

Department of Information Systems,
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Seminar Announcement

*Lock-in Customers and Lock-out Competitors:
How Does the Introduction of Open-Source Software Change
the Pricing Behavior of Proprietary Software Vendors?*

by

*Professor Kevin Zhu
The Rady School of Management
University of California, San Diego*

Date: 2 October 2008 (Thursday)

Time: 11:00 am – 12:30 pm

Venue: Room 4379, ISOM Conference Room (L17/18)

~~~~~ All interested are welcome ~~~~~

## Abstract

“Lock-in customers and lock-out competitors” is an important strategy for software vendors, who attempt to lock in customers by creating substantial cross-vendor switching costs. This paper examines whether such a lock-in strategy will indeed, as commonly believed, benefit proprietary software vendors. Developing a two-period duopoly model in which customers are heterogeneous in their preferences and willingness-to-pay, we find that the answer could be either way. We derive conditions under which the lock-in strategy either benefits or hurts software vendors. When proprietary software competes against open-source software, lock-in strategy actually hurts the proprietary software vendor. But if the competition is between two proprietary software vendors, lock-in strategy is beneficial under the following two conditions: (i) the customers’ willingness-to-pay is high, and (ii) the relative dispersion of customers’ willingness-to-pay is broad. Lock-in is found to be socially undesirable because it always reduces social welfare, though certain customers may be better off with lock-in. Finally, this study shows that the lock-in strategy works differently for different types of customers in the software market (i.e. foresighted vs. myopic customers).

**Key words:** Software strategy, competition, lock in, switching costs, proprietary software, open-source software, game theory

About the Speaker:

**Kevin Zhu** received his Ph.D. from Stanford University, and is currently a tenured associate professor in the UCSD Rady School of Management. His research focuses on innovation diffusion, standards, technology adoption in global environments, economic impacts of IT on firms/industries, and information transparency in supply chains. His research has been published in the top academic journals such as *Management Science*, *Information Systems Research (ISR)*, and *MIS Quarterly*. He serves on NSF research proposal review panels and holds editorial positions at *ISR*, *MS* and *JAIS*. He also received several Best Paper Awards in the field. Dr. Kevin Zhu was recently awarded the prestigious CAREER Award from the U.S. National Science Foundation (NSF). See more information at <http://rady.ucsd.edu/faculty/directory/zhu/>.