As platform based software systems have become popular bases of products and services across industries, a critical question arises in terms of the governance of these systems for firm survival and performance. The platform owner needs to decide on the governance mode for the platform, which in turn influences the two challenges of the platform owner: how to create new knowledge and how to appropriate profits from the new knowledge. A platform owner can choose the traditional hierarchical governance by employing developers to write apps for its platform. Alternatively, it can use a governance mode that involves third party developers to write apps for its platform. This latter mode of governance is called Platform governance mode. The traditional hierarchical governance often faced tradeoffs in achieving both the creation and appropriation. The prevailing assumptions in the IS literature are that some of these tradeoffs are eased by the platform governance mode. However, we know of no systematic study that examines about how well platform governance aligns knowledge creation and knowledge appropriation objectives as compared to hierarchy governance.

With data from an experiment with professional software developers, we test our model of governance and developer knowledge creation and appropriation. We examine both the direct effects of the governance mode on the two goals of knowledge creation and appropriation and the indirect effects of the governance mode through the mediation of the psychological ownership and territoriality.