When Computers Look at Art
Upcoming event May 26th

Join us on Tuesday evening, May 26th in Palo Alto for a talk by Dr. David Stork, Chief Scientist and Head of the Machine Learning and Perception Group at Ricoh Silicon Valley as well as Consulting Associate Professor of Electrical Engineering and Visiting Scholar in Psychology at Stanford University.

Dr. Stork will discuss how applying advances in the areas of vision, optics and computers have allowed him to examine the work of masterpieces and discover just how closely art matches reality.

How can computers be used to analyze Renaissance art and the techniques of renowned artists? What can computers reveal about images that even the best-trained connoisseurs, art historians and artist cannot? How much more powerful and revealing will these methods become? In short, how is computer image analysis changing our understanding of art?

Thanks to cutting edge advancements in computer science, questions and controversies in the study of art are now being answered in ways that were not previously possible. For example, computer analysis is currently being used to authenticate paintings attributed to artists such as Jackson Pollock and Vincent Van Gogh. And analysis of perspective, shading, color and form has thrown a wrench into David Hockney’s bold claim that as early as 1420, Renaissance artists employed optical devices such as concave mirrors to project images onto their canvases.

Dr. Stork is a graduate of MIT and the University of Maryland. He holds over a dozen patents, has published five books, sits on the editorial boards of four journals, and has published numerous peer-reviewed papers and book chapters. His deepest interests are in adaptive pattern recognition by machines and humans.

When Computers Look at Art
Tuesday May 26th, 6:30 PM
WSGR
650 Page Mill Road
Palo Alto

To register for this event, please visit our website at www.mitcnc.org. Please contact Roshni Cooper (rccooper@alum.mit.edu) for more information.

Designing the Future of Cancer Research at MIT with Dr. Tyler Jacks
Upcoming Event -- May 20th

Join fellow MIT alumni, parents, and friends in Palo Alto on May 20th for what is sure to be a fascinating talk by Professor Tyler Jacks, Director of MIT’s Koch Institute for Integrative Cancer Research. Dr. Jacks will discuss the interdisciplinary research undertaken at MIT, including the development of nanotechnology to specifically target cancer cells, advanced imaging technology to improve the early detection of human cancer, programming the immune system to recognize and attack cancer cells, and systems analysis of cancer pathways and drug resistance. These programs are combining MIT’s strengths in engineering and biology to develop the next generation of cancer treatments.

Dr. Tyler Jacks is the David H. Koch Professor of Biology and was recently named an Investigator of the Howard Hughes Medical Institute. His lab has pioneered the use of gene-targeting tech-

(continued on page 2)
Dr. Tyler Jacks (continued)

technology in transgenic mice to study cancer-associated genes and construct mouse models of human cancers of the lung, brain and ovary. Dr. Jacks was named the 2005 Simon M. Shubitz Lecturer and Award recipient, and shared the 2005 Paul Marks Prize for Cancer Research awarded by Memorial Sloan-Kettering Cancer Center. Dr. Jacks received his A.B. in biology from Harvard College and in 1988 his Ph.D. in Biochemistry and Biophysics from the University of California, San Francisco. His graduate work was with Harold Varmus. Dr. Jacks was a postdoctoral fellow with Robert Weinberg at the Whitehead Institute.

The David H. Koch Institute for Integrative Cancer Research is an outgrowth of the MIT Center for Cancer Research. The Center for Cancer Research, established in 1973, has for over 30 years brought together extraordinary biologists in collaborative studies of human cancer. Over the past decade many of these researchers have established collaborations with other scientists and engineers at MIT. The new David H. Koch Institute (completion date Dec 2010) will bring together in one building biologists, engineers and other scientists in order to stimulate interactive activities aimed at understanding, treating and curing human cancers.

Inspirational Teacher Awards

In conjunction with Dr. Jacks’ talk, we will honor two MIT Inspirational Teacher Award winners from Northern California. Each year current MIT students are asked to nominate high school teachers that inspired them to greater achievement. The MIT Alumni Association selected 34 teachers to receive the award. This year there are two award winners from Northern California:

Ms. Leslie Bailey
Independence High School (San Jose)

Mr. Daniel Harris
Thomas Downey High School (Modesto)

While recognizing the dedication of these motivational teachers, these awards also acknowledge MIT’s indebtedness to the teachers that are essential to the preparation of MIT’s student body.

To register for this event, please visit our website: www.mitcnc.org. Please contact Bill Reenstra (wreenstra@alum.mit.edu) with any questions.

MITCNC is grateful to Cooley Godward Kronish, LLP and MIT Professional Education for their generous sponsorship of this event.

Upcoming Event: MIT’s Solar Electric Vehicle to Visit Bay Area

MIT’s Solar Electric Vehicle
Tuesday June 16th
6:30 PM
Cooley Godward Kronish, LLP
3175 Hanover St.
Palo Alto, CA

En route to Australia for the World Solar Challenge in October, MIT’s Solar Electric Vehicle Team will bring their electric vehicle, “Eleanor,” on her U.S. tour with a stop in Palo Alto this summer. Come meet team members and see the star attraction up close.

“Eleanor,” featuring a carbon fiber frame and powered by 580 monocrystalline silicon solar cells, can travel at a maximum speed of 90 mph. The vehicle is also equipped with wireless links so that the lead and chase vehicles during the race will be able to monitor every aspect of the car’s electrical performance in real time. Its batteries have enough energy, when fully charged, to get the car from Boston to New York City without need of sunlight.

This event is brought to you by MITCNC’s Semiconductor and Clean Tech Entrepreneurship programs. This event is the programs’ annual networking mixer. Please contact Eileen Tanghal (Eileen_tanghal@amat.com) for more information.

MIT Club of Northern California
President’s Message

In the words of the inimitable Bob Dylan, “The Times They are a-Changin.” Our club bears witness to this truism, as we continue to evolve and adjust to the environment in which we operate.

As a sign of positive change we continue to infuse new blood into our leadership team.

* Rohit Gupta ’05 is our new VP of Entrepreneurship, bringing with him a vision for bridging our various entrepreneurship tracks (Semiconductor, Clean Tech, C3, BoomerTech, Angel Investing).

* Mike Bowles ’80 heads up a team of eight as we revitalize our Career Development program. More on this below.

* Andrey Titov ’07 takes over VP of Membership and Volunteer Integration. You may have already received correspondence from Andrey, as he is enthusiastically embracing the role.

* Eileen Tanghal ’97 has assumed the reins as Director of our Clean Tech Entrepreneurship track. This continues to be an area of great interest to our alums.

Of course, we are all experiencing the recent changes in the economic environment. In these tough times friends, family and support are all the more important. The club is also trying to help, resurrecting the Career Development program that has been dormant for a few years now. Mike Bowles ’80 and team are working on a number of career related activities and services that we hope will be of value to you. If you are interested in getting involved, or if you have ideas for the program, please contact Mike Bowles (mike_bowles@alum.mit.edu).

One thing that has remained fairly constant over the years is the popularity of our events featuring MIT faculty speakers, so we strive to keep these events coming. These are not easy to organize, as they require the right intersection of faculty travel schedule, coordination between the club and Cambridge, and sufficient advance notice. In the past year we have heard Nicholas Negroponte speak on One Laptop Per Child as our Spotlight MIT keynote speaker; Steve Lerman, Dean of Graduate Education, discuss the changing face of graduate life at the Institute; and Physics Professor Alan Guth talk about Inflationary Cosmology. All were extremely well attended events with very positive feedback.

Your next opportunity to hear a dynamic faculty speaker will be on May 20th, when Professor Tyler Jacks will be visiting to discuss the cutting edge research being undertaken at MIT in the field of cancer research. We will also take advantage of that gathering to honor two local high school teachers as recipients of the MIT Inspirational Teacher Award.

These past two years as club President have passed extremely quickly. While my term will not end for another few months, this is my last opportunity to communicate to you via our newsletter. It’s been a rewarding experience, allowing me to meet a lot of fantastic alumni. Thanks to all of you who have contributed time, effort and money to the club, and to those who have participated in our activities and reached out and connected to fellow alums.

In August, Catherine Calarco G’06 will begin her term as President. She has already contributed a tremendous amount to the club, and we’re fortunate that we’ll have her very capable hands at the helm. All the best!

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3 Spring 2009
Discounted Membership at University Club of San Francisco

MITCNC members are invited to apply for membership to the University Club of San Francisco, with a 50% discount on the University Club initiation fee. For those MITCNC members wishing to gain better familiarity with the University Club before committing the initiation fee, provisional membership are available for up to three months, during which period monthly dues are paid but the initiation fee is not.

Located at 800 Powell Street on Nob Hill, the University Club offers a fitness center, squash courts, as well as various facilities for dining and meeting. Club activities include lectures, social events. Among the many benefits of University Club membership is the club’s reciprocal privileges with numerous clubs throughout the world.

For more information about the University Club, please visit their website:

http://www.univclub.com/

For questions about this program or for University Club application material, please contact Nelson Lin (nplin@alum.mit.edu).

Upcoming event: Starting a Clean Tech Business

Part of the Business Careers in Clean Tech and Entrepreneurial Networking Series

Monday, June 8, 2009
6-8:30 PM
Fenwick and West
801 California Avenue
Mountain View, CA

Brought to you by the MITCNC in conjunction with the HBS Association of Northern California

Program: How to start a Clean Tech Business. Where are the opportunities and how can you best apply your skill set.

Panelists:
Matt Goldman, Co-founder and President Sustainable Spaces
Alex Kinner, Partner at Khosla Ventures
Deborah Magid, Director, Software Strategy, IBM Venture Capital Group
Scott Newcomb, CEO Virgance

MIT Science and Technology Leadership Awards

Congratulations to this year’s MIT Science & Technology Leadership Award winners! For over a decade now the MITCNC has presented these awards to Bay Area high school Juniors.

Award winners are nominated by their high school math and science faculty on the basis of leadership ability and strong knowledge of science and technology. This combination of leadership and technical knowledge is central to the success of our society, not only through the direct applications of science and engineering, but as well in the interrelated fields of political science, economics, architecture, management, and the humanities and social sciences.

To recognize and encourage such students, the MITCNC created the MIT Leadership Award. Award winners receive an engraved clock along with a one-year subscription to Technology Review.

2009 Leadership Awardees

Emil Barkovich
Tamalpais High School
Mill Valley, CA

Clara Posner
Robert Louis Stevenson High
Pebble Beach, CA

Julia Borden
Aragon High School
San Mateo, CA

Christine Tedijanto
Monta Vista High School
Cupertino, CA

Edward Gu
Los Altos High School
Los Altos, CA

Abhishek Verma
H.M. Gunn High School
Palo Alto, CA

Lih-Chiao Hsu
Carlmont High School
Belmont, CA

Christopher Yarp
Palo Alto High School
Palo Alto, CA

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The Harker School
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San Jose, CA

Ritik Malhotra
Lynbrook High School
San Jose, CA

Haley Zarrin
Saratoga High School
Saratoga, CA

MIT Club of Northern California

Celebrating 100 Years
Entrepreneurship is a core component of the MIT experience. As such, the Entrepreneurship Program of MITCNC is designed around providing resources and services to current and aspiring entrepreneurs. Our ultimate vision is to serve as a vehicle where alumni can network, learn, and exchange ideas. The vertically oriented groups – Semiconductor, C3, Clean Technology and Boomertech – continue to offer great events. The Venture Mentoring Service (VMS) is actively working with several startups. However, we have several goals to help enrich and broaden the MITCNC Entrepreneurship Program.

First, we would like to add a more horizontally-focused track that holds workshops and discussions on general entrepreneurship topics. These events could be focused on specific topics that are germane to most young companies, as well as on showcasing startups and other interesting topics. One such group that we are beginning to form in this area is the MIT Angels Investment.

Second, we believe we can improve our engagement and communication with the alumni community. Social networking and forums, among other things, would be a great way to continue dialogue outside of the specific events.

Third, overall attendance at our events could be enhanced. As part of this goal, we will try to engage alumni of all ages to participate in our events to broaden the overall appeal.

If you are at all interested in helping with the Entrepreneurship Program, or if you have any suggestions or comments, please reach out to me at rogupta@alum.mit.edu. We look forward to working with you!!

Thanks,
Rohit Gupta ’05
VP of Entrepreneurship
rogupta@alum.mit.edu

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Sloan Club of Northern California

The Sloan Club of Northern California kicked off its 2009 event schedule on January 15th, with an MBA networking event hosted by Chicago, Harvard, Kellogg, MIT Sloan, Stanford, and Wharton. Ajit Dansingani, Abhinav Khushraj, Bob Meese and Eric Silverberg (all Sloan ’08) led the planning, and more than 200 MBAs attended the event, held in SOMA.

Those of you in the South Bay, please join us the second Friday of every month from 5:30-7pm at MacArthur Park in Palo Alto. Young Sohn (Sloan ’83) has brought C Functions to California. We’ve held successful events in February, March, and April, usually attended by several dozen Sloan Alumni.

Our next event will be a Service Day in San Francisco, planned in coordination with Golden Gate State Park. While the Sloan Club of Northern California focuses on Sloan alumni, our events are open to all MITCNC alumni and we welcome broad participation.

To learn about future events join our Facebook group, Bay Area Sloanies.

Above: Cocktail Hour photo (1/15/09), left to right: Eric Silverberg, Bob Meese, Ajit Dansingani, Abhinav Khushraj (all Sloan ’08). Below: C Function photo (3/13/09), left to right: Neal Savage (SM 83), Rick Marshall (SM 90), Robert Lensch SM 83), Young Sohn (SM 83), Dinesh Shenoy (SM 08)
Upcoming Monthly Hike: Angel Island

Hikers come join us for our annual trip to Angel Island. We climb the mountain at the center of the island for the one of the best 360 degree views of the Bay available. In addition, the ferry ride over is always fun.

This year there is the added historical attraction of the Immigration Station Museum, which has recently re-opened. In the early 1900s Angel Island was the Ellis Island of the West -- but with a more controversial history than its East Coast counterpart.

The hike covers 6.7 miles with 800 feet of climbing. For more information, please visit http://mithikes.n3.net/ Email mitenchikers-owners@yahoogroups.com

Asian Film Nights

Check the MITCNC.org web site events page for upcoming asian film night events. Photos below are from previous AFN gatherings.

Our ~20 alumni attendees all generously contributed towards a Taiwanese potluck (appetizers, snacks, even a “Taiwanese chocolate cake”) meant to complement the showing of Yi Yi, a highly-acclaimed film by Edward Yang. Thanks to Maya Dobuzhskaya for hosting our first MITCNC Asian Film Night series!

The event wasn’t without “technical difficulties.” Jacob Scott: “Your thingie doesn’t do softsubs? Doh, it will take me a long time to transcode this!” We ended up watching 2046 instead, thanks to Vladimir Fleurima who happened to carry around with him a great selection of movies to choose from. All’s well that ends well.

Visit www.MITCNC.org For More Information
A Funny Thing Happened on the Way to Vegas

Three undergraduate students in Professor Ron Rivest’s 6.857 class – “Computer and Network Security” – were set to present their findings on the security of the MBTA’s CharlieCard at DEFCON, a security/hacker conference held in Las Vegas in August 2008. Instead they suddenly found themselves being sued by the MBTA under the federal Computer Fraud and Abuse Act (CFAA) for “delivering information to conference attendees that could be used to defraud the MBTA of transit fares.”

Ms. Jennifer Stisa Granick, Esq., Civil Liberties Director of San Francisco-based Electronic Frontier Foundation (<www.eff.org>) successfully defended the students against the MBTA.

On January 28, 2009, Ms. Granick shared her experiences in this important electronic civil liberties case with the MITCNC hosted by Townsend, Townsend & Crew in Palo Alto.

Her take-home message: The CFAA is a badly crafted law and is dangerous. Alumni/alumna in computer science or IT should consult the Electronic Frontier Foundation website (<www.eff.org>) to learn more about the risks to inherent in the CFAA.

What’s Fundable In a Down Economy - December 11, 2008

In a packed room at the Palo Alto Cooley Godward office, the attendees listened and participated in an open and riveting discussion of how four venture capitalists saw the economy now, and in the near future. Eric Buatois - Sofinnova Ventures, Shahin Farshchi – Lux Capital, Vivek Mehra – August Capital, and Bob Pavey, Morgenthaler Ventures served on the panel to answer pertinent questions from moderator, Bill Eichen, Sensor Platforms.

Bill Eichen asked incisive, thought provoking questions: What have you funded recently, what are your plans for next year? Are the deals cheaper, are VCs getting deals? What’s hot for next year? Are you looking for young teams, or experience teams? Do your existing startups present more competition for time and money for new startups than they do in a better economy?

Bill also proactively translated VC code words like “powder” for money. It was a terrific opportunity to hear from these involved front-line investors. Overall, there was recognition that the economy was extremely tough, more so than 2001, but optimism that it would improve and shared belief that it was important and necessary to keep investing. There was also support for the idea that times like these reduce the noise

Inflationary Cosmology: Professor Alan Guth Speaks with East Bay Alums

The MIT Club of Northern California hosted a presentation by Dr Alan Guth ’68 (Ph.D. ’72 IIIIV) on January 7th at the Berkeley City Club. Dr. Guth, Victor F. Weisskopf Professor of Physics and a Margaret MacVicar Faculty Fellow, talked about his work on inflationary cosmology and the implications that our Universe is only one of many universes. It was exciting to have truly complex aspects of modern physics explained in a way that even non-physicists could comprehend. We expect that MIT professors will talk about their cutting edge studies, but it is especially nice when the presentation was accessible to all who attended. Maybe that is what we should expect when a MacVicar Fellow speaks. (MacVicar Fellowships are giving to MIT faculty in recognition of outstanding teaching.)

A hundred alumni and friends were in attendance, the best attended meeting in the East Bay for many years. Dr. Guth made his slides available to attendees and two-thirds of all alums asked for copies of the slides. Requests were sent with comments that included “best club meeting I have ever attended”, “amazing ability of the speaker to explain complex technical material to a basically non-technical audience”, “it was well worth the 60 mile trip from Mountain View”, and “I may not understand all of it, but it makes a lot more sense today than it did the day before yesterday.”

This event is part of an effort by the MIT Club of Northern California to increase the number of alumni events in the East Bay. In the last 6 months we also have hosted a tour of the Chevron Refinery, a tour of the Laser facilities at LLNL and semi-monthly Happy Hours at Jupiter in Berkeley. The club would appreciate your suggestions for future events. Please contact Bill Reenstra ‘72 (wreenstra@alum.mit.edu) with any suggestions.

Finally, for those who missed the talk, Dr. Guth indicated that he often comes to Berkeley to work with colleagues during IAP and that the next time he comes out he would be glad to talk to alums in the South Bay. We should keep our fingers crossed.
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Ms Ayla Vain ’99
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Mr Ronald J L Van Veen ’85
Dr Jaw-Yih Wang ’80
The Art and Science of Bootstrapping, April 30, 2009

C3, Convergence, Community and Commerce is the MITCNC entrepreneurship series devoted to issues, opportunities and challenges affecting companies in software, internet and communication spaces. On April 30th, the C3 program organized a panel: The Art and Science of Bootstrapping. As the infrastructure needed to build new businesses – hosting and computing infrastructure, development tools, open source software, devices and community/social networking platforms – is largely in place, two key problems that entrepreneurs face these days are finance and monetization. Thus, the panel addressed these questions in the context of bootstrapping a start-up.

The panel was moderated by Sramana Mitra ’95, strategy consultant, Forbes columnist, and author of two books, Entrepreneurship Journeys and Bootstrapping: the Weapon of Mass Reconstruction. The panelists included four founders who bootstrapping their businesses in their own fashion:

*Paul Kocher, Founder, President and Chief Scientist of Cryptography Research
*Michele Munson, CEO and Co-founder of Aspera Software
*Beatrice Tarka, CEO and Co-founder of Mobissimo
*Sridhar Vembu, CEO and Founder of Zolo

The panelists were asked to address the following questions:

*What are the core principles of bootstrapping – the do’s and don’t.
*Is bootstrapping context specific – what unique aspect of the business environment led to a bootstrapping alternative?
*What went right, where it could have been done differently?
*What conflicts arise when choosing bootstrapping as a financing strategy?
*How does one employ bootstrapping in product development versus market development?
*When bootstrapping does not work?

Initiating the discussion, Sramana Mitra pointed out that venture firms increasingly behave like bankers, that is, they are becoming more risk averse, seed funding is scarce and the entrepreneurs face a challenge in finding the initial $25k to $100k to start a business. The panelists took different routes in funding their businesses, with personal motivations and the founder’s vision emerging as key factors in how they bootstrapped their respective companies.

Sridhar said that his vision of Zoho as a business would not have fit the kind of business model that venture firms like to fund but he knew that the business could generate revenues. So he did it slowly over a period of ten years by reinvesting profits.

Michelle Munson started Aspera for freedom because she did not like working for others and always dreamed of starting her own company. She started the company with a $20 thousand loan from her father.

Paul shared that Cryptography’s business opportunity resulted from consulting. He started without a business plan for the company and was simply interested in solving tough technical problems for his clients. He retained intellectual property rights created during consulting – which was rather unusual – that he could reuse, patent and resell. Over time as the intellectual property portfolio grew, four product lines resulted. Thus, revenue from the consulting business financed the company.

Mobissimo started as an enterprise software company that reinvented itself as a travel engine when Beatrice Tarka realized that the same software and tools could be used for online travel. Her company fortuitously emerged during a turning point in the travel industry and she was able to leverage that market window into a revenue-generating company from day one, an example where timing played a key role in success.

The panelists discussed the pros and cons of taking money from family members. All panelists agreed that at small levels, taking money from friends and family does not create a sense of obligation but larger amounts may complicate personal relationships. All the panelists said that they received both financial and emotional support from their parents and spouses/significant others and it was a crucial factor in their success. (cont. page 13)
Dear Alumni:

I have taken over the VP of Membership and Volunteer Integration role from Manjari Bhatia. Manjari has done a great job of driving the complex area of membership through the economic downturn and IT system upgrade for the last two years. Thank you, Manjari!

I would like to highlight that MITCNC launched a new website and IT system. Though it has been a lot of work to define, build and migrate our activities to the new database, the effort has been paid off. Today we have a great web site where you can find the list of new events, activities, membership information and lot of other things.

Finally, and most importantly, thank you to all of our members and volunteers for their generous support of the MITCNC during the 2008-2009 year. We are now planning events for the 2009-2010 year and look forward to a great year with your involvement and enthusiasm!

Warm Regards,

Andrey Titov GM ’07
VP of Membership & Volunteer Integration
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What’s Fundable (cont.)

of questionable ventures and make it clearer to pick strong ones. Possible hot areas were lightly acknowledged, with software defined radio added to the list of green, Saas, and cloud computing, but mostly the VCs wanted to see strong teams, good ideas, and new ideas to round out their portfolios. “By the time there’s a conference on the subject, it’s not new.” – Mehra. The VCs clarified that the desired experience level varied with the newness of the field, and a quality, well rounded, global, and diverse team was most important. The VCs expected to contribute time in addition to money to help small companies grow, and needed to pick carefully for the right choices. Overall the message was encouraging, and there was consensus that there still is room for bright, innovative, well run startups to begin or continue despite the dour economy.
Membership Form – August 1, 2009 through July 31, 2010

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268 Bush Street, Box 600
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San Jose Giants

A little rain didn’t dampen the enthusiasm of MIT alumni and families who gathered to cheer on the San Jose Giants as they clobbered the Modesto Nuts on Sunday May 2. The kids especially had a great time because of the wacky entertainment between innings, and the fun games in the entry concourse, while the adults enjoyed the cameraderie, the BBQ ribs, and the Beer Batter.

MITCNC is looking for Alums interested in volunteering to help with:

- Newsletter Editor
- Director, Family Events
- Director, Sacramento Area Events

If interested, please contact Alison Chaiken (alchaiken@gmail.com), Director of Volunteer Integration.
Bootstrapping (continued)

All panelists agreed that a company cannot always remain bootstrapped and there are circumstances when the founder should be open to accepting outside financing. Paul Kochhar further elaborated that if a company is in a market that is poised to takeoff and there are no barriers to entry for other competitors to come in, moving fast is key to capturing market share. In such circumstances when a company can grow very quickly, it is imperative to look for the type of financing that can facilitate such growth, for example, to develop customer support and sales organizations or to invest in user experience. On the other hand, if a company is in a niche market with no competitors, then one can afford to bootstrap and slow the growth to maintain financial control.

Michelle Munson and Beatrice Tarka both agreed with this. Aspera faced the challenge of eager customers ready to buy its technology but had an understaffed customer support organization which proved to be the bottleneck to meeting market demand. All panelists agreed that there are no hard and fast rules, but properly understanding various funding options and their pros and cons leads to more informed decision making.

Another bootstrapping tactic that these companies followed was to avoid hiring an executive team until absolutely necessary. Where they needed extra skills, they hired consultants and learned from them. Michelle shared that bringing a key sales person on the team at a certain revenue point is crucial.

On building networks, panelists suggested asking one’s professors to connect to industry executives. Paul pointed out that in the case of extremely technical products, connection to someone one who can talk about technology is more fruitful than reaching out to executives. In such cases, it is sometimes better to connect to influencers and evaluators who tend to be at lower levels rather than executives because they become one’s evangelists and champions.

A member of the audience asked about the type of equity structure to create when non-technical founders need to bring key technical staff at an early stage, when much is still unknown about the new staff’s ability to contribute.

The advice from the panelists was that if new people are critical to product/technology development at an early stage, one could give them a staggered equity plan based on achievement of milestones.

The panelists also discussed if they would have done anything differently if they had had more resources. Paul answered that postponing patent filing in Europe saved half a million dollars (a substantial amount for a start up) but at the cost of slowing the business by about 5 years. Having learned from the experience, he said he would now look at the investing in patents differently. Michelle said it was being able to hire people at the right time and being able to build customer support organization to handle growth. Beatrice wished her company had spent more on user interface and not just on building technology in the early going. Earl Rennison, MIT alum and founder of job search engine Trovix also shared his experience of bootstrapping his company until its acquisition by Monster.

Regarding how long a company can be bootstrapped, Michelle said that it is easy to bootstrap in the first two years of a company’s life, but beyond that it was less clear because the window of opportunity remains open only for so long. Sridhar said that if one does not have a big idea and no big discontinuity, it is better to be bootstrapped. Only 1% of new businesses are venture financed. Paul pointed out that some arenas, such as clean tech or semiconductors, are not generally good candidates for bootstrapping. He also cautioned entrepreneurs to avoid the trap of thinking that technology can solve all problems; entrepreneurs must be aware of technology’s limitations.

In summary, the panelists said that creativity and willingness to take risk in interesting technologies, choosing the right opportunity, creating highly differentiable value, finding a core missing value/capability that the market needs and executing as a team are core ingredients of success. All panelists agreed that luck plays a role, but a commitment to solve problems plays a greater role.

For upcoming events from C3, please check www.mitcnc.org. To subscribe to the C3 mailing list, drop an email to vandanau@alum.mit.edu or sign up on the C3 webpage.