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THE ANALYSIS OF COMPETITIVE FORCES: THE CASE OF HOTEL ENTERPRISES

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Abstract: Companies are faced with a multitude of environmental influences. The dynamism of these influences is more and more turbulent. Also the interactions of the companies with their relevant environment are dynamic and complex. Porter has identified five forces that are widely used to assess the structure of any industry. This paper discusses the situation in the field of competitive forces: customers, competitors, technology, and suppliers. The research compares all the Slovene companies with companies in the hotel industry. The researched population includes the companies with more than 20 employees. According to the results of the ANOVA tests, the basic hypothesis that there are no statistically significant differences in the perception of trends in competitive environment between all surveyed companies and hotel companies is generally confirmed, with the exception of only two of the eleven statements.

Key words: Porter's Five Forces, competitive forces in the hotel industry, Slovene hotel industry.

Sažetak: ANALIZA NATJECATELJSKIH SNAGA: PRIMJER HOTELSKIH PODUZEĆA. Hotelska poduzeća se suočavaju s višestrukim razvojnim utjecajima. Interakcija utjecaja hotelskih poduzeća s njihovim okruženjem sve je dinamičnija i kompleksnija. U ovom radu obrađeni su odnosi sudionika "tržišne utakmice": kupci, natjecatelji (proizvođači), tehnologije i dobavljači. U istraživanju natjecateljskih snaga u poduzećima s više od 20 zaposlenih uspoređena su sva slovenska poduzeća s poduzećima u hotelskoj industriji. Rezultati istraživanja potvrđuju hipotezu da nema bitnih razlika između poduzeća u drugim djelatnostima i poduzeća koja nude hotelske proizvode. Za hotelska poduzeća znakovito je da u svom poslovanju više rabe informacijske tehnologije nego u drugim poduzećima.

Ključne riječi: Porterov model natjecateljskih snaga, natjecateljske snage u hotelskoj industriji, hotelska poduzeća Slovenije.

1 INTRODUCTION

A firm competes with a large number of other firms in the business environment. The firm has a two-fold objective. It has to attain its long term goals in the most efficient manner. At the same time, the firm has to deliver higher 'value' to its customer as compared to other competing firms to gain a sustainable competitive

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advantage. The firm has to design its business strategy keeping in mind the aforesaid objectives.

The business environment consists of all external influences that affect its decisions and performance. These should be analysed systematically and with continuous scanning, keeping in mind that it needs to be cost effective and not create too much information. You need to distinguish the vital from the merely important. One can focus on the industry environment for example, especially on customers, suppliers and competitors.

There are three key perspectives on the business environment, namely the "macro-environment," the "micro-environment" - the external environment - and the "internal environment".

The external environment can be audited in more detail using other approaches such as SWOT Analysis, PEST Analysis or Michael Porter's Five Forces Analysis. Porter's analysis helps the firms to contrast a competitive environment. It has similar tools for environmental audit, such as PEST or SWOT analysis, but tends to focus on the single strategic business unit (SBU) rather than a single product or range of products.

2 RESEARCH PLATFORM

2.1 Business environment

Porter uses the economists' concept of substitutability when he proposes a working definition of an industry as the group of companies »producing products that are close substitutes for each other« (Porter, 1985). Porter suggested that these forces shape the competition level of strategic business units and that systematic analysis of each can help managers identify the keys to competitiveness in a particular industry.

There are five basic forces – competitive forces – which govern competition in an industry (Porter 1985, 4):

- entry of new competitors,
- bargaining power of suppliers,
- bargaining power of customers,
- threat of substitution, and
- rivalry among current competitors in the industry.

Entry of new competitors. Factors that can limit the threat of *new competitors* are known as barriers to entry. Barriers to entry arise from several sources:

- Government regulation
- Patents and proprietary knowledge
- Asset specificity

Typical barriers to entry include capital requirements (high capital costs), lack of access to channels of distribution, difficulty of obtaining key raw materials or other components, cost advantages based on economies of scale, absolute cost advantages, brand loyalty, and high switching costs for customers. If barriers are low, and entry is therefore easy, the profitability of companies in the industry will suffer.

Bargaining power of suppliers. Reasons that suppliers might have power are:

- There are relatively few suppliers of a particular product, service or resources

- There are no or limited substitutes
- Switching to another (competitive) product is very costly
- The supplier has a unique franchise
- Buyer's product or service cannot be performed without the supply

Suppliers, if powerful, can exert an influence on the product industry. Some characteristics of a powerful supplier include: high concentration of suppliers, significant cost to switch suppliers, non-standardized product, and powerful customers closely linked with the supplier's product.

Bargaining power of customers. Reasons that customers might have power are:

- Small number of buyers within a large selling market
- Purchases of large quantities
- Switching to another (competitive) product is simple
- The product or service is not critical to the buyer

Buyers are powerful if they are concentrated (i.e. a few buyers have significant market share), purchase a significant part of the output, or possess a credible backward integration threat (i.e. can threaten to buy from a rival firm).

Substitute products and complements (threat of substitutes). Factors that can affect the threat of substitutes are:

- Switching costs
- Buyer inclination to substitute
- Price-performance trade-off of substitutes

Competition from substitutes limits the price that can be asked. Buyers of an industry's products or services are always examining the price/performance trade-off between those products and the ones in a closely related industry. When it favours the substitute, they may switch. The availability of a substitute holds down the profits of the industry.

Rivalry among current competitors. Factors causing increases in rivalry include:

- Structure of competition: a large number of firms competing for the same customers and resources.
- Market growth: slow market growth leads firms to fight for limited market share.
- Structure of costs: high fixed costs result in higher production to attain the lowest unit costs.
- Customer's "switching costs": low switching costs means greater potential for competitors to enter market.
- Exit barriers: high exit barriers places a high cost on abandoning the service or product.
- Industry's characteristics: a mature industry that has limited growth potential.

Every industry has an underlying structure, or a set of fundamental economic and technical characteristics, that gives rise to these competitive forces (Porter, 1985). Every strategist, wanting to analyze the position of a company, has to learn what makes the environment tick, because firms can influence the five forces with their strategies.

Together, the strength of the five forces determine the profit potential in an industry by influencing the prices, costs, and required investments of businesses — the elements of return on investment. Stronger forces are associated with a more challenging business environment.

Industries differ fundamentally in their ultimate profit potential as the collective strength of the forces differs (Porter, 1985, 6-7). The model can also be used by organisations in the public and not-for-profit sector (see Hooley, Sanders and Piercy, 2003, 118).

2.2 The importance of information and communication technology

Both industry cost structure and the perishable nature of the product makes effective distribution particularly important in the hotel sector. Selling each room at an optimum price is critical to a hotel's long-term success. To achieve this, hotel firms use a variety of different distribution channels to help selling their product. While direct sales are most common, extensive use is normally made of a variety of intermediaries, including travel agents, tour operators, marketing consortia and representative companies.

The fact that information and communication technology (ICT) has a significant impact on industries and single firms is an already established and well researched issue. ICT is especially important for firms operating in information intensive industries such as the hotel and tourism industry.

The Internet is one of the main driving forces for these new developments by providing new powerful tools and possibilities of doing business. For the hotel sector it is an excellent platform to bring information about their products to the customers all over the world.

The importance of electronic distribution channels has grown significantly in recent years. The Internet has dramatically changed the way people communicate, make decisions, and particularly the way in which they buy goods and services. Travel products in particular have proven to be some of the most suitable ones to sale online.

2.3 Three generic strategies

The five forces of industry competition are mostly negative, tending to depress profitability. The obvious question is, "How can my firm defend itself against these competitive forces?"

Porter has identified three generic strategies to counter competitive forces - cost leadership, differentiation, and focus (based on either cost or differentiation). An enterprise successfully following a cost leadership strategy has achieved the lowest costs (which does not necessarily mean lowest price) in its industry.

An enterprise successfully following a differentiation strategy will be in a good position concerning the competitive forces. Buyers will be harder pressed to switch away from a differentiated product.

An enterprise following a focus strategy dominates either a market segment (or a geographic market) by using either cost leadership or differentiation. All the

advantages mentioned above still hold, with the added advantage of in-depth knowledge of the segment or area by the focuser.

Each of these strategies (cost leadership, differentiation, and focus) relate to a firm's position of strength. These strategies should be applied at the business unit level and are called generic because they can be applied to any firm or industry.

To be successful over the long term, only one of these three generic strategies should be chosen. This reduces the risk that the firm will project a confusing message. Another option is to create separate business units to address each strategy.

3 ANALYSIS OF COMPETITIVE FORCES

3.1 Research problem

In the paper, we deal with the situation in competitive forces which hotel companies in Slovenia are faced with. We compare the population of all companies with the population of all companies in the hotel industry with over 20 employees. Herein, we deal with the situation that companies and their most important markets are faced with in their most important markets.

The goal of the paper is to ascertain the differences in the competitive environment of all the companies in comparison with hotel companies. The characteristics of such environment dealt with are:

- the demand of customers,
- intense competition,
- pressures on product (service) innovation, and
- the power of the suppliers.

The basic hypothesis is that there are no statistically significant differences in the perception of trends in competitive environment between all surveyed companies and hotel companies. The null hypothesis and the research hypothesis are shown in Formula 3.1.

$$H_0: \bar{x}_{i_{ALL}} - \bar{x}_{i_H} = 0 \quad \text{vs.} \quad H_1: \bar{x}_{i_{ALL}} - \bar{x}_{i_H} \neq 0 \quad (3.1)$$

$i = 1$ to $i = 11$

i_{ALL} = all companies i_H = hotel companies

We compare the mean scores of two samples – all the companies and the hotel companies – to determine whether they are significantly different from each other.

3.2 Methodology

A representative mail survey was conducted using a questionnaire developed from Porter's model of competitive forces.

The paper derives data from the population of all companies in Slovenia (2551). In the paper we deal with the answers of managing directors or members of the board of directors responsible for marketing (from here on »respondents«).

The results of the research represent the views of 759 companies, which is almost 30% of the whole population. There were 52 hotels with more than 20 employees in Slovenia when the research was conducted. The research includes views of marketing managers of 17 of them, which represent approximately 33 percent of the entire population.

The basic survey is composed of 18 questions dealing with some general data about economic characteristics of companies and data concerning typical competencies of the companies in question. These were used for an in-depth treatment of competencies of the surveyed companies. One set of questions also dealt with the following statements on the changes of forces in the most important markets of surveyed companies:

- Customers are increasingly demanding better quality and reliability in the products and services they buy.
- New products and services are coming to market more quickly than in the past.
- The Internet and e-commerce have a significant impact on business practices.
- Competition is now global rather than just domestic.
- Customer requirements, needs, and expectations are changing rapidly.
- We operate in a market where all customers essentially want the same thing.
- Competition for sales is intense.
- Competition is well established and entrenched.
- There is a significant threat that new firms will enter the market.
- There is a significant threat that substitute products or technologies will enter the market.
- Technological change in this industry is rapid.
- The bargaining power of suppliers to the industry is strong.

The respondents evaluated the statements on a scale from 1 (»Strongly disagree«) to 5 (»Strongly agree«). One of the possible options was also »Do not know«. Some did not answer certain statements, however their percentage was negligible.

3.3 Results of the analysis

The agreement with changes in the competitive environment

Table 1 reveals the share of respondents (in both groups of companies) who »Agreed« and »Strongly agreed« with the changes in the competitive environment.

Table 1: The share of agreement with changes (percentages of the answers)

CHANGES IN THE COMPETITIVE ENVIRONMENT	all companies	hotel companies
Customers are increasingly demanding better quality and reliability in the products and services they buy.	95,4	100,0
Competition for sales is intense.	91,6	94,1
New products and services are coming to market more quickly than in the past.	87,3	94,1
Competition is now global rather than just domestic.	75,5	88,3
Competition is well established and entrenched.	72,8	70,1
Customer requirements, needs, and expectations are changing rapidly.	66,2	88,3
There is a significant threat that new firms will enter the market.	64,8	47,0
The bargaining power of suppliers to the industry is strong.	57,4	52,9
The Internet and e-commerce have a significant impact on business practices.	55,9	88,2
Technological change in this industry is rapid.	49,1	53,0
There is a significant threat that substitute products or technologies will enter the market.	38,2	35,3

As seen from Table 1, more than two thirds of all the companies are faced with the following features in their most important markets:

- increasingly more demanding customers with rapidly changing needs, requirements, and expectations,
- well established, intense and global competition of strong competitors,
- a rapid entry of new products in the market.

It is surprising that the use of internet and e-commerce have a significant impact on business on a comparatively modest 55.9 percent of surveyed companies. It is also surprising that there have been significant technological changes in the branch in only a third of the companies (49.1 percent). A relatively small percentage of companies is faced with the serious danger of »substitute products and technologies« being introduced in their most important market (38.2 percent).

As far as their most important market is concerned, more than two thirds of the hotel companies face (Table 1):

- increasingly more demanding customers, who rapidly change needs, requirements, and expectations,
- a rapid entry of new products in the market,
- a well established, intense and global competition of strong competitors, and
- a significant impact of internet and e-commerce in their business practice.

According to respondents, the hotel companies are less threatened by the entry of substitute products and technologies in their most important market (35.3 percent).

The main difference between the two groups of companies is that higher percentages of respondents in hotel companies agree with the presence of changes in their environment.

A neutral opinion on changes

Table 2 presents the share of respondents' answers that had a neutral opinion (they did not »Agree« nor »Disagree« with them) concerning certain changes.

Table 2: Companies with a neutral opinion (percentages of the answers)

CHANGES IN THE BUSINESS ENVIRONMENT	all companies	hotel companies
Technological change in this industry is rapid.	27,3	41,2
The Internet and e-commerce have a significant impact on business practices.	26,5	11,8
The bargaining power of suppliers to the industry is strong.	24,1	23,5
There is a significant threat that substitute products or technologies will enter the market.	21,9	17,6
Customer requirements, needs, and expectations are changing rapidly.	21,1	11,8
There is a significant threat that new firms will enter the market.	18,0	41,2
Competition is well established and entrenched.	13,4	17,6
Competition is now global rather than just domestic.	12,2	11,8
New products and services are coming to market more quickly than in the past.	7,7	5,9
Competition for sales is intense.	3,8	5,9
Customers are increasingly demanding better quality and reliability in the products and services they buy.	2,8	0,0

Approximately one fourth of the respondents within the total population had a neutral opinion about changes in their most important markets depending on:

- the speed of technological changes,
- the significance of the impact of internet and e-commerce on their business practice and,
- the strong bargaining power of suppliers.

A relatively high percentage of respondents in hotel companies had a neutral opinion on:

- the speed of technological changes and,
- the treat of new firms entering the market.

These percentages are higher than those of all the companies and certainly require further research.

In both cases it could be speculated that the percentages of respondents' neutral opinion about the changes in the environment may indicate companies'

indolence towards them. It is the authors' opinion that companies, at least in the developed economies, are faced with crucial changes.

The t test

Therefore, we deal with statistically significant differences between the responses of managers of all participating companies and those of the hotel companies.

The formula for computing the t value for the t test is shown in Formula 3.2.

$$t = \frac{\bar{x}_{i_{ALL}} - \bar{x}_{i_H}}{\sqrt{\frac{Var_{ALL}}{n_{ALL}} - \frac{Var_H}{n_H}}} \quad (3.2)$$

$\bar{x}_{i_{ALL}}$ = sample mean of all companies

\bar{x}_{i_H} = sample mean of the hotel companies

Var_{ALL} = sample variance of all companies

Var_H = sample variance of the hotel companies

n = number of all companies

n = number of the hotel companies

Table 3: Statistically significant differences between two groups of companies

ENVIRONMENT CHANGES	P
Technological change in this industry is rapid.	0,550
The Internet and e-commerce is having a significant impact on business practices.	0,028
The bargaining power of suppliers to the industry is strong.	0,518
There is a significant threat that substitute products or technologies will enter the market.	0,447
Customer requirements, needs, and expectations are changing rapidly.	0,010
There is a significant threat that new firms will enter the market.	0,489
Competition is well established and entrenched.	0,537
Competition is now global rather than just domestic.	0,375
New products and services are coming to market more quickly than in the past.	0,292
Competition for sales is intense.	0,747
Customers are increasingly demanding better quality and reliability in the products and services they buy.	0,150

The results of the one-sided ANOVA tests – we considered the arithmetic mean of respondents' answers in companies – indicate that there are statistically

significant differences between groups of companies concerning the field of products at $p < 0.05$ in the following statements:

- customer requirements, needs, and expectations are changing rapidly on this market are rapidly changing,
- the use of internet and e-commerce have a significant impact on business practice on this market.

The basic hypothesis that there are no statistically significant differences in the perception of trends in competitive environment between all surveyed companies and hotel companies is generally confirmed, as statistically significant differences were only found in two of the eleven statements.

4 CONCLUSIONS

Porter's five forces framework is one way to look at industry structure. It looks at the bargaining power of suppliers, threat of substitutes, bargaining power of buyers, threat of new entrants and industry competitors. The strength of each of the competitive forces is a function of the industry structure, and the underlying technical characteristics of an industry. The collective strength of competitive forces determinates the ultimate profit potential in an industry by influencing the prices, costs, and required investments of businesses.

A more detail industry analysis would require extensive research, talking with competitors, suppliers, customers, and industry experts. However, as a general overview, the five forces analysis provides companies with an excellent tool to examine the profit potential in a particular industry. To identify the important structural features of an industry, we are able to conduct an industry analysis that answers the question, "What are the key factors for competitive success?"

In this paper, we dealt with statements concerning the changes in the environment of the most important markets where the surveyed companies operate. The statements were analyzed for all participating companies as well as for the hotel companies.

The majority of the companies surveyed is faced with increasingly demanding customers, their rapidly changing needs, desires and expectations an intense global competition of well established competitors, a rapid placement of new products on the market, with the a strong negotiation power of suppliers, and with a significant influence of the Internet and e-commerce on business activity. According to the participants in the survey, a relatively small number of companies is threatened by the danger of the substitute products and technologies entering their most important market.

We dealt with a segment of statements, concerning companies' environment, called »competitive forces«; which are (see Table 1):

- customers (statements 1 and 6),
- competitors (statements 2, 4, 5, 7),
- technology (statements 3, 9, 10, 11),
- suppliers (statements 8).

Most surveyed companies in both groups believe that the challenges of the external environment are the following:

- increasingly more demanding customers with rapidly changing needs, requirements, and expectations,
- well established, intense and global competition of strong competitors,
- rapid entry of new products on the market.

However, more than two thirds of the hotel companies also face in their most important markets with a significant impact of internet and e-commerce in business practice.

According to the respondents, both groups of companies are least threatened by the entry of substitute products and technologies. The main difference between the two groups of companies is that higher percentages of respondents in hotel companies agree with the presence of changes in their environment.

The percentages of companies in both groups having neutral opinion about changes in their environment are relatively high. In the case of hotel companies these percentages are even higher than those of all the companies. Perhaps these results require further research due to the speculation that relatively high percentage of the respondents is not sufficiently acquainted with the trends in their most important markets.

At first sight the hotel companies compared with all companies in Slovenia are confronted with more intensive dynamism of their competitive environment. However, according to the results of the one-sided ANOVA tests, the basic hypothesis that there are no statistically significant differences in the perception of trends in competitive environment between all surveyed companies and hotel companies is generally confirmed, with the exception of only two of the eleven statements.

REFERENCES

1. Baker, M. J. 2000. *Marketing Strategy and Management*. London: Macmillan.
2. Hooley, G., Saunders, J., and Piercy, N. 2003. *Marketing Strategy and Competitive Positioning*. London: Prentice Hall.
3. Ogorelc, A. 2001. *Mednarodni turizem*. Maribor: Ekonomsko-poslovna fakulteta.
4. Porter, M. E. 1985. *Competitive Advantage: Creating and Sustaining Superior Performance*. London: Collier Macmillan Publishers.
5. Snoj, B., and Gabrijan, V. 2002. *Zbrano gradivo pri predmetu Osnove marketinga*, Maribor: Ekonomsko-poslovna fakulteta.