The Creation of the New Media Ecosystem in New York City: An Entrepreneurial Approach

Cliff Wymbs
Baruch College
City University of New York

The objective of this study was to further the understanding of entrepreneurship by disaggregating entrepreneurial activity into three distinct actors (freelancing, anti-institutional and institutional). Each of the entrepreneurial actors performs a different, but complimentary, role in a different phase of the creation and evolution of the new media ecosystem/cluster, so they warrant individual attention. The study of ecosystems is furthered by the identification of the dynamic relationships among entrepreneur actors and how their roles, and the relative importance of their roles, change over time.

We know very little about how individual entrepreneurs actually transform the institutions that foster or preclude the creation of ecosystems, which makes it relatively hard to put theoretical insight into practice. A dialectic process model is used to analyze a historical case and gain insight into the processes of contestation and entrepreneurship that explain the emergence of a new ecosystem.

The study highlights the importance of using a narrative approach to identify continuous change factors rather than the traditional comparative static approach to study network changes.

Keywords: District Entrepreneurial Actors, New Media Ecosystems, Process Theory, New York City New-Media Cluster

INTRODUCTION

The paper seeks to address two important and related questions surrounding the formation of an entrepreneurial ecosystem cluster. The first pertains to the process through which new ecosystems emerge, while the second has to do with individual -- entrepreneurial behaviors associated with that process. The questions are important for related reasons. First, the function that "healthy" ecosystems have in promoting entrepreneurial activity (that can then translate into economic development) has long been theorized, so understanding how new systems emerge can help us create policies that better foster their creation. Second, we know very little about how individuals can actually transform the institutional logic that foster or preclude the creation of those ecosystems, which makes it relatively hard to put theoretical insight into practice. A dialectic process model is used to analyze a historical case and gain insight into the processes of contestation and entrepreneurship that explain the emergence of a new ecosystem.

This paper uses a qualitative historical analysis of the New York City (Silicon Alley) New Media Ecosystem. ("New media" is a generic term that is made possible through the use of computer technology

and includes web sites, streaming audio and video, chat rooms, e-mail, online communities, web advertising, virtual reality environments, digital cameras, and mobile computing. New media is often contrasted with "old" media forms that are static representations of text and graphics and include print newspapers and magazines.) It furthers the understanding of entrepreneurship by disaggregating the entrepreneurial process into three distinct entrepreneurial actors (freelancing, anti-institutional and institutional). Each of these actors performs a different, but complimentary, role in a different phase of the ecosystem evolution, so they warrant individual attention. The study of ecosystems is furthered by the identification of the dynamic relationships among these entrepreneurial actors and how their roles, and the relative importance of their roles, change over time.

LITERATURE REVIEW

Ecosystems used in the business context describe activities that support and encourage a network of customers, suppliers, distributors, entrepreneurs, institutions, and complementary businesses (Iansiti & Levien, 2004). Research in this area is quite diverse, as evidenced by Castells (1996) in The Rise of the Network Society who discussed the general innovative processes associated with the creation of technology-based ecosystems around the world since the 1960s, to Saxenian (1994), who specifically compared the information technology ecosystems of Route 128 and Silicon Valley.

Other scholars highlighted the need for research in certain key areas. Santos & Eisenhardt (2005) called for boundary conditions associated with business ecosystems to be explored, while Meyer, Gaba, & Colwell (2005) concluded that volatile ecosystems are becoming the stuff of everyday organizational life, but receive scant attention in organizational theory and research. Li (2009) commented that analyzing a business ecosystem is not an easy task, and therefore only a few studies have been made, even though scholars and managers know their importance in value creation, establishing platforms and enhancing performance. Also, Suddaby & Greenwood (2005) noted that even less attention is paid to the formative phases of ecosystems. They observed that we know very little about what causes shifts in institutional logics, a necessary condition for the creation of a new ecosystem and we lack accounts of the process by which the assumptions that define logics are contested and changed; however, we are reasonably certain that entrepreneurs play a key role. Yayavaram & Ahuja (2008) shed some light here when they find that market ordering institutions can fail because technological inadequacy – technological developments create completely new opportunities not envisioned by the existing institutional logic and practices. This analysis explores the formative phases of one ecosystem, new media. It specifically addresses how entrepreneurial actors come together and create entrepreneurial momentum (Shepherd & Zacharakis, 2001).

Greenwood & Suddaby (2006) identified one type of entrepreneur change agent, Institutional Entrepreneur (IE), and discussed its relationship with institutional theory. They defined IE to be the existing management of a company who uses its broad knowledge of the environment to mobilize a variety of resources and endogenously institute change affecting the firm's basic institutional logic. Their research is a necessary first step in unpacking the entrepreneurial functions, but it did not go far enough. The entrepreneur research previously discussed alludes to two additional latent types of entrepreneurial change agents, i.e., anti-institutional entrepreneurs (one who breaks from the organizational status quo and seeks new combinations) and freelance entrepreneurs (ones who looks to technology to reorder the market).

Anti-institutional entrepreneurs (AIE) are entrepreneurs who are not organizational leaders but who seek radical change within their organizations by highlighting frame-breaking anomalies within existing practices (Casson, 2005). Often their power and legitimacy is tenuous because if current management exhibits strong institutional tendencies, AIE are likely to be ignored and more likely forced out of the organization. However, AIE often break from their existing firms and seek out other like-minded entrepreneurs that share a common, risk-seeking culture and tend to geographically cluster.

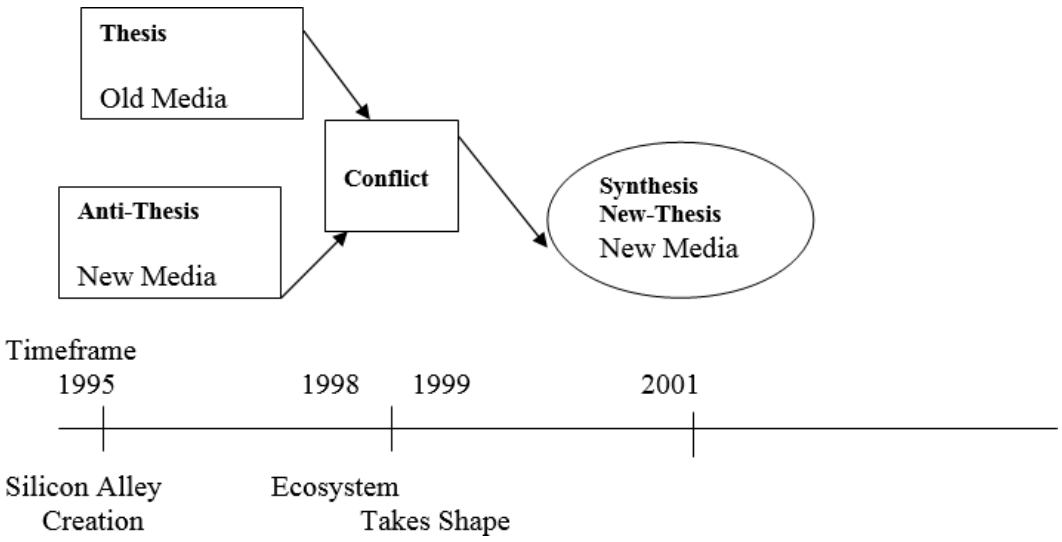
Alternatively, freelance entrepreneurs (FE), from the beginning, engage in the practice of creative destruction, i.e., they usually combine new knowledge elements and create technological innovation (Schumpeter, 1943). Their discoveries attach existing marketing- ordering institutions. FE are responsible for exogenous change to the focal industry and often look to their peers, rather than the market, for their

rewards. (Often, their rewards are psychological, e.g., peer recognition rather than monetary.) This study describes in detail how these three types of entrepreneurs grow and co-evolve in the development of an ecosystem.

At the heart of the analysis is the change in institutional logics driven by entrepreneurial actors. Specifically, the way these actors socially construct the new media ecosystem is by changing the meaning associated with historical patterns and manipulating material practices (Thornton, et al., 2012). The model described below is one of the few attempts to examine the processes by which institutional logics are reconfigured (Jain, 2013).

A dialectic process model is used as the vehicle to link the entrepreneurial actors with the creation of the ecosystem. This development model is appropriate if: (1) At least two entities exist that stand in opposition to one another; (2) The opposing entities confront each other and engage in conflict through some social/economic venue in which the opposition plays out; (3) The outcome of the conflict must consist either of a new entity different from the previous two or in the defeat of one entity by the other (Slotte-Kock & Coviello, 2010). To document the dialectic model, I carefully track steps involved in the conflict and its resolution and determine if a unitary sequence emerges that has sharp dividing points between the phases. (See Figure 1.)

FIGURE 1
DIALECTIC MODEL



DATA AND METHODOLOGY

To generate a deeper understanding of the entrepreneurial process that mobilizes the ecosystem creation and evolution, an in-depth study of one ecosystem, the group of new media firms located in the lower Manhattan part of New York City, labeled Silicon Alley was conducted during the dot-com boom period. Even the study of one ecosystem is complex because "new media" is embedded in the broader context of rapid Internet growth and the Dot-com boom, so it is important to highlight their co-evolution.

In the 1996 to 1999 period, new media employment in Silicon Alley grew from almost nothing to 250,000 people among 8,500 companies with a market capitalization of $30 to $40 billion (Harmon, 2001). The dot.com boom period of 1995-2000 was one of those rare periods in economic history where a tipping point was reached and everything associated with the Internet was viewed positively. The Internet provided the facilitating technology for entrepreneurial- led new media to flourish, similar to the way that railroads provided the connecting infrastructure for overall commerce growth a century before.

To tease out dialectic model inputs and to better understand the relationships among the entrepreneurial actors, the study used a qualitative historical narrative, i.e., a research strategy particularly suitable for investigating "how" and "why" research questions pertaining to non- contemporary processes (Downing, 2005; Yin, 2003). This narrative approach provides a clear sequential order which connects events in a meaningful way, thereby providing critical insights in the evolution of an industry (Hinchman and Hinchman, 1997; Singh, Corner, Pavlavich 2014). Similar to Farjoun (2002) historical narrative methodology, the data used here drew on secondary sources (extensive public documents covering the period 1990-2007), including websites and financial filings of the major industry players; sources contemporaneous with the events studied, including discussions with investment bankers who were funding the build-up, and entrepreneurs who were living the dream; interviews; corporate announcements published in trade journals; and articles published in professional and academic journals. Sources also include conference reports, market analyses, periodicals, government publications, and memoranda, e.g., Red Herring, The Industry Standard, AlleyCat News, Silicon Alley Reporter, Silicon Alley Magazine, New York Times, Wall Street Journal, Crain's New York Business. These sources covered the variety of actors in the field, particularly vendors, producers, and end-users. I also consulted the authoritative review of Silicon Alley history written by Indergaard (2004). The collection of data throughout the evolution of Silicon Alley permits a shift in the analytical angle from looking into the future to looking at the future, i.e., how the future is constructed in real time to marshal resources, coordinate activities and manage uncertainty (Brown & Michael, 2003). This approach is similar to the Jain, (2013) analysis that used a historical case narrative of the Indian telephone sector to inductively develop a process model of institutional change.

At the end of the day, when a single case analysis is used to generate inferences, it is important that the narrative be sufficiently robust to justify developmental causality in terms of criticality and generalizability. Evidence must be presented that shows that the new ecosystem is simply not the existing ecosystem that was given a massive exogenous shock (the creation of new technologies starting with the Internet), and became more porous in its borders and was forced to admit new members who shook the balance of power and internal logic. The new ecosystem must demonstrate a compelling argument that there is new industry trajectory represented by a different set of actors and a fundamental change in institutional parameters. Most importantly, when the new ecosystem is challenged, it must not revert back to old industry logic, but rather, continue on its own new path.

The analysis proceeds with first providing a counterfactual context for the analysis, then the new media narrative that explains the path dependencies and institutional inertias associated with ecosystem development process model is presented. Discussion of the key findings is the last part of the analysis.

COUNTERFACTUAL CONTEXT

Good theory is practically precise in that it provides a systematic way to understand complex phenomena in a real world setting and guides research toward crucial questions and issues (Poole, et al. 2000). Mohr (1982) asserted that explanations of change and development should incorporate all kinds of forces that influence these processes rather than just the immediate preceding cause. To address this holistic challenge, provide context for the narrative and serve as a baseline to convey meaning about the phenomenon (Ericsson & Persson, 2017), several questions relating to a counterfactual background of the Silicon Alley ecosystem are first discussed. The counterfactual context provides at a very high level explanation of the diversity of forces affecting the emergence of the new media ecosystem in New York City. It provides the background motivation for the entrepreneurial actors' effort and temporally fills in pieces of the puzzle of the ecosystem evolution.

Why Did the Ecosystem Emerge in NYC?

The three main reasons for the emergent of the digital media ecosystem in NYC were location, timing, and institutions. To begin with, New York City with its advertising, TV stations, and publishing industries is the recognized media (old) capital of the world. Silicon Alley (new media) is strategically positioned

between Wall Street and old media in mid-town Manhattan, thus providing easy access for venture capitalists to monitor their projects and for change- oriented old media veterans to seek alternative careers without moving their families. Also, New York possesses one of the deepest (media) and most diverse pools of intellectual capital anywhere and much of the creative part of it was spatially located in and around Silicon Alley. In 1994, the New York New Media Association was formed with the main purpose of bringing the new media industry to the public eye and providing matchmaking services. The lack of government assistance also let the new media industry organically revitalize a depressed downtown real estate market that had vacancy rates of over 20% (Wymbs, 2005).

Were There Efforts to Create Similar Ecosystems Elsewhere?

In the mid-1990s, the number of places with "silicon" in their name grow exponentially, e.g., Silicon Gulf (Philippines); Silicon Forest (Portland, Oregon); Silicon Hills (Austin, Texas); Silicon Sand Bar (Cape Cod, Mass.), etc. During boom times, funding chases creative ideas; however, when rationality returns to markets, path dependent, geographic clusters that were present before boom tend to reform, albeit changed. If the change represents a new industry trajectory, then a new ecosystem is possible, if not the dominant logic of the old cluster re- emerges.

Probably the city that most closely approximated the NYC old media/new media cluster was Toronto. Both had real estate underutilization, a large artist community that was underemployed and an active social/club scene; however, they differed in their approach to learning (NYC-self learning/new creation vs. learning on the job/incremental innovation). After the Dot-com bust, Silicon Alley remained but the Toronto new media cluster was not as fortunate (Wymbs, 2005).

Why Did the Eco-System Take This Particular Shape?

The sense making process of the three main entrepreneurial actors was not about getting it right, but rather represented a continued redrafting of an emerging story. The narrative endogenously created by the ecosystem marriage of money and ideas became more comprehensive and compelling as observed data supported the initial bold assertions. The press and industry organizations were quick to highlight many new, creative applications being developed by the freelance entrepreneurs and more and more new media anti-institutional entrepreneur start-ups were obtaining massive amount of funding. Many of the new applications reflected path dependencies associated with nearby old-media industries, i.e., new media advertising agencies (Razorfish) and the monitoring of advertising on the Internet (Doubleclick) (Indergaard, 2004). These new applications changed the ecosystem debate from old media vs. new media, a technology argument, to an argument based on which media the general public was going to consume more in the future, a behavioral argument. If Internet viewing time was to increasingly replace old-media channels, then a new media ecosystem had to develop and would survive.

Were There Efforts to Shape It Differently?

Most old media, including advertising firms, publishing companies, TV networks, PR firms, etc., initially chose to ignore these rapidly growing start-ups. Their expressed view was that none of them would become big enough to affect old media's bottom line in the foreseeable future. Of course, if old-media was not as well entrenched in the market and their institutional roots were not as deep, their resistance to new media applications would have been considerably less. Also, many of the leaders of old-media were not well versed in the technology aspects of new media, so rejecting the area was a much easier short-term approach than learning the nuances of it and how it might change their fundamental business, old media.

Were There Other Players Who Tried to Participate, but Were Excluded?

FE and AIE developed local networks based on shared interest. Spatial geographic clustering of social and professional relations led to spatial concentration of the new media industry. This was re-enforced by the fact that venture capitalist also liked to fund target companies that were in close proximity to their New York offices.

During the loose money days of late 1990s, many firms without coherent business plans should have been excluded, but were funded anyway. In fact, many NYC banks, consulting firms and corporations experienced a brain drain of employees because of the amount of money being used to fund start-ups and the expectation of money to be made. The dot-com bust brought a sense of normalcy back to the market, and once again revenues and profits became relevant funding criteria and many new media firms did not make it. However, the relevant question is whether or not the media industry was on a new trajectory because of the dot-com run-up, a necessary condition for a new ecosystem, or whether it will revert back to old media fundamentals.

With the industry context now established, I now use the narrative to articulate the factors contributing to the success of new media and to link the dialectic model with entrepreneurial actors and show how structure and agency interact in the emergence of a new ecosystem path.

THE MODEL

The dialectic process of institutional and network change begins by linking different types of entrepreneurs (Institutional, Anti-Institutional and Freelance) with the uncertain environment facing media firms during the Internet period (1995-2000). Entrepreneurs, depending on the particular type and ecosystem development phase, are simultaneously viewed as both linking and destabilizing forces affecting the ecosystem transformation. The network of firms to be evaluated and the entrepreneurial roles that they perform must extend beyond the old and new media industry because complementary firms and activities are necessary to provide the critical mass for ecosystem creation. Challenges to the industry's institutional logic by the totality of intervening players are evaluated to see if they are sufficient to create an identifiable thesis/anti- thesis (Van de Ven & Poole, 1995). If a new anti-thesis is adopted, then a new ecosystem with a new institutional set of logics will likely form. This is consistent with recent trends in institutional research now addressing its dynamic aspects, namely, the processes and tensions that are the cause of exogenous, episodic or endogenous institutional change (Bylund & McCaffrey, 2017; Kuchar, 2017). Over time the system-level dialectics are resolved; however, if an ecosystem is created it will proceed along a new trajectory based on reformed institutional logics and structures.

Within the dialectic model construct, each type of entrepreneur actor represents a change agent whose behavior and impact is a function of the particular ecosystem phase. During the initial phase of development, freelance entrepreneurs are expected to dominate. They will create their technological sub-network with dense geographic proximate ties and attack the status quo. Foster (1986) argues that these FE possess "attacker's advantage" and incumbents frequently lag behind, sometimes with fatal consequences. During this "Creative Period" (1995-1998) phase (where the ecosystem anti-thesis -new media is developed) there is limited demand for new media ecosystem resources because FE are operating under the broad context of the dot- com expansion and their new media innovations are not particularly well publicized. Although there is no clear transition between the first phase and second phase – the "Get Rich Quick Period" (1999-2001) -(open conflict between the thesis and anti-thesis), this transition is expected to take on some of the same properties as a paradigm shift. New applications keep being created and as they gain traction, this leads to more applications being created, more funding, more press and more anti-institutional entrepreneurs. In the second phase the anti- institutional (within industry players) and the evolving institutional entrepreneurs (complementary outside industry players who adapt their business models to factor in the new media changing environment) create a continuous cycle, feeding on one another. The cycle contains both the finding of "search" opportunities involving the combining of existing elements in new ways and "discovery" of new elements that continuously change what is possible for the media industry in the emerging Internet era. Collectively, these three entrepreneurial actors redefine the scope and boundary of the value network associated with the emerging new media industry (Christensen & Rosenbloom, 1995).

The co-evolution of technology, markets, and institutional market failures in Silicon Alley appears to reveal two distinct periods of network adjustments associated with ecosystem creation, i.e., "Creative Period" and "Get Rich Period" (Koza & Lewin, 1999). During each one, the entrepreneur groups play

distinct and changing roles. Over time, complementary players join the ecosystem and collectively drive the institutional changes necessary to create a credible thesis/anti-thesis dialectic.

DISCUSSION

The forming of a new network/ecosystem of customers, suppliers, distributors, technology entrepreneurs and complementary businesses requires fundamental change of an industry at the most basic level. De Rond & Bouchikhi (2004) have shown that similar patterns and sequence of events existed in the formation of the biosciences ecosystem a decade or so earlier, i.e., initial new-to-the-world innovation was spurred on by freelance entrepreneurs and not by traditional industry players, primarily because locked-in existing institutions resisted the development and implementation of break-through technologies.

Existing industries (old media and pharmaceuticals) benefit during periods of less uncertainty when stabilizing institutional forces are strong, and suffer, through market capitalization reductions, during periods of extreme uncertainty when industry institutions have misaligned interests and are being severely challenged. Not surprising, the opposite is true for FE and AIE. What seems interesting is that there appears to be a threshold level of extreme uncertainty (usually centering on fundamental changing of industry structure) that start-ups have to collectively reach to have the general public thinking that a new ecosystem could develop. Before this period, the freelance and anti-institution entrepreneurs do not have the necessary resources to achieve an industry tipping point, so they have to obtain the support of a coalition of related, complementary players including, at a minimum, the press in various media outlets, and the financial market community. Existing institutional players and even some institutional entrepreneurs offer considerable resistance to radical industry change; however, the new ecosystem gains traction after a credible narrative of the potentially disruptive power of the ecosystem emerges.

The narrative must emphasize the novelty of the innovation to the industry (or possibly create an entirely new industry), why prior rules or institutional logics do not apply to the particular innovation, and the need for new institutions and guidelines that the new players are more than willing to supply. The narrative appears to build on itself in a self-escalating fashion. Each time a new group lends its support to the ecosystem, it serves as a catalyst to increase the overall credibility of the narrative anti-thesis in the dynamic dialectic. During the rapid growth phase of the ecosystem, negative news is dismissed and the outside world increasingly buys into the narrative. In effect, the narrative becomes the reality (the new thesis) and both internal and external players' sense-making activities are evaluated against what the ecosystem could become, as opposed to the existing world. Expectations are driving reality, i.e., you see what you believe.

This is the critical phase for the organizational entity (ecosystem or the entrepreneurial group within the ecosystem) because everyone wants to be part of the "next big thing." In the new media case, the extreme uncertainty associated with challenging the status quo (in this case old media) had been removed, momentum for the new narrative grew, and the loosely defined, institutionally weak anti-thesis had been accepted. A bubble type mentality developed, i.e., "I better enter this market before I miss the run-up window." Interestingly, the projects that got funded here were increasingly more risky and of poorer quality than the ones at the being of the ecosystem, but were viewed by the funding sources as less risky because the market had bought into the ecosystem's narrative.

CONCLUSION

This paper furthers the understanding of entrepreneurship by disaggregating the entrepreneurial process into three distinct activities (freelancing, anti-institutional and institutional). Each of these entrepreneurial actors performs a different role in a different phase of the ecosystem evolution, so they warrant individual attention. This paper furthers the study of ecosystems by identifying the relationships among these entrepreneurs and how their roles change over time. It identifies key tipping points where institutional logic changes, a necessary condition for ecosystem creation, and furthers the study of ecosystems by fitting the study to a dialectic process model. This paper highlights the effective and frequent ploy of stampeding

people into an investment frenzy, and labeling the questioners as those "who don't get it." And finally, the paper highlights the importance of using a narrative approach to identify continuous change factors rather than the traditional comparative static approach to study network change.

REFERENCES

Brown, N., & Michael, M. (2003). A Sociology of Expectations: Retrospecting Prospects and Prospecting Retrospects. *Technology Analysis & Strategic Management*, *15*(1), 3–19.

Bylund, P., & McCaffrey, M. (2017). A theory of entrepreneurship and institutional uncertainty. *Journal of Business Venturing*, *32*(5), 461–475.

Casson, M. (2005). Entrepreneurship and the theory of the firm. *Journal of Economic Behavior & Organization*, *58*(2), 327–348.

Castells, M. (1996). *The Rise of The Network Society*. Oxford, UK Blackwell.

Christensen, C., & Rosenbloom, R. (1995). Explaining the attacker's advantage: Technological paradigms, organizational dynamics and the value network. *Research Policy*, *24*, 233–57.

De Rond, M., & Bouchikhi, H. (2004). On the dialectics of strategic alliances. *Organization Science*, *15*(1), 56–69.

Downing, S. (2005). The social construction of entrepreneurship: Narrative and dramatic processes in the coproduction of organizations and identities. *Entrepreneurship Theory and Practice*, *29*(2), 185–204.

Ericsson, D., & Persson, P. (2017). Entrepreneurship Lost and Found. In *The 5th International Conference Innovation Management, Entrepreneurship and Sustainability (IMES 2017)*, 25-26th of May, Prague, (pp. 190–199).

Farjoun, M. (2002). The dialectics of institutional development in emerging and turbulent fields: The history of pricing conventions in the on-line database industry. *Academy of Management Journal*, *45*(5), 848–874.

Harmon, A. (2001). *MEDIA*; Requiem for a cheerleader: Silicon Alley Magazine is dead. *New York Times*.

Hinchman, L., & Hinchman, S. (1997). *Memory, Identity, Community The Idea of Narrative in Human Sciences.* SUNY Press. New York.

Iansiti, I., & Levien, R. (2004a). *The Keystone advantage: What the new dynamics of business ecosystems mean for strategy, innovation, and sustainability.* Cambridge University: Harvard Business School Press.

Indergaard, M. (2004). *Silicon Alley*. Routledge, New York.

Jain, S., & Sharma, D. (2013). Institutional Logic Migration and Industry Evolution in Emerging Economies: The Case of Telephony in India. *Strategic Entrepreneurship Journal*, *7*(3), 252–271.

Kuchar, P. (2017). Entrepreneurship and institutional change. *Journal of Evolutionary Economics*, *26*(2), 349–379.

Li, Y.R. (2009). The technological roadmap of Cisco's business ecosystem. *Technovation*, *29*(5), 379–386.

Meyer, A.D., Gaba, V., & Colwell, K.A. (2005). Organizing far from equilibrium: Nonlinear change in organizational fields. *Organization Science*, *16*(5), 456–473.

Mohr, L. (1982). *Explaining Organizational Behavior*. Jossey-Boss, San Francisco.

Santos, F.M., & Eisenhardt, K.M. (2005). Organizational boundaries and theories of organization. *Organization Science*, *16*(5), 491–508.

Saxenian, A. (1994). *Regional Advantage: Culture and Competition in Silicon Valley and Route 128*. Harvard University Press, Cambridge, Mass.

Schumpter, J. (1943). *Capitalism, Socialism, and Democracy*. Allen & Urwin, London.

Shepherd, D.A., & Zacharakis, A. (2001). Speed to initial public offering of VC-backed companies. *Entrepreneurship Theory and Practice*, *25*(3), 59–70.

Singh, S., Corner, P.D., & Pavlovich, K. (2015). Failed, not finished: A narrative approach to understanding venture failure stigmatization. *Journal of Business Venturing*, *30*(1), 150–166.
Slotte–Kock, S., & Coviello, N. (2010). Entrepreneurship research on network processes: A review and ways forward. *Entrepreneurship Theory and Practice*, *34*(1), 31–57.
Suddaby, R., & Greenwood, R. (2005). Rhetorical strategies of legitimacy. *Administrative Science Quarterly*, *50*(1), 35–67.
Thorton, P., Ocasio, W., & Lounsbury, M. (2012). *The Institutional Logics Perspective: A new Approach to Culture, Structure, and Process*. Oxford University Press, New York.
Van de Ven, A.H., & Poole, M.S. (1995). Explaining development and change in organizations. *Academy of Management Review*, *20*(3), 510–540.
Wymbs, C. (2005). Silicon Alley and comparisons with Toronto. *Innovation Systems Research Network*. Retrieved from www.utoronto.ca/isrn/documents/05papes/Session%20VII%20Wy mbsC.ppt
Yayavaram, S., & Ahuja, G. (2008). Decomposability in knowledge structures and its impact on the usefulness of inventions and knowledge-base malleability. *Administrative Science Quarterly*, *53*(2), 333–362.
Yin, R.K. (2003). Case study research design and methods third edition. *Applied Social Research Methods Series, 5*. Sage Publications, Thousand Oaks.