

新興科技與風險治理

New Technology and Risk Governance

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摘要

以資訊化經濟開展而來的全球科學與技術競爭，在二十世紀末進一步的延伸到基因、奈米與光電科技，透過創新與研發利用的轉化構成「創造性破壞」的突破，也為未來人類社會生活、醫療或行動產生劇變的衝擊。為了維持全球的競爭優勢，此新興科技在近二十年來成為世界各國科技發展與政策的焦點，取得科研的領先成為新型態經濟競爭法則的圭臬。然而，此新興的創造性破壞牽涉的不只是經濟與技術的領域，同時產生對於人類行動、倫理、認同、隱私、健康或生態的衝擊，並構成敏感性的社會爭議風險。鑑於此，先進工業國家在科技決策上，莫不重視這些現代科技所共生演化的全球化風險，而提出新的風險治理典範，以期建構透明、參與的風險溝通機制而強化科技決策的民主正當性。正當我國也急速發展這些新興科技工業，檢討與促使各界正視並建構全球科技治理與決策的重要模式，為本文的首要標的。

關鍵字：新興科技、科技政策、科技決策、創造性破壞、風險治理、風險溝通、科技民主、決策正當性

Abstract

As the information economy grows, the international competition increases in the fields of genetic, nano-, and information technology in the 21st century. Through innovation and R&D, this competition has transformed into a kind of 'creative destruction' and become the focus of international technological and policy in recent two decades. Technological R&D is a new yardstick by which to measure economic competition. This new, innovative creative destruction involves not only economic and technological fields; it also influences human actions, ethics, recognition, privacy, health and economy. In light of these problems, advanced industrialized countries tend to promote a new paradigm of risk governance which has become a trend of global risk policy-making. This paradigm is developed to construct a transparent and participative risk communication mechanism for strengthening the legitimacy of technological policy-making and public trust. As Taiwan is rapidly developing these new technologies, it is the purpose of this article to review and encourage all sectors to face up to and to establish a key model of global technological governance and policy-making.

Keywords: New Technologies, Technological Policy, Technological Policy-Making, Innovative Destruction, Risk Governance, Risk Communication, Technological Democracy, Legitimacy of Policy-Making

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