

Examination of Hotel keeping Industry Effective Factors with Hierarchical Analysis Method in Tourism Regions

Zohre Dehdashti Shahrokh

Department of Management and accounting, Allameh Tabatabai University, Tehran, Iran

ABSTRACT

Hotel keeping is one of the branches of tourism industry and in marketing issues are classified as part of service activities. Contrary to goods, service is impalpable and unnoticeable, for this sake it is much more difficult to gain customer satisfaction. In this article managers of 30 hotels in Guilan province were surveyed about how to provide customers' satisfaction and how to classify its dimension. Using hierarchical analysis process and Expert Choice software, besides pair comparison of customer satisfaction dimensions, they were compared and prioritized with marketing eight combined elements including: price, promotion, distribution, product, process, physical documents, individuals and utilization. Among hotel keeping marketing combined elements, Factor "price" had the highest priority in providing customers satisfaction. Rationality of eight factors prioritizing was confirmed on behalf of hotel managers and customers and it was made known that after price, factors: individuals, product, promotion, distribution, process, physical documents and utilization were prioritized respectively.

KEYWORDS: hotel keeping, service marketing combination, customer satisfaction, analytical hierarchical process.

1- INTRODUCTION

Tourism industry is considered the biggest and the most varied industry in the world. Most of the countries have chosen this dynamic industry as their main source of income, employment, private section growth and substructure development. Also Tourism industry attracts a lot of attention in developing countries. (Chalk, 2003, 19).

Nowadays hotel keeping industry along with food supplying industry is considered as one of the most dynamic sections of tourism industry. Wherever the passenger goes he needs a place for sleep, rest and food. Hotel that is considered as one of the guest houses reflects this market customers various needs and tastes. It is the quality of interplay between hotel staffs with customers that enjoys great importance and constitutes marketing basis of tourism services in hotels. Like physical product that its quality is related to the article itself, in the case of service, the quality is dependent upon the way of interplay or reciprocal relation between buyers and sellers during service delivery. For this sake, customer satisfaction in service organizations like hotel in the first place is dependent upon the person delivering the service (staffs and managers) and then the way of service delivery to customers (Katler, 1999). This problem adds on the complexity of marketing of service organizations so requires functions besides what exists in goods marketing.

2-Problem Iteration

The answer to this question that "how are effective factors of hotel keeping industry marketing prioritized to provide customers satisfaction?" constitutes present research main pivot. Purpose of "effective factors of hotel keeping industry marketing" is "services marketing combined elements" that includes product, price, distribution, promotion, individuals, process, physical documents, and utilization. Special explanations of above variables are given in the following.

1-price: the value of an article or service that seller claims from the customer.

2-product: product or outcome includes an article or a service.

3-to place an article or a service in an appropriate place or time is up to customer.

4-promotion: advertisement or promotion includes measures to establish "relationship with customers to introduce product, to instruct and inform customers".

5-individuals: includes those that provide customers with services.

6-physical documents: constitutes physical equipment and amenities to facilitate service delivery to customers. (Esmail poor, 2005)

7-utilization: the degree of effective use of each product agents and here it means staffs utilization in delivering services to customers. (Abtahi & Kazemi, 2001).

Above variables are studied as independent variable and dependent variable is “customer satisfaction”. Balance of an amount the customer pays as expenditure (money, time, energy and...) for what he receives through goods or services can be compatible or incompatible with his expectation. Virtually if the value perceived be equal to or more than customer expectation his satisfaction is fulfilled (Katler, 1999). To answer the research main question two secondary questions are designed that research assumptions are formulated upon their basis.

Is prioritizing hotel keeping marketing combined elements different from the views of hotels managers?

Is prioritizing hotel keeping marketing combined elements different from the views of hotels customers?

3-Reviewing Research Background

Lots of studies have been carried out with regard to tourism. Although we haven't reached an article or a research about how to use hierarchical analytical process to prioritize hotel keeping services marketing combined elements, we can refer to other researches in which hierarchical analytical process is used. (Moshiri, 2001)

AHP modified model has been introduced by Ismael Moshiri for group survey and decision making (Rajibun, 2004). He shows what problems exist in using AHP main model particularly in group decision making and how to overcome these problems using AHP modified model. This study has been carried out in automobile manufacturing industry as a case study. Prioritizing Insurance services marketing effective factors has been carried out by Mohammad Rajabun. He has prioritized the services marketing combined effects upon satisfaction of insurance companies' customers using AHP technique.

His research findings show that the advertisement factor has the greatest priority. Combining hierarchical analysis process and linear programming to determine outsource policy has been carried out by Maghsood Amiri and his coworkers. In this study in the first step, based on hierarchical analysis process, each of frozen chicken suppliers are ranked and their weight is computed and in the next step to maximize desirability derived from product purchase, a linear programming model has been used to identify purchase amount from each supplier based on their weight this article attempts to use data envelopment analysis concept to improve diagnosis power or each input efficiency profile model employment and to combine this model with hierarchical analysis to introduce a complete ranking from decision maker units. (Sarami & Shahryary, 2003) Franklin Liu and Lin Hi have introduced a hierarchical analysis process model to choose suppliers based on different criteria (Liu & Hai, 2004, 308). Tam and Tula have developed the application of hierarchical analysis process model in choosing from distance communicating companies on the basis of two criteria of price and quality and five second level indexes. (Tam & Umnala, 2001, 17) Fong and Young Choi have used hierarchical analysis process to choose final contractor (Fong & Choi, 2000, 547). Dezmi, Rabani and others have developed a decision making supporter model by applying hierarchical analysis process and by combining it with ideal programming to evaluate suppliers' choice. Ghodsipour and Obrain have developed a model that hierarchical analytical process is combined with linear programming to evaluate suppliers and to determine the amount of purchase from each of them (Ghodsypour, 1998).

4- RESEARCH METHOD

In this article using descriptive research whatever exists, is described without conceptual presumptions. Information gathering is performed using questionnaire designing method. Research statistical society includes hotels managers and customers' society in Guilan province. Information obtained from six questionnaire are prioritized through hierarchical analysis process AHP and software Expert Choice. To examine research hypothesis, descriptive statistic and K2 distribution were used.

5-Hierarchical Analysis Process Action

To solve problems through hierarchical analysis process, the problem should be defined carefully and its details should be designed in a hierarchical structure. At the highest level of hierarchy general aim is introduced. At the lowest level there are existent choices that are related to main aim through middle criteria positively or negatively.

Middle levels include pivotal criteria to evaluate main aim (first level). After creating hierarchy, different factors relative importance is determined. Evaluating these factors can take place through decision makers or problem designers. These views qualities are comparable by different degrees. In other words, individuals give their views with regard to one criteria and its impact upon any choice. Then these views are ranked and graded. Having passed integrated supervision stages, desirability of each choice is assayed mathematically and the choice owning the greatest numerical value is selected as the best one. Totally, each AHP problem deals with three general levels that first level is the problem general aim (customer satisfaction in this article), second level is evaluation criteria (secondary factors constituting customers from tourism services and hotels) and third level is choices (services marketing combined element).

There are three principles in statistical thinking that are related to decision making through AHP. (Asgharpur, 2002)

5-1. Drawing Hierarchical Tree

A questionnaire is designed to collect information from hotels managers. Totally managers of 30 hotels in Guilan province are surveyed using questionnaire to determine dimensions of customer satisfaction. Using this questionnaire following issues are announced on behalf of managers (table 1).

frequency	index
6	Appropriate behavior and interaction with customers
3	Velocity in providing the customers with services
4	Giving sufficient information to customers
1	Respect to customers
2	Employees sufficient competence
6	Services price
1	Gaining employees satisfaction
3	Understanding customers
2	Innovation
2	Service desirable face

After determining ten above indexes, through other questionnaire, common indexes were determined on behalf of all managers. So we removed uncommon indexes and added new but common indexes. Using foresaid questionnaire, seven common indexes were extracted from the view of managers and through the other questionnaire they were classified in to two general topics including “qualitative factors” and “factors determining competitive virtues”:

5-1-1. qualitative factors

- customers reliance upon employees
- velocity in delivering services
- appropriate behavior and interaction with customers
- customers understanding
- presenting noticeable and tangible attributes out of service

5-1-2. factors determining Competitive advantage

- innovation or creativity
- service desirable face
- Decision tree “customers satisfaction “from hotels tourism services In Figure 1 is shown.

5-2. priority determination through pair comparisons

Marketing combined elements include 1-price, 2-product, 3-distribution, 4-promotion, 5-documents, 6-individuals, 7-process, 8-productivity that constitutes independent variables of research, along with two main indexes (qualitative factors and competitive advantage factors) and their components are included in a questionnaire to perform pair comparisons by hotel managers.

Pair comparisons carried out on behalf of 30 hotels managers can be listed as below:

- 1- Comparison of competitive advantage and quality towards customer satisfaction.
- 2- pair comparison of competitive advantage towards competitive advantage
- 3- pair comparison of quality components towards quality
- 4- Pair comparison of competitive advantage components (including desirable conceptual picture, innovative attributes) towards marketing combined elements.
- 5- Pair comparison of quality components (including reliance capability, velocity, employees behavior, customers understanding, noticeable dimensions) towards marketing combined elements.

Pair comparisons results led to prioritizing marketing combined elements that are listed in table 2.

Table 2 - Results of the prioritization of tourism services marketing mix in hotel

productivity	documents	process	distribution	promotion	product	individuals	price
0.059	0.069	0.077	0.099	0.101	0.125	0.135	0.335

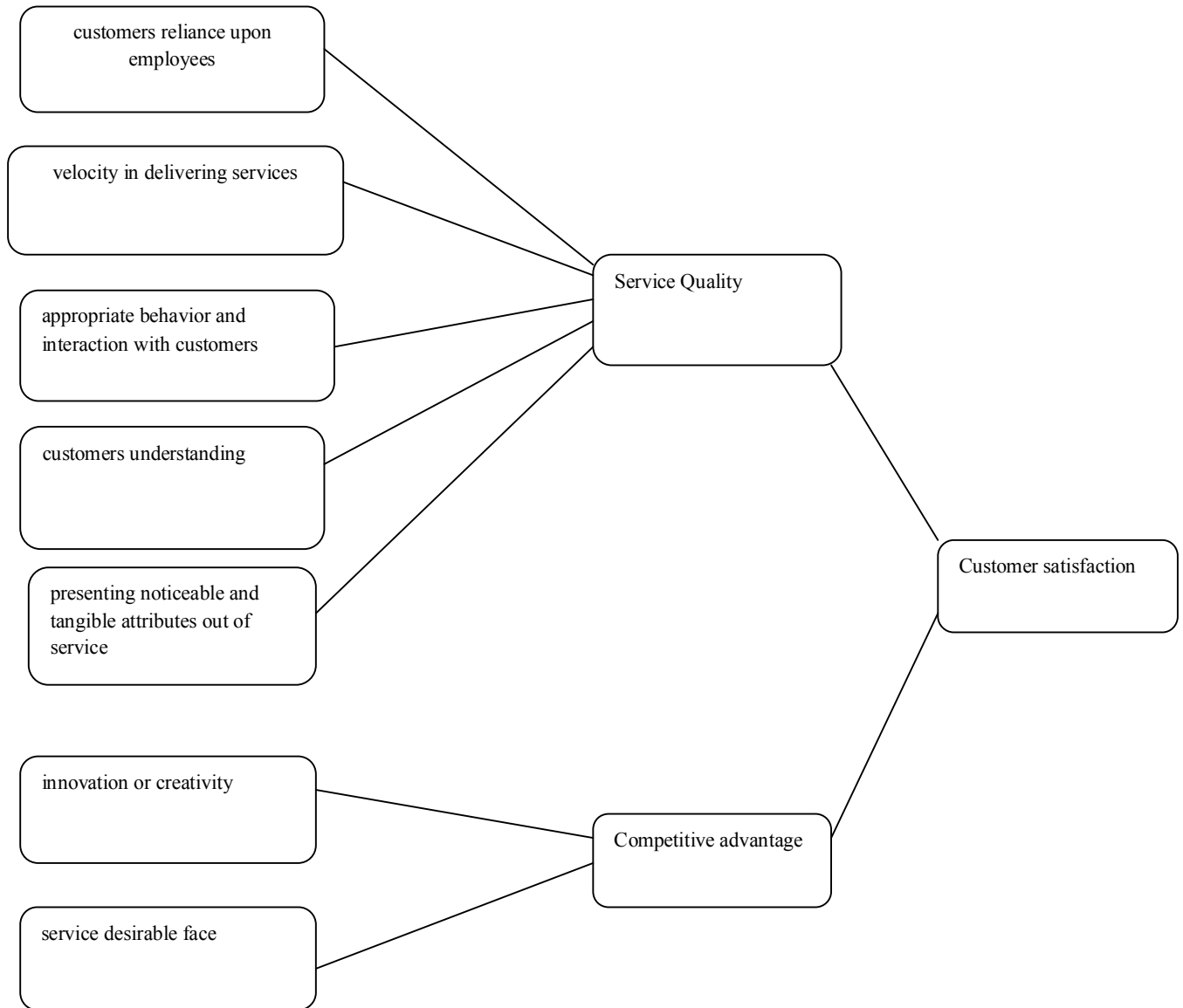


Figure 1 . Decision Tree customers

5-3. logical compatibility (hypothesis testing)

After performing pair comparisons and prioritizing tourism services marketing combined elements by hotel managers, again all of them were asked to assess the logicity of foresaid prioritization through likert five choices. Using prioritization logicity extent assessment, the study first hypothesis means:

H₀: prioritization of tourism services marketing combined elements are not different from the view of hotels managers.

H₁: prioritization of tourism services marketing combined elements are different from the view of hotel managers.

Hotel managers' abundance distribution is shown in table3 based on likert spectrum. Hypothesis testing was performed using k²distribution.

Table 3 - Distribution of the hotel managers Likert range (observed frequency)

Measure scale	1 Very few	2 few	3 medium	4 many	5 Too many	total
Answers frequency	2	3	5	7	13	30

To use this test table 4 shows significance of difference between k frequencies of computation k^2 tables of expected and shown. Since it is bigger so hypothesis H_0 is rejected and H_1 is accepted.

Table 4 - Analysis of the first hypotheses about

Measure scale	The observed frequency O	The expected frequency	O - E	(O - E) ²	(O - E) ²
					E
Very few	2	6	-4	16	2.7
few	3	6	-3	9	1.5
medium	5	6	-1	1	0.17
many	7	6	1	1	0.17
Too many	13	6	7	49	8.17

$$K^2 = \sum \frac{(O - E)^2}{E} = 12.71 \quad d.f = k - 1 = 5 - 1 = 4$$

$$K^2 \text{ valu } E \quad \alpha = 0.05 \quad d.f = 4 \quad k^2 = 9.49$$

Hotel customers were asked to assess the logicity of marketing combined elements prioritization through questionnaire. Frequency of 30 customers assessment, based on likert spectrum is shown in table (5).

Table 5- distribution of customer frequency based on likert spectrum

Measure scale	1 Very few	2 few	3 medium	4 many	5 Too many	total
Answers frequency	2	2	4	5	17	30

Using above table information second hypothesis means

H_0 : prioritization of tourism services combined elements is not different from the view of hotels managers.

H_1 : prioritization of tourism services combined elements is different from the view of hotels managers.

Table 6 is made to perform K^2 test and to determine significance of observed and expected frequencies difference. This table shows that computed K^2 is greater than table K^2 . so hypothesis H_0 is rejected and hypothesis H_1 is accepted.

Table (6) - The second hypothesis about

Measure scale	The observed frequency O	The expected frequency	O - E	(O - E) ²	(O - E) ²
					E
Very few	2	6	-4	16	2.7
few	2	6	-4	16	2.7
medium	4	6	-2	4	0.7
many	5	6	-1	1	0.17
Too many	17	6	11	121	20.17

$$K^2 = 26.44$$

$$K^2 = 9.49 \quad d.f = 4 \quad \Rightarrow \quad \alpha = 0.05$$

6-RESULTS

Prioritization of hotel keeping industry marketing combined elements in descending order is as the following: 1-price, 2-individuals, 3-product, 4-distribution, 5-process, 6-documents, 7-employees utilization. Examination of the first and second hypothesis indicates that priority of hotel keeping industry marketing effective factors are not the same either from the view of customers or managers. Prioritization of marketing combined elements shows that the price of hotels tourism services has the greatest priority from the view of hotels managers and customers. Important point is that the priority difference of factor price in proportion to the other marketing combined elements is relatively great. It seems that request for booking a room in a hotel is very sensitive towards the price, high prioritization of price on behalf of managers and customers can be due to passengers income low level and also the weakness of competition between hotels due to their few number at the province level. Although

in prioritization of hotel keeping marketing combined elements, price gains high priority on behalf of hotels customers and managers, first hypothesis examination shows that this prioritization logicality is different on behalf of managers and customers.

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