (Wireless ASP) for a monthly license fee. The provider guarantees availability of the service for customers of all Swiss cellular providers.

During the project planning phase the decision was taken to exclusively promote the mobile premium calculator through offline marketing activities.

Prospective customers are forwarded to the call center in order to have a personal contact with the customer during contract closure. The responsible call center agents received a one-day training to be informed about the accompanying marketing activities and to get an overview over the process steps the customer has gone through in order to receive a premium offering. For the call center a service level agreement was made. A customer requesting a call-back by the call center is supposed to receive the call-back within a time frame of 10 minutes. After all, the mobile premium offering usually is requested as a spontaneous reaction to a marketing activity, thus the response time needs to be low to be able to leverage the spontaneity. The customer needs to be reached in the same situation in which he or she is already focused on the offering.

Critical Success Factors. The lean and timely realization was critical to the success of the project, mainly because of the need to have a working solution up and running in time for the peak season. Helsana decided to reduce its own role to the one of the project steering committee and to outsource the project management and the technical implementation. This way Helsana only paid for the actual usage of the system based on a monthly license fee, which can be purchased as needed.

The project was aimed at the evaluation of potentials of the mobile channel, not at a final, full scale implementation.

5. New Solution

Strategy. The mobile offering was implemented for the Progrès brand first of all in order to stress the brand's innovative image and also in order to achieve a differentiation between the brands Helsana and Progrès. It was available in 8 German-speaking cities and 3 French-speaking cities. To make the process of a mobile premium request as simple as possible, a standard basic plan was chosen. The customers weren't given any options. Customers could request individual premiums via SMS from October through December. The required support with marketing campaigns the necessary license fees for the SMS gateway gave reason for restricting the systems availability to this time frame.

Processes. Existing processes were extended by the new system, not redesigned. Customers can still communicate with the company through all previously available channels. The mobile premium calculation offering is merely a new way of generating a new lead. It is completely integrated into the existing processes.

Customers' attention is caught by offline marketing activities. Posters, table flyers etc. and several promotion activities in October, including distribution of small presents to bypassing pedestrians, informed customers about the offering.

Customers submit a request for an individual premium via an SMS message consisting of 12 characters, e.g. "PD 1968_8001". The 12 characters consist of a 2 letter program identification code, in the example "PD" for "Progrés Deutsch" ("Progrès German"), year of birth and zip code. The marketing messages also conveyed the short and memorable phone number 20120, which is usually reserved for special activities and sweepstakes. The SMS message is first sent to Mobile Solutions. Mobile Solutions translates the SMS message into a format readable by the web-based premium calculator. This request is then submitted to the premium calculator which performs the premium calculation based on year of birth and zip code. The premium is sent back to Mobile Solutions, is translated into an SMS message and then sent back to the requestor. The entire process is performed in a very short time (1-5 sec). The premium is based on a minimal insurance plan at ca. CHF 150 with a fixed franchise of CHF 600. If the offer attracts the customer's attention, he or she can contact the call center. According to Helsana's creed the contract closure requires personal interaction. Two options are available for customer's choice. The customer can request a call-back by the call center. To do so, he or she replies to the SMS message with the premium information with a message "PDJ" (J for "Ja", yes). Mobile Solutions forwards this message to the call center so they can call the customer on his or her cellular phone. Only in this case the call center receives the customer's cellular phone number, which is done in order to comply with Swiss data protection law. Alternatively customers can call a free 1-800 number and contact the call center in this manner. In personal contact with a call center agent a contract based on the offering as given in the SMS message can be closed. Additionally extensions and modified options can be included according to the customer's needs as determined in consulting by the call center agent.

Systems. For the transformation of the SMS message into a format that is readable for the web-based calculator a customized java based solution had to be licensed from the wireless ASP. The input is the SMS message delivered from the cellular network operator. The body of this message is parsed to extract the year of birth and zip code. This data is then translated into an HTTP request which is submitted to the web-based premium calculator. The HTTP response is retrieved and again parsed to extract the result of the premium calculation. The premium is inserted into an SMS message template which is then sent to the cellular network operator for delivery to the requestor.

Cost-benefit analysis. The costs of CHF 10-20,000 CHF (US$ 7,200 – 14,400) for systems operation have been rather low. The major item is the costs for accompanying marketing activities of about 50,000 CHF (US$ 35,900), resulting in overall costs of about CHF 100,000 (US$ 71,800).

The outcome of the project is considered entirely positive. Across the entire time frame of systems operation a total of 7,500 requests were received. 650 of these have asked for a call back by the call center. Among these 150 closed the contract during those calls. Customers calling the 1-800 directly have not been tracked separately. Thus no precise information about the payback of the mobile channel is available.

Even with a contract closure rate of 150 contracts per year the system would reach a break-even after a period of 2-3 years (assuming maintenance for the SMS gateway is negligible).

Overall costs of CHF 100,000 for 150 closed contracts results in costs of CHF 666.66 per contract. This calculation does not account for the fact that customers acquired via the mobile channel might have called the 1-800 number and closed a contract with the call center directly. In comparison, a contract via an independent sales agent costs CHF 500.00 in provision for the agent.

A correlation between the number of requests and conducted marketing activities was observed. This allows for the conclusion that the mobile request is an immediate, spontaneous reaction to the marketing activity.

Planned advancements. In the following period of operation for the mobile premium calculator, plans are to display the lowest possible premium because the customers' decision is mainly driven by the price. In 2002 the premium was based on a yearly franchise of CHF 600. In future the selected premium will be based on the highest

franchise of CHF 1,500 in order to be able to display a lower premium.

Further advancements affect the performance measurement. In order to be able to calculate the success of each channel precisely call center agents will be required to ask customers and track via which channel they were acquired. In this manner, customers calling the 1-800 numbers directly can also be tracked and billed to the mobile channel. This knowledge is vitally important in order to evaluate the effectiveness of each channel and to correctly assign costs and profits to each channel.

By combining general marketing activities with marketing activities for the mobile channel synergies can be exploited and costs reduced.

6. Conclusions

The main conclusions of the project and the implemented solution are:

- **M-commerce must be an integral part of the corporate strategy**. The user acceptance shows the general interest in new technologies among the target group, but also it shows the need for accompanying marketing activities.
- **M-commerce must be embedded in marketing strategy**. The goal of the mobile channel is to trigger a spontaneous reaction in the customer. While marketing activities attract pedestrians' and public transportation passengers' attention, the innovative offering creates an interest for the mobile premium calculator. The affordable premium must finally convince the customer to close a contract. The contract closure itself is performed in support of the call center to allow personal contact with the customer and for clarification of possible questions such as available options in the offered plan.
- **Reuse of existing components and implementation based on standard products was critically important for keeping costs low**. Technically it was mainly based on the already existing web-based premium calculator. The transformation between SMS requests and the web-based module was implemented using standardized products. Organizationally the mobile channel is embedded in previously existing processes since acquired customers are forwarded to the call center. The offered product is a standard product without customization options. In this manner the premium calculation process could be kept lean and simple for the customer as well as for Helsana.
- **The value chain plays an important role, since outsourcing was an enabler for cost- and time-savings**. Via outsourcing the project could be realized in a timely manner, despite the lack of internal capacities and know-how. Because of the monthly based license fee Helsana can limit the usage of the mobile channel to the peak season in fall.
- **Simplicity and performance were crucial success factors**. The solution was mainly based on SMS technology. This is a wide spread technology in Switzerland and the whole of Europe. Almost any cell phone user is familiar with it. The response to the request is received within a short time accommodating the spontaneous nature of the situation.

Helsana successfully used the environment of its subsidiary Progrès for evaluating the mobile channel and identifying crucial success factors for mobile commerce projects. Due to the comparatively small size of Progrès and the availability of reusable components costs could be kept low.

Expert interviews

Krumdieck, Erik, Head of e-commerce group at Helsana, project steering, Zurich, January, 21st 2003

Cegla, Gilli, Managing Director of Novawind, Tel Aviv, project manager, Appenzell, March, 5th, 2003

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