The paper by Tsai, Dev, and Chintagunta (2015) provides new insight into the rebranding question in empirical marketing literature. The research question they address is: what's the effect of rebranding on firms performance (such as profits and revenues)? They focus on the hospitality industry (namely, hotels in the United States) and build linear models to quantify the outcome of rebranding by separating it into the brand as well as property-brand interaction effects.

The data in the paper covers characteristics and business information of franchised hotels in the U.S. spanning from 1994 to 2012. The source is the PKF Hospitality Research annual national survey of the hotel industry. The available features are the business name, affiliation, characteristics (e.g. has restaurant/spa/golf course or not), average daily rate, the percentage of occupied rooms, franchise fees, and so on.

The authors divide the data into the "treatment group" and "control group". The first group has 260 hotels that switched brand affiliations and the second group consists of 2750 hotels that did not rebrand.

The main regression model is $Y\_imt = alpha + lambda * Rebrand\_imt + X'\_imt * beta + Fixed Effects + Epsilon\_imt$, where the outcome variable is the performance metric such as occupancy rate or profit. The rebrand is the dummy variable and equals to 1 if the hotel rebranded, X is a combination of hotel features, and lambda is the average effect of rebranding.

To address the issue of endogeneity by rebranding effect, the authors use an instrumental variable approach. The IV they identity is the continuing part of franchise fees and then interact them with the hotel fixed effects.

The extended research question to ask: how does the rebranding of hotels change customers' brand perception?

Besides measuring the performance by revenues, online reviews by customers are a great source for monitoring and estimating customers' opinions and sentiments towards hotels' services. There is huge volume of such information available on websites such as TripAdvisor and Booking.com. By performing natural language processing techniques such as sentiment analysis and topics modeling, researchers could obtain more updated data on customers' needs and brand perception. By comparing the reviews before and after rebranding, we could estimate whether the brand names play an important role in influencing customers' booking choices and staying experience. The original paper divides the hotels into the economy, middle-price, and luxury brands to account for heterogeneity. Similarly, we can observe whether the reviews associated the different hotels' classes are different and identify the important factors to satisfy their needs. The authors also mention that hotel owners face uncertainty in the rebranding choice. The online review data could also potentially provide evidence for whether the hotel should be rebranded or not.

Reference

Tsai, Yi-Lin, Chekitan Dev, and Pradeep Chintagunta (2015), "What's in a Name? Assessing the Impact of Rebranding in the Hospitality Industry," Journal of Marketing Research, 52 (6), 865–78.