

產品創新之研發聯盟*

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本文旨在提供一簡單模型分析產品創新與研發不確定性下之研發聯盟，並探討不同聯盟綜效之聯盟均衡、廠商預期利潤以及新產品問世時間。主要結果顯示當產品市場之競爭效果十分大時廠商可能選擇獨立研發而不組成任何聯盟，而若聯盟廠商間研發領域互補性較高，則產業中廠商形成互補聯盟為均衡的結構；反之當同質廠商研發合作之規模效果大時則全體聯盟為均衡。研發聯盟可縮短產品問世時間，當廠商各研發互補性高時，互補研發聯盟之產品問世時間最早，反之當研究規模效果大時則全體聯盟可提供最早產品問世時間。

關鍵詞：研發聯盟，產品創新，研發不確定，互補聯盟，同質分工聯盟，無集體背離之納許均衡

Research Joint Venture for Product Innovation

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ABSTRACT

This paper develops a simple model to study research joint ventures (RJV) for product innovation with uncertainty. Equilibrium RJV structure, members' expected profits and expected time for successful product innovation are analyzed in our framework. The results demonstrate that the equilibrium RJV structure is non-coalition if the competition effect in the product market is relatively large. Complementary coalition is obtained if there exists better synergy of complementary RJV. Grant coalition is shown to be the equilibrium when the scale effect of homogenous RJV is relatively large. Our study also suggests that complementary coalition provides earlier product innovation than others if the synergy is relatively large. Otherwise grant coalition provides earlier innovation.

Key Words: Research Joint Ventures, Product Innovation, Innovation Uncertainty, Complementary Coalition, Homogeneous Coalition, Coalition-Proof Nash Equilibrium