

Schlauri Abstract:

Marketing teams in the textbook industry are often concerned with which attributes of a textbook are most desirable for professors in order to develop better marketing strategies for promoting their textbooks. The textbook market is an example of a market that does not have a straightforward marketing approach from the producer to the consumer. Instead, marketing teams must utilize a third-party technique by appealing to the needs of the professors, who then act as third-party promoters by requiring students, the consumers, to purchase the textbook. In order to gain a clearer picture of which attributes in a mathematics textbook affect the book's desirability, we conducted a Principal Component Analysis (PCA). According to our findings, three groups explained the majority of the data. These are mathematical thinking which contains attributes used to meet students' basic needs, problem solving skills aimed at improving the student's knowledge and lastly content coverage which contains attributes related to the scope of the calculus textbook.

With these groups known, a marketing team can then make more informed decisions about how to improve customer satisfaction with their products, segment their market, and modify their existing products without having to face overwhelmingly large datasets.