



Venture Capital Funding of Innovation

WTF

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What Is the Problem?

- Venture Capital Is Not Funding Innovation
- Increasing Scrutiny of Funding for Innovation
 - » Universities
 - » Government laboratories
 - » Corporate laboratories
- Funding Innovation
 - » Life cycles: innovation comes in waves?
 - » Structural problems: relatively short time horizons?

Methodology

- Information Sources
 - » Initial Public Offerings: 1993-2002
 - » Select Mergers & Acquisitions: 1993-2002
- Define Innovation
 - » Five point scale: T1 Highest, T5 Lowest
- Data Analysis
- Data Interpretation

Information Sources on IPOs

- 1993-2002 Initial Public Offerings
 - » Morgan Stanley Technology IPO Yearbook
 - » 1303 IPOs 1993-2002
 - » Discards
 - Spinoffs, Recaps: Lucent, Agere, Agilent
 - eCommerce: eBay
- 1993-2002 Mergers and Acquisitions
 - » 213 acquisitions by Cisco, Lucent, Nortel et al
 - » Cisco effect: 14 acquisitions 1993-1996

Technology Innovation Ranking Definitions

Technology Ranking	Criteria
T1	New technology representing a fundamental departure from anything existing previously, whose commercialization made possible an entirely new (and important) business market
T2	Fundamental technology improvement in an existing product category (ie, disruptive technology)
T3	Non-trivial technical improvements in existing product categories -- coming from extension of existing technologies.
T4	Modest improvement in existing technologies; ie, by repackaging a combination of already-commercialized technologies in novel ways
T5	No new technology, but able to successfully market existing technology. Alternatively, companies developing new business models using well-established Internet technologies

Profitability of Funding Innovation

- Is Innovation Less Profitable? NO
 - » Higher IPO valuations->higher the innovation ranking
 - » Post IPO->higher valuations stick
- Changes over time in relative valuation?
 - » Valuations higher for higher innovation

Quandary

[For articles, see www.signallake.com/innovation]

- **True Innovation Continues to Attract Little Funding, despite**
 - » A 10x increase in Venture Capital funding in the late 1990s
 - » 1992: <\$3B invested by venture funds in all stages of all companies
 - » 2000: >\$130B invested by venture funds in all stages of all companies
 - » Data indicating that the market rewards innovation

- **Is This Due To**
 - » Life cycle factors?
 - » Structural Problems with Venture Capital?