Lock-in Strategy in Software Competition: Open Source Software vs. Proprietary Software, by K. Zhu and Z. Zhou, Information Systems Research, 23(2): 536-545

## Paper finds with open source getting traction, software companies need new strategies to retain customers

Having an edge over the competition is essential for business success; but, how can a company vie with a competitor that is offering its product for free? Are established business strategies relevant in this environment? A new paper just published in *Information Systems Research* explores this dilemma by examining the use of established business strategies by proprietary software companies in a marketplace where Open Source Software (OSS) is offered as a free or low-cost product. The OSS movement involves many new players, for example, Google, FireFox, Linux, Apache, Red Hat, OpenOffice, and Open ERP.

In contrast to proprietary software, OSS offers consumers free access, free distribution and free modification of software. This new type of software poses a serious challenge to proprietary software companies that commonly use "lock-in" strategy (such as releasing new versions of software and forcing consumers to upgrade) to create customer dependence on a product. "Lock-in" strategy has made it difficult for consumers to switch vendors without incurring substantial costs.

Although employing this strategy has been successful for proprietary software companies competing against other proprietary companies, Professor Zhu and his coauthor, based on game theory, found that the use of "lock-in" strategy is counterproductive in the new OSS marketplace reality.

This marketplace shift has been defined by forward-thinking consumers who are aware that OSS is a viable alternative to the products of software giants like Microsoft, Oracle or Apple.

"Consumers are smart," Professor Zhu said. "They can sense the change and have become reluctant to use proprietary software."

Professor Zhu's findings indicate that software companies need to rethink their strategies because OSS has altered the behavior of software vendors and customers.

"OSS has changed the nature of the game." He said that although OSS is still small in relation to proprietary software goliaths, the big companies are paying attention. He noted that software giants began to open up and launch OSS compatible software. This is good for innovation which will ultimately benefit the consumers and the society at large.