Technology and the Future of Commerce and Finance

D. E. Shaw D. E. Shaw & Co.

Abstract

Over the coming years, an increasingly ubiquitous and increasingly capacious Internet will introduce new opportunities for the creation of tightly integrated databases distributed across multiple institutions. These new capabilities, along with certain techniques arising from the emerging field of computational finance, could ultimately transform a substantial portion of the world's commercial and financial activity in fundamental ways. This talk will focus on some of the most significant changes such technologies may induce in the structure of the world financial system and the mechanisms of global commerce. Consideration will be given to such topics as algorithmic trading and portfolio optimization; electronic markets, automated marketmaking, and the historical inevitability of computational disintermediation; and the future of electronic commerce, including the potential use of shared knowledge bases incorporating standardized representations of enormous numbers of products and services available from multiple sources.

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