

Managing Advertiser and Subscriber Revenues for Online Platforms with Time Varying Consumer Heterogeneity

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Abstract

Online platforms need to strike a balance between advertiser and subscriber revenue streams. Getting more viewers for ad-free subscriptions results in fewer viewers for advertisers. This two-sided market situation calls for joint pricing decisions. Moreover, the demand for the platform's content will often have a time variable demand pattern with predictable seasons of high and low demand. Such is the case of many news portals, online knowledge portals, video streaming platforms, etc. We consider the revenue management problem for such a two-sided market case. Consumer valuations in this case are heterogeneous, thereby allowing segmentation into high and low valuation segments. Our model allows for time varying heterogeneity in consumer valuations as is the situation in the case of news portals or video streaming platforms. The platform's decisions are about the subscription prices, where we consider three cases: low subscription fee, high subscription fee, or no fee at all. We study the platform's pricing decisions during times of high and low demand and find the price regimes that should follow the demand pattern.

Keywords

Revenue Management; Online Platforms; Two-sided markets; Pricing; Heterogeneous valuations

Biography

Vinaysingh Chawan is a Faculty in the Operations Management and Quantitative Techniques area of IIM Indore, India. His research interests include mathematical modelling, simulation, MIS, DBMS, auctions and revenue management. He teaches Operations Management core and Revenue Management elective courses in the MBA program at IIM Indore. He graduated with a dual degree in Mechanical Engineering from IIT Bombay and is a Fellow of IIM Ahmedabad.