Hila Lifshitz-Assaf

Harvard Business School Soldiers Field Road Wyss House Boston MA 02163 hlifshitz@hbs.edu +1(617) 407-2377 Citizenship: US and Israel

EDUCATION

Harvard University, Harvard Business School (2008-2014) (expected)

Doctor of Business Administration, Management Committee: Michael L. Tushman (chair), Karim Lakhani and Michel Anteby

New York University, Stern School of Business (2007-2008)

MBA, Exchange program Research Assistant to Professor Zur Shapira, investigating the relationship between cooperative tendencies and innovation performance in startup network clusters

Tel-Aviv University, Recanati Business School (2004-2007)

MBA, Major in Strategy & Entrepreneurship and Organizational Behavior Magna Cum Laude Research Assistant to Professor David Gilo, analyzing M&As from an antitrust perspective

Tel- Aviv University, Buchman Law Faculty and Recanati Business School (1997-2001) L.L.B in Law Magna Cum Laude and B.A. in Management Magna Cum Laude

Tel- Aviv University and Tianjin University, China (1996-1997)

Exchange program of Chinese language and culture studies

RESEARCH INTERESTS

Organizational theory, sociology of knowledge and science, technological and scientific innovation, innovation strategy, knowledge theory of the firm, organizational boundaries, organizational and professional identity.

DISSERTATION SUMMARY

"Shifting Loci of Innovation: A Study of Knowledge Boundaries, Identity and Innovation at NASA", Dissertation committee: Michael Tushman (Chair), Karim Lakhani and Michel Anteby.

My dissertation is based on an in-depth longitudinal field study of NASA's experimentation with opening knowledge boundaries through Web platforms and communities. In the first paper, I illustrate the co-evolving relationship between knowledge boundary work, identity work, and innovation. Focusing on R&D organizational members as the unit of analysis, I triangulated multiple types of data sources: observation, interviews and internal surveys and documents. The second paper focuses on the R&D process and the emergence of cross-boundary problem formulation. In this paper the unit of

analysis is the R&D problem and I analyze both quantitative and qualitative data from NASA and the online platforms to investigate the impact problem formulation has on the solutions reached. The third paper is a theoretical piece that provides an evolutionary model of dynamic R&D paths with shifting loci of innovation. This organizational level model is inspired by the increased complexity in managing R&D when organizational boundaries are changing throughout the various phases of the process. We model this complexity and suggest how organizations might navigate this process.

PUBLICATIONS

Lakhani, Karim, Hila Lifshitz-Assaf, and Michael Tushman. 2013. "Open Innovation and Firm Boundaries: Task Decomposition, Knowledge Distribution and the Locus of Innovation." Chap. 19 in <u>Handbook of Economic Organization: Integrating Economic and Organization Theory</u>, edited by Anna Grandori, 355–382. Northampton, MA: Edward Elgar Publishing.

Tushman, Michael, Karim Lakhani, and Hila Lifshitz-Assaf. 2012 "Open Innovation and Organization Design." Special Issue on Future of Organizational Design, <u>Journal of Organization</u> <u>Design</u> 1, no. 1: 24–27. (*SSRN's Top Ten* download list for: Organizational Structural Designs)

WORKING PAPERS (Abstracts in Appendix)

Lifshitz-Assaf, Hila. "From Problem Solvers to Solution Seekers: The Co-evolving Knowledge Boundary and Professional Identity Work of R&D Organizational Members at NASA" (Job market paper, in preparation for submission to Administrative Science Quarterly)

Lifshitz-Assaf, Hila. "Found in Translation: Decoupling Problem Formulation from Problem Solving and Opening the Solution Space". (Submission target: Organization Science)

Lifshitz-Assaf, Hila, Karim Lakhani and Tushman Michael. "Innovating *How* to Innovate: Evolutionary Model of Dynamic R&D Paths with Shifting Loci of Innovation" (In preparation for submission to SMJ, special Issue on New Theory in Strategic Management)

RESEARCH IN PROGRESS

Lifshitz-Assaf, Hila. "Term Limits: Unraveling The Contested Meaning of "Open Innovation"" (Data analysis)

Lifshitz-Assaf, Hila. "Towering Over Babel: Alleviating Intra-Organizational Barriers through Cross Boundary Problem Formulation" (Field experiment in design phase)

Lifshitz-Assaf, Hila. "Knowledge: From "Having" To "Doing": The Rise of Knowledge Capabilities and Decline of Knowledge Assets" (Theoretical work in progress)

Lifshitz-Assaf, Hila. "The Thirst for Boundaries: Organizing for Entrepreneurship" (Data in collection)

Lifshitz-Assaf, Hila and Jari Kuusistu. "Roots of Innovation: How Organizational Models Shape Innovation" (Field experiment in design phase)

AWARDS AND HONORS

Harvard Business School Wyss Doctoral Fellowship (2008-Present) Grade of "Excellence" on the Doctoral Qualifying Examination, Harvard Business School (2011) First place in MBA Strategy Case Competition, Horowitz Strategy Management Institute (2006) First in Dean's List, Recanati Business School (1999, 2001) L'Oreal-Recanati Scholarship and Internship for International Management Award (2000) First Israeli representative in Beta Gamma Sigma European Business Schools conference (1999) First place in Junior Achievers Israel and candidate in JA worldwide (1997) IDF officer course graduation with distinction (1996)

TEACHING INTERESTS

Managing innovation, organizational architecture and change, strategy, entrepreneurship and innovation, science technology and society, authentic leadership development

TEACHING EXPERIENCE

Executive Education teaching fellow, Harvard Business School (2009-2012) Leading Change and Organizational Renewal with Profs. Mike Tushman and Charles O'reilly

- Led the facilitation of the course, guiding 12 facilitators on both process and content
- Facilitated executive teams from various industries on their organizational change challenges

MBA course teaching fellow, Harvard Business School (2010) Managing Innovation – Elective MBA course with Prof. Karim Lakhani Assisted in building the course the first time it was taught at HBS

MBA course teaching fellow, Recanati Business School (2004-2006) Organizational Behavioral with Prof. Shoshi Chen, Organizational Theory with Prof. Zipi Shperling, Entrepreneurship with Prof. Miri Lerner

• Taught multiple cases and Graded final projects

INVITED CONFERENCES & PRESENTATIONS

NYU Economic Sociology Workshop (2013)

• Paper discussion: "From Problem Solvers to Solution Seekers: The Co- evolving Knowledge boundary and Professional identity work of R&D organizational members at NASA"

Wharton People and Organizations Conference (2013)

• Paper discussion: "From Problem Solvers to Solution Seekers: The Co- evolving Knowledge boundary and Professional identity work of R&D organizational members at NASA"

Academy of Management Annual Meeting (2013)

• Paper presentation in a showcase symposium: "From Problem Solvers to Solution Seekers: The Co- evolving Knowledge boundary and Professional identity work of R&D organizational members at NASA"

National Science Foundation Knowledge Conference (2013)

• Paper presentation: "From Problem Solvers to Solution Seekers: The Co- evolving Knowledge boundary and Professional identity work of R&D organizational members at NASA"

The Structure and Structuring of Work Within and Across Organizations Workshop (2013)

• Paper discussion: "From Problem Solvers to Solution Seekers: The Co- evolving Knowledge boundary and Professional identity work of R&D organizational members at NASA"

Mack Institute for Innovation Management Emerging Scholars Workshop: Evolutionary Perspectives on Strategic Management, The Wharton School (2013)

Wharton Innovation and Technology Conference (2013)

• Paper presentation with Mike Tushman and Karim Lakhani: "Open Innovation and Firm Boundaries"

MIT Innovation Lab (2013)

• Paper presentation: "Problem storming: Decoupling problem formulation from problem solving and opening the solution space".

Organization Science Conference: Facilitating the Creation and Transfer of Knowledge (2013)

• Paper presentation: "From Problem Solvers to Solution Seekers: The Co- evolving Knowledge boundary and Professional identity work of R&D organizational members at NASA"

Academy of Management Annual Meeting (2012)

- Paper presentation with Mike Tushman and Karim Lakhani: "Innovation streams, Shifting loci of Innovation, and organizational architectures: The intrusion of Open innovation on incumbents"
- Co-organized Ethnography PDW: "Being there/being them: Producing ethnographies", participating: John Van Maanen, Daniel Beunza, Karen Ho, Paul Leonardi, Michael Pratt and Ofer Sharone

Open and User Innovation, MIT-Harvard (2010, 2012)

• Paper presentation on ""Houston we have a solution!" From Solvers to Solution Seekers"

Academy of Management Annual Meeting (2011)

- Co-organized Academy wide symposium : "Enabling Innovation Outside the Firm" [presenting: Gary Dushnistky, Jason Davis, Kapoor Rahul, Karim Lakhani and myself]
- Paper presentation: "Shifting Loci of Innovation and Implications for Incumbents"

• Co-organized Ethnography PDW: "Being There/Being Them: Ethnography Beyond Single Organizations", participating: Siobhan O'mahoney, Alexandra Michel, Tammar Zilber and Graham Jones

Academy of Management Annual Meeting (2011)

• Co-organized Academy wide symposium : "Enabling Innovation Outside the Firm" [presenting: Gary Dushnistky, Jason Davis, Kapoor Rahul, Karim Lakhani and myself]

Other conferences:

- Harvard-MIT Workshop on Internet-Enabled Innovation, Organization design, and Strategy (2013)
- Social Innovation Conference, HBS (2012)
- Boston Qualitative Community Conference (2011, 2012, 2013)
- Strategy and the Design of Organizational Architecture, SMJ Special Issue Conference (2010)
- The Strategic Management of Science, Innovation, and Entrepreneurship, MIT Sloan50th Anniversary Research Conference (2011)
- The Future of Organization Design, Inaugural Conference of the Organizational Design Community (2012)
- Israeli Strategy Conference (2012)

PROFESSIONAL ASSOCIATIONS

Academy of Management, member Institute for Operations Research and the Management Sciences (INFORMS), Member Strategic Management Society, Member American Sociological Association, Member Beta Gamma Sigma, Honor member

PROFESSIONAL EXPERIENCE

Bank Hapoalim [The leading bank in Israel, TASE:POLI], (2005-2007)

Group Manager, Corporate Strategy Unit

- Managed corporate innovation process and researched its effectiveness. Initiatives included new product development and organizational restructuring
- Designed and implemented the bank's Balanced Score Card to support the oversight of the strategic plans' progress
- Formulated the international growth strategy of the retail banking division, including assessing M&A opportunities

Cellcom [The largest mobile provider in Israel, NYSE:CEL], (2003-2005) Strategy Consultant

- Led market research team of four data analysts and two market researchers to investigate marketing opportunities
- Developed predictive statistical model used to significantly reduce customer churn rates

- Initiated a partnership with NTT-Docomo. Formulated the strategy for the partnership, negotiated and managed the JV
- Developed contingency strategies in response to emerging technology threats and opportunities (e.g. VoIP)

Rotem Strategy Group [Premier Israeli strategy consulting group, partner of Booz Allen Hamilton], (2002-2003)

Strategy Consultant

- Developed M&A plan for Ernest & Young Israel, resulting in its becoming the largest accounting firm in Israel. Designed post merger strategy and organizational structure
- Analyzed Strauss Group's competitive positioning. Resulted in Strauss creating a new niche and blocking competition
- Identified growth opportunities for Israel's largest packaging company, resulting in a joint venture in China

Israel Antitrust Authority, (2001-2002)

Legal Intern

- Led the research and drafted the IAA's first case in Israel's Supreme Court. Resulted in a decision in our favor
- Performed legal analysis of the largest media merger in Israel's history

L'Oreal, (2000)

International Management Intern

• Participated in the launch of a new cosmetic brand in the Israeli market

Israeli Defense Forces, (1994-1997)

First Lieutenant

• Served as an officer in an elite unit, training officers in the use of new technologies

PROFESSIONAL CERTIFICATIONS

Israeli Bar Exam, (2002)

LANGUAGES

Trilingual in English, Hebrew and French; Proficient in Spanish and have a working knowledge of Chinese and Italian.

REFERENCES

Michael L. Tushman (Chair) – Paul R. Lawrence MBA Class of 1942 Professor of Business Administration Harvard Business School Organizational Behavior Boston, MA 02163 <u>mtushman@hbs.edu</u> +1(617) 495-5442 Karim R. Lakhani – Associate Professor of Business Administration Harvard Business School Technology and Operations Management Boston, MA 02163 <u>k@hbs.edu</u> +1(617) 495-6741

Michel Anteby – Associate Professor of Business Administration Harvard Business School Organizational Behavior Boston, MA 02163 <u>manteby@hbs.edu</u> +1(617) 496-3756

APPENDIX (Abstracts of working papers)

"From Problem Solvers to Solution Seekers: The Co-evolving Knowledge Boundary and Professional Identity Work of R&D Organizational Members at NASA" (Job market paper, in preparation for submission to Administrative Science Quarterly)

Scholars have long examined the organizational knowledge creation processes related to innovation. Many of these studies have investigated the relationship between various knowledge boundary crossing mechanisms that bring diverse types of knowledge into the innovation process, and the new knowledge and innovation created. A separate group of scholars have studied how innovation related choices are shaped by the pre hoc identity of organizational members. Based on an in-depth longitudinal field study of NASA's experimentation with opening knowledge boundaries through web platforms & communities, I illustrate the coevolving relationship between knowledge boundary work, identity work and innovation. The opening of knowledge boundaries produced an important scientific breakthrough in a short period of time with few resources, but challenged the knowledge creation process as well as the professional identity of organizational members. Prior literature on knowledge boundary work and professionalism predicts a boundary protection reaction to such a challenge; I observe this reaction but also find a powerful contrasting reaction: boundary dismantling. Indeed some organizational members decided to protect their knowledge boundaries and professional identity as "problem solvers", but others deliberately dismantled their knowledge boundaries and expanded and even reconstructed their professional identity from "problem solvers" to "solutions seekers". This was a significant transformation both for the R&D knowledge creation process and the members' professional identity and capabilities. I discuss implications of these findings for theories on knowledge and innovation and professionalism and suggest directions for future research.

"Found in Translation: Decoupling Problem Formulation from Problem Solving and Opening the Solution Space" (Submission target: Organization Science)

We have long believed that the way a problem is formulated is crucial to the way it is solved, and that innovative solutions often steam from reframing the problem. However, since problem formulation and problem solving are two intertwined phases that have been all but impossible to tease apart, our knowledge of problem formulation proper has hardly advanced in the last few decades. Recently, a new setting, namely open and distributed innovation, has allowed us to shed light on the problem formulation process and its impact on problem solving. This new model, in a clear juxtaposition to the standard one, suggests a distribution of the innovation process by decoupling the problem formulation process from the problem solving one. Little is known of these processes and how they are different from the traditional coupled problem formulation and solving process. This paper explores the process that strategic R&D problems at NASA went through in both the coupled standard innovation process and the decoupled distributed one. I find a new process of "cross boundary problem formulation" that emerged in the decoupled model when R&D organizational members aimed to broaden the solution space outside their usual knowledge boundaries, to other disciplines and professions. Problems that went through cross boundary problem formulation had more successful solutions. Furthermore R&D members described the new process as the most important capability developed from their experiment with open and distributed innovation. This paper suggests a theoretical model of the cross boundary problem formulation process and implications on innovation.

"Innovating How to Innovate: Evolutionary Model of Dynamic R&D Paths with Shifting Loci of Innovation" (with K. Lakhani and M. Tushman, in preparation for submission to SMJ, special Issue on New Theory in Strategic Management)

Until recently, the prevailing consensus among various streams of theoretical and empirical literature in strategy, economics and organizational theory has been that innovation does and should take place within the boundaries of the firm. However, growing empirical evidence and emergent theoretical work suggests that the locus of innovation is shifting beyond the boundaries of the firm. A growing number of organizations currently experiment with changing and opening the boundaries of their R&D processes to various degrees. As a result, the complexity of managing R&D systems has increased and our theoretical models and terminology are inadequate. This paper suggests an organizational evolutionary model that captures the changing organizational boundaries of innovation. The analysis suggests the conditions in which organizations will close or open of these boundaries. For each phase of the innovation processvariation, selection, and retention-we identify the drivers shifting the loci of innovation. We suggest that task decomposition is a critical strategic capability and a choice that determines the boundaries of the innovation process. We build on the existing knowledge theory of the firm and the evolutionary perspective streams of literature with extended examples from Apple, NASA, and IBM. The resulting model captures the rising complexity of managing R&D in organizations across various boundary modes and has important implications for organizational boundaries, capabilities, design, and identity.