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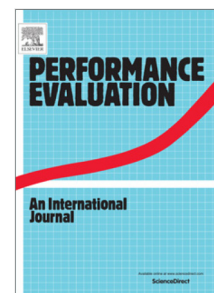
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Provisioning of ad-supported cloud services: The role of competition

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Abstract

Motivated by cloud services, we consider the interplay of network effects, congestion, and competition in ad-supported services. We study the strategic interactions between competing service providers and a user base, modeling congestion sensitivity and two forms of positive network effects: network effects that are either “firm-specific” or “industry-wide.” Our analysis reveals that users are generally no better off due to the competition in a marketplace of ad-supported services. Further, our analysis highlights an important contrast between firm-specific and industry-wide network effects: Firms can coexist in a marketplace with industry-wide network effects, but near-monopolies tend to emerge in marketplaces with firm-specific network effects.

1. Introduction

Cloud based services are increasingly becoming the norm. While cloud-based email applications have been around for decades at this point, other cloud services are quickly replacing a wide variety of applications that used to be run

[☆]Extended abstracts corresponding to this work appear in the proceedings of IFIP Performance 2014 [1] and Allerton 2014 [2].

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