

The Berkeley Innovation Forum- Fall 2009 Meeting, Oct. 13-14

Background

The 2009 forum was conducted over two days, the 13th and 14th of October, and was led by Professor Henry Chesbrough of the Haas School of Business at the University of California, Berkeley. The Agenda can be found at the end of these notes. The feedback ratings for the meeting are separately attached. We had 22 people attending from 15 companies, a smaller group than a year ago, though similar in size to the Spring 2009 meeting. Clearly the economic downturn continues to limit non-customer related travel.

There were five presentations, one major forum-wide structured discussion, a speed-dating series, and an evening of entertainment and networking. The event was held in a driving rain on the first day, which happily abated toward evening when we went to San Francisco. The second half day's workshop was attended by 10 participants, but was highly rated by all who attended.

Tuesday

After welcoming new attendees (and a new member, Qatargas, from the country of Qatar), we began with speed dating. This continues to be the most popular activity of our meetings, based on the feedback. However, we are not going to merge with Match.com!!

We then heard a presentation from Vivek Wadwa of Duke University and Harvard, featuring his research on **identifying Entrepreneurs**. He argued that we have a weak knowledge of exactly who entrepreneurs are, based on a perception that entrepreneurs are “young kids who want to strike it rich”. Results from a survey from a sample of CEOs (and CTOs) was presented in its raw form. The results showed that CEOs (and CTOs) were formerly frustrated employees who must make a living, and are not necessarily money motivated. Some evidence suggested that an Ivy League education not all-important. The median survey respondent was 40 yrs, married, lower middle class, and highly educated in predominantly business and engineering disciplines (60%). There was also a disproportionate amount of immigrants who hold doctoral degrees. The education of entrepreneurs was a strong predictor of 2005 sales, but experience was the #1 predictor of success. Furthermore, evidence was provided that suggested that bootstrapping was the normal method of financing and it was claimed that venture capital (VC) follows innovation and doesn't lead it. One implication of this is that the human capital of successful entrepreneurs looks a lot like the human capital inside our major corporations.

Next, Juliana Shei from GE Research presented. GE research focuses its activities on projects that operate on longer timelines than those of GE's businesses. Research to yield products over medium (two to four year) and long (five plus year) term time horizons is conducted by the firm's internal research division. The firm's research division focuses predominantly on core research and not adjacent projects, less technology push, and more needs pull. This provides one threat to disruptive (transformational) innovation. When the research division does conduct research in an adjacent space, whether intentionally or as an outcome, it can provide opportunities for a dedicated 'experimental' division. Juliana also claimed that GE's Schenectady facility was older than Dupont's (Randy – any response?).

In discussions around Juliana's presentation, the imperative for finding growth (called The “Burning Platform” by one member) drives companies' innovation activities beyond the current business. It is a

pre-“Stage Gate” model approach; a vision looking for growth. The success of a Burning Platform is in the learning that is achieved, though presumably this approach generates or confirms ideas that can be passed on to either a Stage Gate model or to the primary research division. It is perhaps the ultimate embodiment of the “fail fast and cheap” (but learn!) approach. Projects last for twelve weeks and have three predetermined questions must be addressed – these questions are the metric against which the project is judged; the burning platform model embodies notion of playing poker rather than chess (or options rather than project NPVs) in open innovation.

In the afternoon, Jason Yotopolous from SAP presented his work on the Global Business Incubator. This approach is based on the traditional venture capital process, (Jason used to work in venture capital himself) although the gates' (milestones in VC parlance) frequency varies by the stage of the project. Stages are predefined and some stages may have few as one (terminating) gate or as many as five gates. The gates contain the metrics and decision points, though termination can happen at the end of a stage. The bar for success is set high (on the order of \$200m in revenue in the case discussed). However, Jason told us that of the six projects in the process to date, none have been terminated yet. This is due to SAP's culture, which has a hard time killing projects.

Cheryl Fragiadakis from Lawrence Berkeley National Labs presented next. She is in charge of outlicensing for the Lab, and reports to the CEO of the Lab, Paul Alvisatos. LBL traditionally worked on government projects in the energy sector, and today is a hotbed of alternative energy research. JBEI (the Joint Bioenergy Research Institute) was offered as a case study of a new model of collaboration between multiple universities, agencies of the government, and, importantly, industry. An industry advisory council provides input and direction to JBEI projects, and offers a way for industry to engage directly with the Lab. While University research, much like government research takes place on time horizons (and has types of research) that match poorly to the fast-paced corporate process, there were two importance points made. First, for long-term research corporations probably should take advantage of heavily subsidized access to state-of-the-art government run laboratory facilities. Second, universities do not just conduct Ivory Tower research anymore. (Last fall, we discussed the Energy Bioscience Institute funded by BP and housed at Berkeley. JBEI is another innovative partnership that focuses on long term energy research.)

Then Henry Chesbrough discussed What's New with Open Innovation at Berkeley. The Center for Open Innovation is now housed in the Institute for Business Innovation, which is geared on working more closely with organizations and businesses. Michael Katz heads the Institute. Henry also received the first ever Haas Leading Through Innovation Award, reflecting the school's appreciation and support for his research in open innovation. Henry also announced that there would be a new Center for Business Model Innovation research that he would be involved in, and that the article on using Inside-Out Open Innovation in lean times would appear in the December issue of Harvard Business Review (BIF members received an electronic copy of this article last May).

During that session, two opportunities were presented to engage directly with Haas students. Adam Berman presented the [Haas@Work](#) program, which supplies teams of students under the supervision of a Haas faculty member to work on a problem defined by a company. A project typically involves \$50,000 from the company and an assigned person to work with the students. Adam can be reached at berman@haas.berkeley.edu. Sebastian Teunissen of the Clausen Center discussed Haas' International Business Development Program, which posts students on projects of interest to companies that involve working outside the US. These IBD projects typically involve \$30,000 from the company, unless sponsoring organizations are also contributing to the costs. Sebastian can be reached at teunisse@haas.berkeley.edu.

Wednesday Workshop – The Nike Green Exchange

John Wilbanks from Science Commons and Kelly Lauber from Nike introduced the Green Exchange. The Green Exchange is a pool of contributed IP that can be licensed out on a variety of standard terms determined by the contributing organization.

To understand the motivation for the Green Exchange, consider how patents are generated. Technology push is the dominant research undertaking. It generates a lot of patents, but many of these will fall outside of the firm's core making their commercialization and use less likely. Needs pull, that is responding to the changing requirements of users or satisfying the needs of a new user market, generates innovation that can almost surely be utilized, but this is much smaller stream. Thus there is an inherent disconnect between innovation generation and usage. Given then that there are likely to be many patents 'on-the-shelf', it seems appropriate to attempt to extract value from them. The standard utilization ratio for patents lies in the 3% to 50% range. However, forum participants reported utilizations on the order of 1%, and this was not met with surprise. So there is a real opportunity for increased utilization of IP, an example of "inside-out" open innovation.

The Green Exchange creates value for the business in three main ways. First restricted licenses can be sold quickly and at low marginal cost for a fixed fee. Second, there may be a cost reduction through outsourcing of input demand. That is suppose that a patent is not economically at the current production scale that one firm alone could reach. By opening up the patent to non-competing firms, the scale can be achieved across all of the patent users, to the patent holder's benefit. Third, there is the potential for identifying new applications of your own technology by seeing what others do with the technology they license. In some cases, external validation of a technology creates greater subsequent internal use of that technology.

The Green Exchange was initially proposed last January at Davos, and is still under development among a close set of partners. It is expected to be publicly launched next January at Davos. IP will be collected from participating companies, and then made available to anyone who registers with the Green Exchange under a range of standardized contracts. The contracts offer a standard way of excluding a group from licensing, to prevent competitive usage and undermining the traditional licensing model. The key insight is that through standardization it is possible to remove the lawyer from between the user and the creator and through an open posting system it is possible to let the end user find patents easily. Together these imply that patent holders can appropriate a large amount of value for less work. As misrepresentation implies infringement, there is little danger of competitor usage, and improvement rights are excluded from the standard licenses.

We discussed some of the internal hurdles to engaging in such a strategy. First and foremost, attorneys aren't always forward looking. Patents may be held or controlled (partially or fully) by different business divisions, giving those businesses some degree of monopsony over key differentiating technologies by business divisions, and this will create additional difficulties regarding the assignment of returns. Second, this should not compromise the core business - this should be done with patents that are on-the-shelf and purposed towards adjacencies. However, internal politics may still dampen the enthusiasm for such an initiative on these grounds, particular in the aforementioned case of cross-divisional holdings when the core is locally defined. Similar comments apply to the fear of loss of control.

Thanks to Ed Egan, for help on Notes for this meeting. He is a second year PhD student here at Haas, who is showing more and more interest in innovation research! Stay tuned.....

Berkeley Innovation Forum

Fall 2009, October 13-14, Haas School of Business, Well Fargo Room
Meeting Agenda

Monday October 12

7:30pm **Welcome Dinner** - for early arriving BIF members – Paragon, Claremont Resort & Spa

Tuesday October 13

7:15am **Bus Pickup** – at Claremont Resort & Spa to Haas School of Business - Wells Fargo Room

7:30am **Breakfast** - For out of town attendees and those local early birds able to beat the traffic

8:15am **Welcome** - Review of the Two Day Program. Henry Chesbrough.

8:30am **Speed Dating** – an “icebreaker” to give members a chance to engage in short conversations with one another

9:30am **Presenter #1:** Managing Change & Innovation in the Technology Industry - Vivek Wadhwa, Harvard University and Duke University. Vivek is also a successful entrepreneur.

10:30am **Follow-up Discussion:** on Presentation #1 moderated by Henry Chesbrough

11:00am **Break**

11:30am **Sharing Innovation Management Experiences** - 1st Round
Juliana Shei, GE Research, Japan

12:30pm **Lunch**

1:30pm **Sharing Innovation Management Experiences** - 2nd Round
Jason Yotopolous - SAP Global Business Incubator, Palo Alto

2:15pm **Presenter #2,** Cheryl Fragiadakis, Director of Licensing, Lawrence Berkeley National Lab. Cheryl will discuss the R&D policies of the new administration, and how LBL is changing the way it works with industry.

- 3:00pm **Break**
- 3:30pm **What's New in Open Innovation at Berkeley?** Henry Chesbrough
- Michael Katz, Director, Institute of Business Innovation
 - Adam Berman, Executive Director, Haas @ Work
 - Sebastian Teunissen, Executive Director, International Business Development

4:45pm **End of Meeting**

5:00pm **Surprise Dinner Event.** Board Shuttle - please bring a jacket or sweater, just in case... Spouses and Significant Others are welcome. Please let Anita Stephens know in advance if they wish to join us!

Wednesday October 14

7:30am **Bus Pickup – at Claremont Resort & Spa to Haas School of Business - Wells Fargo Room**

7:45am **Breakfast**

8:30am **Presentation #2 – Nike's Green Exchange Initiative**

- Kelly Lauber, Global Director, Sustainable Business & Innovation. The Business Rationale for the Green Exchange Initiative.
- John Wilbanks, Vice President, Science Commons. Organizing and Partitioning the IP to Participate in the Green Exchange.

9:30am **Break**

9:45am **Workshop:** Joining the Green Exchange commons.

11:45am
Feedback on the BIF Meeting

12 noon Box lunches

12: 15pm Conclusion of Meeting, Members depart