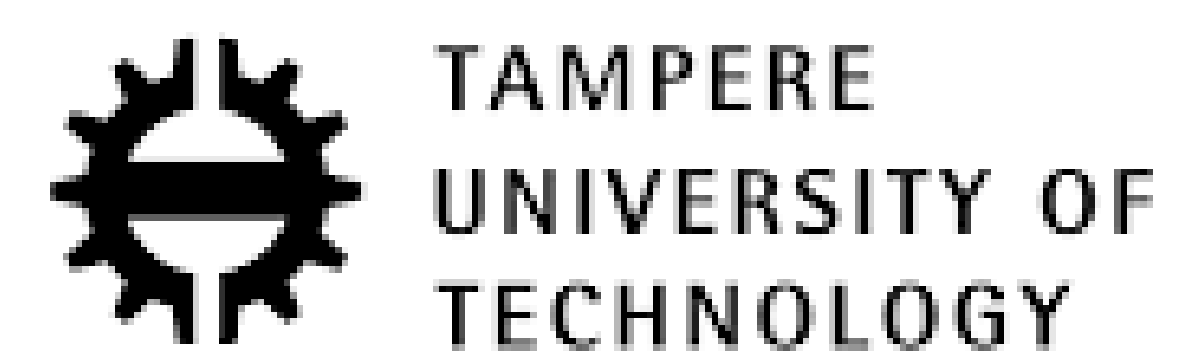




Multiple facets of innovation and business ecosystems – Implications to managing CE business

Aarikka-Stenroos, Peltola, Rikkiev, Saari (2016)
In the Proceedings of The XXVII ISPIM
Innovation Conference, Portugal



An ecosystem approach

An ecosystem approach to innovation and business has become increasingly relevant in contemporary research but research knowledge is scattered across divergent disciplines. The theme is emergent and crucial to innovative companies as well as researchers in the fields of innovation, technology, management, and marketing.

Method

A multidisciplinary literature review for over 230 articles selected from the Web of Science was conducted to integrate the extant knowledge on innovation and business ecosystems.

Results

The results show the variation how business/innovation ecosystems are conceptualized, and what are the implications for business and research.

Making business in Business Ecosystems:

Five processes to be acknowledged and managed:

1. Building leadership, the process of strategy creation
2. Participating the development and growth of clusters or an industry
3. (Co-)evolution of companies and their strategies; learning and enhancement of capabilities
4. Building collaboration; network creation (e.g. value chain or Triple Helix like collaboration)
5. Diffusion to ecosystems (entering into new systems; understanding of how a new systemic innovation/approach/technology is adopted)

The identified ecosystem streams

Type	Stream	Typical reference used
1	Business ecosystems that create value, value-creation networks, collaboration; supply chain type + business ecosystems emphasising competition	Moore 1993; Adner 2006; Iansiti & Levien 2004
2	Firm/product-centric and product/solution ecosystems; platform ecosystems, digital system and software application ecosystems	Cusumano & Gawer 2002; Basole 2008
3	National start-up or entrepreneurial ecosystems, regional innovation ecosystems	Fukunada & Watanabe 2008; Zahra & Nambisan 2012; Clarysse et al 2014
4	Industrial ecology - (focuses on how the natural ecosystem is interlinked and related to business/innovation ecosystems in certain industries, e.g. energy, waste)	Ehrenfeld & Gertler 1997; Korhonen 2007
5	Ecosystems including user communities; societal responsibility	Hiennerth et al. 2014
6	Service ecosystems; systemic value co-creation	Vargo & Lusch 2004
7	Societal and policy approach to business/innovation ecosystems (including regulators; concerns often politically important infrastructures, e.g. energy, vaccination and health care)	Iansiti & Levien 2004; Fragidis et al. 2006
8	Business networks as ecosystems	Möller 2010, Aarikka-Stenroos & Lehtimäki 2014
9	Other, e.g. open innovation ecosystem	Chesbrough 2006
10	NA, No explicit link to any ecosystem stream	

What is “an ecosystem”: A hub-centric vs. collaboration

Type of illustrations and conceptualizations	Focus	Examples
Hub-centric	Key players of an ecosystem: 1. In general (e.g. of industry) 2. Around a named hub-firm 3. Product-hub	1. Gueguen & Isckia, 2009 2. Cisco’s ecosystem: Li, 2009; Amazon’s ecosystem: Isckia, 2009 3. Peng & Sanderson, 2014
Multi-polar	Distinctions and differing perspectives by different ecosystem stakeholders Diverse actors of value chain or value network	Van der Bergh, 2007; Reficco & Marquez 2012; Hiennerth et al. 2014; Romero & Molina, 2011 Ehrenhard et al. 2014; Lopez Pezosa et al. 2012; Weiss & Gangadharan, 2010
Multi ecosystem	Collaboration networks Competing ecosystems	Leten et al. 2013 Pierce, 2009; Li & Garnsey, 2014

