

MASTER

De toekomstige positie van DTS in de parkeermarkt : ontwikkeling van een strategisch marketingplan

Hoek, Myrno R.

Award date:
2000

[Link to publication](#)

Disclaimer

This document contains a student thesis (bachelor's or master's), as authored by a student at Eindhoven University of Technology. Student theses are made available in the TU/e repository upon obtaining the required degree. The grade received is not published on the document as presented in the repository. The required complexity or quality of research of student theses may vary by program, and the required minimum study period may vary in duration.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

ARW
2000
BDK

TBM
3708

De toekomstige positie van DTS in de parkeermarkt

Ontwikkeling van een strategisch marketingplan

Management Summary

**NIET
UITLEENBAAR**

Myrno R. Hoek

Technische Universiteit Eindhoven
Faculteit Technische Bedrijfskunde

Abstract

This report describes the results of a strategic marketing analysis at the Business Unit Vervoersmarkt of the firm Data- en Telecom Services. The project involved the design of a strategic marketing plan concerning the maintenance services market for parking systems. In order to acquire that plan, extensive internal and external analyses were carried out in order to obtain the strengths and weaknesses, opportunities and treats facing the organization. Based on the confrontation of these issues with one and other, insights are given for the strategic choices to be made and the consequences following these choices.

Summary

1. Introduction

This report describes the results of a strategic marketing analysis for the Business Unit Vervoersmarkt (BUV) of the firm Data- en Telecom Services (DTS). This analysis has been done as a graduation project of the author as part of the Industrial Engineering and Management Science course at the Eindhoven University of Technology.

DTS is a company within the Getronics group and was former a department of the National Dutch Train Company (NS). The company undertakes maintenance, overhauling troubleshooting and management for computer Networks and electromechanical systems. BUV is a business unit of DTS and is specialized in the electromechanical market. The graduation project has been executed at this business unit.

BUV's mission is to develop and provide integrated maintenance services for the customers in the market of public transportation.

The customers of BUV can be divided in two groups:

- customers in the formerly internal market (NS divisions);
- customers on the external market (third parties).

The customers on the internal market on this moment bring the largest part (XX%) of BUV's total turnover. The turnover that the internal market generates has been forecasted to decrease dramatically during the following years. This is caused by the fact that:

- internal customers are not forced anymore to buy maintenance services from DTS (BUV);
- technological progress will result in less maintenance activities in general.

BUV wants to compensate the decrease of turnover generated by the internal customers by an increase of turnover by the third parties. The third parties markets that have been identified so far are:

- XXX;
- parkingsystems;
- XXX;
- XXX;
- XXX .

In this project the focus was on the parking systems market. BUV already has a client in this market but did not know how to develop it. Therefore the management team has decided to explore the segments of this market in order to develop a marketing strategy. One of these market segments is the market concerning parking systems for public use. BUV is already active in this market segment, but a growth strategy has not yet been developed.

Based on the data described above the problem of this research project has been formulated as:

BUV does not have a marketing strategy to develop the parking systems maintenance market and does not know how the marketing function should be organized. This lack of strategy and procedures for the marketing is considered to be a problem by the management.

2. Assignment and research model

In order to solve the problem, which is mentioned above, the assignment has been formulated:

Develop a strategic marketing plan concerning the parking systems maintenance services market and advise BUW how they should organize their marketing activities.

The assignment has been restricted geographically to the Netherlands.

The research-model that has been applied during the execution of the assignment is shown in figure 1.

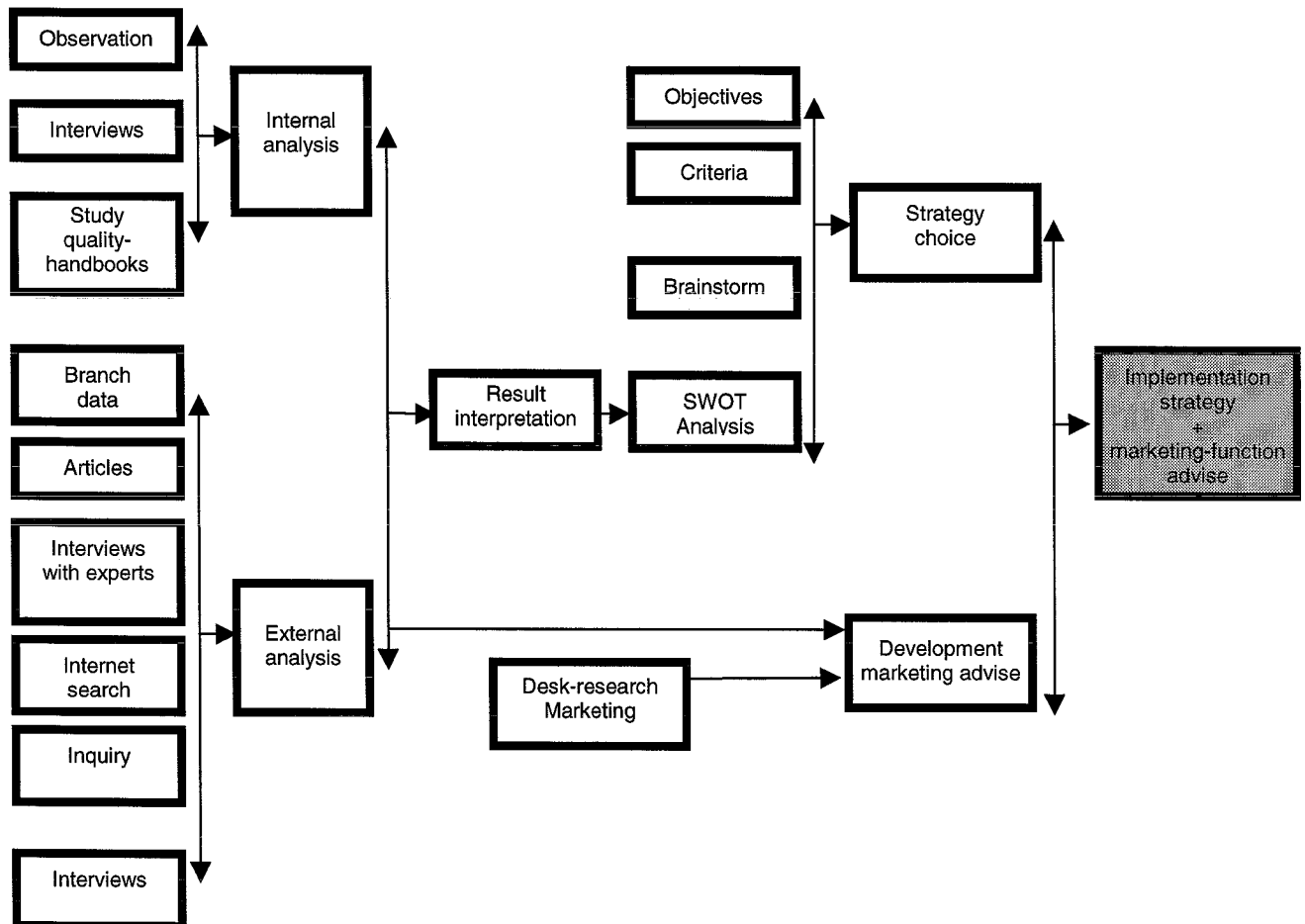


Figure 1: research model

The strategic marketing plan has not been implemented yet. Therefore, the last step will only describe what should be done. It does not describe what the results are of the implementation. For that reason it is colored in a different way in figure 1. In this project, advises are given for the implementation of the solutions.

3. Situation analysis

3.1 External analysis

The external analysis focused on the three main elements of environmental analysis [Ogilvie, 1985]:

- customers;
- competitors;
- surroundings.

In order to obtain insight in these elements, a market research project has been carried out, preceded by desk-research. The gathered information is based on questionnaires and interviews with more than 50 companies in the parking systems market.

Customers

There are approximately 350 public garages and 100 public parking terrains in the Netherlands. These garages and terrains are exploited by approximately 136 organizations. There are 4 participants involved in the parking systems market:

- owners of the parking place and the parking equipment;
- operators who take the financial risks;
- administrators who manage the daily operations;
- parking systems suppliers.

The total annual services expenditures concerning parking systems are approximately Nfl XX million. This can be considered to be the market potential. The market potential will be growing the coming years because of the growing number of municipalities that are introducing parking fees.

Main reasons to outsource maintenance activities are lack of capacity, maintenance knowledge and/or maintenance equipment. A high level of knowledge and advanced equipment are especially necessary for maintenance activities for parking systems concerning garages and terrains. These systems are generally more complicated and have more embedded software and computer operations. Parking systems that are being used for street-parking are easier to maintain because they consist primarily of mechanical systems.

The reliability of parking systems is very different for all of the different organizations that exploit them. In general, there are two parties:

- the bigger municipalities and companies with a core business in parking exploitations;
- small municipalities and companies that use parking systems as a service matter.

The bigger municipalities and companies with a core business in parking exploitations are more concerned with the reliability of the system. When the system is down, it will lead to uncomfortable situations in bigger cities and loss of income for the companies with a parking core business. The bigger municipalities are now outsourcing their parking systems to companies that are capable of complete parking management. These municipalities in general don't outsource only the maintenance of parking systems. Companies with a focus on parking exploitations in general use the supplier of the systems for the maintenance activities but they also believe in the possibilities of a TPM(Third Party Maintenance) company. When a breakdown occurs, corrective maintenance is needed. In this situation the selection criteria for maintenance companies are flexibility, capability and delivery time. When preventive maintenance is needed, criteria such as price and quality are more important.

The biggest problems in small municipalities are the services after office hours and the efficient organization of the parking systems maintenance activities. For this group flexibility of maintenance services is very important. The companies that use parking systems as a service matter, rather outsource the complete operation of their parking systems. In this segment the criterion for outsourcing is completeness of service.

Significant changes are taking place in the management of parking garages and terrains. These developments concern the possibility of operations of parking garages and terrains without the need for continuous physical human attendance at the locality in question. This is being done by using parking systems with remote possibilities integrated with the use of video camera and intercom systems.

Several needs are distinguished which are related to maintenance services for parking systems:

Preventive and corrective maintenance.

The need for a TPM that performs maintenance activities during office hours is small. The most simple maintenance activities are being done by the company itself and the complex maintenance activities by the supplier. In general there is more need for maintenance services after office hours.

Meeting the need of adapted products.

Sometimes parking systems have to be adapted to meet special needs. These adaptations and modifications can be outsourced. In general these modifications are being done by the supplier.

Meeting other needs.

One of the other needs noticed during the market research project is that there is a need for complete management of parking systems. This need however does not only concern maintenance of systems but also the managing of the whole parking garage or parking terrain.

Competitors

Besides some freelance technicians, some technical departments of companies that exploit parking are also competitors. The main competitors fall into two groups:

Original Equipment Manufacturer (OEM's)

Original parking systems manufacturers (e.g. XXXX) provide maintenance services to the parking systems they manufacture. Unique Selling Points (USP) are related to spare parts delivery, manufacturer guaranty and the fact that these OEM's are able to promote their service activities during the parking system selling process.

Third Party Maintenance companies (TPM's)

These companies are independent maintenance service providers for parking systems. One known TPM in the parking systems market is XXX. This company however works only regional. Other TPM organizations that provide maintenance services for parking systems are the Technical Departments of some public organizations (e.g. NUTS). An important USP is the fact that these companies are brand independent. This implies that customers, who generally exploit parking systems of more than one brand, are able to buy certain maintenance services from one specific TPM. In the TPM market BUV is the only organization that offers maintenance service to parking systems throughout the Netherlands.

Surroundings

Relevant macro-environmental developments are:

- Good Dutch investment climate and increase of paid parking areas. As a result proprietors of parking areas will buy new parking systems to replace old ones. This is also because there are more paying possibilities that are becoming popular like chip-knip, chipper and credit cards. In the near future there will also be a new currency in the Netherlands, the Euro. This means that in the coming years there will be a lot of adaptations of the systems to this new currency.
- Increasing wages in the Netherlands cause labor intensive maintenance services (e.g. overhauling) to become more expensive compared to replacing damaged components by new ones. This means that maintenance activities will more and more become " swap activities ¹".
- Technological progress will result in:
 - equipment that needs less maintenance;
 - a shifting emphasis from mechanical to electronic systems.

¹ SWAP activities are activities based on replacing defects modules

3.2 Internal analysis

During the internal analysis two audits have been executed, an organizational audit and a marketing audit. These audits only refer to the BUV and are described below.

Organizational audit

To obtain insight in the BUV organization the 7-S framework from McKinsey was used. This is shown in figure 2.

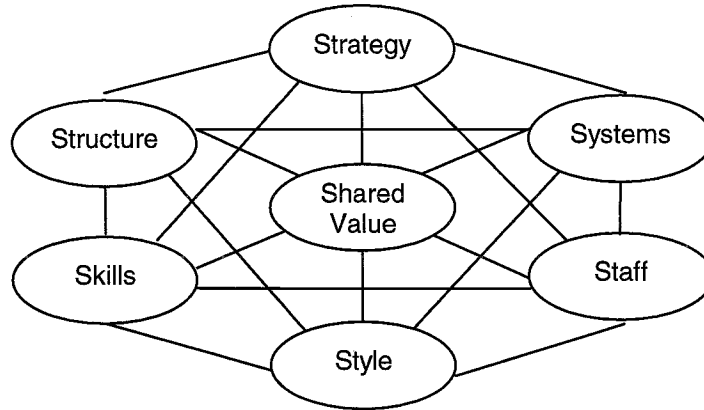


Figure 2: 7-S framework from McKinsey.

Strategy

BUV started maintenance activities for parking systems by chance some years ago. Goals and strategies have not been formulated. The strategy that has been followed was ad-hoc and the idea was to try, as much as possible, to get more maintenance-contracts in that market.

Structure

BUV has a decentralized structure. This means that there are several operating points all across the country. These operating points can be considered as departure points for the service engineers. Every service engineer works for a certain regional area.

Systems

The organization has 4 systems for operations coordination of the company:

- Servicesure. This is a system that is used for documentation of every operational activity;
- Tinoway. This is a automated service-form that is used for documentation of the service operations;
- Qualitybook. This book describes all the work procedures of the BUV. Concerning the quality book it must be noticed that not all procedures are documented and that the procedures are incomplete;
- Account Management Program (AMP). This is a program used by the accountmanagers as an internal reporting system for the activities of the account managers and for documentation about clients. This system has not frequently been used or updated so far.

Skills

The organization has general knowledge of electromechanical systems and data communications. The competencies of the organization are based on the width of services offered that consists of:

- 24 hours service during 365 days;
- brand-independency;
- short response and repair.

The bottlenecks in the systems and the skills are:

- the control and management of the operational service activities are not good enough (lack of communications);
- low knowledge of parking systems .

Staff

The members of the organization have a level of education ranging from medium technical degree to academic level. A lot of education takes place in training on the job and during courses. The appraisal of job performance happens once a year but there is no compensation attached to the appraisal. Reward is fixed depending only on the function.

Shared value

Shared values are work attitude and flexibility. Furthermore there is a slow acceptance of new tasks.

Style

The manager acts like a entrepreneur and possesses a high level of technical and commercial knowledge. He carries out both operational tasks and sales activities. As a result, time and attention may lack to perform management control and redesign activities effectively. In general the decisions that are being taken are mostly made in a cooperative way by the management team.

Marketing audit

Decision on marketing strategy have not been made by BUV until now. This research project will provide a base to make certain strategic decisions. Because there is no strategic marketing plan, decisions on tactical and operational level are made ' ad-hoc'. Some important bottlenecks in the marketing area are:

- preparation for new opportunities is weak;
- there is no insight in what the status (phase) of a business proposal is;
- there is no insight in the profit of a contract/business proposal;
- the sales people (accountmanagers) spend too much time on operational issues;
- business proposals are mostly send to the client after the due date;
- there is no formal complaint and customer satisfaction procedure.

4. *SWOT analysis*

A SWOT analysis involves three major steps:

- determination of Strengths and Weaknesses;
- determination of Opportunities and Threats;
- confrontation of Strengths, Weaknesses, Opportunities and Threats.

Strengths and Weaknesses

Initially strengths and weaknesses were based on the customer perceptions of BUV. These perceptions were carefully checked during the internal analysis to determine the fit between the customer perceptions and the researcher's perception.

The Strengths of BUV	The Weaknesses of BUV
S1: width of services offered.	W1: weak knowledge of parking systems.
S2: all-round knowledge level of the service engineers.	W2: slow adaptation to new tasks.
S3: employee attitude.	W3: management and control of the operations.
S4: network of suppliers.	W4: knowledge of the parking system market and the lack of familiarity/reputation.
S5: good name of the Getronics company.	

Opportunities and Threats

Opportunities were determined by analyzing the existence of needs, wants and demands which are not met properly by competitors. Opportunities are also identified based on the developments in the market. In order to do this, the information has been used which resulted from the external analysis. That analysis gave also insights in the threats.

Opportunities for BUV	Threats facing BUV
O1: outsourcing of complete management of parking garages and terrains.	T1: the view in some market segments that a TPM can't do the maintenance job of parking systems.
O2: need for better maintenance services.	T2: growing complexity and the big diversity of parking systems (configurations).
O3: development of remote control parking systems.	T3: competition of suppliers.
O4: Low service expectations in some market segments.	T4: The dependency in the market other then suppliers.

Confrontation

The Strengths, Weaknesses, Opportunities and Threats, which are mentioned above, were confronted with each other in order to find strategic issues. The confrontation is shown in figure 3. The '--' and the '++' are the situations that are most essential.

		External analysis								
		Opportunities				Threats				
		O1 Complete networking	O2 Need for better service	O3 Development of remote parking systems	O4 Low service expectations	T1 View on about the possibilities of a TPM	T2 Complexity and diversity	T3 Competition OEM	T4 Dependencies on others	
Internal analysis	Strengths	S1 Width service offer	++	++	++	++			++	
		S2 All-round educated	++		++			++		
		S3 Attitude	+	+	+	+		+		
		S4 Network of suppliers	++		++					
		S5 Good name of Getronics					++		+	
	Weaknesses	W1 Weak knowledge of parking systems	-		--			--	--	
		W2 Slow adaptation to new tasks	-		-			-		
		W3 Management and control	--					--	--	
W4 Market familiarity and reputation						--			--	

Figure 3: SWOT confrontation matrix

Strategic issues

Based on the confrontation matrix, four strategic issues were formulated:

Strategic issue 1

For the opportunities two and four, there is nothing standing in the way to utilize these chances. The only difficulties may be the lack of reputation in this market and the believe that TPM's are not capable to perform the job. The question here that needs to be asked is: ' how does BUV convince this market about the reliability of the service offer'.

Strategic issue 2

There are also possibilities for the opportunities one and three. BUV has more strengths than weaknesses to exploit these opportunities. The problem here is that in-house knowledge of parking systems and the parking market is not of a sufficient level. Another problem is that the weak management and control can be a problem for coordination of complicated/extended services.

Strategic issue 3

The threats of complexity of systems and competition of suppliers are difficult to cope with. BUV hasn't got strong points to cope with these threats. The strategic question here is, 'how can BUV cope with these threats?'

Strategic issue 4

Another threat for BUV is the dependence on parties other than suppliers (e.g. NUTS, KPN). The strategic question here is also, 'how can BUV cope with this dependency?'

5. *Objective, strategic options and strategic choice*

BUV's long term objective is to maximize profit and the short-term objective is turnover growth. In order to meet these objectives and also taking in consideration the four strategic issues, three strategic options are distinguished. After that, the marketing activities are identified to acquire the objectives.

Strategic option 1: one stop shopping.

This option offers BUV the possibility to distinguish itself by offering all-round brand-independent maintenance services for parking systems. Growth can be realized by staying independent, i.e. without exclusive cooperation with OEM's. However it might be considered to cooperate with other TPM's in order to increase the knowledge level. Advantages of this option are:

- a high turnover level is possible;
- all strengths are used

Disadvantages are:

- large investments are needed (stock, education, equipment);
- weaknesses have to be improved;
- big impact on the internal coordination and flexibility of the organization.

Strategic option 2: managing parking areas with remote systems in combination with swap-activities.

This option offers BUV the possibility to focus on certain maintenance services, i.e. swap activities. The maintenance activities can also be extended with management and security services. These services can be provided to all companies of parking garages and terrains.

Advantages are:

- lower investment requirements;
- service concept is easy to apply;
- creation of possibilities for maintenance services for video camera- and intercom systems.

Disadvantages are:

- lower turnover level possible compared to option 1;
- maintenance will be restricted to swap activities;
- some investments are needed for expanding the reporting center and to keep rotation parts on stock.

Strategic option 3: Brand specialist

This option offers BUV the possibility to focus on all maintenance services related to a certain brand of parking systems or a small selection of parking systems brands. Growth can be realized by exclusive cooperation with a OEM or a selection of OEM's.

Advantages of this option are:

- a focused increase of knowledge;
- spare parts and information delivery;
- not many investments are needed.

Disadvantages are:

- lower turnover level possible than option 1;
- dependency of OEM;
- losing current customer(s).

Figure 4 shows a score card which has been used to select the best option. Each option has been scored on different criteria.

	Option 1 "One stop shop"	Option 2 "Parking management and SWAP activities"	Option 3 Brand specialist
A. SUITABILITY			
1. Aims at goal?	++	+	+
2. Fit competence?	+	++	+
3. Position in the market?	+	+	0
4. Independence	+	+	--
5. Contribution to distinctiveness	++	++	0
B. FEASIBILITY			
1. Investments needed?	-	--	+
2. Education needed?	--	-	+
3. Stocks needed?	--	-	0
4. Speed of implementation?	--	+	++
C. ACCEPTABILITY			
1. Customer acceptability	++	+	-
2. Acceptability BUV	0	+	+
3. Acceptability DTS	0	-	0
TOTAL SCORE	2	5	4

Figure 4: comparing the strategic options

Based upon figure 4 the conclusion is that option 2 is the better option when compared to the other 2 options. The second best option is option 3 but BUV should consider whether they want to keep their brand independent position.

6. *The marketing function*

Recommendations for marketing are based on the problems described in the marketing audit. In general the following recommendations are made for the marketing function:

- strive for long-term contracts with customers;
- the commercial proposals should be more centralized and uniform for non-precontracted assignments;
- the cost of maintenance activities and the price policy should be consolidated;
- report to clients about completed maintenance operations and systematize performance;
- develop consultancy services to advise clients about possibilities to cut down maintenance expenses;
- communicate information on products and services better to the clients;
- work on a better company image at the present clients;
- introduce a client satisfaction and complaint procedure system.

Because of the growing activities of BUV in the market, it is advisable to appoint a marketing representative in the organization. This person should concentrate on client matters in order to facilitate the accountmanagers in their activities. This will lead to more time efficient operations for the accountmanagers as well as the business unit manager. Figure 5 shows how the marketing representative should be placed in the organization chart.

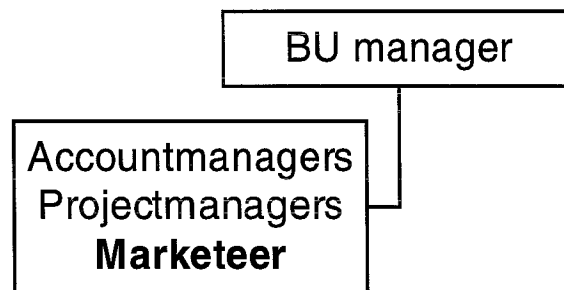


Figure 5: Positioning of the marketing representative in the organization

7. *Conclusions and recommendations*

Based on the findings of the research, are the following conclusions made:

- the service market for parking systems is growing and this leads to a growing need for faster and flexible service;
- BUV has an organization that makes it possible to fulfill this need.

The main bottlenecks facing BUV are:

- the believe of some potential clients that a TPM's can't perform the service in the right way and therefore has a preference for the supplier of the system;
- the limited knowledge of servicing parking systems;
- dependency of others
- unfamiliarity and of BUV in the parking market.

Concerning the marketing can the following conclusion be made:

- there is a lack of marketing activities at BUV;
- BUV needs to do much more advertisement;
- BUV should consider to introduce a person that will be charged with marketing activities;
- the marketing of BUV should focus on bringing BUV in the publicity of the parking market;
- the marketing should also emphasize the quick service and the 24 hours availability of BUV.

The main conclusion of the research project is:

BUV should continue offering maintenance services to parking systems. This should be done by closing strategic alliances with suppliers and security companies because of the lack of knowledge and dependency on other parties. The business should be more focused on swap maintenance activities in combination with control of parking systems through remote systems.

Recommendations

The recommendations in this project can be divided in three parts:

- recommendations related to the implementation of the marketing strategy and the marketing mix;
- recommendation about organization of the maintenance activities at BUV;
- recommendations for further research.

The implementation of the marketing plan should take place in three phases. The phases involved are: sales, production and after sales.

BUV should consider to reorganize the maintenance operations. Each area of operation of BUV should have it's own maintenance team. This will assure that, at a system-breakdown, the client will receive the right services from an engineer with the right knowledge, equipment's and materials.

Recommendations, related to further investigations are:

- to determine maintenance activity costs;
- to determine costs of investments;
- to investigate the possibilities of cooperation with other companies.