A Class Project “Morphs” into a Startup Company

Founder and Inventor: Kate Ryan Reiling T’09

Morphology, a laugh-out-loud party game hit retail shelves around Hanover last month. The genesis of the idea began on a cold Minnesota winter night when Kate was bored with all the old board games and she decided to get inventive. Kate entered Tuck the following fall and worked on her idea in the Introduction to Entrepreneurship course, Morphology was also her First Year project at Tuck (then called MindShare), and the following year Morphology was Kate’s Advanced Entrepreneurship project. Kate test marketed Morphology over and over again during her two years at Tuck from Fall 2007 through Spring 2009.

Post Tuck, Kate elected to remain in the Upper Valley and take Morphology to market. Morphology is now available at Kiddo, the Dartmouth Bookstore, and online. Kate is working on the next step, a national distribution plan.

The Valley News recently ran an article on Kate and Morphology (see next page) and The Union Leader is working on an article with Kate as this newsletter is being circulated.
Morphology Takes Shape
Tuck Alum Sells Her Board Game in Hanover
by Katie Beth Ryan, Valley News Staff Writer

Even back in business school, Sarah Albert of Lebanon sensed great things were in store for her classmate Kate Ryan Reiling and Morphology, the board game Ryan Reiling created. "I thought it was fun, I thought it was a cool idea, and I thought it was not like any game I'd ever played," Albert said yesterday, at an in-store demonstration of Morphology at Kiddo in Hanover.

Albert served on one of the focus groups for the game when it was still Ryan Reiling's first-year project at the Tuck School of Business, and returned to Kiddo yesterday to buy the game as a holiday gift for her stepsister. "I think she'll appreciate having something new and created by someone I know," said Albert, who treated herself to a copy of the game as well.

Years before entering Tuck in 2007, from which she graduated last June, Ryan Reiling, 32, had already planted the seeds for Morphology, a words and shapes game created when she invited friends over for an evening. "We wanted a game that was really creative, and we didn't have anything that served that purpose," said Ryan Reiling yesterday at an in-store demonstration of the game at Kiddo in Hanover. She and her friends grabbed pieces used in other board games, and attempted to create virtual representations of the words chosen at random from a dictionary.

Over the ensuing few years, Ryan Reiling refined the rules and design of Morphology on her own and as part of her business school coursework, but the original concept remains the same. Players draw a card with a term like "diving board" or "art," and use the mini-Popsicle sticks, colored flat beads and string that comes with the $34.99 game to represent the word, leaving the other players to guess what the word is.

Ryan Reiling's boyfriend, Kevin Hinckley, also a Tuck second-year student, describes the game as an updated take on Pictionary. "Instead of just drawing, you create in the third dimension," he said.

Though it's targeted for ages 13 and up, there's a multi-generational appeal to the game, Ryan Reiling said. The joy for her comes in watching a person's creative process at work, and it's a "magical moment" when a player is successful in getting others to figure out the concept they've created. "It's like I'm peeking inside of someone's mind as they create a word," she said.

Morphology evolved into Ryan Reiling's first-year project at Tuck, where fellow MBA students served in focus groups for the game, while visiting venture capitalists gave her positive feedback and tips for marketing Morphology successfully.

A native of St. Paul, Minn., Ryan Reiling elected to move to Lebanon after graduation and market Morphology regionally. It's a difficult time to be an entrepreneur, but Ryan Reiling is optimistic, based on what she sees as a regional trend of supporting local enterprises. "What we've found is that people are really excited about buying a product that was invented locally," she said. "They can see that their kid is interested in this in addition to using what they're (already) playing."

Ryan Reiling and Hinckley spent yesterday morning at Kiddo, demonstrating the game to store patrons. Kiddo owner Kathryn Page said that she's welcomed the advent of Morphology, as she's always looking to stock her shelves with games for older children and teens. "We have a lot of games with a similar spin, but it looks more challenging," said Page.

The path that Ryan Reiling has elected differs from many business school graduates, who often pursue careers in finance and consulting. But as a creative spirit, she says that her goals have always been to bring people together around a concept she's created, and her time at Tuck left her with an entrepreneurial streak as well. "Business school was always going to be another opportunity to get another set of skills to do what I dreamed," Ryan Reiling said. It's where she learned "how to take an idea and turn it into a product, and get this name and idea out to many, many people."
On May 8th 2009 the Dartmouth Entrepreneurial Network Business Plan Competition at Tuck launched with a $50K winner-take-all purse. Medical technology startup Novoculi, which is launching out of the Dartmouth Medical School and the Tuck School of Business, took home the $50K prize for their plan to launch a business around their non-invasive glucose monitoring technology. This technology, which will allow diabetics to put on a comfortable headset to measure their glucose level, rather than prick their fingers to get a blood sample, impressed the judges at the final.

The other companies that competed in the final include: Clifton Charles from DEN Chicago, Five Bamboo from the undergraduate Dartmouth Entrepreneur Society, Gyrobike from DEN Bay Area, Mamaloo Skin from DEN New York, Morphology Games from DEN Hanover and the Tuck School of Business, Nuborn Beverages from DEN LA, PineelR from DEN DC, Tilting Motor Works from DEN Seattle, and Vayametrics from DEN Colorado.

Over fifty teams competed at all levels of the competition with DEN city groups from across the country running preliminary events to select finalists for the May 8th competition. The purpose of the competition, in addition to awarding prize money with no strings attached, was to stimulate new business formation, team consolidation, and learning about the process of launching successful businesses.

The DEN groups in Hanover and around the nation thought it particularly important to launch this competition in the midst of the current recession because entrepreneurship is one of the best engines for bringing the economy and individuals out of the downturn. The DEN city groups took the lead on running eight preliminary competitions around the country, which helped to spread the word about the competition and also provided the means by which finalist teams were selected.
Although Novoculi took home the prize, all of the finalist teams impressed the judges with the teams they had put together, the products they were building (and in some cases already selling), the markets they were pursuing, their business models and careful thinking about financing they required to achieve their goals.

The judges for the final event were venture capitalist Phil Ferneau D’84, T’96 of Borealis Ventures, entrepreneur and Thayer professor Tillman Gerngross of GlycoFi and Adimab, venture capitalist Tom Caputo D’96 of Advanced Technology Ventures and Jay Benson D’90, T’96, Vice President of Strategic Planning for Tele-Atlas. These judges graciously donated their time and their expertise to the competition, giving each team thoughtful feedback and agreeing to deliberate on their decision as to the final winner in front of the audience of teams and spectators. This innovative structure allowed all of the teams and spectators to get additional learning out of participation in the competition.

Much of the credit for this event has to go to its sponsors. Wily Technology and the Wily Initiatives Fund at Dartmouth College, Borealis Ventures, Angeli Parvi, Michael Gonnerman, Inc, Tuck School of Business at Dartmouth, and the Dartmouth Entrepreneurial Network.

Boloco is a 16-unit fast-casual Boston-based restaurant with locations open in Massachusetts, New Hampshire, and Vermont. Boloco expects to have 22 company-owned units operating by year end 2010.

Pepper also co-founded b.good, (www.bgood.com) a 4-unit fast-casual better-for-you burger restaurant concept also based in Boston.
Presenting with nine other Dartmouth-related startups, Novoculi, a medical technology startup, launching out of the Dartmouth Medical School and the Tuck School of Business, defended their idea and business plan, and successfully fielded a myriad of questions from the judges to take home the $50K prize.

Here’s a snapshot of why the judges were convinced….

The Need
Despite overwhelming evidence of the benefit of regular glucose monitoring in the prevention of the complications of diabetes, many diabetics do not test as regularly as they should. This is in large part due to the pain and inconvenience of the finger stick required to draw blood for glucose testing. Many companies have tried to develop noninvasive blood glucose monitors to address this reality, but they all have major drawbacks that have resulted in poor adoption. Novoculi’s Noninvasive Blood Glucose Monitor builds on physiologically demonstrated phenomenon related to the recovery time of pigment in the retina following bleaching.

In addition, Novoculi is developing a next generation implantable device which will offer real-time accurate continuous glucose monitoring.

The Market Opportunity
There are currently ~16 million Americans with diabetes with just over 10 million having been diagnosed. According to the CDC, about 1.6 million new cases of diabetes were diagnosed in people aged 20 years or older in 2007 alone and the incidence is only rising due to the increases caused by obesity. Based on these data, diabetes is one of the epidemics of the 21st century.

The Technology
The Noninvasive Blood Glucose Monitor consists of a device for the bleaching of photo pigment from the retina followed by subsequent measurements of the recovery of the bleached pigment. These measurements can then be correlated to blood glucose.

The Management Team
Dan Burnett MD, MBA, Founder, Interim CEO, founded three venture backed companies and collectively raised $34 million in venture capital, inventor on 6 issued patents and 40 patents pending, former General Partner of MedVentures Associates

Eugene Hsu MD / MBA T’10, VP Business Development, Johnson & Johnson Development Corporation, 3V SourceOne Venture Capital

Keith Baker MD / MBA T’10, VP Medical Affairs, Board Certified Ophthalmologist specializing in oculoplastic surgery, 10 years experience as clinician and practice manager

Ariel Blumovich MBA T’10, VP Operations & Finance, Head of Department, Teva Pharmaceuticals, First Sergeant, Infantry Special Forces, Israeli Defense Forces
DEN NC by Belinda Chiu D’98

Dartmouth and Tuck alumni traveled from Charlotte to Raleigh for the successful launch of the Dartmouth Entrepreneurial Network - North Carolina (DEN-NC). Held at the Elon University Love School of Business, the 9th chapter of a nationwide network featured Elon’s Dean Mary Gowan. Jason Copland T’01, President of Copland Industries, who gave an inspiring and insightful talk about the courage of being entrepreneurial in a fourth-generation family company. The alumni retreated to the Piedmont Ale House where ideas, business cards, and contacts were shared with interest and great enthusiasm.

The purpose of DEN NC is to foster a spirit of innovation by helping people in the Dartmouth community learn about and implement entrepreneurship. Future events will include speakers, workshops, business plan competitions, and opportunities to network locally, regionally, and nationally with Hanover and the other eight DEN chapters. Whether you are starting a business, running one, or working in one and have an interest in entrepreneurship, please join the listserv. For more information or to join the group, please contact belinda.chiu@gmail.com.

DEN Boston by Jason Gracilieri D’99, TH’00

DEN Boston was happy to have Thayer School Professor Lee Lynd come down this September and deliver a passionate talk about Mascoma Corporation, a company co-founded by him and now a leader in the race to create renewable fuels. The event was well attended with a knowledgeable audience, and the post-talk Q&A was lively and educational. DEN Boston also hosted their final event of 2009, held on December 2nd at Dillon’s bar on Boylston Street in Boston. DEN Boston events are open to all Dartmouth alumni, and we encourage anyone with even the smallest of entrepreneurial aspirations to join us for evenings of conversation, idea sharing, and networking with fellow alums. If you’re interested in attending future events in Boston, please visit www.denboston.org.

DEN Seattle by David Cohen D’02

DEN Seattle hosted its largest attended event yet on November 18th featuring Richard Tait T’88 (co-founder and former Grand Pooh Bah of Cranium). Tait’s presentation entitled “It’s Not About How Many Times You Get Knocked Down, But How Many Times You Get Back Up,” provided an interactive forum with plenty of networking following. This past summer, DEN Seattle had a great turn out at its informal networking and happy hour evening at Duke’s Chowder House on Lake Union. Back in June, a panel discussed their successes in a different approach to entrepreneurship in “Identifying and Acquiring an Existing Business: Lessons from Search Fund Entrepreneurs.” Stay tuned for more DEN Seattle events this Winter and Spring.

DEN LA’s Field Trip to SpaceX in Hawthorne, CA on August 21st

continued on next page
DEN Metro NYC by Alejandro Crawford T'03

DEN Metro NYC hosted an entrepreneurs kickoff event on September 24th at Hermann Mazarid's (D'87) townhouse in Brooklyn. This event featured Dartmouth entrepreneur Rick Braddock D'63, CEO, FreshDirect. The evening lingered on with plenty of wine, beer, and networking. DEN Metro NYC and the Dartmouth Alumni Association of New York City presented a workshop for entrepreneurs at The Yale Club on November 12th entitled “Lessons Learned” featuring two of the final teams from DEN's Business Plan Competition at Tuck on May 9th (Hilary Lane D’93, T’00, Mamaloo Skin Care (maternity skin care company) and Cliff Berry D’96, Clifton Charles (fashion GPS for men). Moderated by Ale Crawford T'03, both presenters shared their experiences and what helped to make their submissions successful as well as what they would do differently next time. Stay tuned for DEN NYC events during the winter and spring months.

DEN Chicago by Kate Sackman D’82

DEN Chicago had its first Networking Event on October 29th at the Hyatt Chicago. Amid thousands of other convention attendees congregating at the Hyatt Big Bar, approximately 25 people in the extended Dartmouth family came together to get to know one another and exchange ideas. Many entrepreneurs with medical-related ventures were in attendance, as well as real estate, finance, conservation, and Internet marketing. All exchanged business cards initiating several new potential business relationships.

DEN Chicago has put forward a new executive committee, which is still growing, and is being led by: President, Kate Sackman D’82; Vice Presidents, Alex Stojanovic TH’04 and Sean Harte T’91; and Secretary, Kathy Bridges DP’10. Events planned for 2010 include a presentation by successful venture capitalist and financier Steve Lazarus D’52, Co-founder and Managing Director Emeritus, ARCH Venture Partners, additional networking events, along with a business plan showcase, and panel discussions with Dartmouth entrepreneurs of mid-sized companies and/or venture firms.

Balch Hill Medical

Marty Doyle D’76

DRTC’s newest tenant, Balch Hill Medical, Inc. is working to commercialize medical innovations developed at Dartmouth Hitchcock Medical Center, Dartmouth Medical School, and throughout the Dartmouth community. Balch Hill will evaluate new products and organize funding and approvals for those technologies that have commercial potential. The Company uses Dartmouth-based resources and personnel for analysis, trials, administration, and technical support to the extent possible. Balch Hill expects to launch its first medical device later this year. Website coming soon.

The Dartmouth Regional Technology Center is a 32,000 SF incubator located in Centerra Resource Park.

www.thedrtc.com
The mission of the DEN Cities is to foster relationships among its members, help educate them about founding, operating, financing, and growing entrepreneurial ventures. But most importantly it’s about building a powerful network together. DEN Chapters include alumni, students, and faculty of Dartmouth College, the Tuck School of Business, the Thayer School of Engineering and the Dartmouth Medical School who live or work in the nine DEN Cities.

If you haven’t yet attended a DEN City event, joined a DEN City Chapter, or founded a new one in your own neighborhood, we hope you will.

Learn more about DEN City Upcoming events at www.den.dartmouth.edu/den_and_the_city/.

<table>
<thead>
<tr>
<th>Recent DEN City Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wednesday, June 10, 2009</td>
</tr>
<tr>
<td>DEN Seattle Event and Networking Mixer</td>
</tr>
<tr>
<td>Seattle Taphouse Grill, Seattle</td>
</tr>
<tr>
<td>Tuesday, June 16, 2009</td>
</tr>
<tr>
<td>DEN Metro NYC</td>
</tr>
<tr>
<td>The Yale Club of New York</td>
</tr>
<tr>
<td>Tuesday, June 23, 2009</td>
</tr>
<tr>
<td>DEN Boston Networking Night</td>
</tr>
<tr>
<td>Tia’s on the Water, Boston</td>
</tr>
<tr>
<td>Tuesday, June 23, 2009</td>
</tr>
<tr>
<td>DEN Colorado Networking Night</td>
</tr>
<tr>
<td>Forest Room 5, Denver</td>
</tr>
<tr>
<td>Friday, August 21, 2009</td>
</tr>
<tr>
<td>DEN LA Field Trip and Networking at Space X</td>
</tr>
<tr>
<td>1 Rocket Road, Hawthorne, CA 90250</td>
</tr>
<tr>
<td>Wednesday, September 2, 2009</td>
</tr>
<tr>
<td>Dartmouth Entrepreneurs Forum with DEN Bay Area</td>
</tr>
<tr>
<td>Plug &amp; Play Tech Center, Sunnyvale, CA 94085</td>
</tr>
<tr>
<td>Thursday, September 24, 2009</td>
</tr>
<tr>
<td>DEN NYC Dartmouth Entrepreneurs Kickoff 2009</td>
</tr>
</tbody>
</table>
Clifton C. Berry D'96

Clifton left his position as an insurance executive in 2008 to co-found Clifton Charles, Inc. Born out of frustration with the poor fit, limited selection, and lack of advice currently available to most men when purchasing clothing, Clifton Charles’ mission is the Democratization of Customization - making available to all men affordable luxurious custom-made dress shirts. Through a dynamic online interactive experience, cliftoncharles.com is introducing innovative and disruptive technology to the arcane men’s apparel industry. The website employs a proprietary algorithm and 3-D technology to guide men to the perfect fitting and flattering custom-made dress shirt (delivered in 10 days or less), serving as their “Fashion GPS.” Clifton Charles’ tailored approach is supported by a comprehensive multimedia fashion library and trusted commentary and advice from leading men’s clothing industry experts. Clifton Charles was a finalist in the DEN Business Plan Competition at Tuck on May 8th where he finished in the top three.

Shane Douglas D'09

Shane recently graduated from Dartmouth with a degree in English and left the Upper Valley for the Bay Area in late summer to begin working at Silicon Valley Bank. At SVB, Shane will be a member of the Venture Capital Relationship Management team in the Menlo Park office.

After completing the Introduction to Entrepreneurship course in W'09, Shane used the spring term to explore a senior thesis on social class in “The Great Gatsby” and worked with the DEN on a project that profiled Dartmouth affiliated start-up companies. Shane is now active in the DEN Bay Area.

Rob Adams D'90

Rob recently took the helm as President of Simon Pearce, the company well known in the Upper Valley for its Quechee, VT flagship restaurant, retail, and glassblowing operation. A diverse operation, Simon Pearce has 10 of its own retail stores on the East Coast, sells glass and pottery through 400 high-end retailers across the country, operates a catalog and web business, and has two fine dining restaurants in Quechee and on the Brandywine River in West Chester, PA. Delighted to be back in the Upper Valley, Rob has connected Simon Pearce with Tuck on four fronts—a First Year wholesale strategy project, a Tuck/Thayer lean ops project, a Tuck summer intern, and a Tuck clean energy project. Rob moved back to the Upper Valley with his wife Lauren, a Norwich, VT native, and children Charlie and Caroline after 12 years in Chicago at Kellogg, Deloitte Consulting, a private equity stint, and 7 years running another family owned business.

Read about DEN startup companies at www.den.dartmouth.edu/info/den_companies.html
I am intellectually stimulated when I participate in projects that challenge and inspire me. I enjoy working hard to achieve a goal that I believe will have a positive impact on those around me. In my time at Dartmouth, I satisfied a portion of this passion with work on my first company, Five Ultimate. My four siblings and I founded Five Ultimate in my freshman year, 2006. We manufacture and sell ultimate frisbee apparel to individuals and teams around the world. Three years ago we were a start-up: my brothers worked insane hours, I juggled school and Five Ultimate work, and our office was located in our parent’s garage. Today, we are proud to be a small company: we have an office of 15 people, a headquarters in Seattle, WA, and we are the most popular ultimate brand in the world. Our mission is to grow the sport of ultimate frisbee, to make the lives of ultimate players better, and to promote good sportsmanship in the sport. Through Five Ultimate I have been able to work alongside my siblings (a challenge in its own right!), spread the sport I love, and engage others in an active lifestyle that encourages good sportsmanship and good health.

My siblings and I continue to work together on Five Ultimate, but most recently we have taken on a new challenge: a second company, Five Bamboo. The concepts and ideas for Five Bamboo had been running circles in my mind for a couple years. Thanks to a grant from The Dickey Foundation, I traveled to China in my junior year at Dartmouth to study the environmental impacts of bamboo textile manufacturing. I culminated the project by writing a 40-page paper presenting my findings. I discovered that cotton is an unsustainable crop that is unfit to be the main raw material source for much of the world’s clothing, and that bamboo provides a promising alternative. Five Bamboo’s mission is to redefine how we view and use clothing, thereby reducing the environmental impacts of the apparel industry.

It wasn’t until this spring, however, that we stepped on the gas with Five Bamboo. I heard about the Club of Dartmouth Entrepreneurs business plan competition, and sat down, with the help of Gregg Fairbrothers D’76, to put thoughts into an actionable plan. What was my marketing strategy? How was it going to be sustainable to build a company based on a fabric that is accessible to potential competitors? How was I going to get traffic to my online store?
It wasn’t until I won the undergraduate berth to the DEN Business Plan Competition at Tuck last Spring that I realized the scope of the opportunity at hand. As a young entrepreneur, I was being given the chance to propose my ideas to experts in the field of entrepreneurship and hear their candid, analytical feedback—something people pay thousands for out here in the real world. Through my preparation for the DEN Business Plan Competition at Tuck, I got my act together, answered important questions about the kind of company I want to create, and identified weak points in my plan. It was a priceless learning experience.

As I now move forward with Five Bamboo, I am impassioned because I am constantly challenged, forced to think creatively, analytically about green business and about how to change the consumer mindset. And, I know that if I am successful with Five Bamboo, I will have had a real, positive impact. With every customer converted from buying cotton products to buying bamboo products, the world will be a healthier, more ecologically sound place for us all.

Petite Palate Organic Baby Food . . .

Now available on freezer shelves at the Hanover and Lebanon Food Co-ops

Christine Naylor D’94, Co-Founder
The Big Green Bus returned to Washington, DC this past June during its 5th country-wide tour. This student-run waste vegetable oil-powered bus is spreading a message about individual action and lifestyle changes that can make a difference for our environmental future.

On Friday, June 19th, they arrived from New York City to have an afternoon of visits to legislators on Capitol Hill followed by jazz in the park (a DC summer tradition hosted by the National Gallery of Art), finishing up the night with an alumni potluck dinner.

On a Saturday, the Big Green Bus was parked at the Shirley Povich Baseball Field (www.bigtrain.org) in Bethesda for a local baseball team's Carnival night, which was held in conjunction with Bethesda Green and their sponsor, the local business, Honest Tea. Area alumni joined for this family-friendly affair.

The mission statement of the Big Green Bus is to educate Americans about how to create a future that sustains people, the economy, and the environment by promoting energy conservation and efficiency, renewable energy, waste reduction, healthy food, and civic action.

The Big Green Bus students believe that people, economy, and environment are all interconnected; while there is no perfect solution, there are five things that can help protect the environment, save money, and create a more sustainable present and future. They are:

- Reduce consumption and recycle
- Energy efficiency
- Renewable energy
- Food: Local, seasonal, organic, fair trade, and homemade
- Get involved, take action, and vote
Are You the Bottleneck in Your Organization?

by Brett Martin D’04 and Thanos Papadimitriou

Re-printed with permission from Harvard Business Publishing

Howdy!

Brett Martin D’04 here. Nearly two years ago, I wrote an article about my Fulbright scholarship studying strategic measurement at the Universita Bocconi in Milan. With the help of the DEN, I interviewed over 100+ top venture capitalists and entrepreneurs to determine which metrics founders should focus on to avoid becoming bottlenecks in their own organizations. Below is a brief introduction to my research, as recently published in HBR.org (Harvard Business). I hope it can help you grow your business without sacrificing control.

A quick look at their workflow revealed the problem instantly: Every single client enquiry had to be evaluated by one of the founders. Because each new proposal took at least a week, if not two, for Aris or Stavros to assess, prospective clients frequently defected before someone at MaritimeX even laid eyes on the opportunity. The founders felt that they alone possessed the knowledge to respond to such proposals. But even with both founders evaluating new business around the clock, MaritimeX could only handle a few contracts at once. As a result, the company frequently passed on requests to perform highly profitable specialty charter and vessel valuation services. Aris & Stavros had become bottlenecks within their own firm!

Aris & Stavros had some very important decisions to make, both financial and personal. Did they aspire to expand at the risk of delivering inferior service or damaging treasured relationships? Or, did they wish to stay small but successful, assured to impress their clients through personal involvement? What was more important to them: growth or control?

Entrepreneurs can have both. Here’s how to dispel the three most common excuses you might make for not letting go.

1. **The Decision-maker Excuse:**
   "As the ultimate decision maker, I need to do everything so I know about everything."

   Entrepreneurs cannot avoid getting their hands dirty with the nitty-gritty. That said, decisions and the information necessary to make them should be pushed down the ranks whenever possible. That way, the entrepreneur can pursue activities that truly no one else can do, such as figuring out the big picture.

2. **The Quality Control Excuse:**
   "Delegating tasks to people less competent than myself produces inferior results."

   All founders hate to watch employees make "avoidable" mistakes, but savvy entrepreneurs remember that perfect is the enemy of good (and in many cases, growth). Anticipating employees' shortcomings is not an excuse to do everything yourself. Successful entrepreneurs know that their time is best spent preparing their employees for potential difficulties and helping those same employees learn from their mistakes. Only then can future mistakes be avoided.

3. **The Revenue Excuse:**
   "Time spent training employees is wasted (i.e. non-billable)."

   "Give a man a fish, feed him for a day. Teach a man to fish..." well, you know. Routing every decision through yourself is unsustainable. Entrepreneurs that fail to evolve their management style from "doer" to "coach" will never have the resources to seek new opportunities!

You may be the reason your company isn't growing. You are micromanaging — and it's stifling the organization you are trying to build.

Our research tells us that the very management style that enables a founder to get a company off the ground — a zealous focus on tactical execution — often derails growth down the line. Lost in the heat of battle, many entrepreneurs fail to adapt their management style to the evolving needs of their growing organizations.

Take for example the case the shipping firm MaritimeX. Built from the ground up by childhood friends from Greece, Aris & Stavros, MaritimeX had grown from a peripheral two man shop to a regional powerhouse with 25 employee. There was only one problem: the firm's revenues had plateaued at $9M for three years straight. Despite working harder than ever, MaritimeX's founders could not break into eight-figure revenue.

Entrepreneurs cannot avoid getting their hands dirty with the nitty-gritty. That said, decisions and the information necessary to make them should be pushed down the ranks whenever possible. That way, the entrepreneur can pursue activities that truly no one else can do, such as figuring out the big picture.


About Brett Martin D’04: Brent has been an investment banker, sailboat captain, and Fulbright Scholar. Currently, he is building a better way to find new restaurants at [www.thedataowl.com](http://www.thedataowl.com).
A final presentation event for the Fall 2009 Advanced Entrepreneurship course was held at Tuck on November 20th. Twelve student teams presented to panels of reviewers comprised of entrepreneurs, angel investors, and venture capitalists. Approximately fifty-five students and reviewers moved over to the Norwich Inn for a mixer and dinner featuring several Dartmouth entrepreneurs. Networking, lively discussions, and a special gift filled out the evening.

Advanced Entrepreneurship reviewers and students received a thank you gift of Morphology. Kate Ryan Reiling T’09 is the Founder and Inventor of Morphology and a 2008 Advanced Entrepreneurship grad! Come on and give Morphology a try and buy your game today at www.morphologygames.com.

Boloco Lunch
Inspired burritos, with all the trimmings, were served at the reviewers’ luncheon and were provided by reviewer John Pepper D’91, T’97, Co-Founder and CEO of Boloco with 16 “green” locations including Hanover. Reviewers Phil Ferneau D’84, T’96 (left) and Matt Rightmire T’96 (center) gave Boloco 2 thumbs up!

Red’s Appetizers
Mike Adair T’09, Founder & CEO of Red’s All Natural (big & natural burritos) is all smiles when Red’s appetizers were served. During Mike’s two years at Tuck, Red’s was his Intro to Entrepreneurship project, his First-Year project, and his Advanced Entrepreneurship project. Red’s now has 26 accounts. Go Mike!

Verde Farms Entrée
Dana Ehrlich T’05, Founder & CEO of Verde Farms, is enjoying a Red’s burrito in the center photo (Dana’s an Advanced E-Ship grad too). Another Advanced E-Ship grad, reviewer Daniella Reichstetter T’07, CEO of Gyrobike and pictured above, returned to the Bay Area the following week to launch the Gyrowheel on Black Friday!
Health care reform is in the news every day, and the consensus seems to be that the U.S. health care system is at the breaking point. But for an entrepreneur, the word “crisis” might as well read “opportunity.” So the question becomes, what’s the next big thing in health care delivery?

On October 27th, DEN convened a group of health care experts, entrepreneurs, and venture capitalists from across the country to weigh in on this very issue. Each of the four panelists is betting on a slightly different strategy, but all agreed on the broad, underlying trends of wellness, population health management, and value in health care delivery.

George Bennett, Chairman of Health Dialog, spoke of opportunities offered by technology, such as telemedicine, and the potential he sees in designing incentive systems for patient compliance with medical guidelines.

Tom Colacchio, President of the Dartmouth Hitchcock Clinic talked about the concept of value – improving the ratio of health care outcomes to cost – and discussed the promise of accountable care organizations.

Bob Molinari, President of MedStars and founding investor and CEO of Retrotepe, Inc., sees potential in advanced diagnostic techniques, which would lead to more personalized medicine.

While the panelists did not settle collectively on one next big thing idea, when asked to give a one word answer for the next big opportunity in healthcare delivery, each panelist did:

- Value
- Incentives
- Diagnostics
- Screening

In the end, panelists and audience members alike were in agreement that the opportunity is there and – with health care spending rapidly approaching 20% of the U.S. GDP – the opportunity is sizable.
In my previous article I promised to shed some more light on the fallout from the decision by the U.S. Court of Appeals for the Federal Circuit—the court that hears patent appeals—in the case *In re Bilski*. For the many who may not have heard of this decision, it states in very brief summary that a method patent claim must be either tied to a device or transform matter in order to be patentable. In a nutshell, this appears to mean that methods that turn a compound or physical object from one thing to another (i.e. transforming matter) are still patentable, and methods that employ a device, such as a mold, milling machine, laser cannon, etc. are also okay in the eyes of the Court and U.S. Patent and Trademark Office. However, all those methods for doing business over the internet where the claim focuses on the fancy pricing algorithm and/or exchange of financial data and other information may well be invalid, or are currently having a tough time getting allowed by the Patent Office.

I had planned to give you my thoughts on how to best navigate a patent concept to eventual allowance in the post-*Bilski* world, offering some hints on how to build a “device” into your business method and software package, and how we could best claim it to survive a *Bilski* challenge. Well, to paraphrase my grandmother, people plan and the U.S. Supreme Court laughs. On June 1st, the Supreme Court agreed to review the Federal Circuit’s decision in *Bilski*, and no one can be certain at this point what the final word will be on the protectability of business method patents, software patents or any method patent, for that matter.

I can offer a prediction, but will couch it in terms of my observations as a patent attorney who has closely watched the behavior of the Patent Office over the past few years in examining, rejecting and allowing patent claims. By way of background, every concept filed in a patent application contains a detailed description of the concept and a set of claims that define the boundaries of the requested patent protection in words. After filing, the Patent Office eventually examines the claims and description and determines (1) whether the claims are “patentable subject matter” and (2) whether they are “new and unobvious.”

The *Bilski* case has clearly had its effect on the first item (1), in that the number of rejections I have received on patent applications in the software area bearing a non-patentable subject matter has substantially increased. This is a direct result of *Bilski*. The good news is that, for the most part, we have been able to change our claims slightly to add in the needed device—usually in the form of a display, network or computer system. This was the way we used to claim software methods in the “old days” before business methods were temporarily acceptable. At present this approach will not help where the patent description does not show or describe a computer or other device and is purely a “method”. For many practitioners *Bilski* has become a speed bump, rather than an actual roadblock to our client’s patent coverage.

---

continued on next page
The graph below, generated by the Patent Office, shows patent allowances each year from 1975 through 2008. It tells a more troubling story, mainly related to the second item (2). While it may partly be due to the new restrictions under *Bilski*, the likely culprit for the precipitous decline in patent allowances in recent years is likely due to the increasing backlog of cases in the Office, and to the consequences of the Supreme Court’s *KSR v. Teleflex* decision decided in April of 2007. *KSR* made it more difficult to overcome the “obviousness” hurdle during examination. Practically, we have been finding more and more patents that would normally have been allowed are now being rejected, even after string argumentation with the Patent Office examiners. Recently, at least one examiner stated to me that he “really isn’t allowing anything anymore,” although this is an extreme view that varies based on the area of technology of the patent application. More troubling, there seem to be inconsistencies in the application of both the *KSR* and *Bilski* decisions among different areas of technology in the Patent Office, leading to greater uncertainty in drafting applications and in predicting allowance. Generally, we have been more limited in arguing that an invention is unique over previous inventions, and the breadth of allowed claims must be narrower than we would like. In addition, the number of times we need to reply to the examiner has increased, thus increasing the cost of obtaining a patent by several thousand dollars in many cases. Many more applicants are giving up before obtaining their allowed patent, and the graph bears that out.

Now, should one despair and simply give up on filing new patent applications? In addition to the downside that this would put me out of business, the truth is that patentability searching and carefully tailoring claims before filing takes on new importance to ensure the claims will overcome the new hurdle imposed by *KSR*. Likewise, regardless of the final outcome of the *Bilski* case, traditional forms of device-based method claims will likely remain—even for software methods—and patents should be drafted to include the device environment in which the software operates wherever possible. One other bright spot, which I am a little reluctant to mention, is that lately I have observed an inexplicable increase in the number of allowed claims. Likely we are seeing a policy shift toward a greater number of allowances with the arrival of the new Administration, combined with the biggest motivator of all, money. Allowances bring more revenue to the always-cash-strapped Patent Office. So get out there and file!
This is the second article in a DEN newsletter two-part series on negotiating your first licensing deal. The first article reviewed license grant terms, including intellectual property ownership and grant restrictions, encouraging entrepreneurs to strategically negotiate the grant provision so it meets their business objectives. This article looks at two additional key facets of an entrepreneur’s first licensing deal: publicity and payment terms.

Publicity Terms

As the entrepreneur negotiating a commercial licensing agreement with Big Company licensee, you will be focusing on the aspects of the deal that are well-known to be critically important to your emerging business such as protecting your IP, mitigating risks and earning licensing revenue. However, it may be beneficial to devote attention to other deal terms as well, such as the often-overlooked publicity provision. Many Big Company standard licensing agreements will not include any mention of marketing, publicity, or press release – because they do not need it to bolster their business. But, imagine, for example, the benefits that an emerging software company may derive when a press release hits the industry trade journals announcing the deal they just inked with Cisco: instant industry credibility, VC and investor attention and the start of a win/win track record.

Dave DeLucia, CEO of ImmuRx, a DEN-incubated bio-tech start-up based in the Upper Valley negotiated one of the company’s first licensing deals with a Big Pharma company and he purposefully included a press release provision in the deal terms. He remarks, "Successfully launching a new company requires that you create expectations of success. A deal with a large company confers credibility to your effort - if and only if you have permission to publicize the relationship. Therefore, getting a provision that you can publicize the relationship is very valuable to the start-up."

The beauty of requesting such a provision from the Big Company licensee is that neither party incurs any costs, but the start-up may glean enormous benefits. Generally, the licensee will want to review and pre-approve the press release prior to it being issued, which is fine as long as the entrepreneur drafts it shortly after the deal is signed and the licensee’s approval is not unreasonably withheld.

Payment Terms

Let’s turn our attention to a critically-important term in any licensing deal – the revenue and payment provisions. What type of payment structure or combination thereof best suits your business model? Does your business need an immediate cash infusion? If so, then an up-front payment structure may work best. Or, perhaps you are after a steady income stream over time. If so, then a guaranteed minimum royalty payment may be most appropriate. Generally, licensing agreements include one of three types of payment arrangements: royalties based on sales, up-front payment or usage-based fees. While there are other ways to structure licensing fee payments, these three structures are the most common. This article provides an overview of each.

continued on next page
Royalty based on sales. Royalties based on “net sales” is the most common payment arrangement in any type of licensing deal. Ideally, the licensor is paid a percentage of the licensee’s gross sales revenue minus returns that are actually credited. Assuming the definition of net sales is reasonable, licensors generally favor this payment type because it affords them an opportunity to be paid over the lifetime of the product or service.

The key is honing in on the definition of “net sales”. As the entrepreneur-licensor you want a straightforward definition of net sales (e.g., gross sales revenue less credited returns), so your royalty percentage will be based on the highest possible sales number. The licensee, however, likely will strive for a comprehensive net sales definition. For example, the licensee may want it to include not only credited returns, but also marketing costs, postage, office space lease, packaging and investments, so that the royalty percentage owed will be calculated on as small of a sales number as possible. If this is the case, the licensor may want to suggest that these are simply the costs of the licensee doing business and should not be considered as a licensor expense.

“As the licensor if you are granting sublicensing rights to the licensee, then the net sales definition should also include “sales by sub-licensees”, as Alla Kan, the Director of the Technology Transfer Office at Dartmouth College, points out, “This will allow the licensor to share in any revenue the licensee may derive from such sublicensing rights, which is often called “pass through royalties”.

You may also want to consider structuring the deal so that you have a guaranteed minimum royalty payment each quarter with any additional royalties being paid when net sales exceed a certain threshold. In addition to the net sales definition, you should consider how the royalties are calculated – on an accrual or cash basis. Lastly, you will want to ensure the licensee’s reporting obligations have enforcement teeth and that you have a right to audit. It is wise to scrutinize the royalty provisions and seek advice from an industry-expert business lawyer before agreeing to terms.

Up-front payment. Up-front payment terms mean the licensee pays you – the licensor – at the start of the deal for the right to license your product or service. Obviously, this puts money in your hands quickly and if your business needs an immediate cash infusion this could be the desired model – that is, assuming the terms are straightforward and the license scope is limited. On the other hand, if your product becomes wildly successful and the license was perpetual, then you may think your up-front payment was not ample compensation for the licensee’s perpetual use of your product or service.

From the entrepreneur’s perspective, the cleanest up-front payment provision ensures that the licensee pays you, in full, upon execution of the agreement with no refund capabilities. The licensee, however, may desire to delay – or possibly incrementally stage – the up-front payment until he/she sees that the software is performing as specified or when sales hit a certain minimum threshold. You may, in addition to your up-front payment, want to include a future royalty based on sales when and if the sales reach a certain threshold, so you are sharing in the ongoing revenue stream. Likely, the licensee may want a full or partial refund option, for example, if the product does not perform properly.

Usage-based or unit-based license fee. A usage-based or unit-based license fee means the licensee pays you a fee for each use they make of your licensed product or service. For example, if you patented the process for coating glass for halogen lights, your process may be used in the halogen light manufacturing operation and you would charge a fee based upon the number of glass units produced using your process. Or, if you are licensing software, you may charge a fee for each person accessing your technology or for each server on which your software is installed. If you plan to include a user-based fee structure, be sure to require that the licensee use a usage tracking system and accurately report all usage, which should be reinforced contractually with omission penalties. Oftentimes, software vendors will embed tracking mechanisms in their software to ensure accurate usage reporting and to avoid confrontations with licensees over reporting and payment errors.

There are numerous ways to negotiate a licensing payment provision, so consider the aspects that are critical to your business and consult with your business lawyer accordingly.

This two-part series is intended to provide you with an overview of licensing terminology and offer for your consideration strategic ways to structure your first licensing deal. Before entering any licensing arrangement, you should consult with your business lawyer to ensure it protects your company’s interests and meets business objectives. While the content of this 2-part series should not be considered legal advice, we hope it provides guidance on getting the most out of your first licensing deal.
Will Private Equity Bounce Back?

by Craig Allsopp, Focus Acquisition Partners

It’s no surprise to readers of this newsletter that private equity investors went AWOL during the first half of 2009. And with tight credit markets, frightening economic conditions and struggling portfolio companies who could blame them?

Consider the following from GF Data Resources, an information service that collects private equity deal flow and transaction data from 128 contributing firms.

“Deal volume among firms in the (our) universe, already slow, came to a near halt,” says GF Data in its August report. Contributing firms closed just 21 deals in the first six months of this year, a 75% decline from 88 closings two years ago.

Surprisingly the slowdown, whether it’s past or still with us, has not had a negative effect on the prices paid in the middle market (loosely defined as transaction values of $10 million to $100 million). In fact the GF Data reports shows just the opposite. The deals that are being completed are closing at higher prices.

“The flight to quality – widely discussed in the middle market deal community - is (very) apparent,” says Andy Greenberg, one of the founders of GF Data. “Transaction values paid in this year’s second quarter averaged 6.6x adjusted EBITDA, up from 5.8x in the first quarter and 5.9x for all of 2008.”

But as sure as the Dartmouth campus starts buzzing in the Fall, there are signs that some of the pressure is easing and that middle market deal activity is picking up.

At the Focus Acquisition Partners office in Hanover, for instance, the phone is ringing, the emails keep coming and clients are more engaged. Since July we have closed two deals for private equity clients and we currently our involved in several searches for investors seeking acquisitions in the health care, specialty food, business services, packaging and instrumentation sectors.

Focus Acquisition Partners is a buy-side advisory firm. Our clients are financial and strategic buyers who value the insight we bring to finding quality deals on their behalf. Focus partners Chris Nesbitt and David Parsons have advised several DEN startups and also served as reviewers for Tuck’s Introduction to Entrepreneurship and Advanced Entrepreneurship courses. Reach Focus at 802-332-6261 or 603-676-7221.
Will Private Equity Bounce Back?

“As with our clients we are starting to see things rebound,” said Chris Nesbitt, one of the three founders of Focus and father of Betsy Nesbitt D’04, T’11. “We’re talking with private equity groups every day and moving deals through the pipeline, but the pace is not as quick as we’d like.”

One of the reasons for that slow pace, according to GF Data, is that debt financing for middle market deals is still tight, with equity now making up 63% of the average capital structure.

“This supports the anecdotal evidence that suggests only the best deals will close,” said David Parsons, another of the Focus founders and partners. “This makes it even more important for business owners to emphasize performance if they are considering a sale or recapitalization.”

As for what happens between now and the middle of 2010 only time will tell. A spokesman for a Denver-based client that works with Focus said his partners are enthusiastically looking for deals after spending the last year carefully monitoring portfolio company performance. “It’s time to get off the sidelines,” he says.

Streaming Videos on Entrepreneurial Topics

The DEN and the Tuck School of Business at Dartmouth invite you to view streaming videos on selected entrepreneurial topics. The goal of the DEN and the Tuck Entrepreneurship program in making this content available online is to provide some foundational learning resources for people in the Dartmouth community, wherever they are. Content includes:

- All eight sessions from the 2008 Introduction to Entrepreneurship Course
- Selected sessions from the 2009 Introduction to Entrepreneurship Course
- Selected sessions from the 2008 and 2009 Advanced Entrepreneurship Course
- Founder Forum Speakers such as Richard Tait T’88 (Co-Founder and Co-Creator of Cranium)

To learn more please visit www.den.dartmouth.edu/education_and_events/
First, put a freeze on all outgoing payments—no exceptions. Then review all possible cash sources, including your investors, bankers, factors, customers, creditors, and even your employees. You may be pleasantly surprised to find an "angel" who can float a bridge loan that gets you through the crisis.

If you can't come up with a quick infusion of cash, immediately let your directors and your CFO know about the problem (if they aren't already aware of the situation). Legally, you and they probably have some personal liability for net employee payroll plus federal and state taxes. Chances are, your board members will decide that it's better to lend money to the company than to get stuck with tax and payroll liabilities. But they won't be happy about the situation, or with you.

Since this kind of problem is likely to happen again, you need to reduce your company's overall financial vulnerability. That probably means some layoffs and serious cost-cutting. If a single delayed payment puts you in a financial tailspin, your company is severely undercapitalized.

Yes. Immediately ask a bankruptcy lawyer to review the agreement you have with your customer, to limit your exposure to clawback litigation and related problems. Your situation is very risky, especially if other vendors are getting paid in 30-90 days. If your customer defaults and leaves these creditors with major losses, it's very possible a bankruptcy judge will force you to return any money you collected within 90 days of the bankruptcy.

Since your customer is currently willing to pay you on COD terms, you obviously have some extra leverage in this deal right now. But this leverage will disappear in a bankruptcy filing. And remember that your exposure isn't limited to current receivables: If your customer goes bust, you'll probably have to write off materials, labor, and production capacity that you've committed to the customer's business.

Finally, be sure to discuss your risk exposure with your board members, your investors, and perhaps your banker. If any of your financial stakeholders are caught by surprise, they may react by cutting off your funding just when you need extra cash. Be sure everyone is on board with how you're handling this customer.
DEN People Information

Gregg Fairbrothers D’76  
Director, Dartmouth Entrepreneurial Network  
Adjunct Professor of Business Administration  
Tuck School of Business, Dartmouth College  
Chair, Dartmouth Regional Technology Center  
gef@dartmouth.edu

Sandy Rozyla  
Program Manager  
Dartmouth Entrepreneurial Network  
Dartmouth College  
sandy.rozyla@dartmouth.edu

DEN Mailing Information

Dartmouth Entrepreneurial Network  
10 Allen Street, 2nd Floor  
Hinman Box 6248  
Hanover, NH 03755  
Tel: 603.646.0295 / Fax: 603.646.0291  
denet@dartmouth.edu / www.den.dartmouth.edu

DEN Fellows

Colin C. Blaydon  
Director, Tuck Center for Private Equity and Entrepreneurship; Buchanan Professor of Management; Tuck School of Business

Philip J. Ferneau D’84, T’96  
Co-Founder and Managing Director, Borealis Ventures  
Adjunct Associate Professor of Business Administration  
Tuck School of Business

Peter T. Glenshaw  
Director of Community Relations, Dartmouth College

Mark Israel  
Director, Norris Cotton Cancer Center, DHMC

Aaron Kaplan  
Associate Professor of Medicine & Director  
Device Development Lab, DHMC

Roger Sloboda  
Professor of Biological Sciences, Dartmouth College

Fred Wainwright T’02  
Executive Director, Tuck Center for Private Equity and Entrepreneurship;  
Adjunct Associate Professor of Business Administration  
Tuck School of Business