

Accepted Manuscript

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

Jayakrishnan Nair, Vijay Subramanian, Adam Wierman

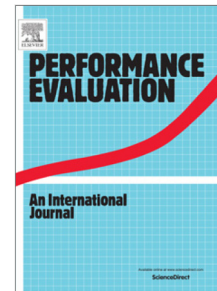
PII: S0166-5316(17)30081-0
DOI: <https://doi.org/10.1016/j.peva.2018.01.001>
Reference: PEVA 1948

To appear in: *Performance Evaluation*

Received date: 27 February 2017
Revised date: 19 August 2017
Accepted date: 8 January 2018

Please cite this article as: J. Nair, V. Subramanian, A. Wierman, Provisioning of ad-supported cloud services: The role of competition, *Performance Evaluation* (2018), <https://doi.org/10.1016/j.peva.2018.01.001>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



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

Jayakrishnan Nair

IIT Bombay

Vijay Subramanian

University of Michigan

Adam Wierman

California Institute of Technology

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].

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات