

# Application of Conjoint Analysis in Improving the Value of New Product Development: A Hotel Case Study Analysis

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## ABSTRACT

One of the most important elements of economic and business activity is developing a strategic marketing plan to improve growth prospects. One of the most important aspects of this in marketing is to understand the behavioral patterns of customers, in order to meet their needs and achieve business objectives. The consumer behavior analysis is key to establish the level of preferences expressed by the consumer towards a product or service. For this reason, conjoint analysis (CA) is one of the main models in the field of consumer research. This paper identifies the usefulness of CA as a marketing strategy in new product development (NPD). An application to “Forte Hotel Design” (presented by Lilien and Rangaswamy, 2004) is developed to highlight how CA can be an effective tool for marketing new products/services. Forte Hotels is a European hotel chain that wants to open a new facility in the United States. This research demonstrates that there are multiple ways to conduct marketing research for any product or service. While the Forte Hotel case study used segmentation and targeting tools in its original analysis, the study shows that CA can also be used to analyze this marketing problem and can lead to similar decisions. This study highlights the value of CA as a tool to evaluate product attributes and shows its value in helping to make marketing decisions. It also shows that there is more than one way to dissect a marketing problem. The original case was solved using segmentation and targeting marketing tools, but this study shows that CA can be used to effectively make marketing decisions on new product development that lead to the same results/decisions as other marketing tools. This study shows original ways of using CA, to dissect a service design problem in new product development and to facilitate both product management and project management.

## KEYWORDS

Case Study, Conjoint Analysis, Hotel Industry, Marketing, New Product Development

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## 1. INTRODUCTION

A famous question that global business leaders ask is, “What makes clients salivate over our new product?” Academic research points in the same direction finding that successful NPD is a basic foundation for firm success (Hauser and Dahan, 2007). A recent report supported by the Marketing Science Institute found that around 25% of effective firms’ present deals were inferred, by and large, from new items presented in the most recent three years (Hauser and Dahan, 2007). NPD has a positive impact on businesses and the entire marketplace. For instance, people have a remarkable use for cellphones; they can choose which specifications they want in their devices. Thus, in NPD, we have tools and techniques that make products unique, even if competitors have produced the same product.

Marketing tools and techniques help the producer to detect specific customer needs. Moreover, these tools are helpful to improve the environment that we live in. From an extensive marketing viewpoint, firms that build up the important authoritative structures and procedures to constantly and proficiently create new items will be more attuned to their clients’ needs. Direct correspondence with clients, which is a fundamental for new item improvement, permits firms to measure customer preferences and tailor items and administration to such requirements (Hauser and Dahan, 2007). This immediate client correspondence helps firms to obtain an abundance of valuable knowledge impacting each territory of the advertising blend – including valuing, appropriation channel, and advancement blend decisions (Hauser and Dahan, 2007). Moreover, projects that involve NPD should use the tools and techniques of marketing as well as CA as an alternative design tool, thus resulting in better decisions being made about the product that will be introduced to the market.

### 1.1. Objective and Contribution of the Study

As Hauser and Dahan (2007, p. 55) have mentioned, projects that involve “new product development should utilize CA as an alternative design tool”, resulting in better decisions about the product that it is going to be introduced in the market. The Forte Hotel Design, the case presented by Lilien and Rangaswamy (2004), is going to be analyzed through the use of CA. In this case, this hotel chain wants to open their first hotel in the United States. They have experience in the European market. Therefore, they want to know what is the best combination of attributes that their facilities must have in order to succeed in the American market. The hotel chain will focus its marketing strategies on both European and American business travelers.

The purpose and objective of this study is to use the data and information from the Forte case study presented by Lilien and Rangaswamy (2004) in order to show how CA can be used to develop the “new hotel” as they enter the US market. They have only been present in the European market. The contribution of this study is that it presents how CA can be used to analytically develop the new US hotel market and NPD (in general). In addition, this study contributes by discussing the role and applications of CA in project management and NPD environments as well as presenting how conjoint analysis fits into the typical project management life cycle.

## 2. THEORETICAL AND RESEARCH BACKGROUND

### 2.1. NPD

#### 2.1.1. *New Product and Service Design*

Product design is one of the most popular topics in the marketing field (Nisula, 2013). Its goal is to focus the customers’ attention, especially if there are multiple companies competing in the market with the same product (Acar et al., 2014). A product is analyzed based on three levels: core product, tangible product, and augmented product (Lilien, Rangaswamy and De Bruyn, 2013). These are known as the three levels of product development. Core product illustrates the satisfaction of the clients as well as the center of the underlining needs or wants. For example, car companies have core products,

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