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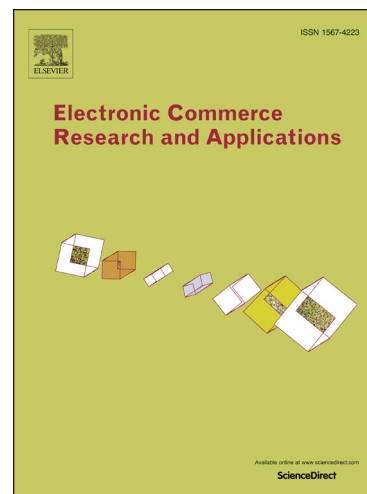
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Impacts of service uncertainty in bundling strategies on heterogeneous consumers

Zichen Zhang^{a, b}, Xinggang Luo^{a*}, Chun Kit Kwong^b, Jiafu Tang^a and Yang Yu^a

^a College of Information Science and Engineering, Northeastern University, Shenyang, Liaoning, P.R.China

^b Department of Industrial and Systems Engineering, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong, P.R.China

Abstract: More e-commerce firms bundle the product with the service and the service uncertainty arising in e-business influences the purchase choice of heterogeneous consumers. Traditional literature assumes the qualities of product or service are distributed at the fixed levels to segment consumers who have the specific preference. In this paper, we adopt uncertain-level services that guarantee the bound or range of the service quality for the purpose of market segmentation in e-business. By using the linear interpolation in the analytical modeling, this paper studies the price competition when fixed-level and uncertain-level services are vertically differentiated between bundling and individual sales. The bundling discount plays different roles according to the degree of service uncertainty in e-business, because the cannibalization effect may drive product-service bundling or individual sales out of the market. Experimental results show the service uncertainty is effective for heterogeneous consumers when the constant-quality of product is low or the cost is insensitive to the quality. However, the bundling discount may contribute or counterbalance the impact of service uncertainty according to the bundling type.

Keywords: bundling strategy; service uncertainty; heterogeneous consumers; analytics; price competition

Footnotes

¹ Wu, Hitt, Chen and Anandalingam (2008) illustrated Hanson and Martin (1990) as an example of full mixed-bundling in p.610.

² Other similar definitions are also referred to as MB-1 or MB-2 in Prasad, Venkatesh and Mahajan (2010) and MBP or MBN in Banciu, Gal-Or and Mirchandani (2010).

³ For ease of exposition, we define:

- 1) “FH” and “FL” represent the fixed high-level service and the fixed low-level service; “U” represents the uncertain-level service.
- 2) “P+FH” represents the individual sales of the product and fixed high-level service, while “PFL” represents the bundling sale of the product and fixed low-level service. “P+U” and “PU” are in the same way.

* Corresponding author. E-mail: xgluo@mail.neu.edu.cn. Postal address: No.11, Lane 3, Wenhua Road, Heping District, Shenyang City, Liaoning Province, P.R.China.

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