Platform Contracting and Exclusivity

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Abstract

Platforms care about the quality of components they host, typically because their customers prefer using high-quality components. For example, a computer operating system is more popular -- and thus more profitable -- when the software is high quality. Thus, the total quality of platform plus component (here: software) matters. Some platforms offer special arrangements to high-quality firms -- for example, Apple promotes high-quality Macintosh software on the Apple website. Others shut out low-quality firms completely, depending on what platform buyers want to have. Nintendo has established a reputation for screening out low quality games from their game consoles.

In practice, platform owners use specific contracting and screening tools to control the quality of components running on the platform. Examples include pricing, product specifications and technical standards, and exclusivity. Exclusivity may increase competition among platforms for a premium component, and this may make it valuable to shut out low-quality components.

We model the optimal design of contractual relationships between components and a platform whose profit function depends on network effects. The platform directly profits from having high-quality components in the regime (common values). Platforms deal with an adverse selection problem because component providers can be of different types. They also reduce moral hazard between the component and the end-consumer by observing the component provider's effort to add quality to the transaction.

Our paper offers new insights into platform-contracting environments with common values. In particular, we emphasize that platforms may distort the quality level specified in their contracts for two reasons. First, they may distort quality to achieve separation under adverse selection, and this distortion may be further modified by moral hazard. Second, they may account for indirect network effects by shutting out some types of components. The paper thus offers some new insight into the relationship of platform contracting with two-sided market effects.