

# **Should Emerging Technologies Follow or Lead Social Issues?**

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## **Abstract**

There are two main pathways in which interest in new technologies is followed by their emergence to serve the needs of society. The inside-out pathway sees the development from inside technical fields (science and technology, energy, agriculture, industry, health, etc.) to fulfill new niches. The outside-in pathway follows felt needs of the society which demand fulfillment from the technical side. The inside-out process can come from development of a specific field, convergence of various fields or transdisciplinary applications. The outside-in process follows felt needs, demands for life/lifestyle improvement, wealth generation, poverty reduction or job improvement. It often starts as a broad, unrealistic wish list, but for success eventually requires technical development similar to the inside-out pathway. Examples are given for processes of identification of emerging technologies and emerging issues in Thailand, leading to policy directives. Both inside-out and outside-in processes can fit in the policy perspective. It is also necessary to consider the ethical, social and legal issues for emerging technologies.