In memory of Avi Fiegenbaum

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ISC 2010
Conference Abstracts
Hambrick and Mason's (1984) notable proposition that an organization is a reflection of its top management team's (TMT's) attributes led to considerable research attention aimed at studying the role of TMTs in making strategic decisions ("SDs") and influencing organizational outcomes. The current study begins with an analysis of the M&A process as a key strategic choice for TMTs. Despite evidence of high M&A failure rates, M&As increase in size and quantity. This phenomenon raises numerous questions: Why do some TMTs make better SDs while others do not? In which ways is the decision making mechanism of successful firms better than that of less successful ones? And more specifically, what are the mechanisms through which improved outcomes might be augmented?

We posit that the answer lies in both TMT characteristics, and particularly in its SD processes. Specifically, we suggest that the TMT engagement in mutual and collaborative interaction (i.e., behavioral integration) facilitates strategic decision comprehensiveness ("SDC"), which in turn, results in enhanced organizational performance. Further, we examine two corresponding models centering on the role of SDC. The first examines the effect of transformational leadership on the establishment of SDC in organizational SD making and organizational performance, while the second links SDC to the formation of TMT connectivity and resulting innovative work behaviors. Unique survey-based and secondary objective data for this study will be collected from small to medium size firms, originating in a wide variety of industries.

Adding by subtracting

Elena Vidal, Duke University

Resource reconfiguration – understood as a combination of mergers, acquisitions, internal development, alliances and/or divestitures – is an important part of firm’s growth strategies (Helfat et al., 2007; Kale & Singh, 2007; Teece, Pisano & Schuen, 1997). Because reconfiguring resources entails change, there is uncertainty around the effect that the strategies would have on the firm. Insights from prospect theory suggest that a firm’s resource reconfiguration behavior will differ depending on its relative position to an aspiration level (Greve, 1998; Kahneman & Tversky, 1979). Drawing on the conventional wisdom in this theory, we argue that firms below the aspiration level undertake more risk and thus engage in more resource reconfiguration activities, both in terms of total number of reconfiguration activities as well as the magnitude of them; on the other end of the spectrum, firms that are above the aspiration level have higher stakes to lose and they face the risk of falling to or below aspiration level, therefore engaging in more reconfiguration activities and at a higher magnitude; firms that are close to the aspiration level, however, are less likely to engage in risky activities such as resource reconfiguration, as the differential between risk and payoff is not as significant as for firms farther from the aspiration level. Using data from the pharmaceutical, banking and entertainment media industries, we study the extent to which firms engage in resource reconfiguration and argue that its relationship to firm performance is non-monotonic. This work contributes to prospect theory by considering how aspiration gaps influence both the frequency and the magnitude of relevant reconfiguration activity.

The Embedded Dynamics of Strategic Alliances

Sebastian Picard, ESCP-Europe

Despite managerial difficulties and a high rate of failure, firms have increasingly attempted to implement alliances since the 1980s. One may ask what the reasons of such a paradox are. Why are alliances so hard to run? And why are some alliances able to last over time despite environmental shifts? To provide some new answers to these recurring questions in the academic and managerial literature, we consider alliances as
complex organisms embedded in specific contexts, built and managed by individuals or groups whose mindsets and interests are likely to shape the relationship. This implies that to explain the dynamics and performance of alliances we need not only to consider them from a capabilities standpoint but also from a cognition perspective. This qualitative research develops several concepts that illustrate how firms can successfully lead their alliances through uncertainty. (1) The first is the Inter-organizational variety which is recognized to help fitting environment's evolution but also to result potentially in messiness and inconsistency. As a consequence, we found that performing and evolving alliances are those that also develop (2) virtual leadership and (3) learning-in-doing capabilities. Indeed, our research shows that these two capabilities enable to maintain identity and generate dynamic strategy while guiding the way to execute it in cohesive fashion. We argues that rather than rational and coherent, it is more important for strategic alliances in highly turbulent environment to develop cognitive framework within which co-evolution is possible despite differences in time, space and motives.

10:00-11:00 Track 2

Extending the Behavioral Theory of R&D Innovation: Implications of Performance Feedback Learning

Galia Schwarz, Technion– Israel Institute of Technology

The behavioral perspective often offers contradicting arguments on the impact of performance feedback on search intensity. This research research examines how performance feedback frames- and constrains- both the allocation of resources for R&D search and the quality of R&D. The study extends the foundations of the behavioral theory of R&D innovation (Cyert & March, 1963, March, 1994) along 3 lines; first, we broaden the scope of learning from performance feedback in terms of: motivation (survival versus aspirations), time impact (short versus long term) and comparisons (self versus social comparisons). Then, we develop theory on the impact of performance feedback on R&D search intensity and R&D quality in 3 different situational zones: underperforming firms threatened by bankruptcy, underperforming firms focused on aspirations, and outperforming firms. Third, the study considers the moderating effect of unabsorbed slack resources and environmental contingencies (munificence and dynamism) on performance feedback learning. Based on a sample of public firms traded in the U.S from 3 high technology industries over a period of 19 years during 1988-2006, we find that the impact of performance feedback on R&D search intensity and R&D quality is conditional upon situational and motivational determinates. Furthermore, different levels of unabsorbed slack and environmental munificence and dynamism may inverse the impact of performance feedback on R&D intensity. The findings point to the importance of considering situational and motivational determinates of performance feedback learning and incorporating the moderating effects of slack and environmental contingencies when predicting organizational behavior in response to performance feedback.

Small Firms, Big Patents? Estimating Patent Value Using Data on Israeli Start-Ups’ Financing Rounds*

Gili Greenberg, Bocconi University

This paper considers the impact of the intellectual property (IP) system on the market for entrepreneurial finance. If the market for entrepreneurial finance were efficient, investors’ valuations of start-up firms should be independent of whether their patents’ were pending or granted. However, during the pre-grant period, the need to disclose unprotected knowledge, asymmetric information and adverse selection could result in lower valuations. This study therefore estimates whether patent grant, which reduces uncertainty about the scope of the IP rights conferred, enhances start-ups’ valuations by venture capitalists. Original panel data pertaining to 188 Israeli technological start-ups, who received more than 600 financing rounds, enter a fixed-effects analysis that controls for firms’ unobserved heterogeneity. The results show a positive association between patent applications and firm valuations. The additional impact of granted patents is positive and significant for younger firms and during early financing rounds but small and insignificant for more mature start-ups. These findings suggest that, in the case of younger start-ups, uncertainty about patent scope, coupled with imperfections in the entrepreneurial finance market, adversely affect the relationship between entrepreneurs and investors. A more speedy examination process of younger firms’ patent applications therefore could enhance their ability to attract financing.
Linking Technology to Markets - An Empirical Examination

Sharon Itzkovitch, Technion – Israel Institute of Technology

Due to the fungibility of technological resources, new technology ventures can identify, evaluate and exploit multiple market opportunities in an evolving process of linking technology to markets, which bear some fundamental consequences for the emerging firm. The relatively scant literature on multiple market opportunities stemming from a technological resource assumes that even when alternative opportunities are indeed considered, entrepreneurs should initially choose one single opportunity. However, theories on strategizing under high levels of uncertainty suggest that multiple viable opportunities may form a set of real options for the venture, and may be simultaneously pursued. Therefore, based on initial interviews and theoretical development, I suggest three different strategies for pursuing real options derived from multiple market opportunities: single strategy (pursuing only one real option at a time), parallel strategy (pursuing multiple real options simultaneously) and semi-parallel strategy (pursuing one real option as a stepping stone for another more ambitious one). The theoretical model aims to understand why these different strategies emerge and become implemented in new technology ventures, and under which circumstances should each strategy lead to better performance. This theoretical model is examined quantitatively based on a face-to-face survey with founders of new Israeli ventures in the imaging and image processing area. Understanding the different market opportunity strategies, why they emerge and how they affect the process of linking technology to markets is both theoretically and practically important, as it addresses explicit knowledge gaps in our current theoretical knowledge and may offer practical strategic guidelines for technology entrepreneurs.

11:15-12:15 Track 1

The Effect of Short and Long Term Performance Feedback on Exploitation and Exploration Strategies: The Moderating Role of Top Management Team's Motivations and Learning Capabilities

Ayala Berenson, Technion – Israel Institute of Technology

In dynamic environments, the pursuit of both exploration and exploitation strategies is a major factor in determining an organization's survival and long-lasting performance. In this regard, the exploration-exploitation literature has mainly focused on how to enhance organizations' ability to pursue both strategies simultaneously, but has paid little attention to the nuances of different antecedents. The aim of my study is to demonstrate the influence of both short- and long-term organizational learning on the decision to pursue exploration and/or exploitation strategies. More specifically, I suggest: (a) performance feedback (PF) theory, based on the distance between current organizational performance and its aspiration, is directly connected to investment in either exploration and/or exploitation strategies; (b) organizations use different time-horizons, namely short-term and long-term learning from PF gaps, to engage in exploration/exploitation strategies, and (c) the characteristics of organizations' top management teams (TMTs), such as learning capabilities—absorptive capacity (ACAP), or financial and epistemic motivations—moderate the effect of PF on organizations' investments in exploration and/or exploitation strategies. Through a series of hypotheses that empirically test these assertions, I intend to shed light on the processes affecting organizations' tendencies to explore or to exploit. Additionally, I expect to make a substantive contribution on the literature by demonstrating the importance of paying close attention to the time horizon in organizational learning from PF. Moreover, considering the TMTs' motivations and ACAP can offer new insights about managing and sustaining organizational performance.

The Performance Effects of Balancing Exploration and Exploitation within and across Governance Modes

Uriel Stettner, Tel Aviv University

This study promotes an emerging perspective on balancing exploration and exploitation and its performance implications. It advances the notion of domain separation which enables firms to simultaneously leverage their experience and uncover new opportunities. In particular, it acknowledges interdependence in firms’
exploration and exploitation activities across distinctive governance modes, namely internal development, acquisitions, and alliances. Balancing within each mode can be rewarding, but the costs associated with resource allocation constraints, limits to specialization, and tension between conflicting organizational routines outweigh the benefits, resulting in diminished performance. In contrast, when balancing across modes, firms minimize or avoid many of these operational impediments, thus enjoying enhanced performance. Furthermore, exploring via externally-oriented modes such as acquisitions or alliances is expected to pay off more than exploring via internal development. Finally, gaining experience with particular governance modes is likely to intensify the benefits of balance across modes relative to balance within modes. Analyzing a longitudinal dataset of U.S. software firms, this study demonstrates that firms do not typically benefit from balancing within modes, yet enjoy enhanced performance when balancing across modes, especially when exploring via externally-oriented modes. Finally, experience tends to amplify the negative performance implications of balance within modes. In contrast, when balancing across modes, experience may be both, an asset and liability. The framework offers a holistic approach to balancing exploration and exploitation on the firm level. It reconciles the mixed evidence in support of Jim March’s balance hypothesis and offers important implications for scholarship and managerial practice.

The Attributes of Partners and Firm Performance in Alliance Portfolios

Seong Young Kim, EM Lyon

The composition and the contribution of alliance partners occupy a central position in the study of alliance portfolios. Therefore, understanding the attributes of partners is of paramount importance. This PhD research will explore the effects of the attributes of partners to firm performance in alliance portfolios, by separating these attributes into technological and commercial resources and reputation, by extending the notion of attributes to the second-order firms with which the partners build alliances. I do so for three reasons. First, prior research has not concurrently examined two resource characteristics, but rather treated them exclusively. Second, research has rarely investigated the costs associated with leveraging prominent partners’ attributes at the level of alliance portfolio. Third, the prominent attributes a partner possesses should be understood beyond its own organizational boundary, because the development of such attributes can also be viewed in relation to those partners’ independent alliance activities over time. Research, however, has so far only paid little attention to the inherent differences in the second-order firms’ attributes, by treating them at the level of network structure. I propose that although firms are expected to enhance their performance thanks to prominent resource attributes brought by their partners, such attributes could incur inordinate costs, offsetting the benefits from those partners. However, a partner's social status and an attribute of indirect partners could delay the relationship. I will design an empirical research in Korean semiconductor industry over the period of 1995-2008.

11:15-12:15 Track 2

Young Firms Evolving: Ownership Fit, Firm Strategies and Performance Effects

Razvan Lungeanu, Northwestern University

The first study in my dissertation brings forward a contingency view on the relationship between ownership, boards and firms, whereby different firms benefit more or less from different kinds of ownership. I place my first study in the IPO context, one of the most common circumstances where owners are active through their board directorships. Given that board monitoring and involvement has been shown to affect firm performance, I argue that matching firms with the right owners in the first place may predict both the IPO likelihood and performance. While previous studies focused exclusively on non-contingent factors and assumed linear effects, I offer a contingency perspective on the likelihood of the firm to successfully reach and then capitalize on the IPO event. In my second and third study, I use the IPO process as a context rather than a cause to investigate the antecedents and consequences of changes in business and corporate strategies for young firms as they evolve. First, I examine the factors affecting the variation in the magnitude, direction and timing of such changes. Second, I study the effect that strategies employed for the first time and their variation, have on the performance of firms making the transition from private to public ownership. Changes in business and corporate strategies that occur during the IPO process remained so far in the back seat of
researchers’ agenda. What triggers such changes that are heterogeneous across firms going public and what are their performance outcomes remain an important and still open question.

**Firm Growth along Product and Geographic Domains in the Short-Run**

**Ohad Ref**, The Hebrew University

This paper discusses firm growth along product and geographic domains in the short-run. The research question of the paper is: do firms focus on a single domain (either product or geographic) per unit of time or do they simultaneously expand along product and geographic domains? I hypothesize that different and even contradictory answers emerge to the above question depending on whether we discuss pure diversification (i.e. penetration into new product domains or foreign markets) or whether we discuss expanded presence in existing noncore product or foreign markets. This is so since the constraints that influence managers’ strategic choices regarding their firm’s evolution do not affect pure diversification and expanded presence in existing noncore product and foreign markets in the same way. Expanded presence in existing noncore product and foreign markets is less demanding in terms of resource requirements than pure diversification and involves less risk. Thus, failure to distinguish between pure diversification and expanded presence in existing noncore product and foreign markets, as occurred in previous studies, may disrupt empirical analyses and lead to faulty theoretical insights.

**Capitalizing on Weak Institutions: Private Equity and the Performance Effects of Local Resources in Emerging Economies**

**Markus Taussig**, Harvard University

How is private equity (PE) performance affected by the weak contract enforcement typical of emerging economies? Using a novel dataset covering the investments of 47 PE firms in 51 emerging economies over the years 1989-2003, I find: i.) performance improved when contract enforcement was weaker; and ii.) this counter-intuitive finding results from the moderating influence of firms’ local resources. Specifically, both locally originating PE firms and foreign counterparts on at least their second local fund exhibit negative relationships between contract enforcement and performance. I show that this moderating influence is robust to a number of relevant subsamples. Having raised an earlier fund in a foreign country, in turn, had value across all institutional settings, indicating that industry-specific resources matter even when crossing substantial country borders. These results represent rare empirical evidence of the performance effects of interacting firm resources and country institutions that contributes to both law and finance theory and integration of resource- and institutions-based views of strategy.
An extensive body of research has sought to untangle the antecedents of alliance performance, yielding two different approaches. One stream of research has underscored *ex ante* properties, such as cultural alignment between alliance partners. The other stream has focused on *ex post* relational mechanisms such as mutual trust, relational embeddedness, and relational commitment. We integrate these two perspectives and argue that in nonequity alliances, congruence of partners’ organizational routines is more critical to alliance performance than the cultural alignment of the partners. Our analysis of 420 alliances in the information technology industry supports this assertion and demonstrates how differences in partners’ internal-task routines undermine relational mechanisms that in turn impact alliance performance. We also show that partners who acknowledge their latent organizational differences can overcome some of these negative consequences. We advance alliance research by establishing the multifaceted nature of organizational differences and their performance effects, and by demonstrating how these effects are mediated by relational mechanisms.

**The Distribution of Value in Relationships: Bargaining over Relational Capital**

**Daniel Elfenbein**, Washington University in St. Louis
Todd Zenger, Washington University in St. Louis

Relational assets such as social capital are jointly owned, and thus the rents that accrue to these assets may be subject to bargaining. We examine this bargaining process in the context of buyer-supplier relations. We take the perspective of a focal buyer and explore how its portfolio of relationships defines the returns to relational capital that can be claimed by suppliers. We show how, against a backdrop of uncertainty, the buyer’s choices of current suppliers shape both the potential future returns and its ability to capture these returns. We analyze this process empirically by examining the procurement activities of a large, diversified manufacturing company and find patterns in the data that are consistent with our predictions about how both sellers and the buyer behave as they jockey to both create and capture returns from relationships.

**How Pay it Forward Happens: Mechanisms of Generalized Exchange**

**Wayne Baker**, University of Michigan
Sheen Levine, Massachusetts Institute of Technology

Generalized exchange is a common practice with wide-ranging implications. Yet it remains a puzzle for theories of rational choice, social exchange, and evolutionary biology. Prior investigations focus on mechanisms developed or tested in isolation, and almost all assume that social preferences are homogenous. This article presents and tests an integrated model of generalized exchange that combines strategic reputation building, fairness-based selective-giving, the obligation to pay it forward, and heterogeneous social preferences (values). Using laboratory experiments, we show that each mechanism is robust: each has significant effects even when we include all four mechanisms in the model and control for other factors. However, some mechanisms have more influence than others, and different combinations of mechanisms yield a wide range of generalized exchange. Overall, generalized exchange is a collective result of people who strive to increase their resources, make decisions contingent on the visibility of their actions and on the behavior of others with whom they interact, reciprocate to a system from which they benefited, and behave consistently with their values. These values moderate how people respond to the presence or absence of reputational incentives, as well as the extent to which they reward generous behavior and punish stingy behavior.
09:00-10:15  Paper Session: Managerial Experience and Decision Making

The Dynamics of Cognitive Structures in Periods of Discontinuous Change

Florian Brummer, University of Passau
Kathrin Haberle, Zeppelin University

Studying longitudinal cognitive data of CEOs operating in fast-clockspeed industries, our analysis reveals that CEOs’ cognitive structure development corresponds to ambidextrous demands. We suggest that ambidextrous tensions and CEO cognitions co-evolve. We contribute to understanding the character of cognitive change in ambidextrous situations. Reviewing past industry shifts, our study helps understanding cognitive processes in ambidextrous settings and provides us with assumptions for future industry shifts.

Venturing into New Territory: Career Background of Corporate Venture Capital Managers and Investment Practices

Gina Dokko, University of California, Davis
Vibha Gaba, INSEAD

When organizations adopt new practices, the practices are often modified to fit the new context. However, the nature and extent of adjustment is not well understood. We propose that managers implementing new practices are instrumental in determining how the practices are adapted. We argue and find that within-firm experience and imprinting from former occupations affect how managers implement organizational practices and prioritize goals. We test this argument by observing practice variation in corporate venture capital units within information technology firms. Our research contributes to diffusion theory by providing insights into how organizational practices are transformed as they enter new contexts.

The Influence of Corporate Acquisition Activity on CEO Leadership Styles: Evidence from the Global Millennial Merger and Acquisition Waves

Kathleen Marshall Park, Massachusetts Institute of Technology
Gavin Schwarz, University of New South Wales

Repeated intervals of intensive merger and acquisition activity have occurred since the late 19th century in the US and additionally across major developed economies worldwide. The first wave ran from 1890-1905 (the monopoly wave), followed by acquisition surges in the 1920s (the oligopoly wave), 1960s (the conglomerate wave), 1980s (the discipline wave), 1990s (the strategic or deregulation wave), and during the first decade of the 2000s (the defensive wave). Our research centers on CEO leadership within the 1993-2000 and 2003-2008 global merger waves. While considerable analysis over various decades supports the existence of discernible peaks in acquisition activity as related to capital market conditions or technological and regulatory factors, markedly less work has concentrated on the analysis of phenomena within acquisition waves. We find that just as each wave has had a unique character in the manner of merging, so has each wave evidenced a singular, socio-politically and financially-embedded style of helmsmanship, driven by the stringent yet unique economic concerns of the time periods.

10:30-11:45  Paper Session: Dynamics of Network Structure

Dangerous Connections: Hedge Funds, Brokers and the Construction of A Market Crisis

Jan Simon, IESE Business School
Yuval Millo, London School of Economics
Neil Kellard, Essex Business School
Ofer Engel, London School of Economics
Financial risk theory focuses on the potential outcomes of investment decisions, but ignores virtually the decision making process itself. This paper is the first to analyze hedge funds’ decision making in detail, examine the risks inherent to these practices and reveal their contribution to the emergence of a market crisis. We collect and triangulate data from interviews and field observations in addition to mapping and analyzing social networks. We investigated 26 hedge funds and 8 brokerage firms in Europe, the United States and Asia between December 2007 and June 2009. The hedge funds analyzed controlled 15% of all assets managed by hedge funds. We find that decision making in hedge funds relies crucially on an elaborate two-tiered structure of connections among hedge fund managers and between them and brokers. We focus on the Volkswagen-Porsche crisis of October 2008. There, our findings show that the connections among hedge fund managers, and between them and their brokers, contributed to a situation whereby, once hedge funds collectively accepted an investment idea and invested accordingly, they ‘locked in’ on the idea, ignoring warning signs. These findings add to our understanding on how financial risk events emerge and to practical expertise of financial risk managers.

Take a Chance on Me: An Examination of the Interdependence of Start-up Tie Formation across Venture Capital and Alliance Networks

Anu Wabhwa, Ecole Polytechnique fédérale de Lausanne
Corey Phelps, HEC Paris

Organizations exploit the information diffusion and signaling properties of their existing interorganizational networks to manage the risks and uncertainty involved in forming new partnerships. How then do new organizations that are unknown to existing network members gain admission to the network? This study examines the conditions under which a stranger to a focal network can gain admission by leveraging a different type of relationship it has with an organization that is also a member of the focal network. We investigate this question by examining whether and when a corporate venture capital (CVC) relationship between an incumbent and a new venture leads them to form a strategic alliance with each other. Building on real options research and our field work, we argue that a CVC investment in a venture creates a growth option and forming an alliance with the venture represents the exercise of this option. We predict the resolution of uncertainty about a venture and its technology and the risk of the option being preemptively exercised by others increases the hazard rate of alliance formation, while the strength of the investor’s technological resources moderates these effects. A survival analysis of 309 CVC dyads provides support for most of the hypotheses.

Exploring the Locus of Innovation: The Dynamics of Network Communities and Firms’ Innovation Performance*

Maxim Sytch, University of Michigan
Adam Tatarynowicz, Tilburg University

The implications of social structure for firms’ outcomes have traditionally been analyzed either at the ego-network level or the global-network level of analysis. Departing from prior research, we explore the role of midrange effects that result from firms’ membership in network communities. Focusing on firms’ innovation performance, we first highlight the role of the structural characteristics of network communities, such as their size and centrality in the global network architecture, as well as the role of community membership dynamics. By shaping the scope and diversity of the community’s knowledge base, these features can significantly affect the resident firms’ innovation potential. We then explore the role of a firm’s movement across communities in determining its exposure to diverse and heterogeneous knowledge inputs. Our findings suggest that larger and more centrally positioned communities enable resident firms to innovate at a higher rate. We further find that the level of membership turnover in a firm’s community and the extent of a firm’s movement across different communities affect its innovation rate in an inverse curvilinear pattern, wherein the firm reaps the greatest innovation benefits at moderate levels of membership turnover and community hopping. Our empirical analyses use the evolving community structure of a network of interorganizational partnerships in the global computer industry over 1985-2001 to predict computer firms’ patenting rates.
There Are Many Ways to Pursue a Strategy: Firm Characteristics and Strategic Vehicle Diversification**

Ithai Stern, Northwestern University
Razvan Lungeanu, Northwestern University

This study extends two major lines of strategy research: firm diversification and choice of strategic vehicles. First, by introducing the concept of strategic vehicle portfolio this study expands diversification research beyond arenas to diversification across vehicles. Our theory suggests why a firm’s level of vehicle diversification is likely to be influenced by some of the same factors that affect its diversification across arenas. Second, in contrast to prior studies on choice of strategic vehicles, which have examined a firm’s likelihood of choosing a particular strategic vehicle, or one vehicle over another, this study examines the effects of a firm’s characteristics on the level of diversification of its whole portfolio of vehicles. The hypotheses are tested using a unique dataset of all U.S. public pharmaceutical firms for the period 1992–2006. The results indicate that a firm’s degree of vehicle diversification is associated with its top management team (TMT) tenure heterogeneity and functional diversity, and with the firm’s levels of product and international diversification.

The Impact of the Structure of the Board of Directors on Pre-IPO Firm Performance

Mark Tribbitt, Drexel University
Azi Gera, Drexel University

The structure of the board of directors has been studied extensively in large firms but has received less attention in firms at the pre-IPO stage of development. We examine a sample of 830 investment-funding solicitations submitted to an investment broker to determine the affect of the board of directors on short-term performance, survival and the source of funding. We propose that the proportion of inside, outside affiliated, and outside-unaffiliated directors representing the board will influence the likelihood of pre-IPO firm survival. Additionally we suggest that the diversity of work experience within the board will be related to firm survival. Further we submit that the role of the CEO in the board of directors has significant – and contradicting – impact on both short-term performance and survival. Last we propose that the structure of the board of directors will influence the source of private equity funding obtained.

Family Ownership and Performance in New Firms

Sharon Belenzon, Duke University
Rebbeca Zarutskie, Duke University

We study the relation between family ownership and performance in a large sample of new firms. We find that new family-owned firms exhibit better performance than new non-family-owned firms in terms of higher returns on assets, wider profit margins and greater survival rates. These findings are especially strong in the earliest years of the firm life cycle and when two of the leading shareholders are married. The performance advantage of new family-owned firms is also larger when managers hold smaller percentages of equity. Our results suggest that family ties serve as a mechanism to improve the monitoring of managers by shareholders and the enforcement of implicit contracts between shareholders and managers. At least part of the advantage of family ties between shareholders seems to stem from an ability of shareholders and managers to commit to keep cash within the firm. Moreover, the additional performance advantage of firms owned by married shareholders, even after controlling for managerial equity ownership, suggests family ties, in particular the ties of marriage, serve as a mechanism to enhance firm performance above and beyond mitigating the manager-owner conflict. Overall, our results support efficiency-based explanations for why family ownership, in particular the "mom and pop shop", is a predominant ownership structure in new firms.
**Do Resource Distributions Within an Interfirm Network Matter? Toward a Networked Resource Distribution Perspective**

**Jesse Karjalainen**, Aalto University  
Aku Valtakoski, Aalto University

This paper puts forth an argument that, instead of considering the impact of resources and interfirm networks separately, they should be considered holistically through the concept of networked resource distributions, which describe how a particular resource is distributed throughout the interfirm network. To demonstrate the applicability of this theoretical argument, we conduct an empirical test of technological and customer knowledge distributions in the context of enterprise software firms. Our preliminary analysis indicates that the shape of both knowledge distributions have a significant impact on focal firm performance. Our study thus provides tentative evidence for our theoretical argument considering the impact of network resource distributions.

**Contingent Effects of Corporate R&D Resources, Scope and Governance in the Formation of Firm Performance**

**Ernst Verwaal**, RSM Erasmus University  
Antonio Verdu, Miguel Hernandez University  
Herman Belgraver, RSM Erasmus University

This study explores the contingent effects of corporate R&D resources, geographic scope, industry scope and governance on the R&D intensity – firm performance relationship. Previous literature has found mixed results when studying the relation between R&D intensity and firm performance. Building on the resource-contingency literature, we submit that these mixed results can be explained by the R&D resources, scope and governance of the corporate alliance portfolio in which the firm operates. To test these ideas, we use a sample of 1404 focal firms across eleven years. The results of this study support the notion that the relation between the focal firm’s R&D intensity and firm performance is contingent on the corporate R&D alliance portfolio resources, geographic and industry scope variables as well as the governance of the corporate relationships. We offer implications for managers and future theory development.

**The Impact of Portfolio Composition on Affiliation Benefits**

**Umit Ozmel**, University of North Carolina  
**Isin Guler**, Sabanci University & University of North Carolina

This study argues and empirically demonstrates that the value of a venture's affiliations depends in part on its relative standing in the portfolio of affiliations held by its partners. Relative standing is determined by how the venture ranks among other ventures in the partner's portfolio with respect to observable signals of quality. We argue that the relative standing of a venture in its partner’s portfolio influences the focal venture's access to the partner’s resources and, subsequently, the venture’s performance. We also argue that a venture's relative standing becomes a more important predictor of performance when the partner has a larger portfolio or higher status. An empirical test of the equity investments by venture capital firms in 1011 private biotechnology ventures between 1980 and 2004 provides support for the hypothesized relationships.
12:00-13:15   Paper Session: Managing Strategic Change

**Leopards Sometimes Change Their Spots: How Firms Manage a Shift between Strategic Archetypes**

Howard H. Yu, Harvard University

This article describes a comparative field study of Taiwan’s PC industry. Tracing the strategic evolution of six leading firms, I found their transformations followed different paths because of the different mechanisms upon which top management relied at different times. I compare the efficacy of three disparate mechanisms. One lesser-known process, termed “deep dive,” is shown to allow top management to induce changes in the informal organization ahead of changes in formal structures, and thereby to ensure undistorted experimentation with a new strategy before making irrevocable choices. This reverses the sequence of change often posited in the organizational design literature.

**The Strengths of Strangers: External Facilitators’ Organizational Change Practices and Resources**

Amit Nigam, New York University
Ruthanne Huising, McGill University
Esther Sackett, Beth Israel Medical Center
Brian Golden, University of Toronto

External facilitators play a critical role in triggering organizational change. Despite their importance, limited research has examined the practices by which facilitators influence change. We argue that external facilitators’ role as unembedded actors allows them enact a unique set of practices to design and build support for change. These practices are made possible by the external facilitators’ cognitive, structural and political disembeddedness from the client organization, combined with their unique role as temporary organization members. Drawing on ethnographic data of change facilitation teams working in seven hospitals, we describe three categories of practice unique to unembedded actors: accessing actors’ perspectives and political stances, reshaping actors’ interpretations, and influencing the political landscape. We argue that these practices are more available to external facilitators. As a result of their outsider status, facilitators gain access to the cognitive and political stances of key actors. Drawing on this local information, also their cross-organizational experience, they reshape internal actors’ interpretations and influence the political landscape, encouraging specific actions and coalitions. The result is that external facilitators are able to catalyze change efforts within the hospital. Members of the organization develop and commit to feasible, creative reorganizing plans that advance organizational goals.

**Business Planning and Venture Level Performance: Challenging the Institution of Planning**

Benson Honig, McMaster University
Mikael Samulsson, Stockholm School of Economics

In this study we longitudinally examine outcomes of entrepreneurial business planning to access whether this is a fruitful activity or not. We use both data replication and data extension to examine previously published and controversial research. Our empirical setting is a random sample of 623 nascent ventures that we follow over a period of six years - from conception, through exploitation venture level performance, as well as termination. We compare and contrast previous findings based on this data, by observing sub-sets for the population regarding a number of dependent variables. Our findings highlight the importance of data replication, data extension, and sample selection bias. Thus, we add not only to the debate regarding the merits or liabilities of planning, but we also contribute to evaluating normative research and publication standards by re-examining past research using more comprehensive data and an extended time frame.
Research Bazaar: Knowledge Transfer and Learning

Digging at Discourse: Examining the Effects of Novelty, Reputation, Competitive Intensity, and Price on Market Discourse

R. Scott Livengood, University of Florida

Entrepreneurial actions, such as new product introductions, present new information and drive the market process by moving the market either toward or away from existing market conditions. These products cause uncertainty for market participants, who engage in discourse as a sensemaking mechanism to reduce this uncertainty and eventually either accept or reject the new product, which is essentially the market process. Central to this process, however, is the oft-overlooked phenomenon of market discourse, or the objective and subjective information exchanged in the marketplace, that can be a key sensemaking mechanism when confronted by uncertainty surrounding new products by firms. However, little is known regarding the impact of entrepreneurial actions and the process of how market discourse moves the market. Using a unique dataset created from the United States wireless telephone industry from 1998-2007, I explore how certain action-, firm-, and industry-level characteristics impact market discourse. Results suggest that discourse can act as a sensemaking mechanism when new products are relatively more novel than prior phones, but that reputation, competitive intensity, and price can act as a substitute for discourse as a sensemaking mechanism to reduce uncertainty experienced by the market.

Strategy Formulation and Implementation: A Cognitive Approach to Strategy Implementation

Joachim Timlon, Linneaus University

In distinction from authors who have theorized about the dynamics of resource-based strategy I describe strategy realization as organizational learning processes and analyze the influence of cognitive repositories on the capacity to renew competences so as to achieve congruence with changes in the external business environment. Results from a longitudinal study of a Scandinavian multinational company indicate that the realization of a new strategy as planned action is the re-conceptualization of meaning structures regarding the principles of organizing how individuals effectively cooperate in order to use resources to perform activities. The result is a modification of organizational routines and a novel activity pattern; the new strategy is therefore realized to the extent to which the meaning structures of the actors involved are congruent with the principles of that strategy. The re-conceptualization involves the re-definition of an organization’s “theory-of-the-business” (Drucker, 1994):institutionalized organizational cognitive structures regarding the external market in which the MNC is embedded, the internal relationships between group companies and how to achieve congruence with market contingencies. Contributions are made to the need for research regarding the cognitive dimension of the behavioural micro-foundations of organizational routines and capabilities.

Strategic Thinking: Refining the Definition and Discovering a Typology

Lara Jelenc, University of Rijeka
Paul Swiercz, George Washington University

Strategic thinking, within the literature of strategic management, has over the past decade become a topic of considerable academic interest; so popular in fact that one author refers to it as an overused concept and under defined term (Sloan, 2006). If true, this characterization is of interest to a relatively small community of researchers because for most scholars’ strategic thinking is a self-understood concept that exists in every single model, concept, theory and approach in the field of strategic management. As with most topics subjected to debate, the truth lies somewhere in the middle. In this article we investigate the underlying intellectual and process content of the term “strategic thinking” via a comprehensive literature review and analysis. The article provides a glimpse of misunderstandings and confusion that are often too closely associated with strategic thinking. As a consequence of this review we then propose a definition of strategic thinking placing particular emphasis on the part it plays in the formulation and implementation of business
strategy. Having developed and presented a formal definition we report results of an empirical research project designed to investigate the utility of treating strategic thinking as a multi-dimensional construct composed of discrete elements or types. Using data from a sample of European top managers from a variety of industries we use factor analysis to sort and verify the existence of varieties of strategic thinking. As a consequence we are able to present a new approach to strategic thinking by showcasing typologies of strategic thinking that can be taken into account for further research of strategic thinking capability. The contribution of the paper is in taking the strategic thinking debate one step further toward a unified definition of strategic thinking and suggesting a strategic thinking typology useful to researchers, practicing leaders, and executive development specialists.

Is Timing Everything? The Temporal Dependence of Methods for Facilitating Knowledge Transfer

Robert J. Jensen, Brigham Young University
Gabriel Szulanski, INSEAD

In this paper we empirically test the contingent effect of the timing of knowledge transfer method usage. To do so we employ unique survey data involving 38 different knowledge transfer methods and 142 transfers of organizational practices in eight companies to analyze the effect of individual and clustered transfer methods on the difficulty, or stickiness, of knowledge transfer across four transfer stages. We develop nine hypotheses and find that not only do transfer methods differ in their impact on stickiness over time, with positive effects being primarily stage specific, but that using methods during the wrong stage may hinder rather than facilitate the transfer of knowledge.

On Structural Means of Coordination - Validating the Impact of Integrators on Organizational Learning Outcomes

Mihaela Stan, University College London

This study develops and tests a theoretical framework that describes how structural means of coordination impact learning outcomes in organizations. While much has been theorized about the coordination benefits of managerial roles which cut across functional groups, less is known about the impact of such “integrators” on organizational outcomes in the long run. Drawing on the research tradition of organizational design, this study focuses on two features of formal structure which enable organizations to overcome the challenges of subunit specialization at the lower levels of organizations: organizational designs where lateral integration of specialized contributors occurs through the informal influence of liaison roles, and structural arrangements where linking roles exercise more formal influence. The novelty of this study lies in its approach to analyzing the link between structural attributes of organizations and performance outcomes, which moves away from static analyses of the relationship by making use of a unique longitudinal dataset relating to fertility clinics. Qualitative evidence from this medical field is also employed to illustrate how integrators with different degrees of influence impact learning outcomes in the long run when underlying conditions remain stable and when they shift. Moreover, the study ventures further by examining the impact of structural attributes on radical learning outcomes through the use of an exogenous disruption which affected the medical domain of fertility treatments.

Knowledge Base, Innovation, and Financial Performance: Evidence from Biotechnology and Pharmaceutical Industries

Chunlei Wang, San Jose State University
Xiaoyan Xu, San Jose State University

As an invention results from combining or re-combining knowledge elements, they are interconnected. Accordingly, the knowledge base of an industry constitutes a knowledge network, where knowledge elements are connected to some but not to others. Firms in an industry tend to differ in their portfolios of knowledge elements and thereby in their positions in the industry-wide knowledge network. In this paper, we argue that a firm’s positions in the knowledge network affect its inventive efficacy, as measured by
inventive productivity and absorptive capacity for new knowledge elements, and its financial performance. We contend that a central position in the knowledge network facilitates acquiring new knowledge elements and engaging in explorative innovations. In contrast, a position rich in structural holes, where a firm’s knowledge elements are tied to disconnected clusters of knowledge elements in an industry, helps increase a firm’s inventive productivity through exploitative innovations. These two positions further impact a firm’s financial performance. Focusing on the biotechnology and pharmaceutical industries in the United States and using patent data from the US Patent and Trademark Office and financial data from Compustat, this research provides an initial test on the effects of knowledge network positions.

16:00-17:15 Research Bazaar: Corporate Expansion Strategies

The Evolutionary Path of Offshore Captive Centre Strategies

Ilan Oshri, RSM Erasmus University
Julia Kotlarsky, Warwick Business School

In its broad definition, offshoring refers to the relocation of organizational activities (e.g. information technology, human resource, research and development) to either an independent service provider or a wholly owned subsidiary both based over the ocean. In recent years, offshoring as a strategic choice has attracted significant interest from academics and practitioners. Several studies have responded to the need to understand the challenges associated with offshoring (Vashistha and Vashistha 2006), and consequently have offered strategies to mitigate risks and considered the capabilities firms should develop in order to manage offshoring well. However, while the strategic option of offshore outsourcing that implies the use of an independent vendor located in another country has been widely addressed in the literature, the offshore captive centre as a strategic option has been poorly explored. Furthermore, the offshore captive centre has been perceived as a single-dimension strategic option, which assumes that a passive role is taken by the offshore captive centre regarding its strategic role within the firm. In this paper we seek to unveil and examine the range of strategic options available to the parent firm and the captive centre when setting up such an offshore unit. Therefore, our research question is: what strategic options a firm can pursue with its offshore captive centre? Based on the study of Fortune 250 global firms we identified four core strategies for captive centres: hybrid, shared, divested and terminated. We describe possible evolutionary paths of captive centres and the capabilities needed offshore.

Does Inward Foreign Direct Investment Increase the Innovative Productivity of Local Firms?

Francisco Garcia Perez, University of Oviedo
Byungchae Jin, University of Maryland
Robert Salomon, New York University

Over the past several decades, research in the fields of international business and strategy has devoted increasing attention to foreign direct investment (FDI). It is now well documented that firms engage in FDI either to exploit existing knowledge-based assets, or to seek new knowledge. Despite extensive scrutiny of the motivations for firms to engage in FDI, we know relatively little about the impact of FDI on host country firms, and especially, how inward FDI affects the innovative productivity of those firms. Extant theoretical arguments predict contrasting effects. One line of research suggests positive externalities to host country firms resulting in increased learning. Another line of research highlights the deleterious consequences to host country firms resulting from increased competition. Utilizing data from 1,799 Spanish manufacturing firms from 1990–2002, we investigate the impact of industry-level and firm-level inward FDI on the innovative productivity of host country firms. We find that FDI inflows into Spain at both the industry- and firm- levels negatively influence the ex post innovation of local firms. We contrast these findings with those using measures of productivity.
Strategic Change or Deja Vu? Why Does Unrelated Diversification Still Create Value in Emerging Markets?
Ayse Karaevli, Sabanci University

Bringing insights from institutional theory and strategic choice perspectives into related research on institutional economics and resource-based view, this study builds an integrated and nuanced theoretical framework and formulate several testable propositions that explain how several economic and behavioral factors at the environmental and firm-levels can affect the value creation potential of unrelated diversification in emerging economies as markets advance. The study also seeks to explain the heterogeneity of strategic behavior in restructuring process within the population of business groups by suggesting that how much value unrelated diversification creates depends on firm-specific factors (i.e., scale and scope, strength of capital base and distribution network) whose origin lie at the founder characteristics (i.e., merchant vs. industrialist background, risk taking propensity) and the entrepreneurs’ strategic choices at the time of founding and in early years of the group’s development. The theoretical arguments are illustrated with empirical evidence from the restructuring process of four major Turkish business groups that differ in terms of key theoretical dimensions, such as scale and scope, resources, and founder characteristics.

Intra-Industry Diversification and Firm Performance**
Talli Zahavi, Technion – Israel Institute of Technology
Dovev Lavie, Technion – Israel Institute of Technology

The strategic management literature has furnished extensive research on diversification, i.e., a firm’s expansion to new businesses beyond its traditional business. This research has focused on the motivation for diversification as well as on its performance implications. Little is known, however, about performance heterogeneity across firms that pursue diversification to related products within their industry. This study seeks to examine how product diversity contributes to the performance of firms that operate within a focal industry. Specifically, this study suggests that the intra-industry product diversity will be related to firm performance in a curvilinear fashion - at low levels as well as high levels of diversity a firm is expected to experience enhanced performance outcomes whereas weaker performance is expected at intermediate levels of diversity. This pattern is ascribed to benefits from economies of scope and impediments associated with negative transfer affects. In addition, this study reveals that the U-shaped effect of intra-industry product diversity on performance becomes more pronounced for firms with a higher R&D intensity and weakens as the firm accumulates product diversity experience. Data on a sample of 156 U.S.-based packaged software firms operating during 1990-2001 serve as the empirical setting for testing these conjectures. This study advances an emerging research stream on intra-industry diversification by underscoring some contingent performance effects.

From Parenting Advantage to Corporate Value Added: A General Framework and Operationalization
Matthias Kruehler, Technical University of Freiberg
Ulrich Pidun, The Boston Consulting Group

The concept of parenting advantage has been introduced by Goold, Campbell, and Alexander as the guideline for corporate-level strategy (Goold, Campbell and Alexander, 1994). It primarily focuses on the corporate parent (i.e., corporate headquarters) and can serve as a principle for executive decision making, the role of the corporate parent (van Oijen and Douma, 2000), different value creation strategies, and corporate portfolio management practices (Sadtlter, 1999). The concept is broadly accepted in the academic world, was quickly adopted by standard textbooks on strategic management (e.g., Grant, 2010), and is considered relevant for strategy formulation and portfolio management in corporate practice (Kruehler and Pidun, 2010). However, its broader application has not come up to expectations and only a few empirical studies have investigated the actual parenting approach of corporate headquarters in a systematic way. In order to close this gap, we developed a comprehensive framework that can be used (1) to investigate actual parenting approaches of corporate headquarters and (2) to analyze the relevance and current usage of different value added activities in corporate practice, as well as their potential combinations to distinct parenting strategies.
**Wednesday, December 29, 2010**

09:00-10:15  **Paper Session: Knowledge Diffusion and Innovation**

**Where and When Can Open Collaborative Innovation Thrive? Towards a Theory of Robust Performance**

*Sheen Levine*, Massachusetts Institute of Technology  
*Michael J. Prietula*, Emory University

While the economic impact of, and the interest in, open source innovation and production has increased dramatically in recent years, there is still no widely accepted theory explaining its performance. We combine original fieldwork with agent-based simulation to propose that the performance of open source is surprisingly robust, even in seemingly harsh environments with free riders, rival goods, and high demand. Open source can perform well even when Cooperators constitute a minority, although their presence reduces variance. Under empirically realistic assumptions about the level of cooperative behavior, open source can survive even increased rivalry and performance can thrive if demand is managed. The plausibility of the propositions is demonstrated through qualitative data and simulation results.

**Tapping external knowledge**

*Daniel Tzabbar*, Drexel University  
**Barak Aharonson**, Tel-Aviv University and New York University  
*Terry Amburgey*, University of Toronto

We examine how external knowledge flows influence early success in a sample of entrepreneurial firms. In sectors based on science and technology, technological innovation is a key factor differentiating between more and less successful firms. In this research we show that two forms of access to external knowledge, research alliances and scientist recruitment, influence innovative success but with different temporal patterns. We develop two hypotheses relating the renewal of these two sorts of external knowledge and innovative success. We test these hypotheses with 857 biotechnology firms during the period 1973–1999. Our results indicate that external knowledge influences innovative success with different dynamics for different sources and that the relationships are moderated by the stock of intellectual property held by firms.

**The Impact of Knowledge Resource Similarity between Competitors on Innovation Performance: A Longitudinal Study of the U.S. Pharmaceutical Industry**

*Victor Cui*, University of British Columbia  
**Ilan Vertinsky**, University of British Columbia

Do competitors have a positive or negative influence on a firm’s innovation? Incorporating insights from the resource-based view and the organizational learning theory, we developed a theoretical framework that sheds light on this question. We argued that the degree of knowledge resource similarity (in both structure and amount) between the focal firm and its rivals is an important determinant of the balance between the positive and negative externalities of competition. We tested our hypotheses using panel data containing innovation races from 1991 to 2004 in the U.S. pharmaceutical industry. We found that the focal firm’s innovation is likely to be negatively affected by competitions where rivals have relatively larger amounts of knowledge resources. Such negative effect, however, decreases as the knowledge structure similarity between the rivals and the firm increases. The net effect can turn positive. The largest positive impact is obtained when the knowledge structure between the rivals and the firm is neither extremely similar nor extremely dissimilar.
The Effect of the Internet on On-Time Performance in the Airline Industry

Itai Ater, Tel Aviv University
Eugene Orlov, Compass – Lexecon

We use flight level data and measures of Internet penetration across U.S. metropolitan statistical areas between 1997 and 2007 to study the relationship between Internet access and flight on-time performance, as a measure of flight quality. We find that on-time performance was substantially worse on flights in which more passengers originated in areas with higher Internet access. The magnitude of the effect of the Internet is larger for competitive segments. Our results are driven by longer departure delays and longer flight time and despite the fact that airlines increased flight schedule times. Our results lend support to theoretical search models, which suggest that firms engaging in price competition may choose to lower the quality of the goods they offer. We also discuss additional explanations for our findings.

Optimal Strategy of Multi-Product Retailers with Relative Thinking and Reference Prices

Ofer Azar, Ben-Gurion University of the Negev

Experimental evidence suggests that consumers are affected by reference prices and by relative price differences ("relative thinking"). A linear-city model of two retailers that sell two goods suggests how this consumer behavior affects firm strategy and market outcomes. A simple model analyzes the case in which all consumers want to buy both goods. An extended version adds consumers who want only one good. Relative thinking leads firms to increase the markup on the good with the higher reference price and decrease the markup on the other good, possibly to a negative markup. Stronger relative thinking increases the firms' profits.

Ain’t it “Suite”? Bundling in the PC Office Software Market

Neil Gandal, Tel-Aviv University
Sarit Markovich, IDC, Hertzliya
Michael Riordan, Columbia University

Our paper examines the importance of bundling for the evolution of the PC office software market. We develop a discrete choice model of product differentiation that enables us to estimate both the complementarity between word processors and spreadsheets and the correlation in consumer preferences across these two products. Our empirical results suggest that word processors and spreadsheets are strong complements and consumer preferences over word processors and spreadsheets are positively correlated; this provides incentives for firms to bundle these products. Using simulations, we find that a merger between the second and third largest firms in the industry would have been welfare improving.

Organizing for Innovation: The Architecture of the Firm and New Technological Knowledge Creation

Niron Hashai, The Hebrew University
Ram Mudambi, Temple University
Tim Swift, Saint Josef University

We theorize and empirically show that innovation in high technology entrepreneurial firms is contingent upon three major factors: 1) the ability of firms to learn from partners through R&D alliances; 2) the ability of firms to learn from their customers by integrating their marketing and sales channels; and 3) the ability of firms to spare managerial time and efforts by outsourcing low value added activities such as production. An empirical analysis of panel data for 147 Israeli high technology entrepreneurial firms is consistent with the
above arguments and supports the view that per value chain activity integration, outsourcing and cooperation decisions are instrumental for enhancing new technological knowledge creation.

**The Organization of R&D within Firms: Measures, Characteristics and Consequences**

Ashish Arora, Duke University  
Sharon Belenzon, Duke University  
Luis Rios, Duke University

We explore the relationship between firms' R&D organization and performance. Both the information-processing view and the incentives-based view of firm organization imply that centralized R&D will be more scientific, broader in scope, and have more technical impact, while being more likely in firms that operate with a narrower range of businesses or in complex technologies, and are more reliant upon acquisitions. Empirically, we develop a novel dataset on the organizational structure of 1,290 American publicly-listed corporations, 2,615 of their affiliate firms, as well as characteristics of 594,903 patents that they hold. By using intra-.rm patent assignments to affiliates as a proxy, we measure the level of .rm-level R&D decentralization, and generally find support for our propositions. Additionally, we find strong results for impact on outcomes that are not clearly predicted by current theories: firms that decentralize R&D invest less in R&D and produce fewer patents, while exhibiting greater sales growth and higher market value. We discuss possible explanations for these findings.

**The Long and the Short of It: Building Absorptive Capacity in Response to Performance Feedback**

Chanan Ben-Oz, University of Haifa  
Avi Fiegenbaum, Technion – Israel Institute of Technology  
Henrich Greve, INSEAD

In this paper we make three contributions to absorptive capacity theory. First, we introduce performance feedback as an activation trigger; second, we turn attention to boards of directors as a decision-making unit; and finally, we develop a process view of absorptive capacity that distinguishes external knowledge acquisition and assimilation — potential absorptive capacity — from its transformation and exploitation — realized absorptive capacity. We develop the theory and measures behind these extensions and test them on survey data from 252 board members representing 129 Israeli entrepreneurial high-tech organizations, yielding supportive empirical findings.

10:30-11:45  **Paper Session: Institutions and Innovation**

**The Influence of Social Audiences on the Acceptance of Radical Innovations: John Harrison’s Quest for Longitude at Sea**

Gino Cattani, New York University  
Simone Ferriani, Bologna University  
Andrea Ianza, Calabria University

Integrating neo-institutional theory and the systems view on creativity we probe the complex dynamics leading to the legitimation of a radical innovation. In particular, we examine the mediating role of social audiences and the mechanisms through which they affect legitimacy formation by selectively allocating the resources actors (candidates) need to succeed in a particular field. We argue that legitimacy can be acquired, maintained and lost as a result of (1) audience heterogeneity — i.e., the presence of multiple audiences, each holding different expectations about the attributes that an innovation should possess to become accepted; and (2) turnover in audience membership — i.e., the entry of new participants in the social process of evaluation and the withdrawal of their predecessors. The analysis focuses on the introduction of a new methodology for measuring longitude at sea using mechanical means (the timekeeper), as opposed to the traditional astronomical approach. The paper sheds light on the role that audiences play in mediating the
interaction between institutions and candidates and, by implication, candidates' ability to foster institutional change.

**The Impact of Institution Quality, Cluster Strength and TLO Effectiveness on the Rate of Academic Staff Spin-offs**

**Gil Avnimelech**, Ono Academic College  
**Maryann Feldman**, University of North Carolina at Chapel Hill

This paper examines the spawning of new company founders' from 124 leading U.S. academic institutions, using a unique database. We examine both local and non-local spin-offs of academic staff members. Accordingly, the rate of spawning is positively affected by the institution quality, the strength of the local entrepreneurial cluster in the region where the institution is located, and the share of R&D expenditure financed by the federal government. On the other hand, the effectiveness of the university technology licensing office (measured by license revenues per R&D expenditure) has a negative impact on the rate of academic spawning. Moreover, we find evidence that after controlling for the entire institution rank, the rank of the business school has a positive and significant impact on the institution spawning rate. When comparing the local spin-off to non-local spin-offs we find that while 42% of faculty spin-offs are created in the region of the academic institution. Not surprisingly, we find that local cluster strength and culture has very limited impact on non-local academic spin-offs. Moreover, institution R&D expenditure and sources of R&D finance has low impact on non-local academic spin-offs.

**Using Modularity Theory to Predict the Prospects of Communications Equipment Ventures**

**Margaret Dalziel**, University of Ottawa  
**Shengnan Zhang**, Nortel Networks

Modularity theory has identified two archetypal roles for firms: system integrator and component supplier. We interpret these roles as sector roles, indications of the positions of firms, or equivalently of industries, within in vertical sectors. A firm's sector role affects its prospects in two ways: direct effects are a consequence of the resources required to perform the role, and indirect effects are a consequence of the role’s position in the sector and its greater proximity and sensitivity to external events. Based on a sample of 106 communications equipment ventures in Ottawa, Canada, we find that component suppliers are founded in greater numbers, system integrators raise more venture capital, and that the founding and financing of system integrators is more strongly associated with changes in demand than the founding and financing of component suppliers. We interpret our results to suggest that modularity theory can be used to describe the nature of inter-industry relations and enable studies of the effects of both industry membership and industry position on firm performance.

12:00-13:15 **Paper Session: Exploration and Exploitation**

**Long-term Benefits of Exploitation: The Role of Individual Capabilities and Willingness to Learn**

**Ji-hyun (Jason) Kim**, New York University  
**Zur Shapira**, New York University  
**Jae-Suk Yang**, Columbia Business School

Exploration vs. exploitation has emerged as an important determinant for long-term survival of organizations. Through a combination of analytical and simulation models that extend March (1991), I challenge a fundamental tenet that exploitation necessarily drives out exploration and hurts performance in the long run. By relaxing restrictive assumptions from March (1991)'s original model: (1) better-performing individuals are distinguishable from low-performing ones; (2) individuals are equally willing to learn from different ideas. The resulting counter-intuitive results suggest two new insights: (1) exploitation is beneficial to a firm’s long-term performance when individuals do not have capabilities to evaluate others’ performance
correctly; (2) the long-term benefits of exploration are not monotonous when individuals are not willing to learn from different ideas.

**Ambidextrous Strategies for Balancing Exploration and Exploitation**

Boris Lokshin, Maastricht University and UNU-MERIT  
Geert Duysters, Eindhoven University of Technology and Tilburg University  
Anna Sabidussi, Eindhoven University of Technology

In this paper, we focus on including time dynamics in the conceptualization of exploration and exploitation balance and on assessing the associated performance implications. In particular, we propose a taxonomy where we differentiate static ambidexterity, dynamic ambidexterity and cyclical separation strategies. Additionally, we consider two specific moderating effects that may influence the relationship between balancing modalities and performance: size and uncertainty. The set of hypotheses were empirically tested on a dataset containing information over 120 global highest R&D spenders in the biotech-pharma sector, during the period 1985-2007. Our results confirm that the success of balancing strategies varies depending the specific contingencies the company faces.

**Clarifying the Impact of Exploratory and Exploitative Innovation on Firm Performance: The Moderating Effect of Firm Proactiveness in Dynamic Environments**

Shiko M. Ben-Menaham, RSM Erasmus University  
Justin J. Jansen, RSM Erasmus University  
Frans A. J. Van Den Bosch, RSM Erasmus University  
Henk W. Volberda, RSM Erasmus University

How can firms succeed in an increasingly dynamic business environment? A received perspective in strategy research highlights the importance of leveraging exploratory and exploitative innovations. Yet, extant work on the effectiveness of exploratory and exploitative innovation provides a limited understanding on how firms may successfully cope with environmental change and uncertainty. We extend the theoretical understanding on this issue by investigating the influence of firm proactiveness. Our findings indicate that in dynamic environments, proactive behavior is pivotal for benefiting from exploratory innovation. Moreover, contrary to prior findings, we show that exploitative innovation can indeed positively influence firm performance in dynamic environments when firms behave proactively.

**12:00-13:15 Paper Session: Raising and Investing Capital**

**Channeling Funds into the Group: IPO pricing in Business Groups**

Aharon Cohen Mohliver, Columbia University  
Gitit Gur Gershgorn, Ben-Gurion University of the Negev

Can business groups gain a strategic advantage by owning financial intermediaries? This study shows evidence that business groups use financial intermediaries to boost the stock prices of affiliated firms in initial public offerings. Using a complete sample of all initial public offerings and all mutual funds in Israel during a four-year period, we find that the participation of mutual funds affiliated with the group leads to economically significant overpricing for Business Group offerings. By analyzing the offerings from the mutual fund’s point of view we show increased likelihood of participation of mutual funds in the offerings of related firms and quick disposal of those stocks in subsequent trade. Our findings expand on the tunneling hypothesis by demonstrating that transfer of resources can come from a source external to the group such as the general public’s passive investments in mutual funds. We find that this evidence speaks to the distorting effects of controlling both financial and non-financial activities in a business group on the allocation of capital in the economy.
Isomorphism toward Local and Non Local Rivals and Their Outcomes: A Study of Firms Raising Capital abroad

Stewart Miller, University of Texas at San Antonio  
Daniel Indro, Penn State University, Great Valley  
Malika Richards, Penn State University, Berks  
Daniel Han Ming Chng, Sungkyunkwan University

We develop a framework to explain the likelihood of isomorphic behavior by a focal firm toward local rivals and non-local rivals and then predict financial performance associated with these rival isomorphic actions. We predict a causal relationship between “rival isomorphism” and financial performance that reveals a paradox. We test our hypotheses using a sample of firms raising capital abroad. We consider a focal firm’s perceptions of local (and non-local) rival isomorphism and assert that investors have different perceptions of the focal firm’s decision to conform to local and non-local rivals that, in turn, affects financial performance of the equity offering.

The Family Firm as an Inter-Institutional System: Strategic Entrepreneurship and New Venture Creation in Indian Family Firms

Ajay Bhalla, Cass Business School  
Joseph Lampel, Cass Business School  
Kavil Ramachandran, Indian School of Business

In this paper we add to the nascent literature on strategic entrepreneurship in family firms by outlining a theory of family firms as inter-institutional systems where new ventures (NVs) are influenced by different processes than in non-family firms. Specifically, we argue that within the family as an inter-institutional system, resource allocation to new ventures will be made according to the family’s Economic, Expertise, Reputation and Attachment (EERA) agenda. Using case studies of thirty-six NVs in eight Indian family firms at different stages of evolution we examine how EERA drivers influence the NV process in Indian family firms with particular attention to the following: the influence exercised by family vs. non-family managers on NV proposals, the use of formal versus relational governance mechanisms during NV formation, and the relative strength of EERA in family firms that are controlled by founders, siblings, and cousin consortia.

14:15-15:30  Special Session in Memory of Avi Fiegenbaum

The Role of Strategic Reference Points in Explaining the Nature and Consequences of Human Resource Strategy

Peter Bamberger, Tel-Aviv University  
Avi Fiegenbaum, Technion – Israel Institute of Technology

We examine how managers use strategic reference points (SRPs) or benchmarks to guide their strategic decision making with regard to human resource (HR) issues and how these benchmarks can affect the performance-based consequences of such decisions. After describing the reference points that are relevant to the HR system, we develop propositions regarding the likely configuration of such reference points and their impact on the nature of HR policies and practices. We also explain how the management of SRP fit and consensus can reduce the likelihood that HR policies and practices will have a negative effect on a firm's performance. Organization-wide implications are discussed.
**The name of the Game is "Global Competition": From Competitive SRP to Competitive ACAP**

**Sara Lev**, University of Haifa  
Avi Fiegenbaum, Technion – Israel Institute of Technology  
Aviv Shoham, University of Haifa  
Oded Shenkar, Ohio State University

During the last two decades, the global competition changed the rules of the business game, suggesting new challenges to many Israeli firms. Consequently, we analyzed the impact of this new game on the performance of various organizations. In the first research, we proposed a three-dimensional construct (SRP; Fiegenbaum, Hart, and Schendel 1996) to conceptualize managers’ perception of the competitive environment. Data from 522 managers of 12 Israeli hospitals highlighted the role of industry rivalry and its impact on short versus long term performance. In a following research, we integrated SRP to extend Absorptive Capacity (ACAP) framework proposing a competitive process for organizational learning. Examination of 141 Israeli high tech companies during the early 2000’s showed that both industry and ACAP were found to affect short and long-term performance but ACAP impact was more significant. In the current research we build on Competitive ACAP (Lev, Fiegenbaum and Shoham, 2008) to extend previous theories on interorganizational learning. The major argument is that the joint learning of allied global firms can be better understood while considering the impact of cultural friction (Shenkar, Luo and Yeheskel, 2008). Our main conclusion is that global competition game helps develop mental approach and practical skills, resulting with superior performance.

**The Learning Board of Directors – Its Strategic Involvement and Knowledge Management in Dynamic Environment**

**Chanan Ben-Oz**, University of Haifa  
Avi Fiegenbaum, Technion – Israel Institute of Technology

The presented research framework extends the theoretical foundations and empirical examination of organizational learning from performance feedback theory and utilizes this theory to advance strategic management theories related to the board of directors and to its knowledge management processes. The boundaries of performance feedback theory have been extended by addressing three research questions as follows. The first research question develops a theoretical framework and propositions including the contingencies nature and the moderating effects of the external environment and the internal characteristics of the board of directors. The second research question emphasizes the explanation power of performance feedback on board strategic involvement relative to upper echelon and agency theories. Finally, the third research question develops differential mechanism behind short versus long term performance feedback on potential and realized absorptive capacity.

**15:45-17:00 Research Bazaar: Corporate Venturing and Entrepreneurship**

**Path Creation and Path Dependence in clean Tech: An Empirical Analysis**

Israel Drori, College of Business  
Shmuel Ellis, Tel-Aviv University  
Benson Honig, McMaster University  
**Alfred Marcus**, University of Minnesota

Clean tech – the production of electricity and fuels with a smaller environmental impact – saw a mini-investment boom occurred in the first decade of the 21st century. This study investigates the degree to which the strategies of clean tech investors varied over time in response to learning from investment successes and failures and from changes in public policy. The literature on path dependence predicts, all else equal, that initial patterns persist into the future. The past character of the investments will continue into the future without much alteration. Professor Marcus’s model suggests that this pattern can be broken based on the feedback that investors receive from successful or unsuccessful rounds of venture capital funding and from
the changes in the clean tech polices of global governments. Thus, there is another theoretical perspective that should be applied to the strategic choices that investors in this domain make, that is learning theory. Its predictions would be that adjustments in strategic choices will take place based on factors included in the model.

**An Institutional Approach of Entrepreneurial Activities: The Case of Sustainable Development as a Source of Innovation in Environments in Transition**

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Entrepreneurs play a strategic role in times of uncertainty and complexity. “Institutional entrepreneurs” bridge the gap between the different layers of the environment. We present a method to explore the role and motivations of institutional entrepreneurs in diffusing new practices and how they participate in creating new institutions. This paper presents tools that could examine the cognitive decision process concerning this specific behavior and is an attempt to reveal how entrepreneurs identify sustainability as a new business opportunity and what motivates them to incorporate it in their strategy. The laddering approach helps in better understanding the motivations and entrepreneurial intentions that actors develop when engaging in sustainable activities. It shows how entrepreneurs, using cognitive means, link the different of their environment.

**Business Incubators’ Performance and Agency and Stewardship Theories: Incorporating Tenant-Entrepreneur and Stakeholder Perspectives on Business Incubation**

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Traditional measures of Business Incubators’ performance focus largely on economic metrics. These measures ignore the diversity of stakeholders, missions, resources, environments, and levels of knowledge agglomeration. This research offers a framework for assessing business incubators’ performance using an Input-Output Framework (Figure 1 below). The Input describes the founding and actions preceding admission of clients. Process begins by tenant selection, and then providing services. The interrelationships between the founders and incubator managers on one hand and between the manager and tenants on the other are viewed from the perspective of the value chain (Output) of incubation. Both Agency and Stewardship theories apply to the relationships described by this framework. A second framework, Managerial Gap Analysis (Figure 4 below), portrays the relationships between the incubator capability to provide services, the level of capacity utilized, and the resulting performance in a triangle. A second triangle portrays tenants’ perceived performance, expectations, and resulting satisfaction with the incubator. The two triangles form a box where relationships between tenants and managers can be assessed using a gap analysis. The wider the gap, the more incongruent the goals, and the more likely is Agency theory to dominate the relationships. Conversely, small gaps indicate greater goal congruence and relationship that follow Stewardship theory. The framework and theories raise numerous propositions that we are testing. For example for-profit incubator missions will require more of an agency perspective; the longer the time period a tenant is in the incubator the more likely is Stewardship to prevail.
**VCs’ Affirmed Attitudes and Entrepreneurs Perceptions – Different Views on Strategic Change in New Ventures**

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High technology new ventures continuously consider strategic changes in light of rapid changes in their business environment and their resources. However, strategic reorientation has a crucial impact on the organizations; hence a successful execution of a strategic reorientation is a rare achievement and in many cases might end in exit. High technology start-ups are commonly financed by venture capitalists (VCs) who are usually involved in strategic reorientation and may have different views and conflicting interests with the entrepreneurs. Based on two independent samples, this study explores different views of investors and investees as follows: (a) investors’ affirmed attitudes toward strategic change causes in reference to each of five activity domains (marketing, technical issues and technology, operations, finance, and strategy formation) and (b) the extent to which entrepreneurs consider their VCs’ involvement in the same five domains upon strategy reorientation. Results show mismatched perceptions. Investors considered the most frequent causes for strategic change in new ventures to lie in the market domain, to a lesser extent in strategy and finance, and the least in the domains of operations and technical/technology issues. On the other hand, entrepreneurs considered investors’ intervention to be highest in finance, then in strategy, operations, marketing, and technical/technology issues. Findings also show that investors’ financial involvement is associated with strategic reorientation only when trust existed between the entrepreneurs and their investors. In absence of trust entrepreneurs perceived their investors sought an exit. This study suggests theoretical as well as practical implications.

**Does Entrepreneurial Orientation Matter in Early Stage Ventures? Strategic Implications**

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Previous research typically finds that firms with a higher entrepreneurial orientation (EO; Lumpkin and Dess, 1996, 2001) are more successful. Our research examines the role of two individual level constructs --- the founding/lead entrepreneur’s attitude towards entrepreneurship (McCline, Bhat, and Baj, 2000) and entrepreneurial self-efficacy (ESE; Zhao, Siebert, and Hills, 2005) --- and EO, to firm performance in early stage ventures. Using structural equation modelling and a sample of 204 early-stage ventures, we test competing models to determine the relative importance of attitudes, ESE and EO to performance. Consistent with Kropp, Lindsay and Shoham (2006, 2008), only the innovativeness component is significant to performance. The structural model of attitudes, ESE and EO innovativeness explained 44% of the variance in firm performance (all relevant Model Fit Indices were in acceptable ranges). However, when the innovativeness component of EO is removed, entrepreneurial attitude and ESE, individual level-constructs of the entrepreneur, explained 40% of the variance. Adding the innovativeness component of the EO only explains an additional 4%. The implications of the alternate models is that the direct impact of EO on performance in early stage ventures is overshadowed and captured by the entrepreneurial attitudes and the entrepreneurial self-efficacy of the founding/lead entrepreneur.
Enablers of Top Management Team Resilience

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Understanding processes and outcomes of top management teams (TMTs) has become an evermore prominent subject of inquiry in the literature of strategy and organization science. TMT processes provide meaningful intervening constructs (Jarzabkowski & Searle, 2004) that help unpack the ‘black box’ of demography research which has produced inconsistent findings (Lawrence, 1997). This research effort has yielded useful knowledge about processes within the TMTs that enable different strategic orientations, improve strategic choices, and enhance firm performance (Barrick, Bradley, & Colbert, 2007; Li & Hambrick, 2005; Lubatkin, Simsek, Ling, & Veiga, 2006; Pettigrew, 1992; Smith, Smith, Olian, Sims, O’Bannon, & Scully, 1994). Although TMT processes are seen as a critical potential refinement to Upper Echelons Theory (Hambrick, 2005), this body of knowledge has yet to be fully developed (Barrick et al., 2007). This study aims to contribute to this emerging literature by examining whether connectivity between TMT members facilitates a higher level of engagement in strategic decision comprehensiveness (SDC) and enhances team resiliency. Based on a sample of 74 TMTs, the findings of this study indicate that (1) connectivity is positively related to strategic decision comprehensiveness, (2) strategic decision comprehensiveness is positively associated with TMT resiliency, and (3) connectivity is directly and indirectly, through strategic decision comprehensiveness, related to TMT resiliency. These findings have direct implications for research on TMTs, decision-making processes, and resilience.

Decoupling Under Tighter Governance through Real Options

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How do organizations decouple under tight governance? Intended to satisfy external pressures for conformity while maintaining the discretion to pursue their own interests organizations undertake symbolic actions that are decoupled from actual underlying substance. Yet, in so doing organizations also expose themselves to increasing risks of governance detection and resulting penalties. I propose a nuanced model of decoupling implementation aimed at examining decoupling strategies under governance. Using a real-options perspective I present an analysis of the varying levels of implementation in decoupling substance. The analysis suggests that managers rely on multiple and possibly conflicting valuations and interpretations of real-options actions in order to (1) increase ambiguity (2) test audiences’ reactions to further possibilities of investment or withdrawal, thus enabling the firm to reduce risk and cope with tighter governance and monitoring.

Strategic Flexibility: Its Nature, Antecedents and Performance Consequences

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We define strategic flexibility as the organizational capability to change strategies in order to adapt to the demands of the environment or anticipate environmental changes. Based on arguments derived from the contingent resource-based view that organizations should align with the requirements of the business environment, we theoretically and empirically explore the nature and the antecedents of strategic flexibility and we propose that firms can sustain strategic flexibility by building operational flexibility, financial slack, learning capacity and innovation capacity. By this way, we propose that strategic flexibility is the outcome of firm resources and capabilities that facilitate the firm’s orientation towards environmental adaptation and anticipation of changes in the environment. We test our conceptualisation by using perceptual and archival data from 399 European companies. The results show that operational flexibility, innovation capacity, learning capacity and financial slack have a stable linear positive relationship with strategic flexibility.
Furthermore we show that high levels of strategic flexibility have a positive impact on ROA. In addition, we find that perceived environmental complexity positively moderates that relationship, however, the managerial perception of environmental dynamism and uncertainty has no significant effects on the strategic flexibility – performance relationship. From the interactions we conclude that the adaptation and anticipation orientation under dynamic and uncertain environmental circumstances do not result in higher ROA, as these conditions might require a more entrepreneurial orientation.

The Allocation of Talent in Business Groups: Theory and Evidence*

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A key tenet of the resource-based view of the firm is that resources should be internally redeployed and recombined so as to maximize their utilization and impact. However, little is known about how resources are redeployed within hybrid structures such as alliances, business groups, and buyer-supplier networks. The present paper takes a first step in this direction by empirically examining the redeployment of managerial skills in a particular type of hybrid organization: the business group. Drawing on prior research, we argue that groups with a large presence of minority shareholders will often exhibit lower levels of intra-group managerial mobility than groups with fewer minority shareholders. However, a different pattern might arise when redeployment is motivated by concerns of direct control. Using a novel dataset on top managerial mobility, we find support for these predictions. Close links among group affiliates also promote intra-group mobility. Our results are especially strong for firms that have recent joined a group.

The Economic and Organizational Underpinnings of Open Innovation Strategies

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The past decade has witnessed an increased emphasis on Open Innovation strategy, where firms proactively seek to leverage external knowledge. Following this strategy, however, a firm is only as innovative as its partners are. Accordingly, this paper investigates the factors that drive a firm’s ability to access innovative partners. We focus on economic and organizational factors that shape the partnering process, as well as the subtle interactions among these factors. To that end, we develop a formal theoretical model of the venture capital setting where established firms, as part of their open innovation strategy, pursue corporate venture capital in innovative ventures. The predications are tested using a unique sample of 157 startup-stage CVC-entrepreneurial investments and a matched-sample of possible investments that did not materialize. Our findings afford important insights as to the economic and organizational factors that shape the success of open innovation strategies.