



## Reinforcing the Rave Reviews of Rumours in Product Launch – A study done through Text mining

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### Short Abstract

The advancement in communication technology and prevalence of social media significantly creates rumours due to information entropy at the time of launch of new product in marketplace. It affects the perception of the customers. This research aims to identify the rumours created at the time of launch of product and its impact. The rumours created during the launch of Kia Seltos (SUV car) has been measured in the present research using text mining methods. Text mining is used to extract the rave reviews before and after the launch of the Kia Seltos. The results show that unprecedented rumours have emerged about the riding, pricing, features, infotainment, spacing and handling attributes of the car. The positive rumours about the comfort riding is having an impact at the time of launch of the product.

**Key words:** Rave Reviews, Text mining, Rumoured difference

### Introduction

Consumer behaviour is unpredictable. The successful promotional campaigns establish a positive change in the behavioural pattern of the consumers and initiate positive rumours at the time of launching new products. The prevalence of social media significantly creates rumours due to information entropy at the time of launch of new product in the marketplace. It affects the perception of the customers. Rumours affect perceptions about the product (Kimmel, 2004). For example, in India, when Kia Seltos (SUV Car) was launched in August 2019, the bookings were high, even though other manufacturers are facing a downturn in the market. The Kia website received two lakh hits and 1,628 bookings on the first day of the announcement. Before launch, Kia Seltos received 32,000 bookings. It sold 6200, 7500, 12854 and 14005 cars respectively during August, September, October and November 2019. But it decreased to 4645 cars in December 2019. In this context, the present research is motivated to identify the 'rumoured difference' during the launch of a new product. The research objectives are as follows:

- To identify the commercial rumours about the product attributes created by the information entropy at the time of introducing a new product in the marketplace.
- To measure the impact of the rumoured difference in the marketplace immediately after the launch of the product.

We define the 'rumoured difference' as the anxieties of the customers about the attributes of the product before and after the launch in the marketplace.

### Major Literature Review & Hypothesis

Subin and Anandakuttan (2016) discovered that the state of anxiety and arousal have a favourable association with the consumer's intention to share the rumour about the product. Kobinah (2013) investigated the effect of brand commitment on consumer decision-making during the outbreak of commercial rumours. Howell & Mizerski (2007) used the information processing theory to study the impact of rumours and conclude that persuasive communication is essential to manage commercial rumours. Kobinah et al. (2003) developed an experiment to test the effect of cultural environment on the choice of a spokesperson to counter the commercial rumours. The current research is based on the estimation of 'rumoured difference' at the time of launch of the new product.

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We select the launch of Kia Seltos in India as the sample for this study. Kia Motors launched its first car on August 22, 2019, during the time of automobiles' sales slowdown in India. Its sales during the first three months were higher than that of its competitors. Its sales dropped 67% during December 2019.

We study this phenomenon and establish the hypothesis that information entropy among the customer about the attributes of the car creates rumoured difference. We establish null-hypothesis that there is no significant difference between the reviews before and after the launch of the vehicle.

## Methodology

We follow the text mining process created by Netzer et al. (2012) for extracting the rave reviews of the Kio Seltos before and after launch in the marketplace. The five stages used for text mining are as follows.

Stage 1: We download 342 web pages, which contain the review for Kia Seltos from a given forum site in HTML format and segmented into two groups, i.e., before and after the launch of Kia Seltos.

Stage 2. HTML tags, images and advertisements are cleaned from the downloaded files.

Stage 3. The product attributes such as design, interiors, features, infotainment, spacing, engine performance, riding, handling and pricing are extracted.

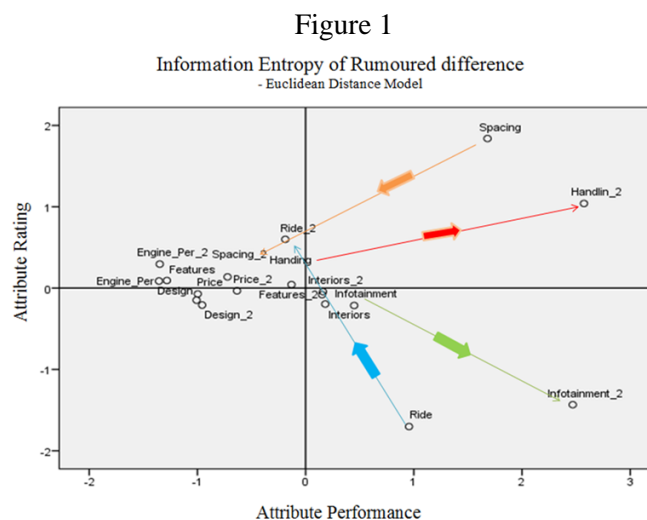
Stage 4.(Chunking): The text is divided into informative units such as threads, messages, and sentences based on the attributes. The equivalent meaning of attributes has been identified based on the online Webster dictionary..

Stage 5. We extract the relationship between products and sentiment of the relationship. We use KH-Coder to detect the attributes and their rating. The word "recommend" has been treated distinctively with "satisfaction" in the Likert scale. Quantitative summaries of content on attributes are used to represent consumers' opinions (Chintagunta 2010; Godes 2004, Liu 2006).

## Data Analysis and Results

The 342 web pages contain 9,172 reviews. The reviews relating the attributes are 2112,1667, 2834 1683, 1967, 2128, 2542, 1458 and 2722 for design, interiors, features, infotainment, spacing, engine performance, riding, handling and pricing respectively. However, there are only 624 reviews for the attribute 'infotainment' before the introduction of Kia Seltos. Hence, the sample size has been determined as 624 reviews for each attribute. To identify the attributes that create rumours, we use a paired comparison test and to find out the 'rumoured difference,' multidimensional scaling is employed.

The output shows that there is a significant difference among the anxiety of the respondents regarding six attributes, i.e., riding, pricing, features, infotainment, spacing and handling of the car. The result of the multidimensional scaling reveals four distinctive forms of rumoured differences (Fig. 1)



The anxiety towards the utilization of cabin spacing decreased after the introduction of the car. In the case of the attributes - infotainment and engine performance, the anxiety of using has been increased. Still, the performances of the vehicle in those aspects have been decreased after the introduction of the car. The

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anxiety towards handling the vehicle and comfort are riding increased, but vehicle performance towards riding diminished.

### **Discussion and Implication**

There were positive rumours about the riding and handling of the car at the time of launch. Before the launch of Kia-Seltos, there is an expectation that Kia will provide uncompromised riding and ease handling. However, after the introduction of the car, the commuters feel that it is not as much as expected. That may be the reason that the sales of the Kia Seltos decreased. The information entropy of the Ki Seltos lies in the comfort riding (spacing and riding).

We conclude that text mining with the rave reviews enables to identify the rumour during information entropy at the time of product launch. Dissecting the rumours created by information entropy allows the marketer to solve the problems on customers' anxiety during the period of product introduction.

### **Major References:**

1. Howell, G., Mizerski, D., & Mizerski, K. (2007). Testing online strategies for responding to a commercial rumor. *Enhancing Knowledge Development in Marketing*, 270.
2. Hu, F., & Trivedi, R. H. (2020). Mapping hotel brand positioning and competitive landscapes by text-mining user-generated content. *International Journal of Hospitality Management*, 84, 102317.
3. Kimmel, A. J. (2004). Rumors and the financial marketplace. *The Journal of Behavioral Finance*, 5(3), 134-141.
4. Kobinah, T. (2013). Rumour outbreak: the impact of personal characteristics on consumer decision-making.
5. Kobinah, T., Mizerski, D., & Mizerski, K. (2003). The effect of cultural allegiance and values on the perception of spokespersons denying commercial rumours. *Asia Pacific Journal of Marketing and Logistics*, 15(1/2), 39-50.
6. Netzer, O., Feldman, R., Goldenberg, J., & Fresko, M. (2012). Mine your own business: Market-structure surveillance through text mining. *Marketing Science*, 31(3), 521-543.
7. Sudhir, S., & Unnithan, A. B. (2014). Measuring consumer motivations to share rumors: Scale development. *International Journal of Online Marketing (IJOM)*, 4(3), 51-67.