Informative Advertising in a Monopoly with Network Externalities

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Abstract

This paper studies the incentives for a monopolistic firm producing a good with network externalities to advertise when consumers face imperfect information and therefore must search to realize their actual willingness to pay for the good. A firm may disclose market information through advertising if it finds it beneficial. The results suggest that advertising is more likely in the case of a negative network effect and less likely with a positive network effect. When a monopolist faces a strong network externality, it chooses to support the maximum possible network and charge a price equal to the value of the externality. Finally, depending on the value of the search cost and type of network externality, a monopolist may use different advertising content: no information, price information only, product characteristics, or both price and product characteristics. Specifically, if all consumers have the same search cost, as the search cost grows the firm must include more information in the advertising content, while as the network externality changes from negative to positive, the firm reduces the content. In contrast, if consumers differ in their search costs, the firm tends to provide more information as the externality changes from negative to positive.

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Keywords: Advertising, Search, Network Effects, Consumption Externality, Bandwagon, Snob Effect, Monopoly, Industrial Organization

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