Customer satisfaction in emergency ambulance services:
A case for empirical research

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MEASURING CUSTOMER SATISFACTION OF EMERGENCY AND AMBULANCE SERVICES

Coping with difficult empirical research situations

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CUSTOMER SATISFACTION IN EMERGENCY AMBULANCE SERVICES: A CASE FOR EMPIRICAL RESEARCH

Summary

The International Committee of the Red Cross (ICRC) provides valuable humanitarian services to the global community. For its funding it relies not only on governmental subsidies, but also on contributions from its member organisations. In the case of Austria and Germany the prominent part of the revenues stems from emergency and ambulance services. However, competition from other non-profit organisations and private firms increasingly seems to threaten this lucrative business. Consequently, the ICRC is looking for new paths to maintain and increase its competitive advantage - the wide-spread service availability and the closeness to the customer. Therefore, a pilot project is carried out within the Austrian Red Cross, one of its member organisations, to identify ways to increase customer satisfaction. However, gathering relevant empirical data is extremely difficult and ethically challenging due to the unique survey situation during the service transaction process. If successful, this project will have lead character for other European countries.

KEYWORDS: health care, emergency services, liberalisation of markets, non-profit-marketing, ethics, marketing research.

1 Introduction

Whenever news flashes report on disastrous events such as military conflicts or natural and environmental catastrophes (such as floods or draughts), we can rely on the immediate reaction of the International Committee of the Red Cross to alleviate the largest problems. This extraordinary humanitarian commitment and the capability for instantaneous help is facilitated through the ICRC's network of its affiliate member organisations throughout the world and its well-established organisational and financial infrastructure (for further detail see Appendix).

The ICRC is funded through its national member organisations which themselves generate revenue from delivering various social and health care services to their local and national communities. Some of these services, such as rescuing efforts after avalanche accidents, reunifying families, assistance in case of natural catastrophes or wars are highly unprofitable on the international as well as on the national level due to the enormous set-up and maintenance costs. If it were not for the humanitarian mission, many of these demanding services would not
be offered. However, this implies that highly profitable services have to subsidise others. As a result, the ICRC is constantly concerned with the national and the overall profitability of the services portfolio.

For this reason, the ICRC has launched several tracking studies to improve profitability in its different strategic business units such as ambulance and rescue services, general health care services, administration of blood donations or first aid classes. "Ambulance and Rescue Services" are particularly well-established and financially successful in Germany and Austria, where they account for more than 50% of total revenue. According to the Austrian Red Cross management, this success is attributed to the wide-spread service availability and the closeness to the customer.

In order to remain profitable in this promising service area, the Austrian Red Cross was asked to conduct a pilot study to identify ways to increase customer satisfaction and retention. In case of promising research results, the design of the study will be transferred to other European countries.

2 The development of the market for social and health care services

Social and health care services are "products" of increasing potential. One major reason lies in the significant demographic and social changes which Austria as many other European countries has been facing for the last decades:

- The traditional form of family relations dismantles into its smallest form - the nuclear families (parents and children, single parents with children). While in the past the extended family provided personal care for elderly family members, this need of personal assistance has to be sourced out to professional organisations.

- Additional support for this trend towards professional assistance in social and health care comes from the increasing participation of women in the active workforce. The time constraints resulting prevent them from offering these unpaid services. Due to the lack of family care, elderly or physically impaired people are bound to live either on their own or in nursing homes.

- This situation is aggravated even more due to the increasing life expectation throughout Austria and other highly-industrialised countries in Europe. Demographic forecasts for the year 2030 project the share of over 60-year-olds around 32% and more of the total population versus around 20% today.
At the same time, governmental agencies try to relieve the already strained social services and health care budgets by redirecting monetary contributions from stationary to ambulant care. For the Austrian Red Cross, this means that the demand for ambulance and emergency services will increase even further.

Still having an outstanding market position and, as a consequence, a sound financial background, the Austrian Red Cross gets under pressure from new entrants, who were lured into offering similar transportation services based on the promising market potential. Decidedly not leaving the humanitarian mission, it becomes imperative for the Austrian Red Cross to run the core business as financially successful as possible and stay ahead of competition.

3 Emergency and ambulance services - an interesting „product“

Emergency and ambulance services are not as trivial as they might appear. The services spectrum ranges from simple pre-scheduled transportation services (transportation to the personal home after a stationary hospital treatment, transportation to and from doctors’ offices, etc.) to emergency operations after severe accidents which require extensive medical equipment and sophisticated know-how. To serve these different service demands, the Austrian Red Cross uses different types of ambulance vehicles. Depending on the specific nature of the services task (serious accident, pre-scheduled transportation service, etc.), they differ in technical and medical equipment as well as in personnel resources supplied.

The following charts gives an overview of the fleet:

<table>
<thead>
<tr>
<th>#</th>
<th>Vehicles</th>
<th>Personnel resources</th>
<th>Technical equipment</th>
<th>approximate initial costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Emergency doctor’s car (NAW)</td>
<td>1 doctor, 2 ambulance men</td>
<td>Electrocardiogram-monitor, oxygen mask, respirator, infusion-apparatus,</td>
<td>ATS 1,800,000,- (ECU 130,530,-)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>storage-box for replantings</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Ambulance (RTW)</td>
<td>2 ambulance men</td>
<td>In many cases the equipment is equivalent to the equipment of a</td>
<td>ATS 1,000,000,- (ECU 72,520,-)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Ambulance service (KTW)</td>
<td>2 ambulance men</td>
<td>Vacuum-mattress, medicaments, oxygen, patient seat, patient carrier</td>
<td>ATS 600,000,- (ECU 43,500,-)</td>
</tr>
<tr>
<td>4</td>
<td>Ambulance service support vehicle (BKTW)</td>
<td>1 ambulance man</td>
<td>portable first aid luggage</td>
<td>ATS 350,000,- (ECU 25,380,-)</td>
</tr>
</tbody>
</table>

Figure 1: Equipment of transportation vehicles (ATS = Austrian Shillings, ECU = European Currency Unit)

The initial contact with customers usually is established via telephone, either by the patient or her/his relatives themselves or medical institutions (hospitals, doctors). In case of serious
accidents, either passer-byes, the police or fire brigades order emergency transport. The telephone call is answered by a highly-trained operator, since this job brings about a high stress level and significant responsibility. The operator has to evaluate, categorise and rank different transportation request according to their urgency. Based on his/her categorisation, the adequate emergency vehicle is directed to the patient where the actual service is carried out.

4 The financial aspects of emergency and ambulance services

The operator’s decision on which car to send out for transportation services depends on his/her precise assessment of customer demand. As different types of vehicles imply different costs, this choice significantly influences the financial revenue situation of the Austrian Red Cross.

This effect is due to the particular framework for reimbursement of transportation services by governmental health care organisations. For example, for emergency transports after a severe accident, the Austrian Red Cross receives a lump sum, which hardly ever covers the cost incurred. In most cases, the actual costs for this sophisticated service are at least 4 or 5 times higher than the amount reimbursed. In addition, consumers of ambulance transportation services are not liable for compensation under the current legal situation.

Less sophisticated transportation services which do not require extensive medical care or a doctor accompanying the ambulance are financed through a variable amount of money depending on the length of the transport (rate per km) and the type of vehicle used. Due to the better cost/reward situation, these services produce the substantial, financial surplus necessary to compensate for emergency services’ deficit.

With regard to the new competitors which are mostly privately-owned companies, the following has to be noted: their profit maximising strategy leads to a limited service range covering the most lucrative transportation services, such as less sophisticated ambulance services particularly in urban areas, while expensive ones like emergency services and services in rural areas remain with the Austrian Red Cross service portfolio.

In order to achieve a more demand- and customer-oriented marketing approach, the Austrian Red Cross collaborates on this pilot project with a group of researchers at the Vienna University. The following questions arise during the planning meeting.
5 Questions

1. How would you measure customer satisfaction with the Austrian Red Cross' ambulance and emergency services?
2. Who would you define as customers of the emergency and ambulance services?
3. Which method of data collection would you propose?
4. Which difficulties might occur in the data collection process?
5. Based on the humanitarian mission of the Austrian Red Cross, which strategies would you suggest to cope with private competitors specialising only in the most lucrative niches (such as transportation services)?
6. You want to replicate the study in a different country setting (your home country or any other country of your choice). Your research goal is to compare research findings across the countries involved. Which adaptations to the research design are required to replicate the study?

6 References


Appendix:

THE INTERNATIONAL COMMITTEE OF THE RED CROSS (ICRC)

History

It all started in 1859 on the battlefield in the Italian town of Solferino, when the Swiss businessman Henry Dunant was profoundly touched by the agony of thousands of wounded soldiers left to die without medical services. Instantaneously, he organised locals for assistance, insisting that soldiers on both sides should be cared for. His initiative soon led to the foundation of a formal organisation - the International Committee of the Red Cross. Today, the ICRC has concluded agreements with more than 50 states world-wide. These national societies embody the work and the principles within the Global Network of the International Federation of Red Cross and Red Crescent Societies.

Mission

"The International Committee of the Red Cross (ICRC) is an impartial, neutral and independent organisation whose exclusively humanitarian mission is to protect the lives and dignity of victims of war and internal violence and to provide them with assistance. It directs and co-ordinates the international relief activities conducted by the Movement in situations of conflict. It also endeavours to prevent suffering by promoting and strengthening humanitarian law and universal humanitarian principles."

Activities

The ICRC operates in several distinct areas

- Visits to detainees: ICRC delegates visited more than 200,000 detainees in over 1,500 places of detention in more than 50 countries.

- Restoration of family ties: another main area of concern is to bring back together family members who were split up by conflict, disturbances or tensions. In 1998, the ICRC collected almost 307,000 messages and distributed more than 295,000.

- Assistance: in 1998, relief supplies such as food, clothing, blankets or tents with a value of $ 80 Mio. and medical assistance worth $ 22 Mio. were distributed in 52 countries world-wide.

- Surgery/ Care for the disabled: the ICRC runs and supplies several hospitals in Africa and Asia and assists medical facilities in countries with need world-wide.

The following chart shows how ICRC funds are distributed:
Funding

The ICRC relies mainly on four different sources of voluntary contributions: governments, supranational organisations such as the European Union, public sources and the National Red Cross and Red Crescent Societies.

![Expenditure by region in 1997](image)


The ICRC and National Societies

In order to accomplish its activities, the ICRC holds close contact with its National Red Cross and Red Crescent Societies. This close relationship allows for an efficient and quick reaction by the ICRC and its national societies, when international interventions become necessary. In addition, the ICRC provides technical assistance by supporting the National Societies' dissemination programmes and by contributing to the training of their staff.

The National Societies

In its home country, every National Society supports the governmental authorities in humanitarian matters - primarily by backing up the military medical services in time of conflict. In addition, each National Society may carry out specific activities in accordance with the Fundamental Principles such as collection of blood, training of first-aid workers and nurses, running of dispensaries or hospitals, and providing aid to the disabled, young people, the elderly, etc.
The Austrian Red Cross

The Austrian Red Cross (ÖRK) is one of the ICRC’s National Societies. According to the Fundamental Principles, the ÖRK is carrying out its social services in the Austrian community. During the past 50 years of peace, its activities were mainly concentrated on emergency and ambulance services, health care and social services such as first-aid courses, meals on wheels, day and home care for the elderly or the Austrian blood donation system, to only name a few.

In 1996, the ÖRK provided 17,745,000 hours of service to the community with its 5,166 employees and 33,550 volunteers. Translated into financial terms, this equals an amount of ATS 2,7 bn (almost € 200 Mio.; based on a minimum hourly wage of ATS 260 or € 19).

The Austrian Health Care System

The Austrian health care system provides universal coverage to its citizens through the government-sponsored social insurance carrier. This socialized, “cradle-to-grave health care system” is financed through contributions by employers, employees, and taxes. In Austria, the average employee salary contribution is about 13%. Unemployed, retired people, or citizens on welfare get government-paid coverage. Payments to doctors, the hospital or other health care providers (such as the Austrian Red Cross) go directly to the health care provider.