PRIVATE HOUSEHOLDS' PREFERENCES FOR PRODUCT BUNDLES IN THE ENERGY SECTOR

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Overview

At present the German energy sector is highly competitive, i.e. energy consumers on average can choose between around 130 out of the overall more than 1,400 different suppliers (Bundesnetzagentur/Bundeskartellamt, 2017). Furthermore, the battle for customers is getting steadily tougher and demanding for the incumbent energy utilities as the rapidly increasing degree of digitalization is stimulating the market entry of competitors from other sectors (e.g. IT or telecommunication companies) and enables innovative business models. For instance, a German email service provider has started to sell electricity and gas to its customers. However, especially the numerous municipal utilities in Germany have the possibility to counter these offers with own products – especially mixed product bundles – as they traditionally cover a wide range of products and services (e.g. energy, water, local public transport, parking garages, public swimming pools, telecommunication).

The objective of this paper is, hence, to examine the attractiveness of integrated product bundles (e.g. comprising electricity, gas, telecommunication, public transportation) from private households' point of view, as research on this topic is sparse, especially if it involves energy. Product bundles are already common in the telecommunications industry and examined in several studies (e.g. Mikkonen et al. 2015, Ranaweera and Karialuto 2017, Pereira et al. 2013), and the energy sector is following the telecommunication sector in undergoing a comparably substantial transmission from traditional business models to more dynamic and integrated models (Oseni and Pollitt 2017). However, our study is among the first to scientifically investigate the motivators for switching to a mixed (cross-sectoral) product bundle including energy, based on empirical data.

Methods

We carried out a survey in April/May of 2017 among residential customers of seven mainly municipal energy utilities located in Southwest Germany. Using data from 3,747 consumers, we performed a binomial logistic regression to analyze the differences between interested and uninterested consumer segments. We focused on the influence of product attributes (e.g. simplified billing, flat rate, price guarantee), provider characteristics, socio-demographic, attitudinal and household characteristics, and consumers' preferred information and communication channels on the willingness to switch to a product bundle in the near future.

Results

Our estimation results explaining households' intention to choose a product bundle in the energy sector can be summarized as follows: (1) product bundles are of interest to about 1/3 of all respondents; (2) the product attributes price guarantee, flat rate, and simplified billing have a positive effect, while lower costs or contract cancellation possibilities seem to be less important; (3) energy utilities and technology or internet companies are the preferred providers; (4) interested consumers are less likely to already produce electricity and attach lower importance to environmental aspects, as they are less likely to support the energy transition and have a green electricity tariff; (5) interested consumers are more likely to have recently changed their attitude towards energy and live in larger households and urban areas; (6) knowledge of or familiarity with a comparable product and the intention to purchase a smart home product have a positive effect; and (7) price comparison websites are more likely to be the main energy-related information source and social media or apps are the preferred channel for communicating with the supplier.

Conclusions

Our findings show that potential adopters of a product bundle are best described by their preferences for convenience and price guarantees, their technological openness (smart home, preference for digital communication and information channels), and the lower importance they attach to environmental attributes. Furthermore, household characteristics seem to be less important in explaining the differences in purchase intention between consumers. Finally, product bundles are currently of interest to about 1/3 of all respondents. This demonstrates that product bundles can be a very interesting means to gain and retain customers, since it is attractive for a large consumer group. Our results can help decision-makers in developing marketing strategies for this promising type of product.

References

Bundesnetzagentur/Bundeskartellamt, 2017. Monitoringbericht 2017. December, Bonn, Germany.

Mikkonen, K., Niskanen, H., Pynnönen, M., Hallikas, J., 2015. The presence of emotional factors: An empirical exploration of bundle purchasing process. *Telecommunications Policy* 39, 642-657.

Oseni, M.O., Pollitt, M.G., 2017. The prospects for smart energy prices: Observations from 50 years of residential pricing for fixed line telecoms and electricity. *Renewable and Sustainable Energy Reviews* 70, 150-160.

Pereira, P., Ribeiro, T., Vareda, J., 2013. Delineating markets for bundles with consumer level data: The case of tripleplay. *International Journal of Industrial Organization* 31, 760-773.

Ranaweera, C., Karjaluoto, H., 2017. The impact of service bundles on the mechanism through which functional value and price value affect WOM intent. *Journal of Service Management* 28 (4), 707-723.