

MASTER

Comparing payment services at TNT-Express

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Comparing payment services at TNT-Express

March 2005

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Abstract

The objective of this master's thesis is the development of a method which compares payment services on their contribution to customer satisfaction and shareholder value. Based on scientific research two sets of criteria were set up that led to a comparison method. This comparison method enables TNT-Express to identify their best practices and to develop a payment service strategy.

**NIET
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Executive summary

Background

TNT is an express company that provides on-demand time definite door to door express delivery services for documents, parcels and freight. This project is about payment services. A payment service is a payment procedure offered to the customer. Offering multiple payment procedures is seen as a service, hence the name payment service. A payment service consists of a combination of the following three variables: the payment method, the invoice method and the delivery option. Each combination of these three variables is identified as one payment service

Assignment

The set of payment services that is offered by the business units and the processes to operate them differ from business unit to business unit. This is the result of a long period in which decisions about payment services were made at business unit level. Not long ago the administration department at the divisional head office became responsible for the total set of payment services. A board decision to standardize the payment service and the processes to operate them raised the question which payment services should be part of the future standardized set and what the best processes are to offer a payment service. This situation led to the following assignment:

Develop a method to compare payment services on their contribution to customer satisfaction and shareholder value.

Approach

The project approach is based on a method as proposed by Kempen & Keizer (1996) and consists of the following phases: orientation, diagnose, design and implementation. The implementation phase falls outside the scope of this project due to time restrictions. The structure of this report is the same as the project approach. The results of each phase are shown below. In the orientation phase a competitor analysis and internal analysis were carried out to provide an overview of the available payment services in the Express-market. In the analysis phase it was determined if and how payment services influence customer satisfaction and shareholder value. This information was used in the design phase to set up two sets of criteria that can be used to compare payment services on their contribution to customer satisfaction and shareholder value.

Orientation

Table 0.1 shows the set of payment services that is available in the express market. One payment service is a combination of each variable. TNT-Express is currently slightly behind in the following three areas: 3rd party billing, delivery duties paid and online billing and payment.

Payment services		
Payment method	Invoice method	Delivery option
Cash	Paper	Bill the sender
Check	Fax	Bill the receiver
Credit card	Email	Bill a third party
Electronic funds transfer	EDI	Delivery duty paid
Direct debit	Online	Collect on delivery
Online		Pre-paid

Table 0.1 Available payment services in the express market

Analysis 1: Payment services and customer satisfaction

In this analysis it was found that payment services influence the overall customer perception of service quality and therefore the customer satisfaction. A payment is an encounter between company and customer. Each encounter represents an opportunity for the firm to reinforce or establish quality perceptions in the mind of the customer. Payment services were identified as dissatisfiers. The invoice is identified as the most important part of a payment service. The invoice is the only tangible aspect in what often is a remote encounter between company and customer. Making invoice mistakes seriously affects the perceived reliability and total quality perception of the total service offering. Next to the invoice also the variety of the payment service offering and the price of a payment service were identified as aspects that influence customer satisfaction.

Analysis 2: Payment services and shareholder value

In this analysis it was found that payment services influence the future discounted cash flow in two ways. The operating costs and the investments cost. The goal of this project is to set up a comparison method for existing payment services. Investment costs can therefore be seen as sunk cost and are no importance at the moment. The operating costs of a payment service consist of cost per invoice, cost per payment and the financing costs. The financing costs are dependent on how well a company succeeds in collecting outstanding sales. The performance metric weekly sales outstanding can be used to measure this. An improvement in the WSO is directly related to an improvement in the operating costs and the discounted future cash flow.

Conclusion and recommendations

The result of the design phase is the comparison method as shown in figure 0.2.

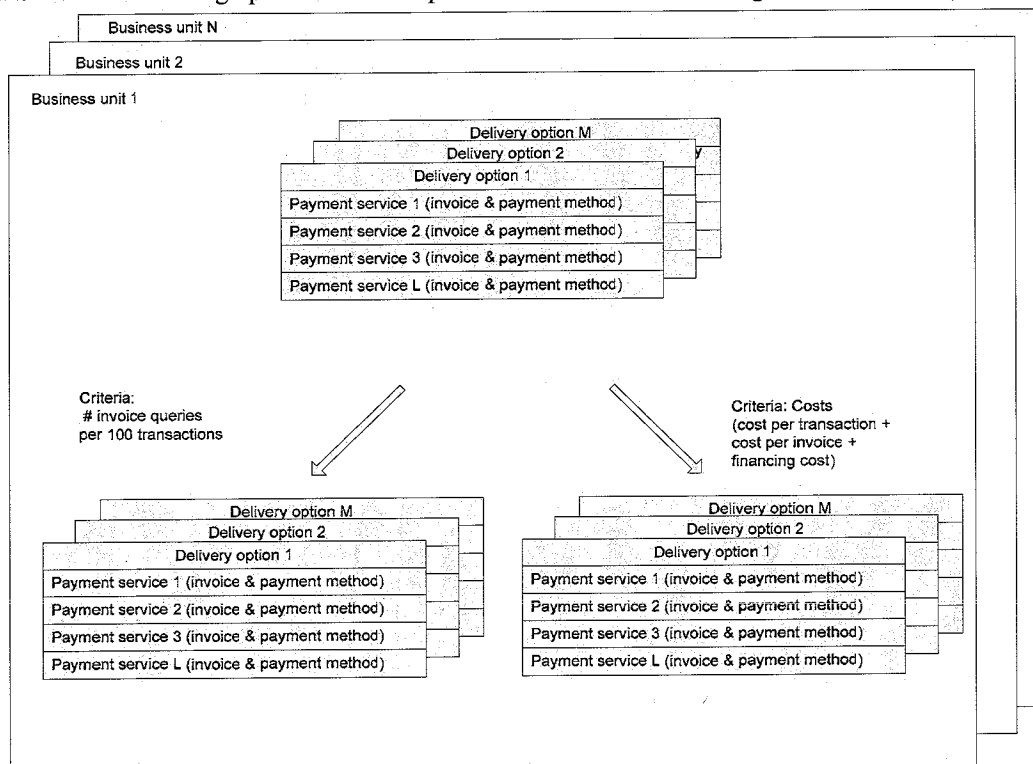


Figure 0.2 Outline design of the comparison method

The tables in the top middle represent the set of payment services that is compared. It is decided to compare payment services on the combination of invoice and payment method and to separate the delivery options. The delivery options are separated because these options are not interchangeable with each other due to their differences in functionality. The payment services are compared on the two sets of criteria. On the left side the payment services are compared on the number of invoice mistakes and on the right side they are compared on their operating costs.

This comparison method enables TNT-Express to:

- Identify their best practices
- To set up a payment service strategy

Identifying best practices

The same payment services are offered in multiple business units. The processes necessary to offer these services are not necessarily the same. Business units use different systems and processes which result in a difference in costs and invoice mistakes. The information gathered with the comparison enables TNT to compare the same payment service across business units to determine which business unit has the best results. The processes in this business unit can then function as a benchmark for other business units for that specific payment service.

Setting up a payment service strategy

The comparison method provides insight in the contribution of payment services to shareholder value. This knowledge makes it possible to develop a payment service strategy, a strategy to promote the services that have a positive impact on the company. The company can provide incentives to convince customers to use those payment services that contribute.

Preface

This report describes the results of my graduation project carried out at TNT-Express. It is the final step in the completion of my study industrial engineering and management science at the University of Technology Eindhoven. For me it was a great experience to participate in the day to day business in a divisional head office of a multinational company.

I want to thank all my colleagues at TNT-Express for their support and the fact that I could work in a friendly and cooperative atmosphere. Subsequently I want to thank my university coaches: Sicco Santema, Charmianne Lemmens and Erik van Raaij for their constructive feedback and support.

In conclusion I want to thank my parents for supporting me throughout this project and the rest of my study!

Walter Grootveld

Eindhoven, March 2005

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Introduction

This report is the result of a graduation project executed at TNT-Express and is part of the final phase of the study industrial engineering and management science.

The competition in the express-industry is intense, new products and services are quickly copied by competitors. Companies are looking more and more for new ways to differentiate itself. This project is focused on payment services. Paying used to be a necessity, something unavoidable that had to be done. As a result of the intense competitions it is more and more becoming an important way for a company to differentiate itself. Nowadays there are many possibilities to receive the invoice information, to pay the amount due and choose between several delivery options. As a result of this proliferation of payment services it is difficult for a company to determine which payment services are of value to the company. Or better said which payment services are the most beneficial. This project provides an answer to the question about how a company can compare payment services on their contribution to customer satisfaction and shareholder value.

The structure of this report is as follow. Chapter one starts with a description of TNT-Express, how the company is organized and what the recent developments are. The motive behind this project, the project approach and the research questions are described in chapter two. Chapter three provides an introduction into payment services. An internal and competitor analysis brought in the information to make an overview of the payment services that are currently available in the express-market. Chapter four deals with the question which aspects of a payment services influence customer satisfaction. This answer on this question is based on an extensive literature review. Next in chapter five is described how payment services influence shareholder value.

The findings from chapter four and five are used in chapter six to set up criteria that can be used to compare payment service on their contribution to customer satisfaction and shareholder value. How the necessary data needs to be collected and processed is described in chapter seven. The findings and recommendations as a result of this project are summarized in chapter eight. The structure of this report is visualized in figure 0.3.

Orientation	Analysis	Design	Implementation
<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Chapter 1 Company description</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Chapter 2 Project approach</div> <div style="border: 1px solid black; padding: 2px;">Chapter 3 Payment services</div>	<div style="border: 1px solid black; padding: 2px; margin-bottom: 10px;">Chapter 4 Payment services and customer satisfaction</div> <div style="border: 1px solid black; padding: 2px;">Chapter 5 Payment services and shareholder value</div>	<div style="border: 1px solid black; padding: 2px; margin-bottom: 10px;">Chapter 6 The Comparison method</div> <div style="border: 1px solid black; padding: 2px;">Chapter 8 Conclusions and recommendations</div>	

0.3 Structure of the report