

Knowledge about Knowledge since
Nelson & Winter: A mixed record

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Mixed Performance

- The Benefits of Public Knowledge ✓
- Dynamic Competencies ✓
- Innovating Routines ?
- Industry & Technology Dynamics ✓ ?

SUBJECT	N+ W CONTRIBUTION	ACHIEVEMENTS SINCE THEN	OTHER CONTRIBUTING DISCIPLINES
Public Knowledge	Tacit knowledge	Benefits partially localised	Economics, sociology, bibliometrics
Theory of the Firm	Organizational Capabilities	Dynamic capabilities	Business Strategy
Management of Innovation	Routines	Continuing conceptual discussions	Few links with innovation studies
Industry & Technology Dynamics	Search & selection.	Industrial dynamics, often with technology exogenous Confusion in unit of analysis.(Firms, Products, Technologies) Neglect of in-firm processes	Economics Biological models & metaphors. Few links with history of S & T, or cognitive science

TECHNOLOGY DYNAMICS

**Clearly identifiable directions of rapid *technological* change
(e.g. Moore's law)**



**Many and uncertain innovation
(*product & process*) opportunities**



**Advantages of diversity &
experimentation in *products & processes***

- **What determines the emergence of rapid technological change?**
- **Improved "code" (theory) and lower cost of "construction" (prototypes) [Perkins, 2000; Constant, 2000]**
- **No "code" + high -cost construction" = 700 years of no change in the Japanese sword [Martin, 2000]**

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