

By order of VEVIDA BV

VEVIDA

Marketing strategy for a Dutch web hosting company

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Management summary

The research problem addressed in this report is aimed at identifying a proper marketing strategy for VEVIDA, considering the organisation's strategic position. A combination of both quantitative and qualitative research techniques were used. Qualitative interviewing was used to gain insight into the strategic capabilities of VEVIDA, while a survey research was used to analyse customer preferences. The analysis of existing statistics provided additional information to investigate key issues in the environment.

An analysis of the environment indicates an increasing level of (price) competition within the web hosting industry. Application-specific hosting services are slowly replacing the demand for web hosting services. Non-business customers are very price sensitive and can easily compare prices by using comparison websites. Combined with low switching costs, this leads to intense competitive rivalry among web hosting providers. Business customers, on the other hand, are less price sensitive. Opportunities arise from the trend towards outsourcing and the growing demand for Software as a Service (SaaS). VEVIDA's main strategic capability is economies of scale. The company's age and size, reputation and dedicated customer support facilities are also identified as competitive advantages. However, the lack of a clear marketing strategy and declining customer satisfaction inhibit VEVIDA from dealing with the concerns arising from the environment. VEVIDA's in-house developed control panel restricts development that could address these concerns.

VEVIDA could add additional features to their web hosting service to deal with the threat of substitute services. Sitebuilder functionality is a common feature offered by competitors. This strategic option is only feasible when the legacy software is replaced by commercial control panel software. However, the human resource costs associated with the integration of commercial software are still very high, thus reducing the feasibility of this strategic option. A measurement of customer preferences also indicated a limited importance of sitebuilder functionality. An alternative strategic option is to implement additional services on a SaaS basis, addressing the trend towards outsourcing of IT functions, and the growing demand for the SaaS model. This option is advisable, because it will likely enable VEVIDA to gain higher profit margins. The costs associated with this option are also lower, as it does not require the complete restructuring of existing systems. Established support facilities and extensive experience with the Windows operating system would allow the company to benefit from economies of scope, while using their extensive client base to gain traction for their new services.

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1. Introduction

1.1. Background

VEVIDA is a web hosting company that provides web hosting services to individuals and small to medium sized organisations. The company is located in a former dairy factory, converted into a business complex, in Groningen. It employs nine people. Five employees are responsible for support and server management; two programmers are working on implementing a new accounting system and one employee is responsible for the administration. Management functions are in the hands of the CEO.

VEVIDA has been offering web hosting services since 1997. Web hosting is the service of making websites accessible through the internet, by providing disk space on a web server where customers can store files. In other words, whenever you view a website, web hosting is involved. Web servers can host a large variety of files, from plain text to text with mark up, from pictures to complete movies. An important distinction can be made between static and dynamic web pages. A static web page will always contain the same information. A dynamic web page, on the other hand, will display different content based upon the request that is made from the client; usually a person using a web browser. A common web site on the internet contains dynamic web pages, using a scripting language¹ which interacts with a database to serve the specific information the web site visitor is requesting.

When VEVIDA was founded there were only a handful of competitors. This allowed the company to grow without having to make significant advertising efforts. The demand for web hosting was high, and growth came naturally. However, as with all markets, high growth attracts competitors. The web hosting industry is no different. Increased competition forces VEVIDA to make explicit decisions with regard to their marketing strategy. With little information publically available regarding competitor strategies and customer preferences, formulating a marketing strategy for a web hosting company can prove a difficult task. This report aims to provide some insight into these areas, and explores possible marketing strategies for VEVIDA.

¹ For example PHP or ASP.

1.2. Research problem

The research problem addressed in this paper is:

What is a proper marketing strategy for VEVIDA?

In order to solve the research problem, data will be gathered about the following research issues:

- 1) What main environmental issues are affecting VEVIDA?
- 2) What are the organisation's main strategic capabilities?
- 3) What are suitable alternative development directions considering VEVIDA's strategic position, and which option is advisable?

1.3. Justification for the research

The goal of this exploratory research is to provide insight into the web hosting market in the Netherlands, as well as to offer advice to VEVIDA in terms of strategic decision making. The initial research proposal for this paper was formed in consultation with VEVIDA's CEO. This proposal was aimed at performing a customer analysis using an online survey. Data from this survey can be used to improve the configuration of the web hosting plan according to customer preferences. However, the direction of the research has gradually shifted towards a broader range which also includes the marketing strategy level. The survey has been integrated into this approach.

Little specific previous research has been done to chart the main market forces within the Dutch web hosting industry. Understanding environmental issues is, however, essential for the long term sustainability of the company, especially within an industry characterized by rapid technological development. Furthermore, VEVIDA's limited product range (one product) constitutes to an even higher dependency upon these environmental influences. A potential application of the recommendations made in this report is an adjustment of the current marketing strategy.

1.4. Outline

The first chapter of this paper has introduced the research problem, and the context of the problem. Chapter 2 will present an overview of relevant theoretical models that lead to the research issues. These research issues were already briefly introduced in chapter 1.2. The methodology used to collect the necessary data is described in chapter 3. Chapter 4 presents an analysis of the collected data. Subsequently, chapter 5 concludes this report with conclusions about the research issues and the main research problem. Definitions of frequently used terms can be found in appendix 8.1.

2. Literature review

2.1. Introduction

This chapter will elaborate on the theories and classification models that lead to the research issues introduced in chapter 1. The research problem of this report deals with management on a strategic level. The main difference between strategic management and operational management is that strategic management deals with ambiguous and non-routine situations, while operational management is concerned with day-to-day management of resources within an existing strategy (Johnson & Scholes, 2005). The strategy-making process involves capturing both soft insights (i.e. personal experiences) and hard data (i.e. market research) and synthesising that learning into a vision of the direction that the business should pursue (Hamel, 1996).

Strategic management is often depicted as a linear process with three stages, namely planning, implementation and controlling (Kotler, 2003). The first stage, planning, involves planning on several organisational levels (corporate, division, business and product). Planning is followed by the implementation process. Controlling, in turn, consists of measuring results of the implementation, diagnosing these results and taking corrective actions. The process of controlling subsequently links back to implementing and planning, creating an iterative process. An alternative to this approach is the framework by Johnson and Scholes (2005). This framework contains three elements, namely the strategic position, strategic choices and strategy into action.

The shape of the framework (figure 1) emphasizes that strategic management should not be seen as a linear process. Instead, the three elements are interlinked because in reality strategic management often does not follow a predefined path. Intended strategy tends to differ from realised strategy, for instance as a result of a changing environment or a resistance to change from inside the organisation (Mintzberg & Waters, 1985). The arrows between the three elements represent the notion that the elements “inform each other” (Johnson & Scholes, 2005).

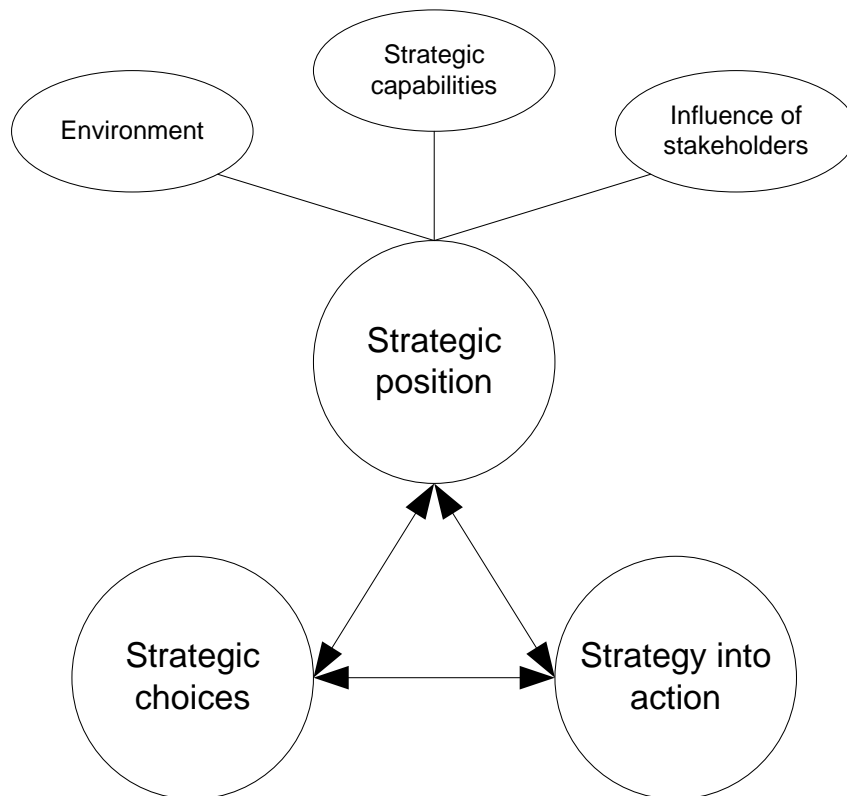


Figure 1: Elements of strategic management

The goal of this research was to identify possible strategic choices for the future of VEVIDA. As the framework indicates, strategic choices are related to the current strategic position of the company, and to the element ‘strategy into action’. As this research did not include the latter element of implementation, this report will focus mostly on the strategic position of VEVIDA in relation to strategic choices. Both these elements will now be elaborated respectively, along with potential analytical models that can be used to focus the data collection.

2.2. Strategic position

The strategic position encompasses the impact that the business environment and an organisation’s strategic capabilities have on strategy. The environment refers to the context in which the organisation operates. This context can be described on a macro, meso and micro level, and presents the organisation with opportunities and threats. The strategic capabilities of an organisation are determined by their competences and resources, and can lead to advantages and disadvantages in relation to the competition. These advantages and disadvantages can be seen as strengths and weaknesses. The third factor that determines the

strategic position of an organisation is the influence of stakeholders. Expectations of these stakeholders with regard to the purposes of the organisation reflect upon the strategic position. The insights gained from the analysis of the environment and the strategic capabilities indicate the key issues the organisation is dealing with. These key issues can in turn be used to guide strategic choices.

2.2.1. Environment

Several models can be used to explore the environment of an organisation. The PESTEL model provides a classification to examine environmental influences on a macro level. Porter's Five Forces framework describes the main forces that can be examined to explore the environment on an industry level.

The PESTEL framework offers a way of analysing the macro environmental forces that affect an organisation. The framework classifies environmental influences into six categories, respectively political, economic, social (or socio-cultural), technological, environmental and legal influences. The PESTEL framework can serve as a starting point for identifying key drivers of change and the relative influence these drivers have on industries, markets and organisations.

Porter (1980) identified five main forces that determine the (financial) attractiveness of a certain industry. The first force is the threat of entry. This force is dependent on the barriers of entry within an industry. Barriers to entry result in a delay of the market entry for new entrants. A typical example of a barrier to entry is economies of scale. Activities within certain industries are only viable with a high production volume. Another example of a barrier to entry is access to supply and distribution channels. If these channels are under the exclusive control of a few organisations, this will have a detrimental effect on the opportunities of new entrants. Another important barrier to entry is legislation, for instance patents or other governmental forces that reduce competition. The second force is the threat of substitutes. Substitution can be on a product-by-product basis, but can also be substitution of need as a result of new products or services rendering existing goods obsolete. The power of buyers and suppliers (the third and fourth force) also determines the attractiveness of an industry. If there is a concentration of buyers or suppliers, this has a constraining effect on the strategic freedom of an organisation. Price sensitivity of buyers and the cost of switching are important elements of risk in this respect. The fifth force is competitive rivalry, which is determined by organisations in the environment with similar products or services. Elements of importance in

this regard are for instance industry growth rates and the extent to which competitors are in balance (in terms of size) within the industry.

2.2.2. Strategic capabilities

The goal of identifying strategic capabilities is to gain insight into the internal influences on strategic choices. One approach to the internal analysis of an organisation is the 7S framework by McKinsey (Pascale, Peters & Waterman, 1980). An alternative way to examine an organisation is by using the value chain concept. The value chain describes the activities within an organisation that create a product or service (Porter, 1985). However, the typology used in the value chain framework by Porter is derived from traditional manufacturing companies, and is less suited for the analysis of organisations in service industries (Stabell & Fjeldstad, 1998). An alternative model particularly suited to describe the value creation within service organisations is the value shop concept (Thompson, 1967).

The 7S model provides a holistic approach that includes both the hard and soft factors within an organisation. The hard factors include strategy, structure and system. The soft factors are shared values, style of management, skills and staff. The model implies that effectiveness can be achieved when a balance exists between these seven aspects of an organisation.

A value chain analysis can be used to decompose an organisation into strategically important activities. A distinction is made between primary activities and support activities. The primary activities (inbound logistics, operations, outbound logistics, marketing and service) are seen as a sequential long-linked chain that results in the transformation of inputs into products or services. The support activities are linked to each group of primary activities (HRM, technology development, etc.) While the primary activities are directly aimed at creating value to the customer, the support activities are instead directed at improving the performance of the primary activities. This framework provides insight into the strategic capabilities of an organisation (strengths and weaknesses) by separating the value creation process into discrete activities that contribute to the organisation's relative cost position and create a basis for differentiation (Stabell & Fjeldstad, 1998).

In contrast to the long-linked activities of the value chain, the value shop revolves around solving customer problems. Instead of performing a fixed set of activities to produce a standard product, the value shop schedules activities and allocates resources in a fashion appropriate to the needs of the client's problem. A key characteristic of the relationship between the value shop and the customer is information asymmetry. Although many problems

can be solved using standardized solutions, the value creation process of the value shop is configured to deal with unique cases. The interactivity between activities is cyclical or spiralling, rather than sequential. As mentioned in chapter 1.5, web hosting can be seen as a hybrid form between a product and a service. Therefore, the value creation process of web hosting companies is likely to have characteristics of both the value chain and the value shop.

An activity that is recognized within both value configuration models is marketing and sales. This activity is commonly described in terms of the marketing mix of organisations offered to consumers. Within the marketing mix approach, marketing management is seen as a process of 'mixing of ingredients' (Borden, 1954). These ingredients can be classified in four categories, the four P's, namely product, price, place and promotion (McCarthy, 1996). The first two describe the product or service; the following two define the methods and tools used. The four categories can also be seen from the viewpoint of the consumer, in which case they can be defined respectively as customer solution, customer cost, convenience and communication (Lauterborn, 1990). The first category, product, describes product features and possible varieties. It also includes elements such as brand name and support. The price category defines not only the product or service price, but also factors like discounts and upgrade prices. The place category describes the channels by which the product or service is marketed. The final factor, promotion, describes the way the company communicates the product or service towards the consumer.

Specifically aimed at service organisations, three P's have been introduced in addition to the traditional four P's, creating an extended marketing mix. The three additional P's are people, physical evidence and process (Booms & Bitner, 1981). By definition, a service requires interaction between consumers and employees. The people element is therefore introduced and refers to selection, training and motivation of employees. Also other customers can be included in this category of the marketing mix, depending on the type of service. Physical evidence (or presentation) provides a way for service organisations to convey their service quality in terms of tangible aspects or intangible experience. The third element, process, refers to the procedures and mechanisms by which the service is delivered. All three elements can have a significant influence on customer satisfaction.

A technique often used in association with the value configuration models is benchmarking. Benchmarking involves assessing an organisation's strategic capability in relative terms. Historical benchmarking compares organisational performance to previous years. Industry

benchmarking, on the other hand, compares between performance indicators of similar organisations in the same industry.

2.2.3. Influence of stakeholders

Apart from the business environment and strategic capability, stakeholders also have an influence on the strategic position of an organisation. A stakeholder analysis can provide insight into the influence of stakeholders on the organisation's purposes and strategies. Stakeholder mapping (Mendelow, 1991) provides a way of understanding and describing the context in which strategic developments take place. Stakeholder mapping can be done by classifying stakeholders along two dimensions, namely power and level of interest. The level of interest refers to the probability that stakeholder groups actually use their power to support or oppose certain strategies.

2.3. Strategic choices

The organisation's strategic position can guide strategic choices and indicate options for developing future strategy. The TOWS matrix concept can be used to identify and summarize key issues. Subsequently, suitable strategic options can be generated based upon these key issues. Several methods can be used to identify potential development directions for future strategy.

2.3.1. Identifying key issues

Key issues from the organisation's environment and strategic capability can be summarized in the form of a SWOT (strengths, weaknesses, opportunities and threats) analysis. Strengths and weaknesses refer to the relative strategic capabilities of an organisation, while opportunities and threats include key issues from the environment. The TOWS matrix concept (or confrontation matrix) can be used to generate strategies, by exploring the interrelationships between strengths and weaknesses, and opportunity and threats. For instance, combining threats and strengths can lead to a defensive strategy, while combining opportunities with weaknesses can lead to a strategy focused on overcoming these weaknesses.

2.3.2. Developing strategy

One commonly used technique for strategy formulation on a corporate level is the growth share matrix (or the Boston Matrix). The model emphasises relative market share and market growth as two important factors when classifying types of businesses. A strategic business unit with a high market share in a growing market is coined a star. The exact opposite of a star is a dog, a business with a low market share in a static or declining market. A question mark

or ‘problem child’ is a business unit with a low market share, but within a growing market. A cash cow, on the other hand, is a type of business with a high market share within a mature market. There are, however, several (practical) issues with this model. It is often difficult to determine what constitutes a high level of market growth or market share (Higgins, 1985). The model also does not account for the possibility of economies of scope, for instance as a result of the shared use of resources by different types of businesses (Wind & Douglas, 1981).

Ansoff’s (1988) product-market growth matrix provides a way of identifying potential development directions of strategic management. Table 1 illustrates the possible directions based upon the product and market combinations. The directions presented in the table should not be seen as exclusive, and can in practise overlap one another. The risk involved with the strategic direction increases while moving away from the upper left corner.

	Present products	New products
Present markets	Protect/build	Product development
New markets	Market development	Diversification

Table 1: The product-market growth matrix

Porter (1980) suggested three generic strategies with regard to strategic formulation, namely overall cost leadership, differentiation and focus. The first two are focussed on a broad market scope, while the latter is focussed on a narrow scope. Cost leadership is focussed on efficiency and entails competing on production and distribution cost. Utilizing economies of scale is usually an important aspect of this strategy. However, cost leadership is vulnerable for other companies assuming even lower costs and prices, cutting the overall margins in the industry. The second strategy, differentiation, can be achieved by concentrating on an area that is valued by a large part of the consumers, for instance by concentrating on superior quality, design or brand image. Focus on the other hand is a strategy that is aimed at a narrow market segment or niche. Within this narrow segment the organisation can either pursue cost leadership or differentiation. The two latter strategies are likely to have higher profit margins because the resulting entry barriers are typically higher.

2.3.3. Evaluating strategic options

In order to evaluate strategic options, Ambrosini et al. suggest three success criteria. The first is suitability; a strategic option should address the circumstances in which an organisation is operating. In other words, an option should be evaluated in light of the strategic position of the company. The second criterion is acceptability, which refers to the expected performance outcomes of a strategy, for example in terms of risk and return. Lastly, feasibility is concerned with the practicalities of the strategic option. A strategic option can be considered feasible when an organisation has the necessary resources and competences to put the strategy into action (Ambrosini et al., 1998).

2.4. Conclusion

The model by Johnson and Scholes was used as the main framework for this paper. The framework emphasises the iterative nature of strategic management. The focus of this report was on the strategic position and strategic choices. The element of putting strategy into action was not dealt with in this paper, as this research did not include the process of implementation. The strategic position of VEVIDA was investigated by exploring the organisation's environment and strategic capability. The environment was analysed by using the PESTEL framework and Porter's five forces model. The analysis of internal influences (strategic capability) was focused on the value chain and value shop concepts. These concepts were preferred to the 7S model, because they are specifically suited for the analysis of firm-level competitive strengths and weaknesses. The 7S model provided a (too) broad perspective in which strategy is only one part of the seven elements. When possible, benchmarking was used to compare performance indicators. A stakeholder analysis was not included in this research. Being a small organisation, only two people within VEVIDA had significant influence on the strategic position, namely the owner and the CEO. Including a stakeholder analysis would have not added any additional insights.

Information about the strategic position of the organisation subsequently guided the process of developing strategy. Ansoff's product-market growth matrix was used to generate possible strategic options, based upon the key issues that were summarized in a TOWS matrix. The growth-share matrix was discarded for the purpose of this research, as it is mainly relevant in the context of corporate level portfolio management. Considering VEVIDA only manages one service, this model was not appropriate. Strategic options were subsequently evaluated based on the success criteria suggested by Ambrosini et al., namely suitability, acceptability and feasibility.

3. Methodology

This research used a combination of research techniques, both quantitative and qualitative, in order to adequately investigate the research issues. A combination of research methods can provide multiple perspectives on the strategic position of VEVIDA. The first step in answering the main research question was to identify relevant literature through a literature research. Subsequently, the research issues have been formulated based upon this literature research. The methodology used to answer these questions will be discussed respectively.

3.1. Qualitative interviewing

Qualitative interviewing was used to gain insight into the strategic capabilities of VEVIDA. This qualitative field research method was appropriate considering the exploratory nature of this research. Qualitative interviewing is more flexible than structured interviewing, which allows for the necessary interaction between the interviewer and the respondent. General directions for the conversations were established prior to the interviews. Apart from the flexibility of this method, it is also inexpensive. However, a potential weakness of qualitative interviewing, and qualitative field research in general, is the limited reliability. My personal perceptions of the company and its environment could have influenced my interpretation of the observations.

Qualitative interviews were held on between 8 January and 12 February 2007. The sources were the CEO, a programmer and two support employees. Considering support is a continuous effort, most conversations were held within a limited timeframe. The general direction of the interviews differed, based upon the function of the respondent within the organisation. The topics discussed with the CEO dealt with the main activities of VEVIDA, and their contribution to the value creation process. The conversations with the programmer focused on the development of the control panel. The general direction of the interviews with the support employees was aimed at gaining insights into the support facilities provided by VEVIDA. Questions were posed as open as possible, in order to avoid subtle biases in the questioning.

3.2. Unobtrusive research

The analysis of existing statistics provided a supplemental source of data. This type analysis is a form of unobtrusive research. Extensive statistics on the configuration of web hosting plans of competitors of VEVIDA were available. This data was used to analyse the marketing activities of these competitors, and to compare these activities to the efforts of VEVIDA. The

existing data was extracted from consumer website [Hostingvisie.nl](http://www.hostingvisie.nl)² during March 2007. This website contains information on around 400 web hosting providers and 2000 web hosting plans. The functionality of the website allows web hosting providers to add multiple web hosting plans, and consumers to compare company and web hosting plan characteristics. For each web hosting plan, data was available on key characteristics such as price, amount of traffic, and disk space. Aggregate information (averages and frequency) was derived from this data.

The data on the website were added by each individual web hosting company, which should be noted as a limitation of the reliability. Furthermore, web hosting companies operating in the low-budget market range might be more likely to sign up to a (price) comparison website than providers offering hosting services at higher prices. Both limitations might have resulted in reported price levels that were lower than the overall industry average.

3.3. Survey research

Survey research was used to analyse customer preferences. More specifically, the survey was used to analyse the price sensitivity of private and business customers. Price sensitivity is an element that is related to the power of buyers in the context of the five forces framework. It is especially relevant with regard to web hosting customers, as the pricing differences are minimal and customers can easily switch between providers. This characteristic of the web hosting market will be discussed in further detail in chapter 4.1.5.

Customer preference information was collected through the use of a discrete conjoint measurement. A conjoint analysis was subsequently performed to analyse the data from these conjoint measurements. Conjoint analysis is based upon two general ideas. The first idea is that direct rating scales in surveys, aimed at measuring the relative importance of product or service attributes, are inadequate in predicting behaviour. When customer preferences are assessed using direct rating scales, this often fails because respondents are typically not aware of their relative preferences (Orme, 2005). Respondents are likely to find all attributes (very) important, rendering the research almost useless. Conjoint analysis ‘forces’ respondents to make trade-offs by presenting them with alternative product or service concepts to choose from. The second idea is that a product or service can be viewed as a product of its parts, in other words that preference is based upon additivity. When decision making is complex,

² URI: <http://www.hostingvisie.nl>

people will resort to certain heuristics and limit the number of dimensions they will evaluate. Conjoint analysis provides a way of making these heuristics visible.

Conjoint analysis in general originated in the 1960s from the field of mathematical psychology. Early conjoint analysis was performed in the form of what is now called traditional conjoint analysis. This technique uses ordering to measure preferences. All possible concepts were shown on physical cards, which had to be ordered by the respondent in order of preference. Scores were then assigned to each card based upon their order. These scores in turn provide the dependent variable in the analysis; the levels per card are the independent variables. In other words, the assumption is that levels that are important to the respondent are likely to be on top of the stack and thus receive a higher score than unimportant levels. Using a regression analysis, the extent to which each level is able to predict the score of a specific card indicates the importance of this level. This level importance is also called a part-worth. Factor importance can be inferred by observing the difference between the highest and lowest scoring level.

A discrete or choice based conjoint analysis, which was first used in the field of econometrics (ibid.), differs from traditional conjoint analysis in the way the task is presented to the respondent. Instead of having to order all possible concepts, respondents are now presented with a small number of concepts from which they have to choose one³. As with traditional conjoint analysis, the levels remain the independent variables, but the dependent variable now changes to a binary value (chosen or not chosen). Again, regression analysis can be used to calculate level and factor importance. However, using a counting method is also possible⁴. The level importance can be calculated as following (Orme, 2005):

$$\text{Level importance} = \frac{\text{Number of times a level has been chosen}}{\text{Number of tasks in which a level has been shown}}$$

Factor importance is subsequently calculated by dividing the difference between the highest and lowest level importance per factor, by the total of these differences.

The conjoint measurement for this research was performed in the form of an online survey on Hostingvisie.nl, a web hosting comparison website. Most of the visitors of Hostingvisie.nl were referred to the site by Google, and they were specifically looking for a (price)

³ In some designs choosing 'None' is also an option.

⁴ With the restriction that there are no prohibited level combinations.

comparison website⁵, which made the website useful for this type of analysis. In total, data from 1030 respondents were gathered during April, May and June of 2008. These respondents made a total of 3449 choices. Respondents who made less than three of the four choices were excluded, leaving data from 818 respondents to be analysed. Results were differentiated, based upon the purpose customers have for the web hosting they intend to buy (private or business). Data on 503 private customers and 315 business customers were analysed.

An important limitation of this research method was the potential selection bias caused by self-selection. People that use a price comparison website are likely more price sensitive than the population of web hosting customers as a whole. Additionally, the low response rate also formed a potential threat to validity. The comparison website had around a hundred unique visitors daily, and the response rate was between 5 and 10%. This was, however, the only feasible option available for gathering aggregate data on price sensitivity.

3.4. Conclusion

A combination of both qualitative and quantitative methods was used to analyse the strategic position of VEVIDA. Quantitative interviewing gave insight into the strengths and weaknesses of VEVIDA, while unobtrusive research and survey research were mainly aimed at investigating and quantifying key issues in the environment.

⁵ Based upon Google search keywords visitors use.

4. Research findings

This chapter will describe the research findings, structured around the research issues that were formulated in chapter 1. The first section of this chapter will discuss the environmental issues that VEVIDA is facing. The second chapter will describe the strategic capabilities of the company. Each of these two sections will respectively conclude with the main opportunities and threats, and main strengths and weaknesses that can be deduced from the analyses. Subsequently, this information will be used to identify key issues and suitable development directions for future strategy.

4.1. Environment

4.1.1. Macro environment

On the macro environmental level, several external influences are important to the web hosting industry in general, and some to VEVIDA in particular. On a political and legal level there is a trend of increasing government legislation surrounding internet activities. An example of this is the data retention directive, adopted by the European Union. This directive has subsequently been passed into a law by the Dutch government. Telecommunications companies (as registered by the OPTA⁶) are now forced by law to preserve the internet traffic data of all their customers for twelve months (Veenman, 2008). Though this does not affect VEVIDA directly (webhosting providers are excluded from the directive), it may affect some of the companies' competitors. It is not uncommon for the larger hosting providers to also offer internet access (through cable or ADSL), and for the internet service providers to also include and sell hosting services alongside their internet access offers.

Economic influences also play an important role for the hosting industry. Firstly increasing energy prices result in higher costs. Data centres are installing ampere meters to measure power consumption per server rack. The costs for high energy prices can be transferred down the supply chain, and eventually to the customers of the hosting companies, but this option can be detrimental to the market share. Not relaying the increase of costs can, on the other hand, decrease profit margins (Alink, September 2006). Hosting providers are exploring new techniques to increase the efficiency per server. For instance, server virtualisation is utilized to decrease the number of servers needed. New generation processors also increase the

⁶ Onafhankelijke Post en Telecommunicatie Autoriteit; the Dutch government agency who is responsible for enforcing Dutch telecommunication laws.

efficiency of servers, however replacing entire server racks with new hardware can require large investments.

Energy consumption is also an environmental issue. It is estimated that the ICT industry as a whole accounts for two percent of the global carbon dioxide (CO₂) emissions (Gartner Symposium/ITxpo, 2007), which is equivalent to the amount of CO₂ produced by aviation. As environmental sustainability is also beginning to affect buying decisions (ibid.), saving energy will not only be beneficiary from a cost perspective. Hosting providers anticipating this influence can already be seen, for instance in the form of hosting services marketed as 'green hosting' (Rosenthal, 2008).

Another important driver of change in the economic category is market globalisation. Dutch web hosting providers are subject to competition from large hosting providers operating on an international level. For instance, Active 24, a Norwegian organisation, is operating in fifteen European countries. The company has established significant market share in several of these European countries through mergers and acquisitions (Zuiderveld⁷, 2005). Because of similar customer needs, these large international organisations can transfer their operation and marketing efforts across countries while benefitting from economies of scale and scope.

Outsourcing can also be identified as a key influence on the economic level. Apart from large companies, small to medium sized organisations are also turning to outsourcing of IT functions to reduce costs (Zuiderveld, 2007). Services that were being handled by internal IT staff are now being outsourced to specialised IT companies. An example of this within the web hosting market is online back-up hosting. An increasing number of web hosting providers are now offering online back-up services. This enables companies to outsource both web hosting and back up hosting to a single company, reducing the transaction costs of using multiple hosting providers.

4.1.2. Threat of new entrants

The threat of new entrants is high as a result of low barriers to entry. Even with very limited technical knowledge it is possible to start a web hosting company. Some larger hosting companies offer reseller hosting, which enables novices to sell web hosting through an inexpensive 'white label' reseller service (Alink, September 2006). Only customer support and administration is handled by the reseller; the technical side is taken care of by the company providing the reseller account. Without reselling it is also not difficult or costly for

⁷ CEO Active 24 Western Europe.

new entrants to join the market. Almost all facets of running a web hosting company can be handled with software packages for automating the processes involved. Fairly inexpensive software packages can be bought or licensed for setting up accounts, invoicing, and support. By combining these packages almost all aspects of providing web hosting can be integrated. The relative ease of starting a web hosting company attracts many new competitors. The business entity of these new entrants is typically in the form of sole proprietorship (Hostingvisie.nl, 2008). It is not uncommon for owners to have started the business while in college or even high school. Not having the fixed costs of the larger companies (housing, staff etc.) enables these new entrants to compete on price with the larger established organisations. However, this might force new entrants to operate just above the cost price, limiting the sustainability of these new businesses. This results in a high business mortality rate among new entrants. To illustrate, of the 698 hosting providers that registered on consumer website Hostingvisie.nl in the course of four years, 87 (12%) were out of business⁸ on December 2008.

4.1.3. Threat of substitutes

Whether or not the Web 2.0 is interpreted as merely hype or a substantial change on the internet, the growth of application-specific hosting services is evident. For instance setting up a blog or personal website⁹ can be done without any technical knowledge (apart from basic computer operating skills) and does not require web hosting. Most of these services are free and obtain revenue from advertisements. For business customers that seek a more customizable website there are also specific hosting solutions available, offering hosted content management systems¹⁰ that allow customization through the use of templates. The latter usually involves a monthly fee. Application-specific hosting is part of a trend towards Software as a Service (SaaS), which refers to software houses taking care of both the development and the hosting of the software. SaaS can be defined as software that is owned, delivered and managed remotely by one or more providers¹¹, which deliver software based on a pay-for-use basis, or as a subscription based on use metrics (Desisto & Pring, 2009). These solutions can be designed very specifically to target certain market segments, for instance providing content management systems (CMS) for real estate brokers. Without SaaS solutions, brokers will have to invest in the development or licensing of software, as well as

⁸ Had no functioning e-mail address and/or website.

⁹ For example Blogger and Google Sites.

¹⁰ Also referred to as a sitebuilder.

¹¹ Also coined an Application Service Provider (ASP)

finding a reliable web hosting provider. In avoiding the latter, businesses using SaaS are in effect using a substitute for web hosting, which constitutes a threat for the web hosting market. The growth for SaaS is estimated to have a 23.8% compound annual growth rate from 2007 through 2012 for enterprise applications (Mertz et al., 2009), thus representing a significant threat.

4.1.4. Power of suppliers

The power of suppliers however is fairly limited. The most important suppliers of web hosting companies are hardware (i.e. servers, routers, switches, power units etc.) suppliers and rack space providers. Also suppliers of software licensing are important, depending on the software used. It is possible to use only open source software, however most control panel, invoicing and support software require a paid license fee (Van der Graaf, 2005). The power of these suppliers is limited, for the dependency on a single supplier is low. There can however be large costs involved in switching between suppliers, in particular switching between rack space suppliers. This will almost always involve downtime of the services and will entail high setup costs and a large number of man hours to physically move the servers. Even switching racks within the same data centre can be a very costly operation.

4.1.5. Power of buyers

The power of buyers on the other hand is high. Although the turnover for each individual buyer is low, customers can choose from a wide variety of web hosting companies, and the costs for switching between providers are low. The buyer information availability is also high. Because web hosting can be defined in a few very specific factors (price, traffic, disk space), it allows for fast and precise comparison. Consumer websites allow buyers to compare web hosting plans and read customer reviews (Alink, September 2006).

An important aspect in relation to the power of buyers is price sensitivity, especially when switching costs are low, and buyer information availability is high. In order to measure customer preferences in general, and price sensitivity in particular, a discrete conjoint analysis was performed on a consumer website. Image 1 below illustrates one step of this survey. The survey consisted of four steps. Each step, the respondent was asked to make a choice between three possible hosting plans (concepts). These concepts were automatically selected to be as different as possible from other concepts within the same task, as well as from concepts shown in previous tasks, in order to avoid linear dependence which might skew the results. The possible concepts shown are the result of a Cartesian product of the possible levels per

factor. The factors price, traffic and disk space each have three possible levels (shown in Image 1). The factor ‘sitebuilder’ has two possible levels (yes or no). At the first step respondents were also asked to indicate the purpose for which they required web hosting (for private or business purposes). Appendix 8.2 further illustrates the design of this application through a model diagram.

Enquête (stap 1/4)

Voor wat voor website zoekt u webhosting?

Particuliere website Zakelijke website

Stel u wilt vandaag webhosting aanschaffen, welk pakket zou u kiezen?

Hostingpakket	Hostingpakket	Hostingpakket
Prijs (incl. BTW): 4 euro per maand	Prijs (incl. BTW): 6 euro per maand	Prijs (incl. BTW): 2 euro per maand
Dataverkeer: 5 GB per maand	Dataverkeer: 15 GB per maand	Dataverkeer: 10 GB per maand
Schijfruimte: 75 MB	Schijfruimte: 150 MB	Schijfruimte: 225 MB
Sitebuilder: Nee	Sitebuilder: Ja	Sitebuilder: Ja
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Image 1: Conjoint measurement as presented on consumer website Hostingvisie.nl

Table 1 through 4 show the measured part-worth utility per level for each factor.

	Business purposes (n=315)	Private purposes (n=503)
2 euro VAT excl.	0.44	0.51
4 euro VAT excl.	0.31	0.31
6 euro VAT excl.	0.25	0.18

Table 1: Proportional part-worth utility for the factor price

	Business purposes (n=315)	Private purposes (n=503)
5 GB per month	0.22	0.28
10 GB per month	0.36	0.34
15 GB per month	0.42	0.39

Table 2: Proportional part-worth utility for the factor traffic

	Business purposes (n=315)	Private purposes (n=503)
75 MB	0.20	0.20
150 MB	0.32	0.33
225 MB	0.48	0.47

Table 3: Proportional part-worth utility for the factor disk space

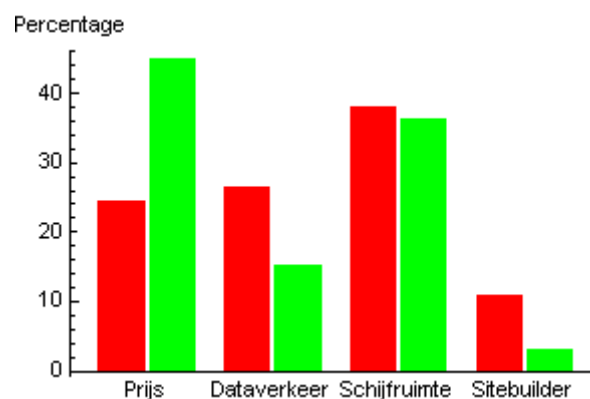
	Business purposes (n=315)	Private purposes (n=503)
No	0.46	0.49
Yes	0.54	0.51

Table 4: Proportional part-worth utility for the factor sitebuilder

Graph 1 illustrates the results in terms of factor importance, shown in table 5. The data indicates the importance of the factors price, traffic, disk space and sitebuilder.

	Business purposes (n=315)	Private purposes (n=503)
Price	24 %	45 %
Traffic	26 %	15 %
Disk space	38 %	36 %
Sitebuilder	11 %	3 %

Table 5: Factor importance



Graph 1: Factor importance for business customers (red/left) and private customers (green/right)

A difference can be observed between preferences of customers with private purposes for their website, and customers with business purposes. While private customers base their decisions mostly on price (45%), business customers value the different factors more evenly and are less price sensitive. Apart from the difference between the two groups in relation to price, there is also a difference with regard to the importance of traffic, and whether or not sitebuilder software is included in a web hosting plan. Compared to private customers, business customers more frequently chose a hosting plan based on the amount of traffic included, as well as on the presence of sitebuilder software. The relatively high price sensitivity of private customers, combined with low switching costs and easy access to buyer information, results in high buyer power within the private web hosting market. The market

for business customers is less affected by buyer price sensitivity, possibly due to a greater emphasis on reliability instead of costs.

4.1.6. Competitive rivalry

The competitive rivalry within the web hosting industry is high. Many companies operate at low profit margins to attract customers in a market of aggressive price competition with a large number of smaller companies. The dominant form of business entity is that of sole proprietorship. Hosting providers with two or more full time employees constitute for less than 14% of the companies registered on Hostingvisie.nl (2008). Less than 10% of the organisations has a business entity other than that of sole proprietorship (ibid.) The distribution of competitive rivals is further illustrated by the market share¹² of the top registrars of .nl domain names (SIDN, 2006).

Top domain registrars	Share
Top 10	21,4%
Top 25	35,9%
Top 50	48,3
Top 100	60,2%

Table 6

One main pattern in competitor marketing strategies can be identified, namely that most web hosting providers are engaged in low cost strategies (Alink, August 2008). With few options to differentiate, many hosting companies focus their advertising efforts largely on the price of their service. Especially the market segment of small to medium sized businesses and consumers is largely dominated by price competition. The differences in web hosting plans are trivial, with hosting providers offering an amount of web space and traffic that most users will never use. This strategy is also coined overselling; a practice that is sustainable as long as heavy users are compensated by a large number of light users, paying the same amount (Alink, March 2007).

The typical web hosting plan consists of a Linux environment, running Apache and some form of control panel (Alink, July 2008). 43% of the plans come with a domain name included. Most commonly supported programming languages are PHP (71%), Perl (61%), Python (24%) and ASP (22%). The predominantly used database management system is MySQL (76%), followed by PostgreSQL (12%) and Microsoft SQL Server (10%). Price

¹² In terms of registered .nl domain names; this does not necessarily relate to revenue.

differences are also minimal and hardly show any relation to the amount of disk space, and a limited relation to the amount of traffic included in the hosting plan (Alink, July 2008).

Although the differences between web hosting plans are limited, most web hosting companies offer a variety of web hosting plans (an average of four¹³), varying on multiple factors. In recent years, many web hosting providers have included sitebuilder functionality as a standard feature for their hosting plans. This feature enables users to create a website without requiring any specific web development skills. Using the control panel of their web hosting account, customers can easily select a layout, and add and edit menu items and content. Customers can also include other features within their website, for instance a forum or photo album.

The lack of differentiation of features indicates that the web hosting market can be seen as an industry of pure competition. Many competitors offer the same service, and are subsequently forced to engage in similar marketing strategies in order to attract customers. With the lack of options to differentiate their web hosting services, some web hosting providers have also started offering services related to web hosting, such as online back-up hosting and virtual private server hosting. This allows customers to have their hosting needs (for instance both web hosting and online back-up hosting) serviced by one hosting provider, instead of having to deal with several companies.

Competition also increases as a result of declining demand for web hosting, while the demand for substitute services such as application-specific hosting increases (Google Trends, 2008). On a global level the largest part of the search volume for web hosting can be attributed to developing countries (for instance, India, Malaysia and Indonesia). In The Netherlands a rapid decline in search volume can also be observed. Competition within the industry mostly takes place on a price dimension, with hardly any non-price competition on for instance marketing or innovation.

4.1.7. Conclusion

Overall, the attractiveness of the web hosting market can be characterized as low, primarily as a result of the high competitive rivalry and high buyer power due to low switching costs and high buyer information availability. Several opportunities and threats can be derived from the previous analysis of the environment.

An important opportunity that can be identified is that business customers are less price sensitive than private customers. Compared to private customers, business customers also

¹³ 4,4 rounded to 4; Hostingvisie.nl database.

more frequently choose a web hosting plan based upon the presence of sitebuilder software. This could indicate an area in which web hosting companies can choose to differentiate in order to avoid direct price competition.

The trend towards the outsourcing of IT functions within small to medium sized companies can also be considered an opportunity. This trend will increase demand for hosted and managed services such as online back-up hosting.

Related to the trend towards outsourcing is the growing demand for SaaS solutions; software that is managed and delivered by the provider, and charged on a pay-for-use basis. Many software vendors (for instance Microsoft) offer software that can be offered in SaaS form.

Another possible opportunity is the trend towards the reduction of energy consumption of businesses, from an environmental perspective. When environmental sustainability is also affecting buying decisions, saving energy will be beneficiary from both a cost perspective and an environmental perspective, and can be marketed as such.

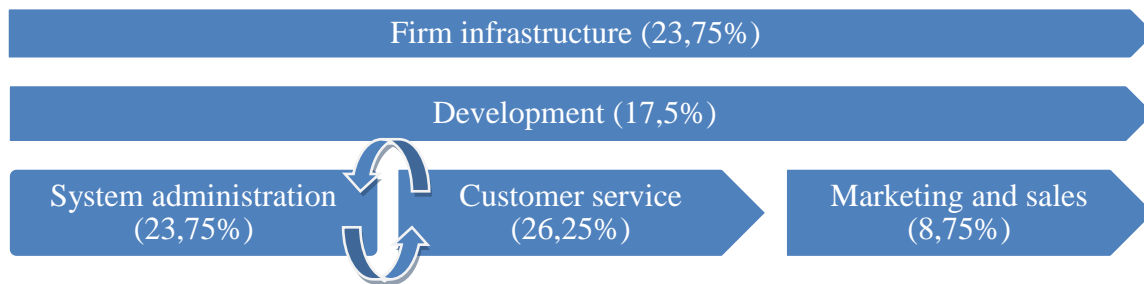
A significant threat on the other hand is the decreasing demand, resulting in a continuously increasing level of competition in an industry that is already predominated by low price competition. The increasing level of price competition has already resulted in many web hosting providers offering web hosting plans below 0,80 € a month (Hostingvisie.nl, 2008).

Substitute services form another significant threat towards web hosting providers. The decreasing demand for web hosting can be attributed to the rise of application-specific hosting services. A web hosting account is no longer needed to create an amateur website. Private amateur websites can be easily set up for free using for instance Google's Blogger or social network websites such as Hives.

Related to the previous threat is the observation that customers with private hosting purposes are very price sensitive. The relative importance of price is 45% for private customers, in contrast to 24% for business customers. This price sensitivity combined with the increasing level of competition is also a considerable threat.

4.2. Strategic capabilities

Three primary activities were identified at VEVIDA, namely system administration, customer service (support) and marketing and sales. Support activities¹⁴ consist of firm infrastructure and development. Each of these activities will be described respectively, along with relevant drivers of cost and value. The value chain diagram (below) borrows from both value chain and value shop characteristics (Stabell & Fjeldstad, 1998).



The diagram represents the value chain of VEVIDA, and shows the relative approximations of the costs associated with each activity. Around 70% of the total cost can be allocated to labour costs (CEO, 2007). Other costs are mainly incurred by server management activities (e.g. rack space and power costs) and activities related to the firm infrastructure (e.g. housing). The arrows connecting system administration with customer service and vice versa serve to illustrate the cyclical interactivity relationship between the two activities. Although many customer problems can be solved using standardized solutions, the process must also be configured to deal with unique cases. A cyclical relation between customer service activities and system administration activities is essential in this regard.

4.2.1. System administration

System administration involves the management of hard- and software. The main cost driver of the system administration activity is economies of scale. A main skill of VEVIDA as an organisation, as also reflected by their mission statement, is the use of a standardised way of working (CEO, 2007). The most important manifestation of this approach is VEVIDA's standardized server environment. It is company policy to maintain the same server environment on every physical server. Feature requests (for instance for a PHP extension) by customers are either installed on every server, or not at all. This standardisation allows for cost reduction through economies of scale. To some extent, however, this cost reduction is detrimental to the value of this activity, as it introduces inflexibility. Since web server functionality will not be provided on an individual customer basis, customers with specific

¹⁴ In the value chain terminology; not referring to the main activity of customer service.

requirements will have to look elsewhere when the requirements are not available within the standardized server environment.

As with almost all web hosting providers, VEVIDA allows customers to manage their web hosting account through a control panel. This enables customers to configure their hosting environment without the need to contact VEVIDA support employees. Functionality typically consists of managing (sub) domains, databases and mail accounts, changing DNS records and viewing usage statistics¹⁵. Although all web hosting providers offer some form of control panel, the extent to which customers can configure their hosting environment differs among providers. Most web hosting companies have outsourced the development of their control panel to specialized development firms (table 7). These firms offer control panel software against a license fee. VEVIDA's control panel (MYVEVIDA), on the other hand, is developed in-house.

Control panel software	Share
DirectAdmin	35%
Plesk	22%
cPanel	14%
Other	14%
In-house developed	12%
No control panel	2%

Table 7: Control panel usage among web hosting providers (Alink, July 2008)

VEVIDA's use of an in-house developed control panel must be seen from the historical context of the organisation. VEVIDA was founded in 1997, and at that time there were no commercial control panel software packages available. A custom control panel was thus built in-house out of necessity. However, the use of an in-house developed control panel can be seen as a competitive disadvantage. The commercial control panels are far more advanced in terms of functionality than VEVIDA's control panel (programmer, 2007). Almost all commercial control panel software also includes sitebuilder functionality, a feature which is widely advertised by competitors (Hostingvisie.nl, 2008).

4.2.2. Customer service

Customer service is primarily concerned with solving customer problems. These problems can be administrative (e.g. payment issues) or technical. The problem solving aspect of this

¹⁵ Commonly disk and traffic usage.

activity closely resembles the value creation logic within the value shop concept (Thompson, 1967). The flow of activities is typically iterative and cyclical between customer service and system administration. Multiple observed cases involved customer support employees requiring assistance from a system administrator, in solving unique customer problems.

For value shops in general, value drivers are far more important than cost drivers. The competitive advantage of value shops follows from the fact that clients are primarily looking for certain solutions to their problems, without focussing on low prices as their main attribute (Stabell & Fjeldstad, 1998). As briefly mentioned in chapter 2.2.2, the value creation process of web hosting providers has characteristics of both the value shop and the traditional value chain. This is likely to result in conflicting messages from customers. In the initial stage of the buying process, customers will compare companies and web hosting plans mostly on quantitative measures (price, disk space, amount of traffic), simply because these measures are easily comparable. As a result, there is a relative high demand for low priced web hosting plans. This demand signals to the market that cost drivers are more important than value drivers. However, most customers will at some point inevitably need customer service. When this happens, the customer will be looking for a solution to their problem, without focussing on low prices (as mentioned by Stabell and Fjeldstad). Given that the web hosting service was already paid for, it is not uncommon for the customer to realize at this point that “if you pay peanuts, you get monkeys”. This subsequently results in numerous angry reviews being written daily on consumer websites.

In short, web hosting companies must find a balance between reducing costs and creating value by offering adequate customer service. VEVIDA offers three main types of support. Customers can contact VEVIDA through e-mail, through an online customer control panel (MYVEVIDA) or by telephone (CEO, 2007). Four employees are responsible for dealing with (potential) customers. Generally a back-log on support requests through e-mail of MYVEVIDA is not uncommon, at times as high as two hundred requests (support employee, 2007). VEVIDA has two telephone support lines; when both lines are busy, a customer will get a busy tone. The decision to limit the telephone support lines to two has been made in order to keep human resource costs down. However this is not an issue, as most days two lines prove to be sufficient (CEO, 2007). Communication with customers is generally formal, although some difference can be observed between individual support employees, ranging from somewhat brusque to friendly.

How these support efforts actually materialize is reflected by VEVIDA's reputation. A previous paragraph has already hinted a way that reputation can be measured. VEVIDA is registered on two consumer websites, ISPGids.com and Webhosters.nl. Customer reviews on these websites allow for an indication of VEVIDA's reputation throughout the years. It should be noted that Webhosters.nl did not include a discrete rating scale until 2007. Reviews without a rating were analysed and subsequently given a rating based on their content. Table 8 is a historical overview of the ratings on both consumer websites. Rating range from 1 (very unsatisfied) through 5 (very satisfied). The table indicates that overall VEVIDA has a strong reputation with many satisfied customers.

Year	Number of reviews	Average rating
2001	18	4,7
2002	30	4,8
2003	9	4,9
2004	4	4,8
2005	5	4,8
2006	12	4
2007	8	2,3
2008	4	3
2009	2	3

Table 8

As the table illustrates, the number of reviews declines from 2003 onwards, with a surge of negative reviews in 2006 and 2007. The large number of reviews in 2001 and 2002 can be attributed to the fact that there were only a limited number of competitors at the time. The decline in customer satisfaction indicates that the balance between reducing costs and offering acceptable customer service is tipping the wrong way.

4.2.3. Marketing and sales

In contrast to most other web hosting companies, the advertising efforts of VEVIDA centre around one web hosting plan. This plan contains 150 MB of disk space, 10 GB of traffic and includes the registration fee for a Dutch (.nl) domain name. The web hosting environment supports PHP, ASP(.NET) and Perl and the standard database system is Microsoft Access. This standard plan is priced at 39,00 euros a year (excluding VAT). No differentiation is made between private or business customers. Through the use of a configuration wizard, customers can add additional disk space and traffic during the buying process, for an additional fee. A MySQL database is also available for an extra 12 euro a year.

The average industry price for a web hosting plan with 10 GB of traffic and 150 MB of disk space is around 14 euro a month (Alink, July 2008). With a price of 4 euro a month (VAT included) for a comparable hosting plan, VEVIDA can be classified in the ultra-low budget range of web hosting providers. VEVIDA's price level has not changed much since the start of the company. Over the years the standard web hosting plan has had some increase in the amount of traffic and disk space, but the price level has hardly fluctuated.

The promotion of their service has been limited to word of mouth, and an occasional flyer campaign (CEO, 2007). This remarkable lack of direct advertising efforts is an indication that their primary marketing strategy depends upon cost leadership. The explicit mission of VEVIDA is to offer a high quality web hosting service, at a minimal price, using a standardised way of working. In other words, VEVIDA uses economies of scale in order to minimize costs. The high quality aspect of their mission statement is a nominal differentiation, as the price setting does not allow for a focus on quality that can be considered a de facto differentiation from the competition.

The company website serves as the main mode of presentation to (potential) customers. The website prominently features the standard package configuration and a link to a page which allows visitors to calculate the price of a package with different parameters (in terms of traffic and disk space). Within the text on the website a distinction is made between private and business customers, however this distinction is symbolic, as there is no actual distinction between the web hosting plan offered to both types of customer.

VEVIDA's early market entry can be seen as the most important cost driver with regard to marketing and sales. The limited number of competitors during the early stages allowed the company to grow without having to make significant advertising investments to generate sales. Similar growth would have been impossible in today's environment, considering the current level of competitive rivalry. VEVIDA is now one of the larger web hosting providers in the Netherlands, and has established a position within the SIDN top 10 registrars.

4.2.4. Firm infrastructure

VEVIDA originated in a student-like setting (CEO, 2007). Being a small company with mostly young employees, the culture is rather informal. A sense of mutual interdependence can be observed, especially among support employees. The lack of effort on account of one employee would immediately increase the workload for the others. The culture within VEVIDA is very process-oriented. Support, the most demanding process within the

organisation with regard to human resources, is a continuous process. Action controls are the dominant form of management control system, and there is no emphasis on risk-taking within the organisation. Progress of the support department, for instance, is measured by the number of open support requests.

The structure of the organisation is very flat, and decision making is centralised at management level. Typically, decisions are made by the CEO, after having consulted employees, depending on the subject. Important decisions are made in concert with the owner. VEVIDA has a functional structure, which can roughly be divided into the functions support, administration and development. This functional structure is also reflected in the physical layout of the office.

Apart from the four employees mentioned responsible for support and setting up hosting accounts, VEVIDA employs two programmers and an employee responsible for accounting and administration. These employees typically do not interact with customers. The employees responsible for support and system administration are educated on a MBO or HBO level, while the programmers responsible for development both have a university degree. The selection, training and motivation of the employees is chiefly the responsibility of CEO.

The management style within the company can be characterised as informal. For instance there is no company dress code, and communication between the CEO and other employees also seems very informal. The leadership style is mainly supportive. The formal hierarchy is typically not reflected in everyday communications. The CEO having his own office, as opposed to the other employees, can be seen as the main observable aspect of the hierarchy.

Both the informal culture and the flat organisational structure can be seen as value drivers, especially considering the cyclical interactivity that is required between the customer service and system management activities.

4.2.5. Development

The development activity consisted mainly of creating a software link between the ordering system and the accounting software (used for billing). Both the control panel and the connected ordering system are developed in-house. Even though the development of the in-house developed systems has been continuous and incremental, the functionality is very limited compared to commercially available software (programmer, 2007). Especially the control panel software is fairly crude. As mentioned in chapter 4.2.1, a control panel generally

enables users to manage FTP and e-mail accounts, sub domains, password protected directories, database tables and so forth. The in-house developed control panel of VEVIDA lacks many of basic functions that can be provided by using control panel software developed by specialized software vendors. By employing two fulltime programmers, the costs associated with in-house development are also significant, placing VEVIDA at a competitive disadvantage in relation to competitors that outsource development.

4.2.6. Conclusion

The main strengths of VEVIDA are economies of scale, the age and size of the company, their support facilities and their reputation. Firstly their ability to maintain a low cost strategy is enabled by utilizing economies of scale. The process of installing new customers and maintaining servers is highly standardized, which reduces labour costs for these activities. Labour costs are the most significant part of total costs of the company; as much as up to 70% (CEO, 2007). Functionality is also standardized across the web servers for the same reason. When customers request functionality for their account, for example a PHP extension, it is VEVIDA's policy to either add the functionality on all servers, or not at all. This significantly reduces the amount of administration required for each customer. A standardized server environment also simplifies the process of redistributing customers between physical servers.

VEVIDA was started in 1997, and is among the top ten of web hosting companies in the Netherlands with regard to the number of registered .nl domain names. The age and size of the company result in several benefits. For instance, web hosting relies heavily on overselling. Experience gained over the years enabled VEVIDA to adjust the amount of disk space and traffic, according to their historical data. Also, having a larger number customers enables VEVIDA to spread costs associated with heavy users; customers that use so much traffic that they actually cost more than they pay. VEVIDA's age has also enabled the company to benefit from the strong growth in demand from 2000 onward to 2004.

VEVIDA's support facilities are also a strength in relation to other web hosting providers. Most web hosting companies are run by one person, and generally do not have multiple telephone support lines (ISPGids.com, 2008).

Related to their age and size is their brand name and reputation. Since their marketing efforts have been limited to word of mouth, a strong reputation is crucial in order for the company to grow. Reviews on consumer websites illustrate that the reputation of VEVIDA is strong. Reviews are generally very positive up until 2007.

From the beginning of 2007 until recently, however, a trend of negative reviews can be observed (Webhosters.nl, 2008). Customers complain about downtime and an inadequate level of customer service. Specifically long wait times for support issues are reported. Since consumer website Webhosters.nl features prominently on the first Google search page when searching for VEVIDA, this is likely to deter some potential customers. A declining reputation can eventually form a weakness for the company.

Other weaknesses can also be identified. Firstly their standardized server environment is efficient from a technical perspective; however it leaves no flexibility for the customer. Although the environment is set up to satisfy the largest number of customers possible, it will force some customers with special requirements to look elsewhere.

A related weakness is the lack of standard software that can be installed without technical knowledge. Many web hosting companies enable customers to install blogs, image galleries, forum software or content management systems on their web hosting account with one click. This is usually done from inside the control panel of their web hosting account. However, this functionality is hard to implement since VEVIDA has developed its own custom control panel. Most web hosting providers use commercially available software such as DirectAdmin or Plesk. These software packages are continually being updated with new features and functionality. For VEVIDA implementing similar features would require an immense investment.

The absence of a clear marketing strategy can also be classified as an important weakness. VEVIDA's main implicit strategy is cost leadership, and in light of the increasing competition within the web hosting industry, this cannot be considered a strong selling proposition on the long term.

4.3. Strategic choices

Information about the strategic position of VEVIDA from chapter 4.1 and 4.2 is summarised in the table below. Key issues from both the environment and the organisation's strategic capability indicate several strategic options that the company can pursue.

		Opportunities				Threats				
		Business customers are less price sensitive than private customers	Trend towards the outsourcing of IT functions	Growing demand for SaaS	Trend towards the reduction of energy consumption	Increasing level of (price) competition	Substitutes for webhosting	Private customers are very price sensitive	Decreasing demand for web hosting	
Strengths	Economies of scale					+		++		3
	Company age and size					+		+		2
	Support facilities	+	+	+						2
	Reputation	+	++	++		+				4
Weaknesses	No flexibility for the customer					-				-1
	Trend of negative customer reviews	-				--			--	-5
	No clear marketing strategy		--			-	-	-	--	-7
	Lack of standard software; custom control panel restricts development	-					--			-3
		0	1	3	0	-1	-3	2	-4	

Table 9: Confrontation matrix

The confrontation matrix illustrates the current strategic issues VEVIDA is facing. Two clusters of key issues are apparent. Firstly, strengths such as VEVIDA's support facilities and reputation could be used to benefit from the opportunities arising from the environment. Especially the trend towards outsourcing and the growing demand for SaaS could form a strategic option, when combined with their reputation. If VEVIDA would introduce a new type of service alongside of web hosting, the company could benefit from economies of scope as the customer support facilities are already in place. The company's extensive client base could serve as a launch pad to promote a new service.

On the other hand, the absence of a clear long term marketing strategy inhibits VEVIDA to take advantage of the mentioned opportunities. It also prevents VEVIDA from taking appropriate measures in order to limit the main threats. The use of a custom control panel is detrimental, mainly with regard to the threat of substitute application-specific hosting services. The in-house developed control panel lacks functionality, while the costs of development are higher compared to the costs made by competitors that choose to outsource this development. Three strategic options are suggested to deal with these two clusters of key issues.

4.3.1. Continuation

The first strategic option is to continue on the current path. As this option does not require any major investments, it can be considered the most risk-free option on the short term. The company's economies of scale can be utilized to avoid the threats regarding increasing competition and the price sensitivity of private customers. VEVIDA's age and size will likely give the company an advantage over most other web hosting providers, as the consolidation within the web hosting market continues.

On the long term, however, this strategy can prove to be unfavourable. As mentioned, many competitors offer a wider variety of services apart from web hosting, such as virtual private server hosting, Microsoft Exchange hosting and online back-up hosting. Large competitors (for instance Active 24, Argeweb, Your Hosting and Hostnet) also include application-specific hosting services within their web hosting environment. Commonly included services are a sitebuilder, an online web shop or a blog. With the rise of substitute services, the demand for web hosting is likely to continue to decrease, potentially increasing the competitive advantage of these competitors. Considering the size of VEVIDA, the company

may not experience the detrimental effects of inaction immediately, but in the long run a decrease in demand should be anticipated.

4.3.2. Diversification

The second strategic option entails the horizontal diversification of services offered by VEVIDA. Possible new services to offer include online back-up hosting, Microsoft Exchange hosting and Microsoft SharePoint hosting. While utilizing their reputation and established support channels, VEVIDA can take advantage of the trend towards outsourcing of IT functions by offering these additional services. As business customers tend to be less price sensitive than private customers, these services can also be offered with a higher profit margin, compared to web hosting services.

In contrast to the first strategic option, this option does require significant investments. Firstly, the online ordering process needs to be updated to facilitate the new services, along with the integrated customer administration system. The process of setting up a new service (for instance a new hosted Exchange environment) should be automated as much as possible, in order to keep the set-up costs per customer low. The investment costs required for this strategic option will largely consist of human resource costs; specifically costs related to the programming of new functionality with regard to the ordering and billing process.

VEVIDA, being a Windows only web hosting provider (CEO, 2007), could benefit from their experience on this operating system by offering Windows business software. Besides the solutions Exchange and SharePoint previously mentioned, Microsoft also offers the Dynamics software line, which includes customer relations management and enterprise resource planning solutions. These services can also be offered in the form of Software as a Service. By offering these services, along with their current web hosting service, VEVIDA can become a 'one stop shop' for business customers looking to outsource multiple IT functions. This option also enables the company to benefit from economies of scope, for instance with regard to marketing and customer support costs.

4.3.3. Product development

The third strategic option is to further develop the current web hosting service. As mentioned in the external analysis, many of VEVIDA's large competitors offer sitebuilder functionality, for instance by utilizing the sitebuilder software that is included in the Plesk control panel. Sitebuilder software usually also includes functionality to easily add a forum, a blog, a web

shop or a photo album to a website. Customers can also choose from a wide variety of templates in order to customize the look of their website.

As most web hosting providers use commercial control panel software, adding newly developed features is a turnkey operation. VEVIDA, however, is using a custom control panel which is developed in-house. Consequently, developing new features is a costly process for VEVIDA, whereas competitors benefit from the continuous development of the commercially available control panel software. In light of the threat of substitutes for web hosting, the lack of these common features put VEVIDA at a competitive disadvantage.

Implementing these features within the current custom made control panel will likely prove a long and costly process. A more viable alternative is to abandon this custom made control panel for a commercial package, offered by automation software suppliers. Costs arising from using commercial software include monthly fees, which might put pressure on the current profit margin. There are also several technical issues regarding the migration of customers to a new hosting infrastructure, which would imply some significant planning and execution costs.

Although the current control panel has very limited functionality, it is tightly integrated with other organisational processes, for instance with billing and support. A transition to a commercial control panel would also require these processes to be reshaped. Other technical issues arise from the difference in server architecture between the current situation and the way most commercial control panel packages are designed. For instance, VEVIDA currently has one central mail server, which forms a large bottleneck, as every e-mail sent to a VEVIDA customer is directed at this one server. Commercial packages on the other hand decentralise mail server functionality; each physical server has a separate mail server. In other words, utilizing commercial control panel software is not merely a case of installing new software; it involves the complete restructuring of server architecture, along with changes related to billing and support processes. Consequently, this strategic option is the most drastic choice of the three options presented.

4.3.4. Conclusion

The three strategic options vary in the level of investment required. The first option requires no investments; however this strategy is likely to be unfavourable in the long term. This option is only suitable if the competition within the web hosting industry remains stable on the long term. Considering the decline in demand and the increasing level of competition, this

is unlikely. VEVIDA is highly dependent upon the demand for web hosting, as it does not offer additional hosting services, in contrast to many competitors. Also the rigid legacy control panel software places VEVIDA at a disadvantage. The second option requires significant investments. Nonetheless, considering VEVIDA's extensive experience with the Windows platform, the feasibility of this option is high. The suitability of this option is also high, because it takes advantage of the trend towards outsourcing of IT functions. The introduction of new service is also predominantly aimed at the business market. This also contributes to the suitability of this option, as business customers are less price sensitive than private customers, likely enabling a higher profit margin. The third option involves the highest costs. The feasibility of this option is lower than the second option, because it requires a long development process. The suitability of the third option is also questionable, for the external analysis indicates that the importance of the sitebuilder functionality is low in relation to other factors, especially among private customers. In terms of acceptability, the second option is the most favourable. Although actual demand for the suggested services requires further investigation, the associated risks in terms of costs are lower in comparison to the third option. The third option requires a complete overhaul of all the organisation's systems currently in place, whereas the development and introduction of new services does not directly interfere with current operational processes. Overall, the second strategic option, diversification, is the most advisable option.

5. Conclusion

There are several issues arising from both the external and the internal that indicate that a change in the current marketing strategy of VEVIDA is called for. An analysis of the external environment indicates that there is an increasing level of competition in the web hosting market, partly as a result of a decreasing demand. This decrease in demand can in some degree be attributed to substitute services such as application-specific hosting. The analysis also indicated that private customers are very price sensitive, compared to business customers. As a large portion of the customers of VEVIDA are private customers, this can also be considered a significant threat. The observation that business customers are less price sensitive, on the other hand, can be seen as an opportunity. This opportunity, combined with the trend towards outsourcing of IT functions, can be used to VEVIDA's advantage.

An internal analysis suggests that VEVIDA's main strength is economies of scale, along with the company's age and size, and reputation. The lack of a clear marketing strategy, however, inhibits VEVIDA from dealing with the concerns arising from the external environment. VEVIDA's in-house developed control panel, legacy software from the rudimentary stages of the company, also restricts development that could address these concerns.

One strategic option that can be suggested to cope with these concerns is the development of additional features of VEVIDA's web hosting service. A common feature among competitors is sitebuilder functionality. However, further in-house development of the current control panel is likely a very costly process. An alternative is a transition to commercial control panel software. This would enable VEVIDA to benefit from ongoing development by the suppliers of this software, while reducing the need for the human resources associated with software development. Although this kind of transition is less costly than in-house development, the human resource costs associated with the integration of commercial software are still very high, thus reducing the feasibility of this strategic option. The suitability of this option is also limited, as the external analysis indicates that the importance of the sitebuilder functionality is low in relation to other factors.

Another, more feasible line of action is to diversify the services offered by VEVIDA. This strategic option addresses the trend towards outsourcing, and also enables the company to gain higher profit margins by serving business customers instead of private customers. Diversification also allows VEVIDA to benefit from their strong reputation, while obtaining economies of scope by using their established support facilities and extensive experience with

the Windows operating system. The feasibility of diversification is higher, compared to product development, as the development and implementation of new services does not require a complete restructuring of current systems. In terms of both feasibility and suitability, this strategic option is preferable.

6. Limitations and further research

Various limitations can be noted with regard to the methods and theories used in this research. Firstly many observations in the research are based upon online sources, and are possibly subject to bias. Opinions expressed in online interviews, for instance, might serve ulterior motives. Observations might be done in order to justify current strategies of an organisation, or to convey a certain image of the company and its environment that does not necessarily reflect reality.

The competitor analysis of this research is partly based upon data from the *Hostingvisie.nl* database. *Hostingvisie.nl* is a consumer website that connects hosting providers with customers. Hosting companies can add their company detail, along with extensive information on the web hosting plans they offer. Customers, on the other hand, can search this information on all possible variables, and add reviews of hosting providers. Although a large portion of the Dutch web hosting industry has added plan and company information on the website, there is a possible selection bias. Customers doing an online comparison of web hosting services might be more price oriented than large business customers using alternative means. Subsequently, hosting providers using these websites to market their services might also be more focussed on attracting customers through price competition than providers not registered on the website.

Likewise, the customer analysis in this research is susceptible to the same type of selection bias, because the data is gathered through a survey performed on the same website. If indeed the visitors of *Hostingvisie.nl* are more price oriented than the target population of web hosting customers, results from the analysis are probably overestimating price sensitivity, thus forming a threat to the internal validity of the research. Additionally, visitors that actually participate in the survey might have different characteristics than visitors that choose not to participate.

This paper also argues that, within the hosting industry, business customers in general are less price sensitive than private customers. The statement is based upon the measurement of the preferences of web hosting customers. However, generalisation of this statement to customers of other types of hosting requires further research in order to test this assumption.

Because this research is exploratory in nature, further research is required, when the strategic options of diversification or product development are pursued. With regard to product development, additional conjoint measurements can be performed to verify the current results.

Further conjoint analyses can also include other factors, in order to explore if the development and implementation of additional features is justifiable considering customer preferences. Other levels, for instance on price or traffic, can also be introduced to fine-tune the current plan variables.

To evaluate the demand for new services in relation to the diversification strategy, a more qualitative approach is recommendable. This kind of investigation would require insight into the outsourcing decisions of typical business customers of VEVIDA, for instance using a focus group. When a certain selection of new potential services has been made, the research can then focus on service specifics, using both quantitative and qualitative methods. For example if a focus group research indicates a demand for hosted Exchange or SharePoint services, further research can then be focussed on exploring the optimal price level for the typical business customer, and whether multiple plans should be introduced.

7. Personal reflection

My proposal for this research was initially mainly aimed at performing an online survey to gain insight into specific customer preferences. Being the owner of a consumer website on this subject enables me to publish an online survey to thousands of visitors searching for web hosting and related services. However, I learned that my initial approach was too narrow, and that I had to provide a broader context in order to make recommendations on a strategic level. I revised my research proposal accordingly, now also incorporating a framework to evaluate the strategic position of VEVIDA, while not abandoning my initial intent to use my website to measure customer preferences.

I am generally very interested in web development, and was hoping to gain some programming experience during this research with building a web application to perform an online survey. From the beginning of the assignment I had the notion that presenting respondents with direct questions would not generate valid results, as this would not require respondents to make trade-offs between the different variables of a web hosting plan. After some searching I learned that there was a type of measurement method that did present respondents with trade-offs, namely a (choice-based) conjoint measurement. Reading up on this subject brought me to the difficulty of actually having to program the web application that displays the survey questions and extracts aggregate results from the data.

Although commercial software is available, this software is either very expensive, or it does not allow the user to incorporate the survey within an existing website. Building the application from scratch introduced some interesting issues. One difficulty I encountered was how to select a concept web hosting plan; at random or as different as possible from previously shown concepts. I ended up using a user manual from a Sawtooth software product to deduct the most appropriate functionality. I have also used the development process to learn a new programming language along the way. Performing this research has helped me to gain experience in both specific technical skills, as well as seeing the bigger picture by placing the research findings in a larger context.

8. Appendices

8.1. Definitions

In order to establish a common understanding of the key terms used in this report, definitions of these terms are provided in this appendix.

Strategy – the direction and scope of an organisation over the long term, which achieves advantage in a changing environment through its configuration of resources and competences with the aim of fulfilling stakeholder expectations (Johnson & Scholes, 2005). Similarly, Porter (1980) defined strategy as an integrated set of actions, aimed at increasing the long-term well-being and strength of the enterprise relative to competitors. Porter (1996) also defined strategy as the creation of a unique and valuable position involving a different set of activities.

Strategic position – refers to the impact of the environment and the organisation's strategic capability on strategy (Johnson & Scholes, 2005). Porter (1996) stated that (in line with his second definition of strategy) a company is strategically positioned when it performs different activities from rivals, or performs similar activities in different ways.

Suitability – the extent to which a strategy addresses the circumstance in which an organisation is operating – the strategic position (Johnson & Scholes, 2005).

Environment – refers to the external environment of an organisation; the context in which an organisation operates.

Strategic capabilities – the adequacy and suitability of the resources and competences of an organisation for it to survive and prosper (Johnson & Scholes, 2005).

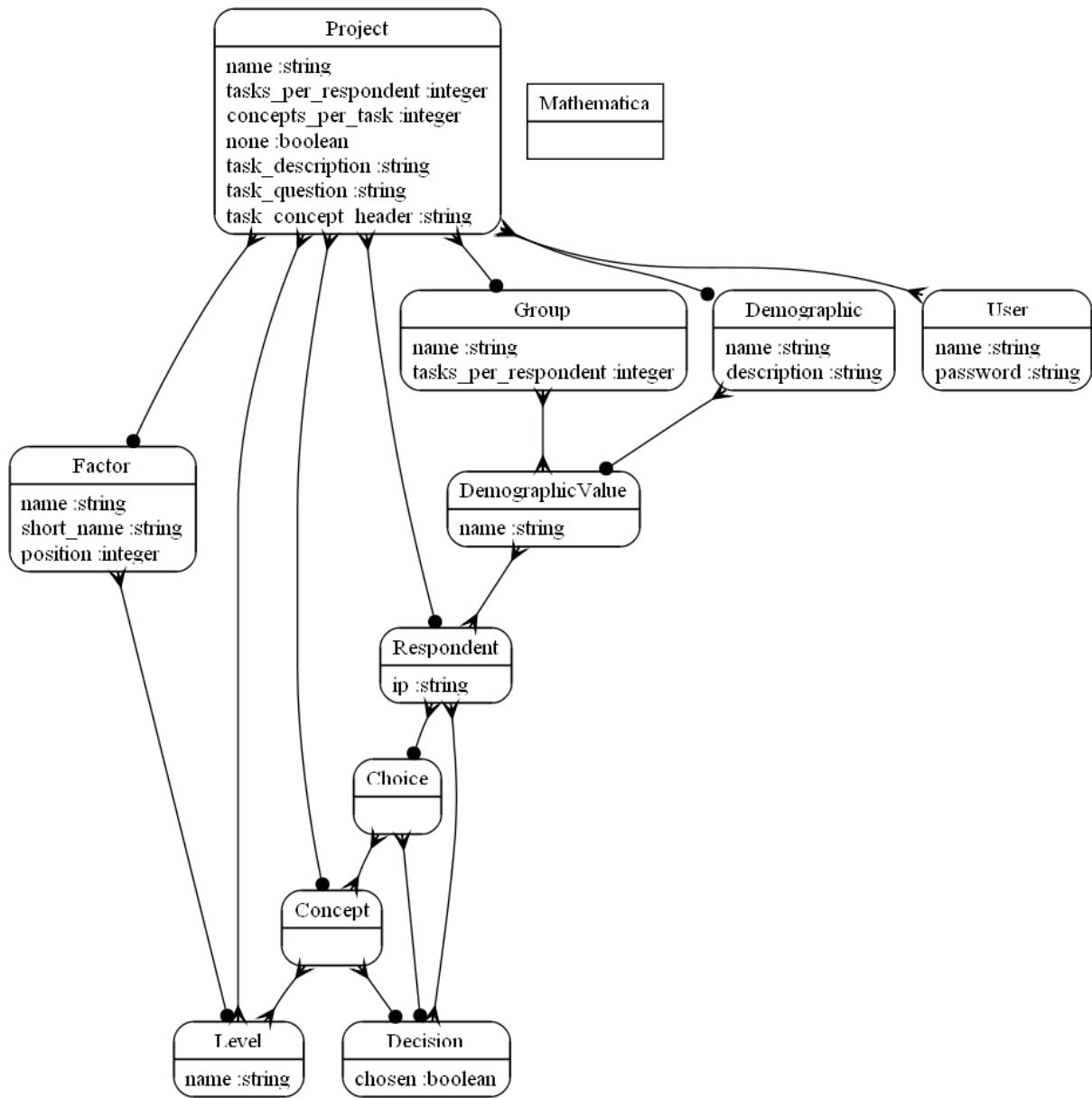
Web hosting (service) – the service of making websites accessible through the internet, by providing disk space on a web server where customers can store files. Web hosting can be seen as a hybrid form between a product and a service. A service has two main features that distinguish it from a product, namely intangibility and interaction (Van Looy, Gemmel & Dierdonck, 2003); a service is an economic activity that is intangible, and implicates interaction between the provider and the client. Using that definition, web hosting in the strict sense – providing space on a web server – can be seen as a product, for it does not require any interaction between the web hosting provider and the customer. A web server is also tangible. Support, however, does require interaction between the provider and the customer. A phone

call for support, for instance, is also completely intangible. This intangibility of support makes it impossible to stock for times that the demand for support is higher. The interactive nature of support also makes the activity more heterogeneous than the non-support activities. Web hosting can thus be seen as a mixture between service and product elements. For the sake of brevity, however, web hosting shall be addressed as a service in this report.

Web hosting plan – a combination of factors that define a web hosting service. Because for many people web hosting is a very abstract concept, the description of web hosting plans features prominently on the websites of most web hosting companies. The most common characteristics used to define a plan are price, disk space and the amount of traffic.

SaaS (Software as a Service) – software that is owned, delivered and managed remotely by one or more providers, which deliver software based on a pay-for-use basis, or as a subscription based on use metrics (Desisto & Pring, 2009).

8.2. Class diagram for conjoint measurement



8.3. Search volume for the keyword 'web hosting'



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