

MARKET SEGMENTATION AND TEMPORAL VARIATION IN IMPORTANCE-PERFORMANCE ANALYSIS. THE CASE OF A PRIVATE INDOOR CLIMBING CENTRE IN FRANCE

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1. Theoretical background

The sport manager seeks to maximize customer satisfaction in order to increase loyalty which therefore leads to greater profitability. Understanding the determinants of customer satisfaction allows better decisions in allocating scarce resources. Among the statistical tools to study the factors of customer satisfaction, Importance-Performance Analysis (IPA, Martilla and James, 1977 ; see several variations in Crompton and Duray, 1985) is widely recognized as presenting some advantages because it is simple to administer, simple to analyze by the means of basic computations and simple to translate into actions. Several extensions of the original technique were proposed first to take into account sampling variation by the means of confidence intervals, second to replace the self-stated importance weights by computing derived importance weights (from some regression analysis of an overall satisfaction measurement by the satisfaction attributes) and third to explore some market segmentation strategies.

2. Research question

In the classical quality improvement perspective, when some actions are taken from an initial study, they must be checked (and sometimes corrected). The goal of the paper is to consider pre-post customer satisfaction surveys in order to build some effective statistical tools to study the temporal variation of the importance-performance relationships (Anderson and Mittal, 2000). Moreover, these variations can be differentiated by market segments to develop more sophisticated market strategies.

3. Research design

Despite the fact that indoor climbing has become a popular activity (more than 800 000 participants in France), there are still few studies about this phenomenon and the management of public or private indoor climbing equipments. A first customer satisfaction survey was carried out in November 2011 in a French private indoor climbing centre. The questionnaire was designed considering the specificities of sports services (emotional and symbolic dimensions, co-production...) It comprises in particular 25 attribute importance measurements and 25 corresponding performance measurements, each rated on a 4-point Likert scale. These variables describe primary and secondary services, service quality and atmosphere. In addition, overall satisfaction was evaluated on an 11-level Likert. A census method was employed during one week long (n=921, response rate=67%). The same questionnaire and design (n=923, response rate=64%) were re-used in December 2012, few months after remedial works and services upgrading.

4. Data analysis

Two types of IPA were used. On the one hand, importance is directly evaluated by the customer (IPA1) and in the other hand, importance weights are estimated using a statistical method (IPA2). Statistical tests with a Bonferroni adjustment were used to study the temporal variations and to plot only significant evolutions, significantly different market segments (Farnum & Hall, 2007) or their interactions.

5. Results (IPA1)

From 2011 to 2012, there are greater satisfaction ratings in attributes corresponding to active steps in improvement works: sauna, fitness room, bar, relaxing spaces and shower cleanliness. The stability of high satisfaction assessments in primary services (keep up the good work!) must be noticed.

Several market segments were studied in 2012. Female have greater expectations than males about air-con, cleanliness and staff help. Young people give larger importance ratings to secondary services and conviviality when older ones focus on cleanliness and calm. On the whole, satisfaction drops with age. Expectations in route quality increase with sporting level. On the contrary, staff support is more crucial for beginners. The main innovation - a fitness room devoted to climbing - is acclaimed by experts but route renewal is under their criticism. New customers are generally more satisfied than older ones (route renewal, waiting time, price, cleanliness and calm). They show greater expectations in cleanliness, staff help, material renting and fitness equipment.

No interaction between time and markets segments was statistically significant.

6. Discussion and conclusions

IPA can be useful to study both market segments and their evolution. Intuitive plots are produced to help to manage the performance of attributes over time according to different customer groups. Nevertheless, IPA suffers from theoretical drawbacks by ignoring the relationship between importance and performance and considering that the link between overall

satisfaction and attributes satisfaction is linear. The three-factor theory suggests a more realistic picture with attributes adding values, others fulfilling minimal requirements and hybrids. Penalty-Contrast-Reward analysis (Brandt, 1987) is a statistical tool implementing these ideas. As IPA in this paper, it would benefit to be broadened by including market segmentation and temporal variations.

References

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