Midlife ~~Crisis~~ STARTUP

Lessons from Venturing Out of the Ivory Tower

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9. The $150,000,000 Epilogue

This epilogue relates how the story ends: the sale to a major media company, the earn-out provisions and benchmarks, how the contract was violated, and how the ultimate buy-out was negotiated.

9.1 No Peeking

You need to read the story before reading the end game – at least Part I. You need to understand how I built the Board of Directors, before you can appreciate their role in the end game. Penny, at my request, stayed on the Board to the end, even after Steve and I resigned. Ed stayed on the Board until he took over as the CEO of a multi-billion-dollar public company. Especially, you need to understand the tacit compact I had with the most powerful Board member, when I allowed myself to be removed from power at the end of 2001. You need to understand why this Board member, I called Bud – an enormously powerful entertainment attorney, would be a backer of an internet advertising and e-commerce venture. If I allowed the CEO to run the show, Bud would not let the company fail, if humanly possible. This is the only way you can understand the

small, unsecured, bridge loans that Bud and the CEO took out of their own wallets to avoid another financing round. You need to understand the small, but powerful and dedicated technology and management team that drove the company. You need to understand the detailed focus of the CEO to understand the kind of deal he initially negotiated.

I ended Part I with the story of the Series E and the line "Perhaps one day I will actually be able to profit from what I helped create." Let's see.

9.2 The Two Sides of Value-Based Pricing

The technology team had created a massively scalable, display-ad delivery structure, with optimization built in from the beginning. New clients always seemed to start out loving SDC. The performance bump brought in revenue levels the clients had never previously achieved. The value-based pricing model that had always been the SDC approach started producing substantial revenues, enough to be cash-flow positive, and pay off the short-term loans to Bud and the CEO.

At first, clients greeted the SDC revenue increases as found money. As clients started writing big checks to SDC, they started thinking of ways to reverse engineer the system -- contracts that forbade such notwithstanding. Despite clients never being able to match the performance SDC provided, a pattern emerged of SDC having difficulty holding onto large clients after the large checks started flowing. Cash flow was running about $1 million per month. That is not bad for a 14-person company, but the growth that would change SDC into an IPO candidate was not in the cards. A strategic sale was still the most likely exit. So the game became treating each new client as an advertisement – bait for the few whales that were still afloat.

While there were numerous contacts that could have resulted in sales, the first major bite came in the late summer of 2006. One of the major social networks came sniffing around. It had been acquired the previous year by a very major media company, which I will call the Media X Corp. It had a huge user base, but little in the way of a

revenue model. The interactive division, which I will call Interactive X, struck a deal with a major search company in which the search company would pay around $250 million a year for all the advertising revenue it could generate from *search* on the social network, despite the fact that social-network users do not search in the same way that users of Google, for example, search. Google, Yahoo, or MSN searches are most often part of the consumer decision process – a natural place to gain advertising revenue. On search networks, something else is happening. The SDC focus at this point was on optimizing revenue from display advertising. The search deal should not have impacted the display ad revenue that SDC could generate.

SDC put together a proposal that indicated what application of SDC technology to the huge user base on the social network could mean in revenue. It was the embodiment of one of my high-level principles of startups – stay close to the cash register. The CEO of Interactive X began serious negotiations.

I was not close to those first negotiations, but do know a few things. Media X Corp. was extremely closed lipped about talks. They insisted that SDC could not shop the deal around to other clients or potential whales – all of whom came calling once the informal rumor mill started. Both complete buy-out and performance-based deals were discussed, as well as hybrids. Then talks came to a crashing halt. No matter how important the talks were to SDC, the head of the Interactive X had bigger fish to fry. He was concerned his deal with the media parent did not give him enough upside to share in the success of what he was creating. He left to start other ventures.

Normally, when a division CEO departs, all his or her deals crash. The new CEO has a different agenda, wants a fresh start, or does not want to share credit or take the blame for the prior CEO's unfinished efforts. There can be a myriad of reasons. This was another place where having a board member as powerful and connected as Bud came in. In Hollywood, these movers and shakers always meet up on one project or another. So, in the fall, at a meeting on other issues Bud asked the new CEO of Interactive X, "What's up with the SDC deal?" The candid and, perhaps, flustered response was, "I have no idea, but I'll find out, and let you know."

The negotiations were restarted, with vigor, within two weeks. If you do not have Board members with that kind of access and clout, you might end up with nothing, regardless of how good your technology is, or how great a fit the combination might be.

9.3 The Forest and the Trees

While many combinations of deal terms were discussed during the tedious negotiations during the next two months, the final deal reflected the very detail oriented CEO that headed the SDC team. What emerged was a minutely detailed contract that provided an upfront payment of $40 million, five million of which was held in escrow for 18 months to cover the potential of fraud on SDC's part. There was an additional $10 million payment for bringing online a new ad server capable of serving many billions of display ads per day from an ad inventory that could possibly be around a million different display ads. This would be the largest ad server in the world, and SDC had three months to get it going and six months to be fully operational. While the specs for this server were daunting, and the deadlines demanding, I never doubted the tech team. The CTO confided to me later, that as soon as he heard in the early fall that a deal was in the works, he started development. My original co-founder, Giovanni, had returned to Sicily many months before this deal developed, but left the Office of Technology in brilliant hands that he had recruited and developed.

The real money was tied up in the earn-out that SDC's CEO negotiated. The first part seemed relatively straightforward. There would be an early window on the performance of the system. Some months after the system was fully commissioned, they would take a reading of the average revenue levels achieved from each class of display ad and compare these to historical figures that the social network provided. If the average revenue from each of four classes of display ads had increased by 35% over baseline historic levels, SDC would get $6 million (Early Lift Low criterion). If the average revenue from each of four classes of display ads had increased by 50%, SDC would get $10 million (Early Lift High criterion). If

average revenue fell short of these increases, SDC shareholders got nothing.

After the initial reading on performance, there would be three annual contingent payments based on sustaining revenue increases. In year one, SDC shareholders got 35% of the revenue that exceeded 125% of the base rate for all ad classes, up to $90 million. In year two, SDC shareholders got 25% of the revenue that exceeded 155% of the base rate for all ad classes, up to $120 million. In year three, SDC shareholders got 15% of the revenue that exceeded 175% of the base rate for all ad classes, up to $90 million.

The SDC CEO also negotiated fat retention bonuses for himself and key SDC employees, provisions that allowed SDC employees to work only on projects that advanced the earn-out, guaranteed staffing levels at 17 full-time equivalents (FTE), and guaranteed 4.5 FTEs selling the performance ads that SDC was to optimize. The negotiations were so detailed and tedious that Bud had to intervene several times to keep the Media X Corp. at the table. In the end, however, $360 million was on the table from performance on Interactive X's main internet properties, plus more if the technology was extended to newly acquired sites, or extended to other sites on the web.

The contract weighed over two pounds, and was written at a level of specificity that the SDC CEO said was likely to assure shareholders of a final settlement over $200 million. What was not obvious to him was that the world, particularly the on-line world, changes at a speed that did not mesh well with his desired level of detail and specificity. He negotiated with his eye on each tree, but without seeing what was changing in the forest. None-the-less, even the initial payment would be welcomed by the investors and common shareholders many of whom waited seven years for this overnight success.

Possibly the most important part of the deal was that Bud was named the SDC Shareholders Representative, and given a central role in overseeing the compliance of Media X Corp.'s with contract terms. David, the former SDC CFO was enlisted to support Bud's efforts.

9.4 Celebration

We signed the deal in late February, 2007, in the same magnificent board room where I had pitched the initial idea, and where the very first board meeting was held. It was the first time the SDC CEO and I had been together in over five years. Past animosities were set aside. The company value was not the billion he promised, and it took seven years, not the 18 months he envisioned, but given the crash of the first internet bubble, everyone was pleased with the outcome, and teased by the prospect of three years of potentially large payments. When the first payment was received in March ($35 million plus $5 million sent into an escrow account), there were a lot of personal celebrations – me included.

The deal was announced, but not the price. When speculation circulated that it was only $50 million, I think the new CEO of Interactive X thought that was not a substantial enough amount for his first deal. It is speculation on my part, but soon the unattributed rumor circulated that the deal was for $150,000,000. I am guessing that number did not come from anyone connected to SDC. I know it did not come from me. The potential size of the deal, $360 million, was not reported until the next quarterly report from Media X Corp. – buried in a footnote on reserves.

It was early June before Bud could arrange a celebration dinner at his house for all the former SDC Board members and employees. At one point Bud's wife pulled me aside and confided that before Bud would go on a major trip he would say to her, "If anything should happen to me on this trip, whatever you do … don't sell the SDC stock." I am sure, however, if anything had happened, the bottom line on this epilogue would not have been nearly so good.

9.5 Benchmarks

The CTO had the system operational before the due date, and used only about 25% of the hardware that had been spelled out in detail in the contract. The traffic allocated to the system was cranked up on the media company's schedule, slower than we expected, but the

technology was always ready for the load. The first contingent payment ($10 million) was made, on schedule in the early fall of 2007.

The next hurdle was the early indication of lift. Early Lift High would pay $10 million. Early Lift Low would pay $6 million. Anything less would pay nothing. SDC had until around the end of February, 2008, to hit this benchmark. By that time the world had changed.

The search-ad deal that Interactive X had struck was performing miserably. In order to assuage the search company, half the traffic to the leader-board ad on the most popular page for each user, was redirected away from SDC's optimization to the search company's display-ad division – making it harder for SDC to hit their lift goals.

The performance goals themselves came under scrutiny. Rumors spread by former Interactive X employees that the initial rates were just fabricated. One person said her then boss told her to create performance numbers that SDC could never hit. Despite the concentrated efforts of the technology team, no historic figures could be obtained that confirmed that the base rates had been set accurately. The alternative, which the SDC CEO had negotiated into the contract detail, required access to historic data that were never available.

Interactive X never provided the 17 FTE that SDC negotiated, nor did the division provide the 4.5 FTE for the performance-ad sales staff -- meaning the ad inventory that is so crucial to optimization was missing. Instead, Interactive X focused on what are called CPM campaigns (often brand advertising that pay simply a given rate per thousand eyeballs), which the SDC ad-engine optimized and served, but played no role in the earn-out for SDC shareholders.

While the contact provided that SDC staff need only work on projects related to the payout, they were pulled off to some 10 to 15 other projects.

Even in the face all the potential misrepresentations, and failure to provide the guaranteed resources, SDC exceeded the $6 million Early Lift criterion. It exceeded the $10 million Early Lift High criterion if

you included the display ads sent to the search company. Without those ads SDC was 99.96% of the $10 million Early Lift criterion. Interactive X would not certify and pay the Early Lift High bonus.

Bud held a series of meetings to try to get a handle on all the issues. I put together explanations of some of the quantitative side, and tried to bring as much clarity to the issues as I could. The SDC CEO did the same. Then Bud called the CEO of Interactive X with a list of complaints. The first response was, "We consider you a friend of the Company, and will try to work this out." Media X Corp. was known for playing hardball. But this was Hollywood. If you screwed a major player on one deal, it might come back to haunt you on a dozen others. That certainly did not stop the dirty deals. It just meant many balls were in the air at once. If you looked at the game too narrowly, you did not see what was really going on. For example, while these discussions were beginning, the whole social network was in play as a chip in a high-stakes game for control of another on-line media giant. If that chip were to be played before summer, the SDC shareholders would get an additional $150 million in lieu of all future earn-out payments.

So the SDC shareholders, including me, did not know if they would get their share of the additional $150 million in the early-termination clause, the up to $310 in potential future earn-out payments, or only the $6 million from the Early Lift Low criterion. Or we might get nothing – a pretty wide range of fantasies. The only thing I was committed to was making sure I did not spend it before I had it in my pocket.

The discussions with Interactive X dragged on in a seemingly endless array of detail and delay. The focus had been on how to revise the contract to come close to the original meaning given that the online world had changed. By summer no resolution was at hand. Bud decided to re-gather the facts and bump the issue up the corporate levels at Media X Corp. Bud called the major shareholders and got commitments to fund a litigation war chest, if needed. There were, however, alternatives. The escrow payment was due, and Bud had that $5 million delivered to him, rather than the shareholders. He retained a forensic accountant and a litigation firm – just in case.

Then he called the COO of Media X and set up a meeting to lay out the case. The COO would never have taken a call from me. If you do not have someone as well connected as Bud on your side, you may not get what you deserve. Even so, it helps to show you are serious. With a $5 million war chest and Bud doing the talking, SDC got the attention it needed.

The COO of Media X Corp. agreed there were potentially issues to be resolved. He offered to send a high-level attorney from the corporate headquarters to figure out what would be a fair resolution. At last they were discussing a buy-out of the contract, rather than a revision of the earn-out terms.

The first thing that was acknowledged was that at least the Early Lift Low criterion was achieved. By August, the shareholders were paid that $6 million. The rest of the inquiry dragged on and on, as the bottom began to fall out of the general economy. By sometime in late October, an offer was finally put on the table -- $69 million, plus the $5 million in escrow. For Bud, of course, this was the beginning of the fun. I think he had a figure closer to $120 million in mind. It was mid November, with the economy rapidly moving south, that the final figure of $94 million, plus the $5 million in escrow, was agreed to. One of the factors was simply that under $100 million the COO of Media X Corp. could sign off. Over that threshold, and the deal had to be signed by the mogul that headed Media X Corp. – a prospect that no one wanted. Bringing a media mogul in at this late stage would have quashed the deal regardless of the clear merits of SDC's position.

The first deal point was that the money had to be paid before the end of the calendar year.

9.6 The Best Phone Calls Ever

Bud called to tell me the result when I was visiting Steve Mayer, a former SDC Board member, and my oldest friend, at his place in the Calistoga Ranch. The conversation was pure joy. Even better, he gave me the task of calling a number of investors I had brought in and

some of the other Board members. I wish everyone could have such a joyous task assigned to them.

Lots of people were watching their 401Ks turn into 201Ks. To have new money come in at that point was just short of a miracle. Attitudes had changed. I remember in the spring having conversations over tennis with one of the major stockholders about the potential for $150 million coming out of the deal. At that point, he was debating between a 104-foot cabin cruiser he would keep in the Caribbean or an upgraded jet with his share of the deal. By mid December, when the payment came, he was just short of stuffing the cash in his mattress. There would be celebrations and extravagance, but the economy was a game changer, even for the very rich.

For me, the payment was a great consolation prize. I started the venture mainly to let marketing-science faculty have a crack at the rich data that were driving the e-commerce revolution. The first generation of products/services needed to form the basis of a profitable venture, or the resources to achieve my greater goals would not exist. That dream ended in early 2002 when I left the Board of SDC. But I am enjoying the consolation prize. Having started on the UCLA faculty in 1969 at 25 and retired at 60, I figured I earned a time to play, and the resources to make the games fun.

9.7 Caveats for Entrepreneurs

So, in total, $150 million was paid for a 14-person company. Around $9 million was invested in five rounds of financing at SDC – giving a 16-× return on average. Last money in, Series E, got a 23-× return. My strategy of investing in the Series E, once I lost my fight to get better terms for the company, paid off handsomely. All the common shareholders, including me, did well – despite the serious dilution created by the C, D, and E Rounds. The option holders who left the company were faced with the difficult choice of whether or not to exercise their options and pay a stiff strike price, when the prospects for a sale were not rosy. Those who took the risk were rewarded. I wish I could have avoided that risk, so that they could also have shared in this exit.

My wife and I have had a great time traveling to thank, in person, the friends and colleagues that helped create this venture, and make it a success. We have held celebrations in Santa Monica, Los Angeles, Los Osos, San Francisco, Calistoga, Deer Valley, Chicago, Atlanta, Philadelphia, Fontainebleau, Catania, and Osaka. This is the good side of *success has many parents*.

So what are the *caveats*?

Management Team: As an entrepreneur you hope to create value. SDC did create value, and is still generating value for Media X Corp. I assembled a great management team, mostly from alumni of the UCLA Anderson School – mainly Jason, Ravi, and David, but many others in earlier times that are not named here. One of the hallmarks for Anderson graduates is their ability to work in teams – individual initiative within a team framework. Free-riders are a drag on corporate performance, and a killer in a startup environment. Our management team had the right skills and spirit. The company fails without their efforts.

Technology Team: I talked Giovanni into co-founding SDC while he was still in the UCLA Computer Science doctoral program. He had worked as my RA for several years on big-data R & D projects. Still, going from RA to co-founder is a major change. He took a great leap of faith with me. He recruited and developed an exceptional technology team. The team spirit of the management team was mirrored in the technology team. Giovanni led the team, but despite the brilliance of many of the members, there were no prima donnas. General plans were set in top management meeting with Giovanni as a major voice. Technology plans were developed in the tech group, and problems were solved both individually and in the group. Debugging and testing was public enough for everyone to understand what were the main issues and accomplishments. The company fails without Giovanni and his team.

Advisory Board: I assembled a great advisory board. Without the help of Eric Bradlow (Wharton), Bart Bronnenberg (UCLA and Tilburg University), and Akihiro Inoue (Kwansei Gakuin University and Keio University) the problems the company faced in the very early days

might never have been solved. No solutions, no company. I think they were all assistant professors at the time we started. Now, less than nine years later, they are all full professors, some with endowed chairs.

The rest of the advisory board was composed of very senior faculty and industry players. They never got deeply involved. These were the minds that could take a successful startup to the billion-dollar company we envisioned. I've always regretted that we didn't get the chance. But if they had not endorsed my efforts, the early funding might not have materialized even in the easy-money days.

Board of Directors: A Board of Directors is a boundary organization, helping a firm bridge to the vital constituencies outside the firm's control. I have discussed Bud Pennington's vital role. The company fails without him. But other board members played crucial roles, too.

Bud brought in billionaire Fred Hart, a frequent co-investor with Bud. Fred's wealth and influence, added to Bud's already substantial clout. While they were angel investors, their clout was more akin to the VCs that sit on the boards of many startups. When entrepreneurs seek funding from *smart money* part of that exchange is for the clout in the end game. During the early discussions of funding (Series A and B) much lip service was paid to the role of *smart money* in getting first clients and filling out the management team. The cliché was that we were getting access to *fat Rolodexes*. Clout in the end game turned out to be a far more tangible reason they earned their share of the company. The same should be true of VCs. They extract a substantial fraction of a startup in exchange for dollars *and* benefits that might seem elusive to entrepreneurs at the beginning. Isn't all money *smart money*? The answer is "No," particularly if a strategic acquisition is the exit. The web of business interests in a VC's portfolio provides a buffer against large companies taking advantage of their leverage over smaller startups in acquisition negotiations. Find VCs who can stand with you in discussions with major players in the field. Then align the incentives of those VCs with the interests of all other shareholders.

All board members must be of the stature that makes board meetings a panel of peers. Board membership is such an important and

powerful position that the entrepreneur must know *why* each member is there. Steve experienced hypergrowth as one of the original seven at Atari, and dealt with the board-level politics after Atari was acquired by Warner Communications. He also founded the Kleiner-Perkins funded Digital F/X. He was always a strong advocate for common shareholders, in his prior experience as a founder of major technology companies and in his role on the SDC board, and a personal sounding board for me. Penny was one of the three founders of IRI, one of the largest marketing research firms in the world, and the prime mover behind *efficient marketing services, inc.* a major venture-funded information intermediary between manufacturers and retail outlets. She understood big data, and how to drive ventures that aim to capitalize on big data. I never had to explain things to her twice. Better yet, she explained things to other board members better than I had explained them to her. Len and Bryce both had great experience as entrepreneurs, and shared their experience and insights in those early days when it was all new to me. Len and Bryce both left the board after one year – Len making room for Fred, and Bryce making room for Ed.

Ed was accustomed to negotiating multi-billion dollar energy deals. Without his savvy in the Series C, D, and E, which combined brought around $3 million, the common shareholders, including me, would have fared far worse. Whether there was a billion dollars on the table or one dollar, Ed demonstrated the same intellect, vision and intensity. He loved negotiating deals. To Ed, it was *all* business – regardless of the size. Ed would have made an excellent partner as CEO. One of my biggest mistakes was listening to some of my board members when they said the company needed more "Internet DNA." Ed was the CEO candidate that could have made SDC the billion-dollar company we first envisioned. The business model would have been closer to the original vision of e-commerce support and personalization. Advertising optimization was part of that, but not the main focus. Remember that while the Internet advertising business crashed in 2001, e-commerce fared much better. While the rest of the economy was sinking further into recession, on-line sales grew 21% to $51.3 billion in 2001, jumped 48% to $76 billion in 2002. Approximately 70% of on-line retailers showed positive operating margins in 2002, up from 56% the year before. Such a

business design would have made the company much less the vassal of the few whales that dominate the Internet ad market.

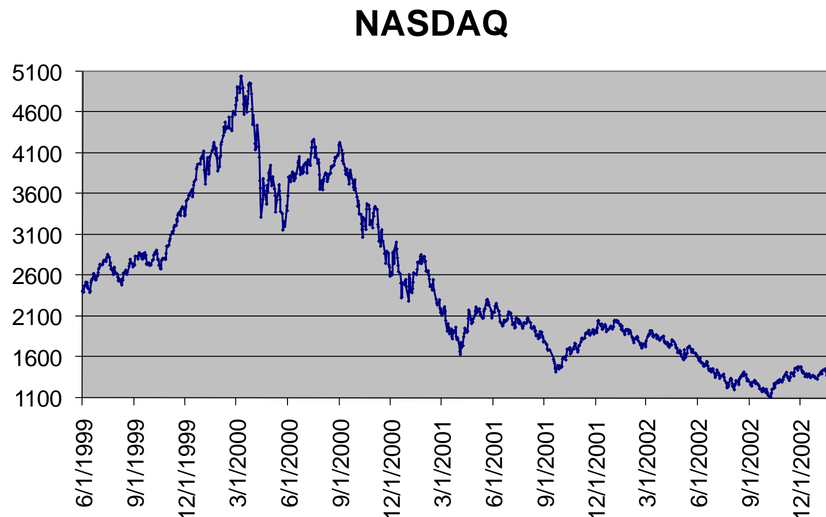
Andrew came onto the board representing the Series B investors. Whether or not he always intended to try to take over the company, I do not know. He certainly had the credibility as a serial entrepreneur, and never has become entangled in the civil or criminal investigations of his previous company. The first lesson here, however, was that entrepreneurs should be wary of rich guys that still had something to prove. He had been forced into the COO role in the previous company he founded, and would never have been content to play second fiddle in SDC. The second lesson is a little more subtle. I thought the battles between me and Andrew were over who would control the technology. He seemed ill-equipped, and I felt personally and professionally affronted that he would try to impose his vision. What I missed was that he wanted control of the company, more than control of the technology. Once he had won that battle, he stepped back, and let the people with the know-how to address the technology do their job. So my fear that he would dominate the technology, and my arrogant annoyance with anyone who would challenge my technological vision, blocked my insight into what was really happening.

Timing: SDC's first round of funding ($1.25 million) came in times of easy availability of angel and venture funding, January 2000. The company would most likely fail to get funded if I waited even six-months longer. The other side of this is, if you are funding a startup when funds are easily available, you should know that condition will not last.

The $5 million Series B closed on May 1, 2000. The NASDAQ was already six weeks past its peak. There was $11 million on the table, when the terms were being negotiated on March 23, 2000, one week after the market peak. There could have been more. Because we set a $5 million cap, the Series-A investors were all persuaded not to exercise their participation rights, which would have expanded the funding pool by around 25%. I should have taken all the money that came with no consulting strings attached – all but $1 million of the total.

Even with all these unlikely victories, if we had started re-negotiations with Media X Corp. even three months later, the macro economy would have trumped the deal.

Timing is crucial. Entrepreneurs are swept up in their vision, but must not be blind to the larger scales of forces on which their success also depends. That is why I used the chart over time of the NASDAQ market to highlight when in the macro-economic climate different organizational events occurred.



Understanding Risks: Many things have to go right for an entrepreneur to succeed. The sources of risk do not add to the overall risk, they multiply the risk probabilities – just as overall systems reliability is the product of component reliability. Even if each component is quite reliable, say 95%, a system with 100 such components has less than a one percent chance of operating.

The situation an academic entrepreneur faces is much less certain. The sources of risk have to be segregate into the *must haves* versus factors that contribute to the likelihood of success in a *the-more-the-merrier* sense.

For each source of risk you should ask, "What is the likelihood of success, given that the board was missing the key player." If the answer is near *zero*, the factor is a *must have*. The *must haves* I've discussed included: the management team, the technology team, the early problem solvers on the advisory board, the key players on the board of directors, and the timing of both the early funding rounds, and the timing of both the sale and later contract renegotiation. I think the chances of success without one of these key factors is very near zero, but even if we say the startup had a 10% chance of surviving each of these key factors, the overall chance of success would be one out of one hundred million.

The odds are stacked against the entrepreneur. That is not a stable system for innovation. It may not be a rational choice for someone to attempt to start a venture – particularly an academic entrepreneur. We have alternatives – typically tenured professorships at research universities. In that environment we have a greater understanding of the tacit rules governing success in our academic careers, and typically have succeeded.

On the other hand, the solutions to the complex societal problems, even global problems, are maturing in universities labs today. Many billions of dollars have gone into research that could spark the industries capable of getting us out of the deep hole we face. If some possibly irrational faculty members do not attempt to take things from the lab to the marketplace the opportunity costs could be staggering. Universities need to provide better infrastructure to make the transition less treacherous. They need to make it easier for faculties to be both academics and entrepreneurs. Some are. Private universities such as M.I.T. and Stanford are better set up to make startups easier – established angel groups and venture funding sources, service providers, and mentors. Still successful exits are rare. We may know of dozens of success stories, but each of these universities has thousands of faculty and hundreds of government- and foundation-funded laboratories.

Public universities are not as well situated. Some have boundary organizations, such as the Wisconsin Alumni Research Foundation that helps to commercialize technology developed at the University

of Wisconsin. Even UCLA has finally established a business incubator in the California Nano-Systems Institute.

Probably the easiest are for reform involves aspects of the *conflict of commitment* regulations. Typically, faculty are free to consult one day a week without prior approval. This doesn't need to change. Faculty are precluded, however, from taking a management title/role in a startup without prior approval. This requires formulization of relations before one really knows what is required in the longer term. Nascent organizations have enough obstacles without having faculty founders wonder how a dean or chairman will feel about a particular startup. As long as university duties remain the primary obligation of faculty, no restrictions should be placed on outside titles or roles.

The next easiest area of reform governs disclosure to the university patent or tech-transfer office of scientific findings. The mandate to *disclose* inventions flows from the Bayh-Dole Act of 1980, which encouraged patents to commercialize inventions arising from federal funding. Such a mandate fits better with a technology-licensing model than a startup model. In a licensing model, lab developments fit more or less neatly into existing industries. Existing firms may find it easier to commercialize such developments than, say, a startup might. But with radical innovations, disruptive change, new markets are created, and specifying field of use is a much less certain activity. Further, radical innovations have the potential to impact multiple markets. Keeping the oversight of the new technology in the hands of the innovator is very important. No one is likely to understand the core of the new technology better than the faculty who created it. No one is better equipped to know how to tailer the technology to fit future markets.

Good and dedicated people are working to rethink the historic role of faculty entrepreneurs. I hope such efforts change the odds in favor of innovation.

If you received this epilogue and would like a copy of the book on which it is based, please stop by the Price Center at the UCLA Anderson School. Ask for a copy of Midlife Startup.

- Draft May 20, 2009. Send comments to lee.cooper@anderson.ucla.edu.