www.compstudy.com

2007 Compensation & Entrepreneurship Report in Information Technology

2007

((ABRIDGED VERSION))

WILMERHALE®

ERNST & YOUNG
Quality In Everything We Do

J. ROBERT SCOTT

TABLE OF CONTENTS

Letter to the Industry .3

Summary of Results .4

Founders .10

Interview

Mort Rosenthal – Enterprise Mobile, Inc. .12

Raj Atluru – Draper Fisher Jurvetson .18

About the Sponsors .24

We are pleased to present the 2007 edition of our Compensation and Entrepreneurship Report in Information Technology. This Report, our eighth annual version, includes summaries and analysis of compensation data collected from more than 240 private companies located throughout the country in the following five industry segments: Software; Communications; Hardware, Semiconductors and Electronics; Services, Consulting and Integration; and Community, Content and Information Providers. The survey data was collected between June and September of 2007.

Our inspiration for creating this survey was a direct response to our clients' requests for better access to reliable, comparable compensation data to assist them in the critical decisions involved in attracting, motivating and retaining key executives at private companies. Over the years we have been able to present the correlation between executive compensation and a number of variables, including financing stage, company size both in terms of revenue and headcount, founder/non-founder status, industry segment, and geography. We have also been able to provide a number of analytics on how an organization evolves with additional financing, Boards of Directors compensation and make-up, and a granular view at company equity plans.

This study was produced by professionals at WilmerHale, Ernst & Young and J. Robert Scott. We were assisted in our work by academics from the Harvard Business School. Our survey has evolved over the years based on input received directly from the industry, and our hope is to continuously improve our data so that we can best serve the needs of our clients in the Information Technology industry. In that regard, we encourage readers of this publication to submit comments and suggestions to help us most efficiently and accurately present the compensation dynamics of the market. Suggestions and comments should be directed to Mike DiPierro of J. Robert Scott, mike.dipierro@fmr.com.

Participants have been provided detailed data results at no charge. You may secure a copy of the detailed report for $500 plus a commitment to participate in our next survey. Contact Mike DiPierro of J. Robert Scott at 617-563-2770 or mike.dipierro@fmr.com to obtain the unabridged results. You may also access these summary level results from our website at www.compstudy.com for no fee. We appreciate your professional courtesy in providing proper attribution when citing study results.

LETTER TO THE INDUSTRY

We are pleased to present the 2007 edition of our Compensation and Entrepreneurship Report in Information Technology. This Report, our eighth annual version, includes summaries and analysis of compensation data collected from more than 240 private companies located throughout the country in the following five industry segments: Software; Communications; Hardware, Semiconductors and Electronics; Services, Consulting and Integration; and Community, Content and Information Providers. The survey data was collected between June and September of 2007.

The Report also includes interviews with Mort Rosenthal, a serial entrepreneur, who describes his experience as a founder and leader of multiple technology organizations, and Raj Atluru, a prominent venture capitalist in the CleanTech sector.

Our inspiration for creating this survey was a direct response to our clients' requests for better access to reliable, comparable compensation data to assist them in the critical decisions involved in attracting, motivating and retaining key executives at private companies. Over the years we have been able to present the correlation between executive compensation and a number of variables, including financing stage, company size both in terms of revenue and headcount, founder/non-founder status, industry segment, and geography. We have also been able to provide a number of analytics on how an organization evolves with additional financing, Boards of Directors compensation and make-up, and a granular view at company equity plans.

Our survey has evolved over the years based on input received directly from the industry, and our hope is to continuously improve our data so that we can best serve the needs of our clients in the Information Technology industry. In that regard, we encourage readers of this publication to submit comments and suggestions to help us most efficiently and accurately present the compensation dynamics of the market. Suggestions and comments should be directed to Mike DiPierro of **J. Robert Scott** (mike.dipierro@fmr.com).

Lastly, we would like to express our gratitude to two individuals who continue to contribute greatly to our publication: Professor Brian Hall and Associate Professor Noam Wasserman of the **Harvard Business School.**

KEY: 2006 2007

Demographics of Respondent Population

- This survey of executive compensation in privately held Information Technology companies was conducted between June and September 2007. The questionnaire resulted in 244 complete responses with data from over 1,200 executives in a wide cross-section of industry sectors, geographies and stages of development.
- The 2007 report provides aggregated results of the data as well as a deeper examination of the population from a number of perspectives, including: financing stage, founder status, geography, headcount and company revenue.

Financing Rounds

- Companies are divided between those that have received one or fewer financing rounds, two or three rounds of financing, and those that have raised four or more rounds. The detailed breakdown by financing round again shows a concentration of respondent companies at the early stages of development.

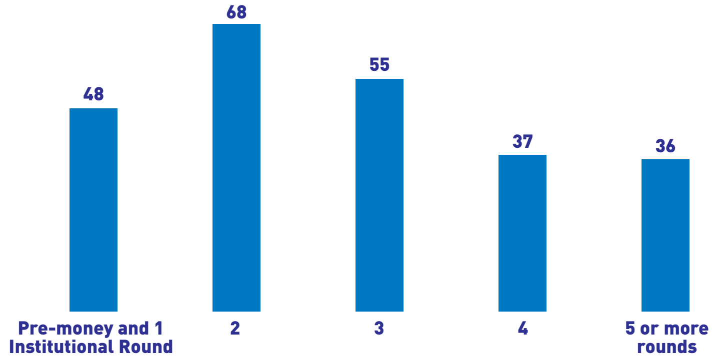
Founder Status

- 28% of the executive population this year were founders of their company, approximately the same number as in previous editions.
- CTOs and CEOs were the most frequent founders of their companies; each group was comprised of 53% founders, though in total number the CEO is the most frequent founder.

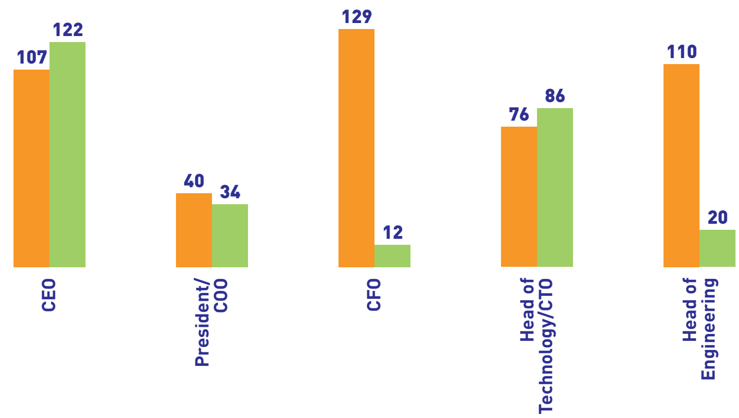
Headcount by Number of Full-Time Employees (FTEs)

- Companies with fewer than 40 FTEs again make up more than 60% of the population.

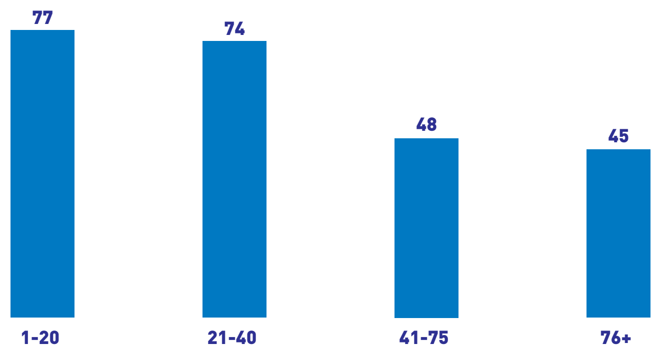
Financing Rounds



Founder/Non-

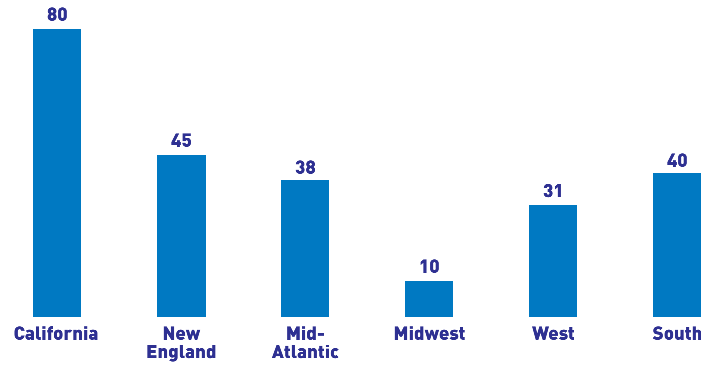


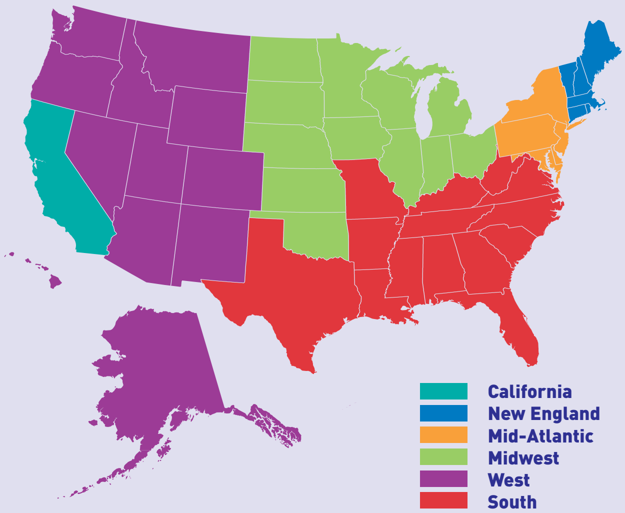
Headcount by Number of Full-Time Employees (FTEs)



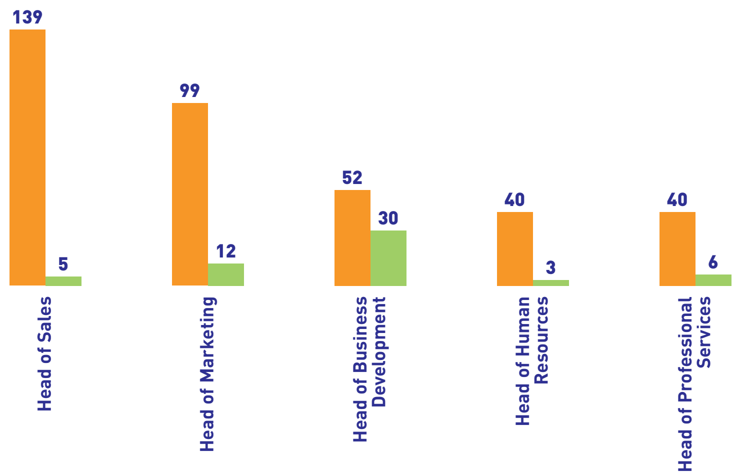
SUMMARY OF RESULTS

Geography





nder Status



Geography

- California and New England dominate the population of companies, closely mirroring venture capital funding trends. In this 2007 edition there was a slight increase in companies in the South.

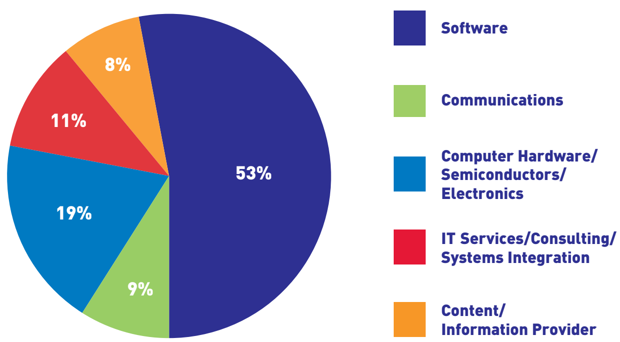
Business Segment

- Software companies again were the most common segment comprising just over half of the respondents. Hardware, Semiconductor, Electronics companies were next largest with 19% of the response.

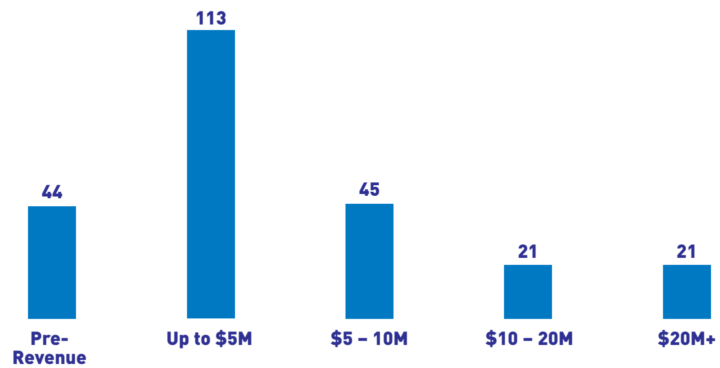
Company Revenue

- The respondent population continues to lean heavily toward early stage revenue companies with 64% of participating companies generating less than $5 million.

Business Segment



Company Revenue



KEY:

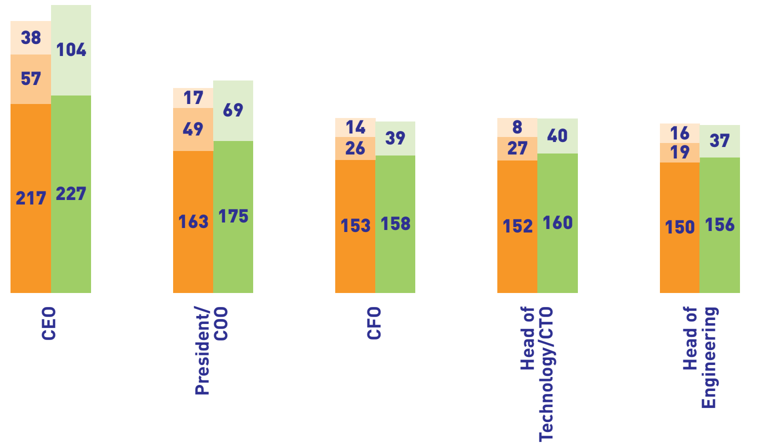
2006	Target Bonus Not Received	2007	Target Bonus
2006	Actual Bonus Received	2007	Base Salary
2006	Base Salary		

Cash Compensation – 2006 and 2007

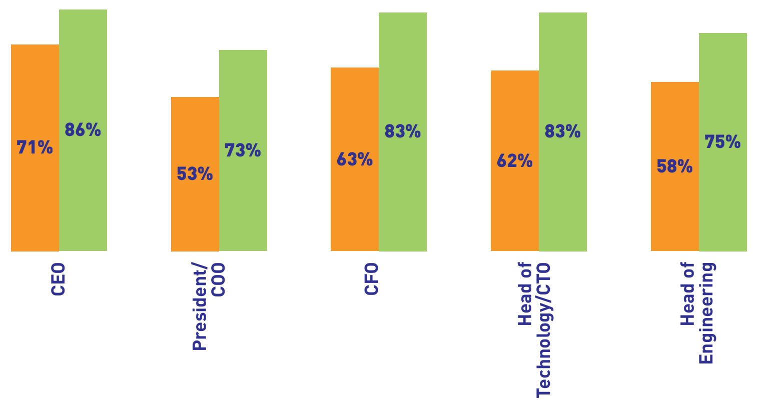
This data represents 2006 and 2007 compensation for non-founding executives. 2006 figures are represented with both actual bonus received and total target bonus for the year. 2007 bonus figures indicate at-plan target amounts.

- Average base salary across all positions increased overall at a steady 4.6% rate from 2006 to 2007.
- The Head of Human Resources and COO saw the largest percentage increases in base salary, 7.2% year over year.
- In this year's edition we have distinguished between actual and target bonus from the prior year, 2006. Breaking the bonus apart in this way demonstrates that, on average, executives earned approximately two-thirds of their target incentive compensation in 2006.
- Overall bonus targets as a percentage of base salary did not change materially from 2006 to 2007.

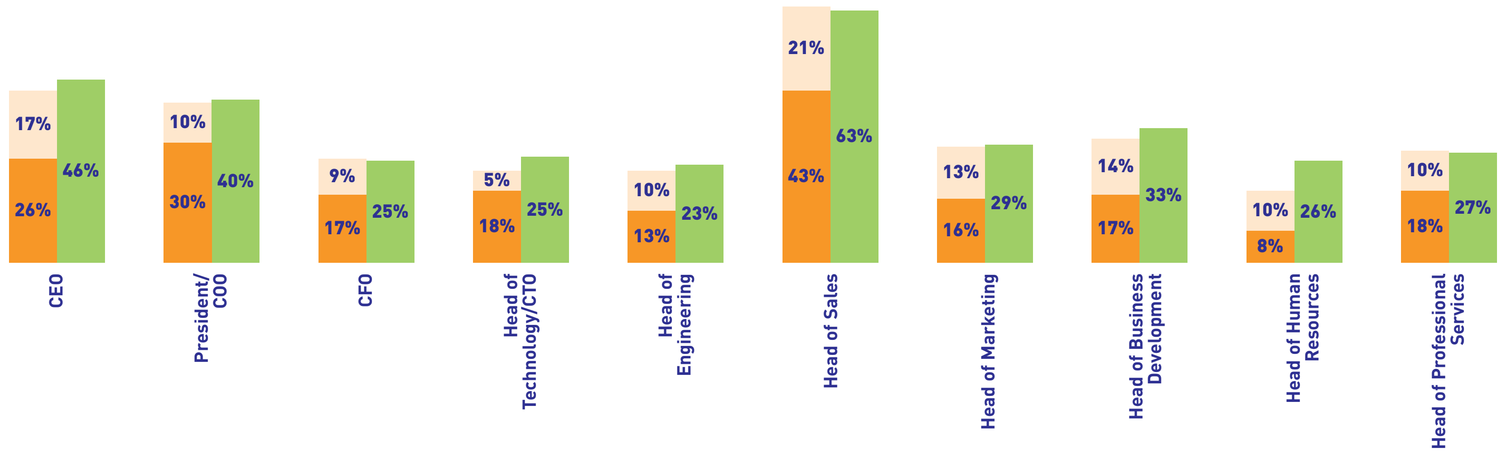
Total Cash Compensation



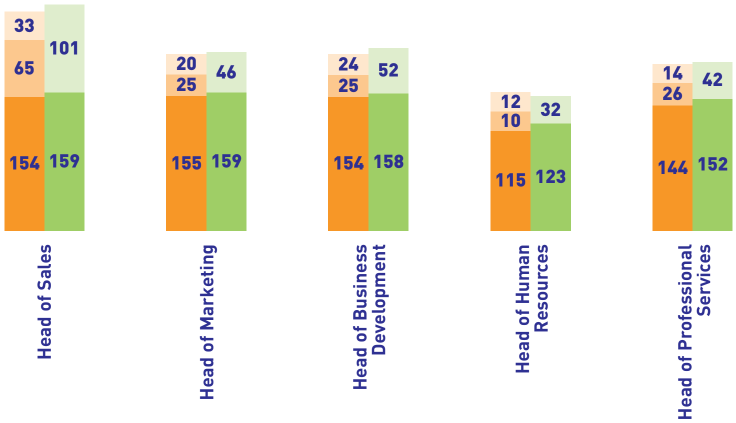
Executives Eligible for



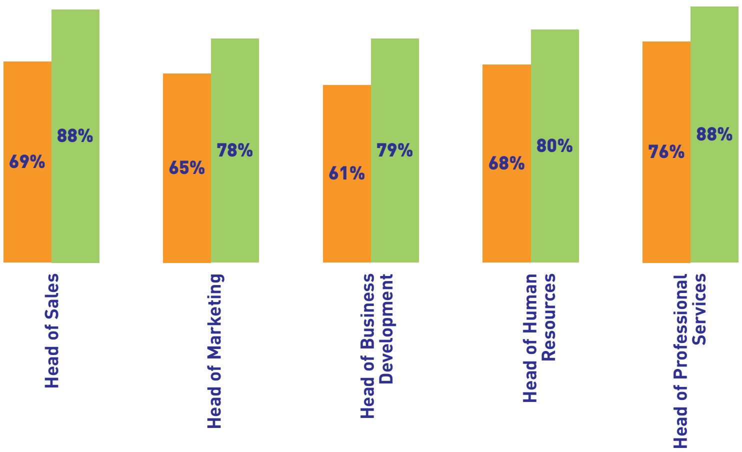
Bonus as a Percentage of Base Salary – 2006 and 2007



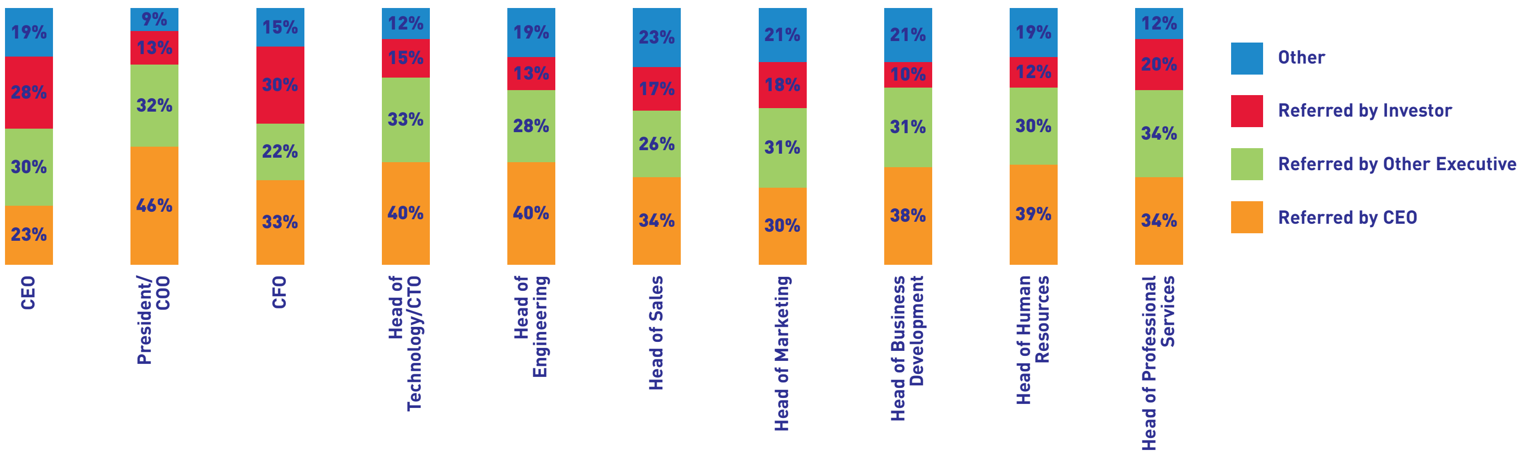
– 2006 and 2007



Bonus – 2006 and 2007



Where Companies Locate Talent



SUMMARY OF RESULTS

KEY: Median Average

Equity/Option Grants at Time of Hire

- At the average, the non-founding CEO receives a 5.43% grant to join the company, which, as expected, is the highest of the positions surveyed.
- Incentive Stock Options are the most common form of equity granted in the companies surveyed, accounting for 64% of the aggregate equity given. Nearly 80% of respondent companies utilize stock options.

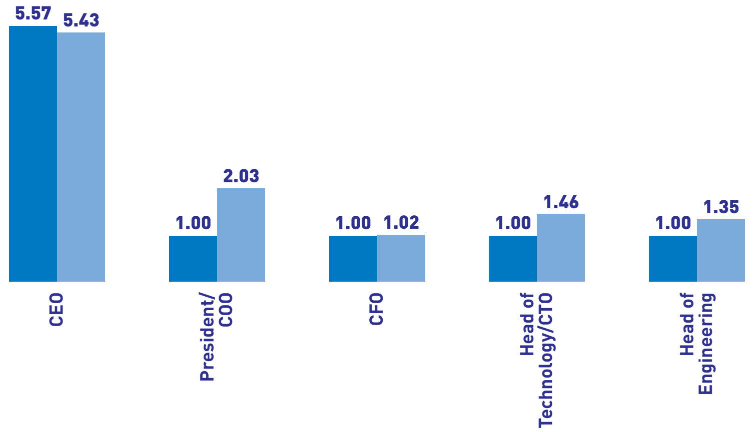
Equity Holdings

- Outside the CEO and President/COO, the non-founder Head of Technology holds the next highest average equity percentage at 1.77%.
- The 10 positions surveyed in this report hold a combined average of 17.13% of the company.

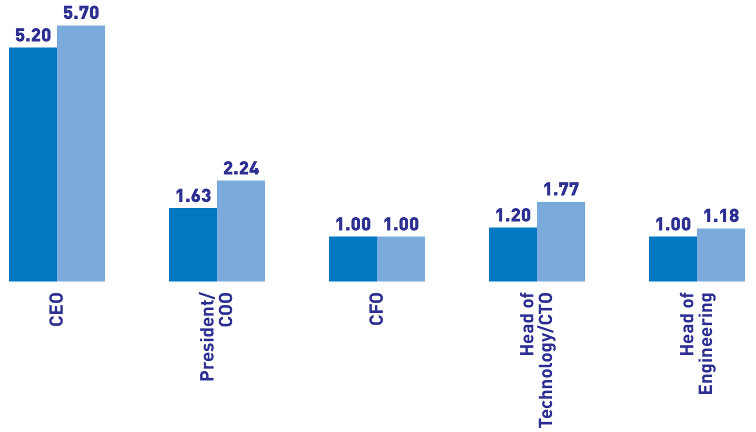
Severance Packages

- 67% of non-founder CEOs have a severance package, up from 62% in our previous survey. Between approximately one-quarter to one-third of the remaining management team has a severance package.
- The average CEO severance package is 7 months. The CEO and President/COO each have a median severance of 6 months, while the rest of the non-founding positions surveyed have a median severance of 3 or months.

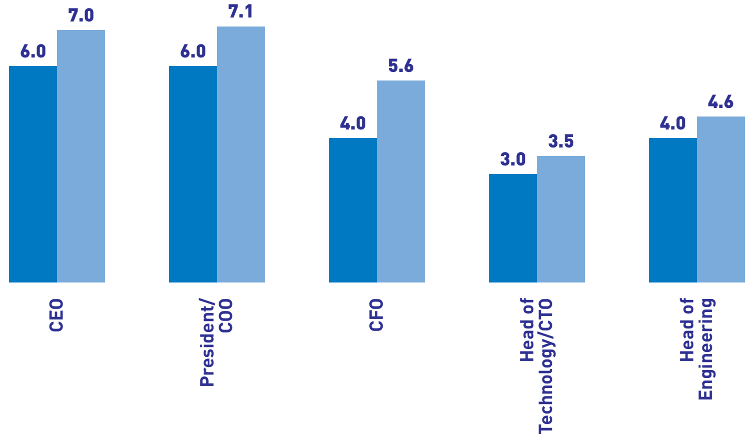
Equity/Option Grants at Time



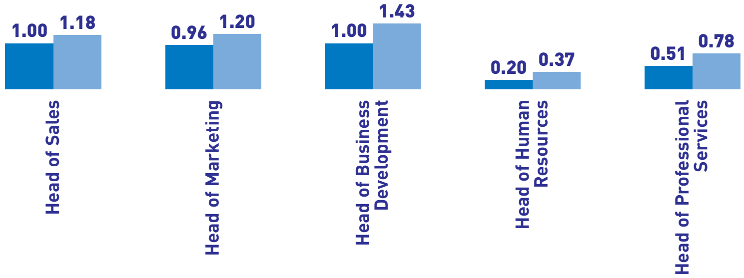
Equity Holdings



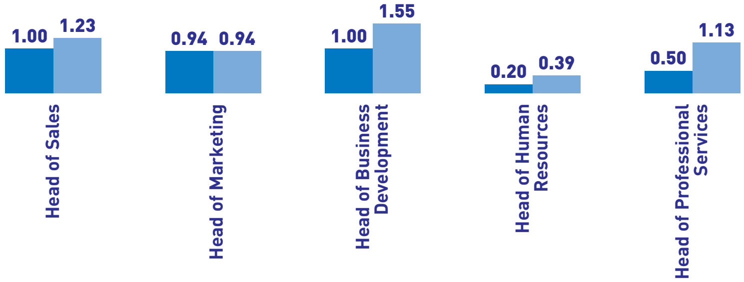
Severance Packages (Median



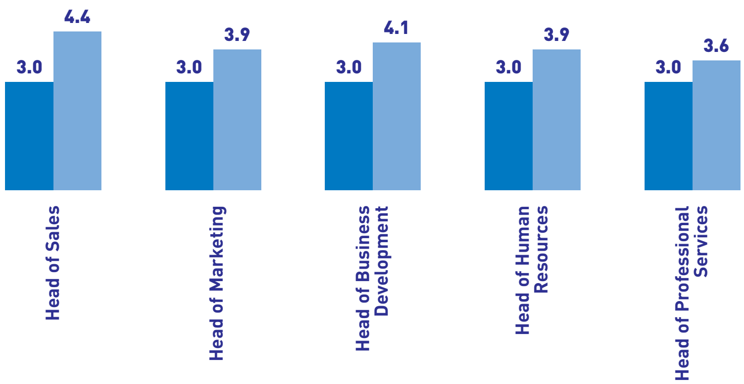
of Hire Median Vs. Average (%)



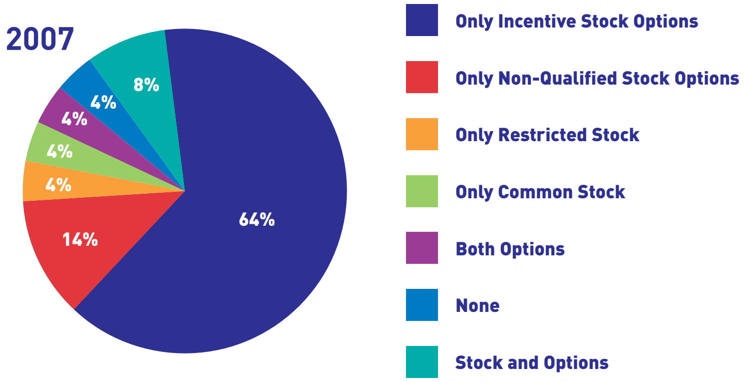
Median Vs. Average (%)

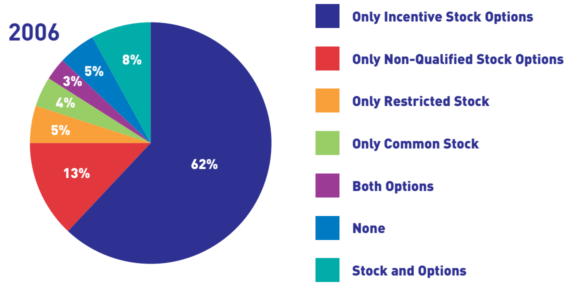


and Average in # of months)

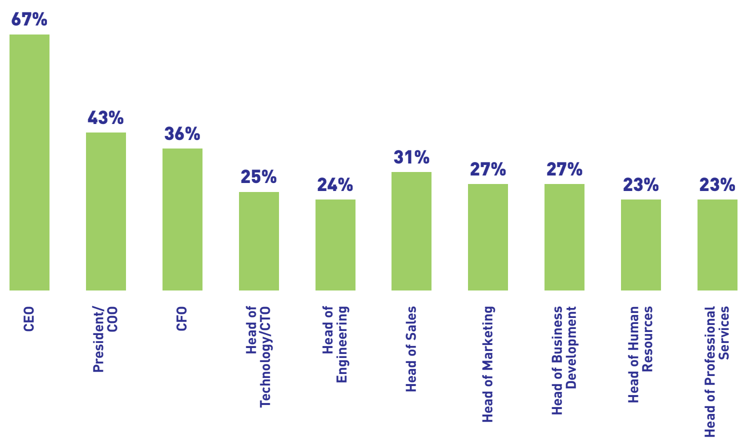


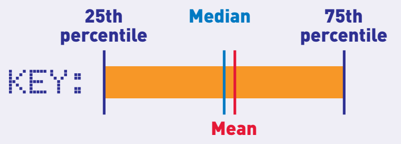
Equity Vehicles Used





Executives with Severance Package





Organizational Structure by Financing Round

- 92% of companies in the earliest stage of financing report having a CEO. In over two-thirds of those companies having raised one or fewer rounds, the CEO is a founder of the company. For those companies in the latest financing stages, however, the CEO is a founder in just 32% of the cases.

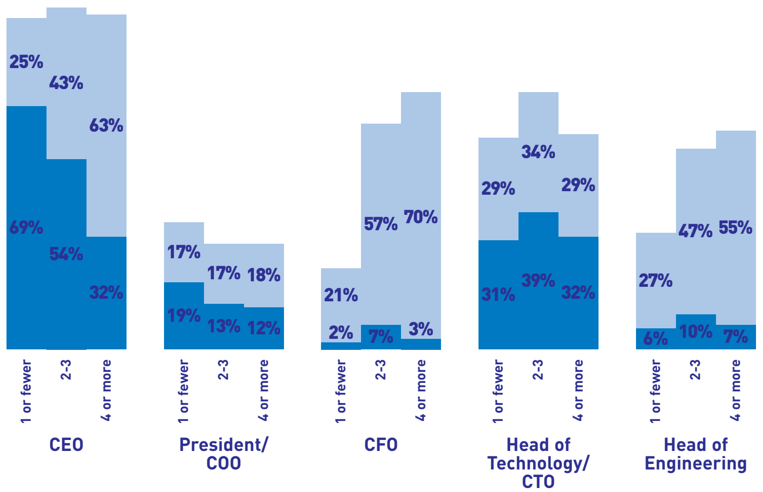
Equity by Financing Round

- In companies having raised one or fewer rounds the average founding CEO holds nearly 50% of the company's fully diluted equity. After two rounds of financing, this dilutes to an average of just below 18%.

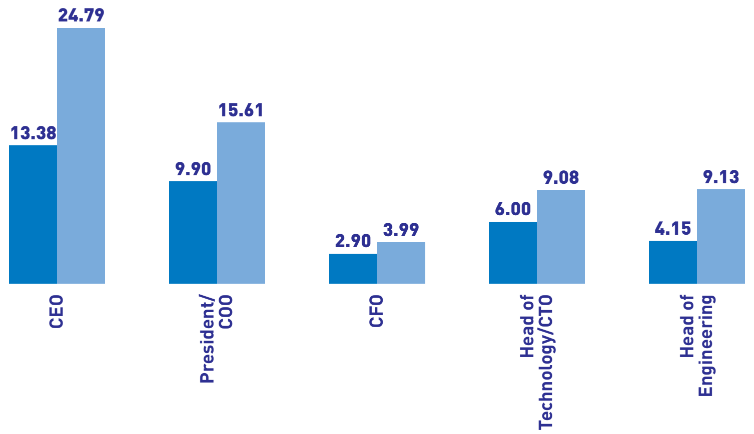
Total Cash Compensation

- Founding executives in the 2007 report saw a slight rise in average total cash compensation, with the exception of CFOs. For founding CEOs, base salary rose 9.9% to $199,000 in 2007.

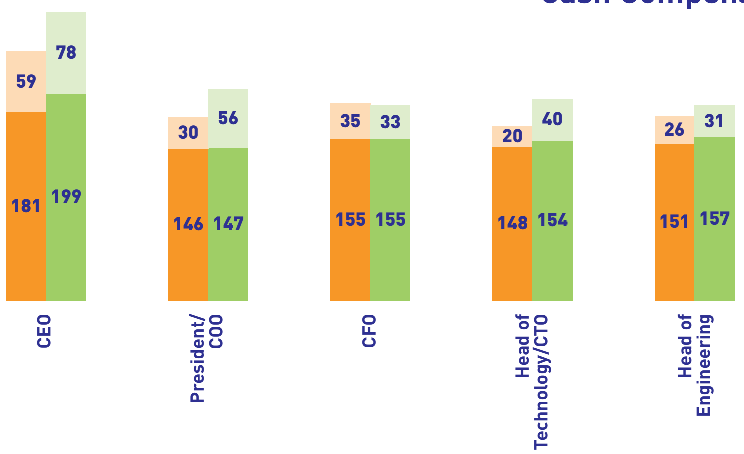
Organizational Structure by Financing



Equity Holdings



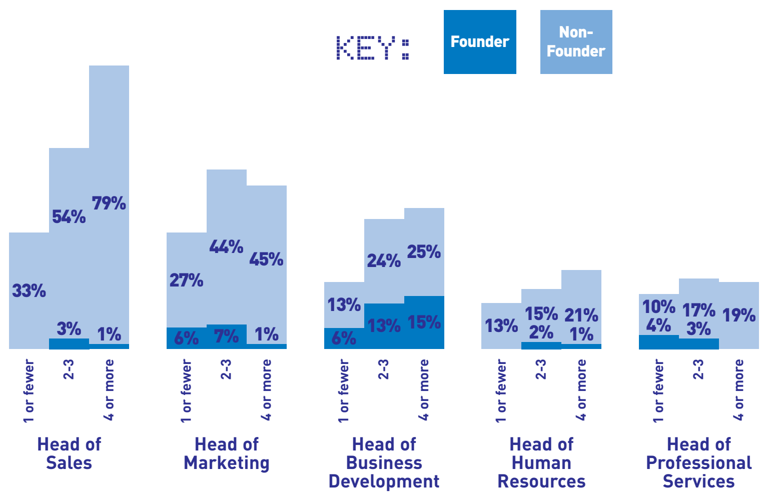
Cash Compensa



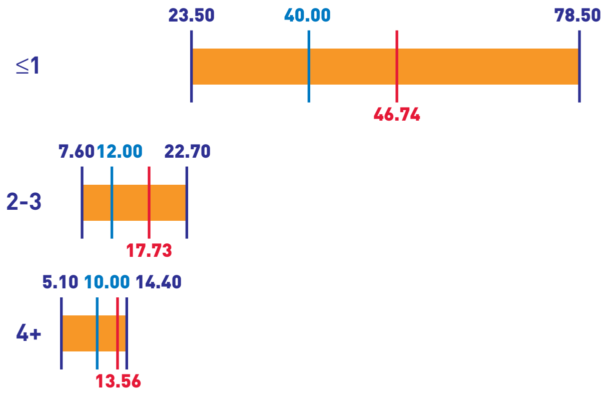
KEY: 2006 2007 Bonus — 2006 2007 Base

FOUNDERS

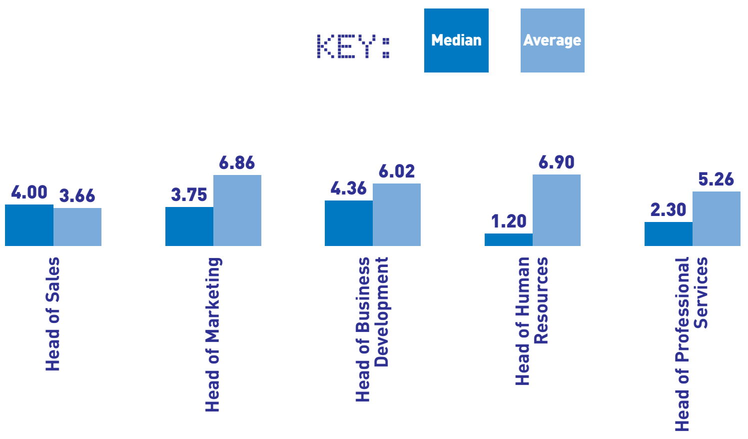
Round (Founder and Non-Founder)



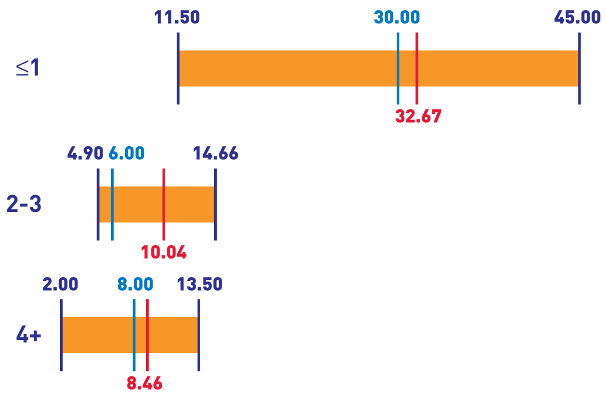
Founder CEO – Equity by Financing Round



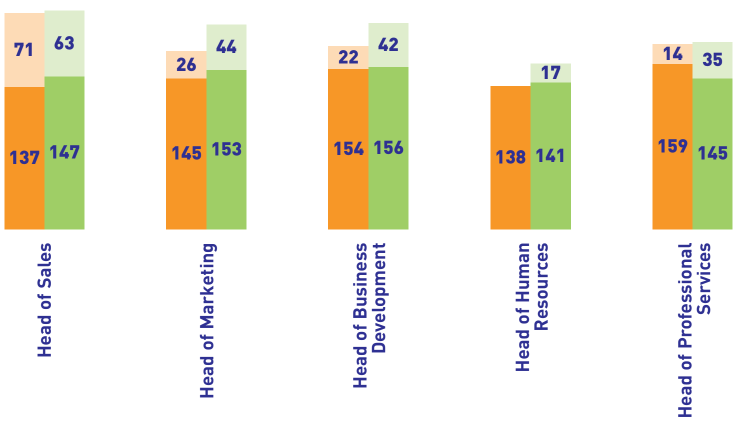
– Founders



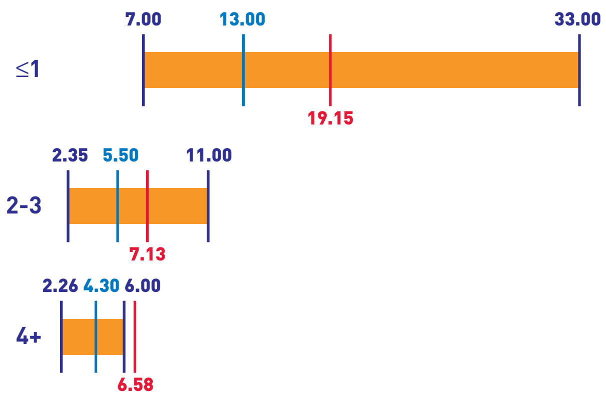
Founder President/COO – Equity by Financing Round



tion – Founders



Founder Head of Technology/CTO – Equity by Financing Round



MORT ROSENTHAL

Chairman & Chief Executive Officer

ENTERPRISE MOBILE, INC.

Mort Rosenthal serves as chairman and chief executive officer of Enterprise Mobile, Inc. As company founder, he is responsible for establishing the strategic direction of Enterprise Mobile's growth and expansion efforts and defining the company's leadership as a provider of end-to-end services and support for enterprise-wide implementations of Windows Mobile®.

A successful entrepreneur with extensive technological and channel distribution experience, Rosenthal has been instrumental in driving the success of companies in a variety of industries ranging from wireless to the software channel. Recently, Rosenthal founded IMO, a company that offers a unique retail experience for the way people select and buy cell phones.

In 1982, Rosenthal founded Corporate Software, Inc. which served as a new distribution channel that resold software to large organizations and offered a high level of technical service and support. By 1995, Corporate Software's sales approached $1 billion and the company was merged with a division of R.R. Donnelly, the leading physical manufacturer of software, with Rosenthal assuming the role of chairman and CEO of the newly merged company, Stream International. After two more years under Rosenthal's control, Stream grew its service organization, sales offices and plants to reach 18 countries with 9,000 employees and revenues of $2 billion.

In 2001, Rosenthal was inducted into the Computer Industry Hall of Fame for his time spent at Corporate Software inventing the new channel of software distribution that continues to dominate the industry today.

Aaron: Could you provide a little background to your early career history?

Mort: I grew up in Cambridge and went to Yale, where I studied psychology and biology. I was destined to go to graduate school, but realized that most of the work in graduate school involved proving what was already known through the experimental method and I concluded that I did not have the patience for it. I wound up working in the music business instead. I started a music photography agency in New York, which I sold after three or four years. I represented mostly European photographers of mainly Rock and Jazz musicians. I sold their work for album covers and the like. The music business was fun as a young adult; however, I was interested in new media and tried to get a job in what, at the time, was the nascent cable industry, specifically at HBO and Showtime. I actually have a letter somewhere that I sent to the editor of Showtime essentially suggesting MTV about five years before MTV was launched. I didn't get the job and I don't think they paid attention to the letter. From here, I went to business school at Columbia and moved to Boston after graduating to work for a small media consulting firm.

Aaron: What directed you toward the high tech industry and software in particular?

Mort: The fall after I graduated from business school was when VisiCalc came out. I have copy number six of VisiCalc somewhere. After finishing business school and having had to crunch numbers the old fashion way, I was quite taken by the software-based spreadsheet. I thought it was remarkable and it turned me on to software and I got to know the early entrepreneurs of the industry.

Aaron: What was your inspiration for starting Corporate Software?

Mort: Like most ideas, it was a simple concept. I had been consulting to large companies and they were starting to move into personal computers. They clearly were not going to buy software through retail stores, which at the time was the primary software distribution model. It was logical to me that there needed to be a different channel of distribution, and that is what we ended up building. I was 29 when I started the company in 1982 and, I think it's safe to say, I had no clue. I had run a couple of successful businesses but still had no clue about running a big company and Corporate Software was destined to be a big company. I had the good sense to bring two people on board; one was a sales person and one an operations person. They were much older and wiser than I was and I learned a lot from them and we ran the business together. When I started the business I talked to 99 different venture capital firms who all said no. Finally, after two years in business, Rich D'Amore at Hambro said yes.

Aaron: Did your business model evolve much from your initial vision?

Mort: It took a couple of years to get the model right, but when we did, it grew very fast. Corporate adoption of software at the time was somewhere between the back door and the front door; it was sort of a side door thing for analytical people who were not typically all that connected to IT. Sometimes IT got involved in purchasing software, but over the course of a few years, software became core technology and was adopted in a more vigorous way. We led that movement by providing services that were more IT focused in terms of support, selection, and training the help desk. We ended up being a leader as software started going in the front door. At the time, very few people recognized that selling to enterprises required a different way of doing business. A relevant reflection is when Lotus 1-2-3 came out; it was fairly quickly adopted by finance organizations of large companies. The corporate version of 1-2-3, however, was the same software you would buy as a retail customer, except it was in a leather binder as opposed to a cloth binder. So the distribution model for software to the enterprise was broken and we set out to fix it.

Aaron: What was the turning point in getting the business model right?

Mort: Margin was the key thing. We had an original business plan that asserted that the gross margin was going to be around 30%. When we lowered the margin to about 19%, sales shot through the roof, so we learned that our pricing was just too high. By the time I left the company, the margin on software sales had moved to single digits. It's probably mid to low single digits now. So margin deterioration was a factor through the entire history of Corporate Software, but we managed to be profitable one way or another.

Aaron: How did the team evolve as the company grew?

Mort: Sadly, with a fair amount of trial and error. We didn't initially have a particularly vigorous or disciplined approach to hiring and software was still pretty much a cowboy's industry. As the industry professionalized, we got better at hiring and I had a more stable management team. I can't say there was any brilliance behind how we built the team. We occasionally used recruiters, but mostly we relied on networking. The only venture investor we had was Hambro. Rich D'Amore, who moved from Hambro to North Bridge, was on our Board and stayed on well after we became a public company. He remained a valued player and helped us recruit other people to the Board, as well as to the team.

Aaron: When did you take the company public and why did you privatize several years later?

Mort: We took the company public in the summer 1987 with about $60 million in revenue. The public markets, however, didn't understand our business as well as we would have hoped. Even though we had a significant amount of coverage as a medium size public company, the coverage was largely a function of the access we had to the ISVs. We were trying to change the business, which was going to take some investment yet we didn't feel the public market was the best place to raise the

AARON D. LAPAT

Managing Director

J. ROBERT SCOTT

Aaron has been with J. Robert Scott since 1993 and built the firm's high tech practice. He leads senior level search assignments across a range of industry segments, including Software, Communications, Semiconductors/ Microelectronics, Specialty Materials and CleanTech. His practice emphasizes recruiting CEOs and functional leaders for growth-oriented and venture-backed companies.

Additionally, Aaron oversees the creation of the annual Compensation and Entrepreneurship Report in Information Technology at www.compstudy.com.

Prior to joining J. Robert Scott, Aaron spent four years with a retainer-based executive search firm that serviced the high technology industry.

Aaron holds a B.A. in Anthropology as well as an M.B.A. from Boston University. He serves on the Board of Advisors of Stax, Inc., a privately-held consulting and market research firm. Aaron and his wife Lauren have two children, Sophie and Sammy. In his spare time, Aaron plays tennis, runs and listens to music. On the off days, he can be found stoking the embers of his VW-sized Texas BBQ, mixing up a homemade hot sauce, or trying to create the perfect play-list from his ever-expanding record (mp3) collection.

additional capital we needed. So, we took it private in 1992 with Bain Capital. At that time, we were doing about $350 million in revenue. After going private, we grew very rapidly. By 1995, we were just shy of $1 billion in revenue. We then created Stream through merging with a division of R.R. Donnelly. At that point we had two businesses; we had the original distribution and sales business and Stream, a support business for ISVs and OEMs. Microsoft had become a major customer. We sold a lot of their software, but we also did a lot of their support and their outsourced technical and customer service.

Aaron: Was the merger successful?

Mort: Not exactly. Bain and management felt we were selling to Donnelly and Donnelly felt they were selling to us. We sort of had two sellers who had to co-exist and it wasn't a particularly good cultural fit. Donnelly, being a company that is used to stability and the software industry not being stable at all, didn't really play well.

Aaron: Did you continue to manage the business?

Mort: I continued to manage the business with Steve Moore, who was the President of Corporate Software. Steve joined in the late 1980s to run the UK and Europe. He then came over to be President around 1991. The management team was still largely in tact after the merger with the exception of some people who were brought in from Donnelly.

Aaron: How did things end up with Corporate Software?

Mort: The Board of course changed after we went private. The Board largely became a Bain Capital and Donnelly Board, which didn't work very well. It was a reality show/soap opera; people did not get along very well. I left in 1997 and soon after that, Stream was broken back into three different business; the original Corporate Software business; the support business, which retained the name Stream; and the outsourced manufacturing and distribution business, which was Modus Media. The Modus

Media business ultimately ended up as part of CMGI. The Stream business ended up being sold to Solectron and the Corporate Software business ended up getting bought by Level 3, and then was merged with Software Spectrum, which was bought by Insight. Somewhere along the line, just to make things more confusing, there was a spin-out of the distribution business, which actually ended up buying the support business back from Solectron. Today, there is still a business called Stream, which is a support business that is in some way derivative of Corporate Software.

Aaron: What did you do after leaving Corporate Software?

Mort: I tried retirement, which did not last not very long. I didn't want anything to do with technology. So, of all things, I started an alternative health center called Wellspace, which was fun and interesting, but not wildly successful. We raised some institutional money and then ended up selling it. I was then offered a job in education and became the SVP of Distance Learning at Lesley College, which was the largest teacher of teachers in the country. I enjoyed being involved in academia for a while. I truly enjoyed the mission of the organization. The politics of academia, however, were difficult and prompted me to leave after a couple of years. This left me thinking I should get back to technology. I was playing around with a variety of things and was attracted to the mobile telecommunications market and looked specifically to the cell phone sector.

Aaron: Is this when you formed IMO?

Mort: Yes. IMO was an idea around creating a more rational way of buying a cell phone for a consumer.

Aaron: Did this come from personal experience?

Mort: It comes from all our personal experiences. We created a store that provided a great customer experience on every level. It gave customers a range of choices and treated them well. The bad news was I wasn't so good at it. Retail is a whole different thing. IMO was and still provides a good consumer experience; however, the company has not yet broken the code with respect to how to build a great business from an economic perspective.

Aaron: Where did the idea for Enterprise Mobile come from?

Mort: The genealogy of Enterprise Mobile derived from Corporate Software. We had done a very good job at Corporate Software of helping Microsoft to be an important enterprise player early on. Steve Ballmer and Ray Ozzie were in a conversation about needing a Corporate Software-like entity in the mobility space to help accelerate their success in that market. They had a problem and asked me to assess the issue and determine if we would be interested in doing something about it by building a business. For six months, Steve Moore and I did that. We talked to a variety of different players in the industry, with some support from Microsoft. We confirmed that there was in fact a major need and concluded that a very exciting business opportunity existed. So we created the business and raised money from Microsoft and off we went.

Aaron: How would you categorize the differences in building an early stage business with a strategic investor versus being backed by venture capitalists?

Mort: Well, Microsoft is not just any strategic investor and while we are a startup, we are a startup that is being asked to essentially provide a capability extension, if you will, to Microsoft, which has some 15,000 sales people; in the U.S. for Enterprise, it's a few thousand sales people. Thus, there are thousands of sales people who know about us, reach out to us, and say, "Can you help solve my customer's problems?" As a result, we are a start up that has to play in a very big pond, from day one. As such, we have had to have reach, depth, and quality from day one. Most startups generally increment things in step functions. We couldn't do that if we were going to meet the goals we have. We also think there is a barrier to entry created by fast growth. Additionally, we are not a pure start up in terms of having risks everywhere you look. We don't have a particular market risk or even a customer risk. We'll get customers through Microsoft relationships or from relationships with the carriers or ISVs or other third parties who need what we have. The risk is really execution, but that is exciting for a management team.

Aaron: So how do you manage in an environment of such accelerated growth?

Mort: You have to live close the edge. You have to be willing to take risks. Steve has a great way of describing it using a skiing analogy. He says, "The best skiing is done when you're close to the edge. You're a little bit out of control, but not so out of control that you'll hurt yourself." You have to allow for a little bit of imperfection to grow as fast as we need to and to be as responsive as we are being asked to be.

Aaron: How has your experience influenced the way you assess leadership for your team?

Mort: For this company, people who have had a variety of experiences, who are fairly senior, are very smart, are willing to take risks, and are not intellectually lazy are critical traits. We have to figure out our business model as we build our business. That takes a lot of work and it requires a skill set most people don't have and an improvisatory business environment in which most people are not comfortable. We require that people are willing to work together and figure it out collectively. They need to be confident in themselves, and confidence is gained, to a large degree, through experience. They need to have made a variety of mistakes and have seen the good, the bad, and the ugly and are still excited and motivated to build something meaningful. Most of the people on our team have those characteristics. Every member of the team has a ton of brain power and is not afraid to speak out. They are all also highly respectful of operations. It is a culture that emphasizes execution over strategy. We have great strategists, but they are more than that. We are all about getting things done in a way that works.

INTERVIEW WITH MORT ROSENTHAL, CHAIRMAN & CEO OF ENTERPRISE MOBILE, INC.

Aaron: You are CEO and Steve is President. How do you make that seemingly top heavy organizational structure work?

Mort: It has worked for a long time. I think it basically works because we have different skill sets. Back when we worked together at Corporate Software, it was very clear that we had to continue to innovate and I was the guy who drove the innovation and Steve made the innovation operational. One way of putting it is that I had the machete and he had the road paver. I found the path through the forest, and Steve made it so that other people could follow us. Since then, I have been more of an operator at times and Steve has been more of a strategist, so increasingly we have become extensions of each other. Remembering the magnitude of our growth trajectory and that we are a little company doing big things for big companies, it requires a lot of bandwidth. I think the management team would say that one of us without the other would not be anywhere near as good, interesting, or fun.

Aaron: How do you manage a geographically dispersed senior management team?

Mort: Clearly, one of our challenges is having the headquarters in Watertown with a second headquarters in Bellevue, WA. We have an engineering team and sales leadership out there, and we have people in other parts of the country as well. So, creating a culture at a distance, in an organization that is very virtual is a challenge. I think we are doing a pretty good job. We get together regularly. We travel a fair amount and we try to over communicate, even if it's on the phone. We haven't established all the cultural norms. It's a small enough group that is still about touch. We have about 45 people right now but are growing very rapidly. By the end of the year we expect it will be over 100, and that will surely create challenges we will have to manage through.

Aaron: Your ambition is to build another big company?

Mort: First of all, mobility is a great industry that is still in its infancy. Secondly, mobility in the enterprise is becoming extremely important and is very badly served today. IT managers repeatedly say things like, "I'm getting sick of being treated like 10,000 consumers." In general, that is how the mobile industry deals with enterprises. There is a major opportunity to service that market. Having the Microsoft partnership gives us a significant leg up, and having an experienced team provides us a huge advantage. So, I think this could be a very big deal. It's a lot of fun.

Aaron: Do you think you'll ever go back to the music business?

Mort: No. I still have respect for musicians; I still listen to music; but the music business is definitely out for me.

RAJ ATLURU

Managing Director

DRAPER FISHER JURVETSON

Raj Atluru is a Managing Director at Draper Fisher Jurvetson where he serves on the boards of Great Point Energy, Konarka Technologies, mChek, Skoop, SeventyMM, Varolii, Ping Identity, and Solicore. In addition, he led the firm's investments in EnerNOC (ENOC), Bright Source Energy, CoalTek, Deeya Energy, Live Media, Miartech, Reva Electric Vehicle, SOA Software, and Tioga Energy. Mr. Atluru currently focuses on emerging clean technologies, business and consumer services, and wireless technologies. He has over 14 years of venture capital, private equity, and leveraged finance experience both domestically and in emerging markets with a specific focus on India.

As one of the leading venture capitalists focused on the CleanTech sector, Mr. Atluru is frequently cited in leading industry and national publications, including *The Wall Street Journal, The San Francisco Chronicle, The Sierra Club Monthly, SiliconIndia, Nanoinvestor News* and the *Venture Capital Journal.* Mr. Atluru also spent three years with TL Ventures where he focused on early stage software, wireless communications and energy technologies. In addition, Mr. Atluru worked in the Leveraged Finance and Asian Corporate Finance groups at Credit Suisse First Boston in New York, Hong Kong, and Singapore.

Mr. Atluru received B.S. and M.S. degrees in Civil/Environmental Engineering from Stanford University where he taught the solar and wind energy lab and was a full time research assistant on the Waste Isolation Pilot Project for Sandia National Labs (Department of Defense Nuclear Repository Study). In addition, he received an MBA from the Stanford Graduate School of Business.

Aaron: Can you provide some background on how you got into venture capital?

Raj: I was at Stanford getting my MBA from 1995 to 1997 when the Internet was on the cusp of exploding. I was initially looking to join an Internet startup in the summer between my two years and had several offers. One of my roommates suggested that I could gain a broader perspective of what was going on in the market before picking a sector or a company by joining a venture fund for the summer. I took his advice and spent the summer between years of business school working for a venture fund, and I fell in love with the business. I really enjoyed working with entrepreneurs, learning about new technologies and businesses, and decided to give it a try full time upon graduation.

Aaron: So you joined DFJ when you finished business school?

Raj: No, I joined TL Ventures, where I spent my summer, which was part of a large group of funds that were created around Safeguard Scientifics, a large publicly traded venture vehicle. There were seven different funds, including Internet Capital Group, which invested across all stages, but I focused on early stage investing through TL Ventures.

Aaron: What kind of investments were you focused on back then?

Raj: Three areas broadly: wireless, enterprise software, and energy. I started looking at opportunities in energy back in the summer of 1996 as the gas and electric utility businesses were deregulating.

Aaron: When did you join DFJ?

Raj: I joined DFJ in late 1999. At DFJ I continued looking at enterprise software and services and wireless communications.

Aaron: What is DFJ's CleanTech history?

Raj: DFJ moved into CleanTech by way of our interest in applications of advanced materials and nanotechnology. One of my partners, Steve Jurvetson, was looking actively at nanotech and was pushing that thesis for the firm. We started to brainstorm specific application areas for nanotechnology, and I was personally interested in the energy sector. Given my academic background, which included teaching the Small Scale Energy Systems Lab (solar lab) at Stanford, as well as my experience looking at the energy sector while at TL Ventures, I became actively involved in our efforts around Energy and CleanTech. I initially started looking at solar applications and we invested in Konarka in 2002, which was our first CleanTech investment. From there, we started looking for more applications and, little by little, we began seeing businesses that really made this category stand out as a place where innovation was happening at a rapid pace. From 2002 to the present, I have been driving DFJ's activity in this sector.

Aaron: CleanTech covers a lot; how do you segment the market?

Raj: We segment it pretty broadly. For us, energy and power tend to be the dominant sector and that encompasses broad fields such as solar PV and solar thermal, biofuels, energy storage, clean coal, waste to liquids and energy efficiency to name a few. However, we look at a variety of other segments, including air emissions and water, advanced materials applications, solid state lighting, next generation transportation, sensor networks, and smart grid services such as EnerNOC. Any technology or service that enables us to use natural resources more efficiently falls into the CleanTech bucket. Clearly, it is one of the broader investment categories we have.

Aaron: DFJ's history in this sector dates back to your initial investment in Konarka. What is the history of CleanTech as a sector for the venture industry at large?

Raj: The initial focus of CleanTech investing involved getting behind the business opportunities that emerged out of the deregulation of the energy sector. There are a handful of pioneering firms, such as Nth-Power and EnerTech, which were early entrants into this market. The focus in the early days centered on the de-regulating electric and gas utility market, the power sector, and the energy technology sector. That activity started back in the mid-1990s. Even though these firms were doing energy technology investing before that, it was a relatively small niche. From 1996 through 2001, the sector was dominated by only a handful of firms. The broader attention started coming in the 2002/2003 timeframe.

Aaron: How critical a role does human capital assessment play in your evaluation of these deals?

Raj: I would say the teams associated with the deals are the most important thing in venture capital, especially early stage venture capital. It is not different in the CleanTech sector. The sizing up of entrepreneurial talent is the most difficult thing to gauge, but also the most important.

Aaron: When you think about the CEO role, what characteristics and types of backgrounds are most appropriate?

Raj: I skew towards sales and marketing people who have real industry depth for the CEO role. I look for clear thinkers, folks with really high integrity and a determination to succeed. The biggest challenge as we move outside of sectors that we know well, like solar, is finding talent. That talent is unfortunately largely not based in Silicon Valley. The people who can commercialize these technologies and build big projects tend to be in places like Houston, Denver, Kansas City and Chicago. So the nexus of where a lot of our companies are starting to build operations, particularly the ones that are aiming directly at the energy infrastructure, is somewhere in the middle of the country.

Aaron: Many CleanTech companies are derivatives of old-line industrial businesses. What are the implications of this in trying to form and grow new CleanTech companies?

Raj: The biggest challenge is finding individuals who have experience in an entrepreneurial growth environment. We are, however, now starting to see more true entrepreneurs in the CleanTech sector, whether they came from software or Internet or semiconductor or energy companies, they have begun to migrate into this area and it has really energized this investment sector for venture capitalists. As investors, we like to back individuals who know how to build businesses, raise capital, build high quality teams, evangelize to first customers and position their companies as leaders in their category. They need to be able to paint a vision for the world that is unique and compelling and that makes other people want to join them and get behind the mission. When I first started investing in energy technology in 1996, the biggest challenge was finding high quality entrepreneurial managers. There were interesting technologies, but the missing link was growth oriented, entrepreneurial people; these types of individuals are now moving into the category fairly rapidly.

Aaron: How did you solve the entrepreneurial talent problem early on?

Raj: We ended up looking for true entrepreneurial athletes, as opposed to people with particular domain expertise. This meant crossovers from software, Internet, materials companies, etc. To this day, those individuals with previous entrepreneurial experience have been the most successful in our portfolio.

Aaron: Has the talent gap closed?

Raj: Yes it has. It has been accelerated by the maturation of existing companies in the sector as well as by the expansion of investment activity. In 2002, we probably saw 20-50 CleanTech business plans. We will probably see 4,000 this year. It has become a dominant space from a venture capital perspective this year. It's gone from a handful of firms focused on the market to nearly all the major firms having looked at or invested in a CleanTech company. With the emergence of the category, there has been a growing population of experienced entrepreneurial talent to choose from.

Aaron: Aside from solving problems around talent and organization building, have there been other idiosyncratic challenges associated with investing in the CleanTech sector?

Raj: Unlike the software or Internet markets, where you learn a lot from each deal and can carry over a lot of what you learned from investment to investment, the challenge in CleanTech is that you're making investments across a very broad range of categories and technologies. Thus, trying to get your arms around the existing technology and the emerging technologies presents a much bigger challenge as you are doing so across multiple sectors. Additionally important is understanding the macroeconomic and regulatory drivers across the various sectors. For instance, investing in coal is different than investing in solar, which is different than investing in bio fuels. To address these issues, we are really leaning on the multi-disciplinary talents across the firm. Two of my partners are much more adept at investing in bioscience technologies, and when it comes to leading the thesis for bio fuels for the firm, they are the ones driving that sector. I've been driving solar since I've spent a lot of time in that space. CleanTech demands a broader swath of technical expertise. That is where institutional knowledge and expertise across sectors is extremely helpful. Further to this, I have another partner who has been very active in semiconductors and he has been very helpful looking at the hardware plays and advanced materials opportunities in CleanTech.

Aaron: Is CleanTech a global sector?

Raj: It is indeed global. It is, in fact, the global nature of the market that creates some of the challenges in the industry. You have to understand the business and regulatory drivers, which vary on a global basis. That includes the macro economies of China and India and their impact on all the resources that we are now consuming. You need to understand what is happening in Europe, which has been a real driver of renewables in particular. This is also true for Japan. Then you need to understand the different drivers in the U.S. In the U.S., it's not just national drivers, but there are about 24 state-based standards for renewables. Understanding those nuances is critical to making smart investments in this space. Additionally, the technologies and leading companies are emerging globally, unlike the Internet or IT, where historically the predominance of companies were U.S. based, in fact, California based, though that is certainly changing as well. The CleanTech companies that we are investing in are more broadly dispersed across the U.S. and the world. Examples of companies that have been either private equity or venture capital backed outside the U.S. include Q-Cells in Germany, SunTech in China and Suzlon in India. What has also surprised a lot of people is how big these companies have become. The scale of the businesses and the market capitalization that these companies have accrued is significant and that excites us.

Aaron: Is DFJ's portfolio in this sector now global?

Raj: It is. Of the 20 or so CleanTech companies that we have invested in, we have investments in Europe, one in China, two in India, and the rest across the U.S. We are looking at new deals right now in India, Vietnam, China, Korea and Europe.

Aaron: What role do large companies play in fueling entrepreneurship in this sector?

Raj: Most of the technology we are investing in right now is not being spun out of large companies. Instead, it is coming out of universities and government research labs. It is also coming from entrepreneurs who have gained meaningful experience in the sector and have uncovered an opportunity to try to build a company in a particular segment of the market. Almost all of my companies have some kind of academic institution or government lab research in their origin, with very few of them coming from large companies. However, large companies have been really helpful here as go-to-market partners. They could be feedstock partners, off-take partners, beta partners, joint R&D partners, development partners, etc. Our portfolio companies have been very actively engaged with much larger companies on all of the above fronts. They usually have a skill set or reach that small startups cannot match.

Aaron: What have exits looked like for these types of companies?

Raj: The primary exits have been in the public markets. The M&A activity in this sector has not been nearly as active over the last ten years as it has been in other categories. The types of companies that would acquire these businesses have not been as active as Cisco might have been in the Communications space or Yahoo! or Google in the Internet space.

Aaron: Is that because the industry is so new?

Raj: One reason is that it is a new industry. Another may be that the pace of innovation has been much greater than anyone would have expected in these industries. A lot of the technologies are industrial or energy oriented and the acquirers in these sectors are just not used to that rapid a pace of innovation. I think we should start to see a more active M&A market, particularly in sectors like solar, where some really strong companies that were founded from the ground up are now maturing as businesses and will be much more likely to be acquisitive. Historically, if you think about the energy sector in general, there have been only a handful of companies that would be potential acquirers. I believe that number is going to expand, and with that, we will see more M&A activity. The exits that have generated the biggest returns have been through the public capital markets so far.

Aaron: So the companies that were start-ups ten years ago are now evolving toward becoming larger successful businesses, and it is these companies that will lead the M&A activity?

Raj: I think that's right. It will happen on a sector by sector basis. Certainly in solar we are starting to see that. I think we will start to see some of that in the sectors around ethanol and bio diesel as well as smart grid technology. I think we will start seeing more M&A from the dominant companies in each sector.

Aaron: We talked a bit about team building and leadership characteristics for these companies. What about boards? Does your philosophy around board building in early stage CleanTech companies differ from the investing you do in other sectors?

Raj: Yes, definitely. Having a board with industry expertise is incredibly important in this sector, whereas in a Software, Communications, or Internet company, it is certainly helpful, but not critical to have a non-venture, industry board member. When you have an entrepreneur who, as we have discussed, may be in the company more for their entrepreneurial skill than industry knowledge, capturing industry knowledge at the Board level is a major focus. In my portfolio companies, we also try to build strong advisory boards in addition to bringing in one or two board members who have strong industry expertise, and we do this at a much earlier stage in the process than in other verticals.

INTERVIEW WITH RAJ ATLURU, MANAGING DIRECTOR, DRAPER FISHER JURVETSON

Aaron: What role do strategic investors and corporate investors play in the market?

Raj: I think they play an important one. More so than many of the other sectors in which we invest. We have worked with strategic investors and partners in a lot of our companies and they have been very helpful. They are good market and data partners. They are also helpful in validating the quality of the technology or opportunity for other potential partners or investors. We would not normally have as active a strategic partnership/investor orientation in most other types of companies.

Aaron: How sophisticated have venture capital Limited Partners become around CleanTech?

Raj: I think the limited partners have become very smart with respect to this market. A good example of this is that many now have resources dedicated to figure out their own carbon footprints in addition to figuring out the extent of the exposure their portfolio should have to CleanTech. More importantly, most of these Limited Partners have had exposure to CleanTech not just through venture, but through other asset classes. Three or four years ago, when we first started presenting the CleanTech investment thesis to our LPs, I think it was viewed as interesting, but it was not regarded as the significant category it has become. So, LPs had to get smart on it. Most LPs are actively looking for funds that have some level of CleanTech exposure in them, whether they are stand alone funds or a larger portfolio investing in CleanTech in addition to other sectors.

Aaron: Clearly you're bullish on the CleanTech market. How do you imagine the sector evolving over the next 2-3 years?

Raj: I think we're going to see more companies getting to the public markets. I think we are going to start seeing, or we already have, some very specific segments that may have been over funded. I think we're going to see a broader swath of investments in the category by venture funding in general. I think most venture firms start in solar as their primary area of focus, which is pretty easy to understand- the macro market is going gang-busters, it's a global opportunity, there is a lot of innovation, and the technologies are pretty easy to understand. From solar, there are a lot of venture firms that have moved on to the bio fuel thesis, as well as energy efficiency, transportation and energy storage. I think we are also going to start seeing more interesting opportunities in the heart of energy, like clean coal, or utility scale operations. In general, I expect the CleanTech category to expand in a meaningful way beyond what we have seen over the last three or four years.

Wilmer Cutler Pickering Hale and Dorr LLP

60 State Street
Boston, MA 02109
617.526.6000
1875 Pennsylvania Avenue, NW
Washington, DC 20006
202.663.6000
www.wilmerhale.com

WilmerHale is internationally recognized for its experience in representing both venture-backed companies and venture capital firms in their initial public offerings, mergers and acquisitions, intellectual property and intellectual property litigation. As a leader in technology and life sciences, the firm represents clients in a wide variety of sectors including telecom and wireless, software, electronics, biotechnology and medical devices. The firm's full-service practice also includes antitrust and competition; aviation; bankruptcy; civil and criminal trial and appellate litigation (including white collar defense); communications; defense and national security; financial institutions; international arbitration; securities regulation, enforcement and litigation; tax; and trade.

The firm is more than 1,000 lawyers strong and has offices in Baltimore, Beijing, Berlin, Boston, Brussels, London, New York, Oxford, Palo Alto, Waltham and Washington, DC.
If you would like more information about WilmerHale's compensation and benefits practice group, please call or email:

A. William Caporizzo
Chair, Tax Department
617.526.6411
william.caporizzo@wilmerhale.com

Kimberly B. Wethly
Partner, Tax Department
617.526.6481
kimberly.wethly@wilmerhale.com

Ernst & Young LLP

200 Clarendon Street
Boston, MA 02116
617.266.2000
www.eyonline.ey.com/growth

Ernst & Young, a global leader in professional services, is committed to enhancing the public's trust in professional services firms and in the quality of financial reporting. Its 114,000 people in 140 countries pursue the highest levels of integrity, quality, and professionalism in providing a range of sophisticated services centered on our core competencies of auditing, accounting, tax, and transactions. Further information about Ernst & Young and its approach to a variety of business issues can be found at www.ey.com/perspectives. Ernst & Young refers to the global organization of member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited does not provide services to clients. Ernst & Young LLP, a Delaware limited liability partnership, is a U.S. client-serving member firm of Ernst & Young Global Limited.

Ernst & Young's Strategic Growth Markets (SGM) practice guides the best high-growth companies. Our multi-disciplinary team of elite professionals provides perspective and advice to help our clients accelerate market leadership. SGM delivers assurance, tax, transactions and advisory services to thousands of companies spanning all industries. Ernst & Young is the undisputed leader in taking companies public, advising key government agencies on the issues impacting high-growth companies, and convening the experts who shape the business climate. For more information, please visit us at www.ey.com/us/strategicgrowthmarkets.

Bryan Pearce
Northeast SGM Leader,
Venture Capital Advisory Group
617.859.6199
bryan.pearce@ey.com

Joseph Muscat
National Venture Capital Advisory Group Leader
650.496.4517
joseph.muscat@ey.com

J. Robert Scott

260 Franklin Street, Suite 620
Boston, MA 02110
617.563.2770
www.j-robert-scott.com

J. Robert Scott is a retainer-based executive search firm specializing in the recruitment and selection of senior managers across a broad range of selected industries. Founded in 1986 as a wholly-owned subsidiary of Fidelity Investments, the firm has developed a specialization in entrepreneurial oriented technology businesses. Specialty vertical practices include: Information Technology, Life Sciences, Financial Services, Higher Education and Not-for-Profit.

J. Robert Scott provides a thorough, timely and proven process for locating and attracting highly qualified candidates to fill key positions. Our approach is client-oriented and distinguished by a commitment to service that is not only promised, but guaranteed. If you would like more information about J. Robert Scott's services, please call or e-mail:

Aaron Lapat
Managing Director
617.563.2770
aaronl@j-robert-scott.com

WILMERHALE

ERNST & YOUNG
Quality In Everything We Do

J. ROBERT SCOTT