M&A Seminar Series, Session Seven

VC/Chairman/CEO/Founder View Summary
The Merger to form Cadence—an M&A Retrospective

MARCH 13, 2007

Fenwick FENWICK & WEST LLP

Panelists:

- **Glen M. Antle**—Chairman of the Board and Acting CEO, Trident Microsystems; Member, Boards of Directors, Semtech and Novas. Former member, Board of Directors, Compass Design Automation and Silicon Perspective Corporation (SPC). Former Chairman of the Board of Directors and CEO, PiE Design Systems. Former Chairman of the Board, Quickturn Design Systems (acquirer of PiE) and Verplex Systems. Co-founder of ECAD, Inc., now Cadence Design Systems, Inc., and served as its Chief Executive Officer, Co-Chairman and Chairman of the Board of Directors.

- **Michael C. Child**—Managing Director and Member, Executive Committee, TA Associates; Current Member, Board of Directors, Eagle Test Systems and IPG Photonics; Former Member, Board of Directors, Artisoft, AST Research, Cadence Design Systems, ECAD, DH Technology, Fargo Electronics, Finisar Corporation, Network General Corporation, Novellus Systems and Ultratech Steppe. Member, UC Davis Foundation Board, Advisory Board for the Graduate School of Management and the College of Engineering. Trustee, Sacred Heart Schools, Atherton.

- **Donald L. Lucas**—Member, Board of Directors, and former Chairman of the Board, Oracle Corporation. Member, Board of Directors, and former Chairman of the Board, Cadence Design Systems. From its inception, served as Chairman of the Board of SDA Systems, Inc., a predecessor of Cadence. Private venture capital investor since 1960. Member, Board of Directors, 51Job, DexCom, and Vimicro International. Trustee, Santa Clara University and Chairman Emeritus, Stanford Institute for Economic Policy Research.

- **James E. Solomon**—founder and former CEO, SDA; founder and former Chairman, General Manager of various Cadence business units including the IC unit and the Analog & Mixed Signal unit, Cadence; former CTO of Cadence. Founder/CEO Xulu Entertainment. Founder/Chairman, Smart Machines. Venture Investor and Member, Board of Directors, Pyxis Technology, Nascentric, Applied Wave Research, CiraNova, Gemini Design Technology, and Silicon Navigator (EDA start ups). Fellow of the IEEE. Winner of the prestigious EDA Kaufman Award.

Moderator and Summary Author:
David W. Healy, Partner and Co-Chair M&A Group, Fenwick & West LLP

Merger of ECAD and SDA to form Cadence

This merger was a good example of the benefits and risks of merging two strong companies in hopes of creating the clear number one player in a market, in this case the market for Electronic Design Automation (EDA) software.

Background

ECAD was public, had the currency for future acquisitions and had started on that effort. It had a strong engineering and sales team, a dominant "cash cow" product in the form of the DRACULA verification tool, and good customer relations, so marketing expenses were modest. There was a perception that ECAD did not necessarily need to merge with SDA, and could grow by acquisition of others. However, there was some perceived need to add to the depth of the management team, broaden the product line and prevent SDA from being acquired by another large EDA vendor.

SDA had compatible technology and a complete, integrated product line (schematic editor, simulator, layout checker, and a place and route tool). It had a strong, complementary management team, including Don Lucas and Jim Solomon and the then President and COO, Joe Costello. SDA had a great place and route product that was generating high margins and strong relations with important Japanese customers. However, SDA had "missed" the IPO window by a single day (despite having completed its road show and filling its book), essentially killing its near term IPO prospects (other than perhaps by merging with a public "shell company"), denying SDA the currency for future acquisitions. If that lack of a liquid currency could be overcome, however, SDA felt that it had brighter future prospects than ECAD long term. SDA had sufficient cash and was profitable, and it was not interested in a "cash out" merger at a low valuation.

The competitive landscape was that the then three large EDA competitors, Daisy, Mentor and Valid, were respectively tied to proprietary operating systems running on PCs, Apollo and IBM/UNIX platforms respectively, and they were all board rather than chip (IC) focused.

ECAD and SDA were both chip focused. ECAD's Dracula tool ran on mainframes on multiple operating systems. SDA's platform ran on UNIX, which was portable to multiple hardware platforms. Together, ECAD and SDA had superior tools and a better router than their EDA competitors, and were better positioned due to these factors to buy other point tools and aggregate them into a complete design flow. That helped the company resulting from their merger, Cadence, to become the leading EDA vendor.

Good Timing

The timing of the deal turned out to be highly fortunate because:

There was a transition from hardware to software EDA solutions occurring;

Mentor was more focused on software but relied on Apollo, and was more PCB than chip focused, whereas Cadence had the right focus on chip design at the right time;

Cadence's willingness to port its tools to DEC, Sun, Intergraph, and IBM workstations, and thus be platform independent, killed the competing proprietary hardware solutions; and

There was an increasing willingness of customers to buy third party tools rather than in house tools.

Merger of Equals

As an indication that the deal was negotiated "just right", the parties still may disagree on who made the greater concessions to get this (unusual) 50%-50% "merger of equals" done: ECAD, because it was public with M&A currency and had the dominant Dracula product, or SDA, because of its strong management team and rapidly rising revenues in Japan. On a straight numbers basis, SDA's revenues, net income, and profitability were lower than that of ECAD, and it later turned out that ECAD's Dracula product remained dominant for longer than expected, so ECAD arguably overpaid just based on the numbers.

Aggressive Dealmaking

The panelists do agree, however, that the deal was a bold and courageous move by both companies, and it enabled Cadence to be best positioned to make the acquisitions needed to become the leading EDA vendor. Evidence of this aggressive approach was that even though ECAD was public, it agreed to a "locked" deal due to the unique strategic fit/upside of the transaction (that is, the parties entered into voting agreements (locking 52% of the vote on the ECAD side and 55% on the SDA side) and granted 15% cross options to each other; each side sought deal certainty, not a better bid, given competitive and other risks of a blown deal. In the current M&A environment, it might be difficult to obtain a fairness opinion (or to avoid M&A litigation) for a locked, 50%-50% public-private deal with disparate financial metrics, as was done here.

Key Drivers/Enablers for the ECAD/SDA Deal:

Tremendous Business Synergies—combining two R&D teams, with one focusing on tool excellence and the other a design framework that tied the tools together, allowed the combined company to develop the overall solution faster; the deal gave ECAD access to SDA's Japanese semiconductor customers (*e.g.* Toshiba), and partnership/services model, and gave SDA access to ECAD's public currency for future acquisitions and liquidity, the benefits of the dominance of the Dracula product, and ECAD's OEM customers.

Being Willing to Make Hard Decisions—ECAD gave up half a public company, despite its solid prospects, because it saw the long term synergies and value creation; SDA gave up half of its company despite what it believed were the superior financial model and product vision; and both CEOs (Jim and Glen) ultimately turned over the CEO role to the younger Joe Costello;

Willingness to do a True "Merger of Equals"—evenly split board, split management team, 50%-50% equity split, and most importantly, no "acquired company" feeling on either side.

Key Benefits of the ECAD/SDA Deal:

Enabled Future Acquisitions. The deal let Cadence move on to do the right acquisitions (Gateway and Tangent) at the right time;

Strengthened Management. The deal gave Cadence a very strong board (including the panelists) and a strong management team, especially in the combination of Joe Costello's management leadership and the technology vision and R&D management/leadership of Paul Huang and Jim Solomon, which in turn enabled Cadence to consummate and effectively integrate many key acquisitions;

Leadership. Joe Costello had critical elements that were important to Cadence's ultimate success: energy, intelligence, drive, strong leadership and motivational skills, and deep M&A integration skills, which were critical in establishing a broad product line to include place and route and logic synthesis;

Change Agent. The deal was a catalyst for change (in Cadence's management), which was net positive;

Innovation Platform. The deal created a platform for innovation; for example, after the merger, Cadence's Analog division, headed by Jim Solomon, raised $10M from partners in NRE deals and developed a suite of analog tools, including Spectre.

Lessons Learned

Lessons from the ECAD/SDA merger and other deals in which the panelists have participated are:

Ego Management: the number one factor that stands in the way of mergers that "should be done" is strong egos. CEOs and boards should think of their shareholders' best interests first; if that goal is the focus, at least the parties are doing a deal for the right reasons. But this takes leadership and objectivity.

NIH Syndrome: the second factor that gets in the way of mergers is that companies don't want to buy technology that is not internally developed (i.e. don't want to buy technology that is "not invented here" (NIH), due to concerns about quality, compatibility, product life or intellectual property rights);

for example, SDA had concerns that ECAD's batch DRC Dracula product line would not have a long enough life to justify giving up roughly half of SDA, which had a broad set of products, but slightly less revenue. SDA already had interactive products that competed with the batch Dracula tool. At the time SDA's marketing message was to move away from main-frame batch tools and move towards workstations. As it turned out, the one tool that remained batch was DRC, and Dracula continued to dominate that space for many years.

SDA also had concerns that combining the 2 technologies might bog down the data translation rate, thus it generally favored internal R&D over acquisitions, so as not to dilute the value of native R&D;

in this case the parties overcame the ego and NIH factors, and instead focused on long term financial success and whether the deal would improve value for the shareholders;

Changing Market Dynamics. The benefits of competition are "overrated"; reducing competition by merger improves business prospects and ability to serve customers;

for example, the PiE/Quickturn merger, which Glen negotiated, was wise even though it was between the only two competitors in the emulation market—the companies were spending excessive amounts on patent litigation between them and not focusing on product quality; after the merger, the combined company controlled the emulation space and all the relevant patents, which served as a barrier to entry. This enabled Quickturn eventually to go public. Ultimately, Quickturn was acquired by Cadence as a means of fending off a hostile bid from Mentor Graphics.

Criticality of an M&A Strategy for Growth. If a company can overlay a good acquisition program on top of good organic growth, it can enhance shareholder value significantly. Acquisitions are probably the most critical element for any company that wants to be a leader in its space--few companies are examples to the contrary;

e.g. Cadence, Oracle and Macromedia were all successful because they were the result of many acquired companies; SAP may eventually be overcome by Oracle because SAP is arguably not acquisitive enough.

Oracle arguably waited too long to start making large acquisitions, but it has more than made up for that with the recent spate of deals, and it is on a roll, buying a place in many verticals, which is essentially like buying customers.

Key CEO Attributes. To lead a successful serial acquirer, a CEO must be personable, sincere and understated, a good negotiator, a motivator, attentive to detail in the integration effort and willing to make acquisitions rather than believe in the superiority of existing IP.

Key Ingredients for M&A Success:

Aggressiveness—EVERY deal has risk-you just must be convinced that the upside outweighs that and make a leap of faith—don't over-think the deal;

Decisiveness—you must make sure that all target employees know where they fit immediately. The CEO of the buyer must be focused on and committed to ensuring a smooth integration effort.

Don't Over Promise—don't over-promise roles to incoming executives;

Pick the Best Board Candidates—if you are going to take target directors onto your board, they must: be local (so the board can convene quickly), have deep business experience and an action orientation and, above all, have great leadership traits.

Strategic Fit—it is critical to harmonize the product line without alienating major customers;

Operational Fit—evaluating product/employee overlap; harmonizing sales/distribution/OEM channels; managing integration issues;

Cultural Fit—combining teams without losing the benefit of each culture; right-sizing the company without adversely impacting employee morale; in this deal, there was little employee overlap and thus no need for a lay-off; however, the cultures of the two companies, while not clashing, were significantly different. Trying to integrate the cultures was an ongoing challenge for years after the merger. But Cadence management worked hard on that, and that issue proved not to be an impediment.

Financial Fit—EPA accretion/dilution and fair price:

Valuation is "all about the numbers."

The buyer should convince itself that the target's management projections as presented are credible (and it helps if there is a clear statement that those will be tracked and measured (as Oracle does), and that if target management falls short, they must realize that such failure may cost them their jobs). Sometimes, if the target's product is already in the market and the buyer has a significant sales channel, the buyer will be in a better position than the target to estimate projected revenues for the target's product.

Given these factors, you may not need much of a "fudge factor" in discounting the target's projections.

Then figure out, based on standard metrics, and your assumptions about cost savings from eliminating redundant personnel, what price is justified by those target projections. But your valuation will not be correct if you do not quickly realize the projected cost synergies.

Generally speaking, if a buyer can achieve better than its cost of capital over 3 years, then it makes sense to use existing cash or borrowing capacity to make an acquisition.

Earnouts:

Where the target has little or no revenues, a fixed price is highly speculative, so an earnout may be the only way to sensibly price a deal. It also has the benefit of incentivizing retention until the earnout period is ended and ensuring that the buyer does not overpay if revenue synergies are not realized. Many of the uncertainties created by earnouts can be addressed by careful analysis and drafting—such as carefully defining what products qualify for bookings credit on the earnout.

But earnouts have many disadvantages as well, which include the following:

target founders often leave promptly after the payout of the earnout;

pay disparity between existing and acquired teams may cause resentment and lack of cooperation;

the buyer must separately track the results of the target, and that can impair its ability to integrate quickly and decisively;

use of an earnout curtails the buyer's ability to fire those that would be best to fire at the target to ensure smooth integration, and sometimes that is counter-productive; and

often, there will be arguments over how target products (or derivatives thereof) are priced, sold, bundled or discounted and over whether the buyer's support of the acquired business' R&D and sales functions was adequate.

Timing is Critical in Deciding When to Sell:

Cadence/Verplex: Verplex had a good product; it was a private company with no IPO prospects. Initially, Cadence made an unattractive offer to acquire Verplex; negotiations stalled for 6 months. Later, as Verplex' prospects improved, discussions were again started and there was a reasonable deal struck, including an earnout based on bookings (which is normally attractive to a target where the buyer has a strong sales channel). The lesson here is always sell on an upswing, not when you are weak.

Silicon Perspective/Cadence: Cadence approached SPC at a time when Cadence needed the leading edge performance of SPC's product to improve its reputation for innovation and kick start its renewal sales. As a result, SPC was able to negotiate an attractive valuation and earn out.

Cadence/Quickturn: Interestingly, in the Cadence/Quickturn deal, Cadence insisted on a stock deal with a fixed dollar consideration, with no collar, perhaps on the assumption that Cadence's trading price would rise, so that the number of shares to be issued would decline; in fact, however, Cadence's trading price dropped substantially between signing and closing, so the number of shares delivered by Cadence increased substantially between signing and closing.

Lessons for Founders:

The key for any start up is to exploit some discontinuity or change, that will position you for growth and to be acquired.

For example, in EDA, the two current "discontinuities" and changes are–multithreading and open access-so start ups should try to exploit those developments. Doing so requires a founder team with deep domain knowledge. The EDA space is difficult because it is hard to realize sufficient revenues to go public, which means that start ups' likely exit is to be bought by a larger EDA vendor, but some of those have recently curtailed their acquisition activities.

Semiconductor start ups have become more difficult in the US, especially if they do not take advantage of the engineering talent, funding sources and governmental support increasingly available in China.

There are opportunities in the Internet and storage spaces. ERP is difficult, but there are opportunities in enterprise software targeted at vertical market segments.

Software as a service (SAS) (where sales over the Internet can be ramped without out a costly channel buildup) is an excellent space to build an independent company. There are revenue recognition issues that delay time to profitability, but the public markets are looking past that.

Start ups should not try to make a frontal attack in a mature market—rather, they should make a side attack, and then expand the side attack, and seek to keep a low profile so as not to draw a competitive response from major vendors in that space prior to gaining significant traction.

In emerging markets, such as entertainment, time to market is critical, which often requires partnering for key capabilities and crisp, flexible deal making.

Could an Aggressive ECAD/SDA-Type Deal Happen in Today's Changed M&A Environment?

The M&A markets have arguably changed in several ways:

There are fewer smaller public companies willing to gamble on a large, highly dilutive deal;

Increased price volatility makes it harder to do stock for stock deals;

There are fewer immature market segments ready for a dominant player to emerge from a single combination of relatively small companies;

There is more M&A-related litigation. This could make public directors in particular less willing to take fiduciary risks (such as by locking the vote of a public company buyer);

Increasing reliance of institutional investors on proxy advisors such as ISS and Glass Lewis in voting on deals, and those advisors focus on both deal terms and deal process;

Higher risk of a hostile intervening strategic bid or a friendly private equity financed bid;

Changing investor views of M&A deals. For example, some proposed private equity deals have been voted down in favor of internal recapitalizations due to concerns over such funds "flipping" companies for a quick gain.

SOX forces buyers to confirm that integration of targets will not adversely impact their internal controls.

Nevertheless, the panelists agree that these changes have not dampened director enthusiasm for M&A, though there is an increased focus on what is best for stockholders.

Impact of Private Equity (PE) Deals

According to recent published reports, private equity sponsored M&A was about $340 billion in 2005, whereas last year it was $600 billion, so it has grown dramatically. In 2006 in the U.S. 24% of M&A was driven by private equity controlled companies, up from 5% in the late 80's and 90's, and 15% recently. Private equity is also driving an increasing number of large LBO deals. There were reportedly 6 LBO's in 2006 that were over $10 billion in size. Money continues to flow into these PE funds because institutional investors want to put money into alternative assets and the venture industry per se has not been able to grow rapidly enough to take that capital in. There are now sixty firms that have funds of over $2 billion, so the amount of money that needs to be put to work is tremendous. The management and deal fees for PE funds are so sizable that it's very difficult for them to decline to accept funds.

Another driver is the amount of leverage available. The debt markets are willing to provide additional capacity, and willing to lend on increasingly higher EBITDA multiples, and investment banks are willing to make bridge loans to PE firms so as to maintain their role in deals, so the PE firms are scouring the market for companies that they can leverage and buying them.

In the PE space, investors are only requiring that PE fund returns exceed that of the S&P, so for example a 15% return will be sufficient; if that is the case, then PE funds can use 1/1 (100%) leverage so that they can look at companies that are growing only 5-7% which is opening up many more targets for them to evaluate.

A reported trend is that there is so much PE money chasing deals that deals are being done at higher valuations, or for companies that will generate lower growth, which may deliver lower returns going forward; but that has not happened yet, because the debt markets have been so favorable that many PE targets have consummated recapitalizations, allowing PE funds to generate up to 40% returns in one year; those firms may not achieve 2x returns over the longer term, but their returns look very good in the short term.

The panelists do not agree whether the advent of private equity buyers, who are willing to value companies at higher EBITDA multiples that public markets in some sectors, are making it harder for strategic buyers to do deals, given the inherent ability of strategic buyers to take account of the value of deal synergies (as well as to lever off the target's cash).

But what PE deals have shown is that to survive companies must "lever up" (increase their leverage) to remain successful and independent--the "math is clear".

Another factor driving PE deals is the relative unattractiveness of IPOs, due to SOX, option backdating issues, etc. So managements and boards are much more willing to look at being taken private.

In general, there is PE and M&A activity in the semiconductor space now, due to the perception that semiconductor companies' risk of cyclicality is moderated somewhat because tech in general is more diverse so semiconductor industry revenues will be less volatile, which lets semiconductor companies get comfortable with use of greater leverage, which is what PE funds do. 2005-2006 was a great year for semiconductor companies. Historically, the semiconductor industry prepared for market downturns/recessions by becoming well capitalized in advance of those downturns--but now they are becoming better capitalized even in "up" cycles.

There are roll up opportunities to acquire and combine multiple companies that are low growth but that have stable strong cash flows, for example from maintenance or other service revenues. Golden Gate has done well at that. It focuses on software companies of this type, cuts overhead, and grows the maintenance cash flow, even if revenues remain flat.

Divestitures are a natural PE target because of the ability to bring those divisions public again, perhaps after some consolidating acquisitions or restructuring. Divestitures often make sense for public companies (*e.g.*, Trident divested its graphics division and Agilent divested its semiconductor division). For example, if a division depresses the financial results of the public company, is a distraction, or is not reflected in its market capitalization fairly, divesting it is beneficial.

*Questions about the panel can be addressed to Dave Healy, 650.335.7266, dhealy@fenwick.com.

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Donald L. Lucas–Member, Board of Directors, and former Chairman of the Board, Oracle Corporation. Member, Board of Directors, and former Chairman of the Board, Cadence Design Systems. From its inception, served as Chairman of the Board of SDA Systems, Inc., a predecessor of Cadence. Private venture capital investor since 1960. Member, Board of Directors, 51Job, DexCom, and Vimicro International. Trustee, Santa Clara University and Chairman Emeritus, Stanford Institute for Economic Policy Research.

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Moderator: David W. Healy, Co-Chair M&A Group, Fenwick & West LLP

SPEAKER	Lessons Learned from ECAD/SDA Merger to Form Cadence
Dave Healy	With no further ado, we thought this would make an interesting panel, even though the EDA/ECAD deal, which formed Cadence many years ago, is a deal that was long ago in the history books. It is a very interesting and unusual deal, and we thought we'd look at in the Harvard Business School sort of model as a case study of what to do and what not to do perhaps, I don't know–I think mostly what to do–because it's unique in that it is one of the few deals that any of us can actually remember where it was actually a 50/50 split–it was a true merger of equals. The board was split right down the middle; the management teams were effectively split down the middle. As Jim will talk about, it was not an acquired company feeling on either side and then it went on to be a company that completely transformed the industry. So it's unique in that sense and I think there are very few other companies that could have achieved that. I think in large part that is due to the people here on this panel. Glen, why don't you give us a little EDA background on how ECAD came to be, spinning out of Gould and so forth.
Glen Antle	We had a division in Sunnyvale for a company called Gould Electronics–I don't know if they're still around anymore. And while we were there Paul, Ping–there's two more of the founders in here right now if you want to see them–Ping, stand up, Lap, where are you?–there are two more of the founders–and they developed the Dracula verification software while we were at Gould. And Gould decided to shut our division down. We argued against it. They did it anyway and we raised so much hell that they said okay, we'll fund your guys for another year and give you a place to work and give you a computer.

Glen	And we'll give you the perpetual marketing rights to the software and in return you give us a quarter of a million dollars on your first million dollars in sales and we get the right to use the software any time we want to. So we said okay. So it turned out after the first year we were profitable. So we went around to all the VCs trying to raise money and nobody would give us money, which is normal. [laughter] And then as soon as we got profitable Mike came to see us. [Laughter] [Mike interjects: "It starts already." [Laughter]] But TA Associates was very good and we were glad to have them. That's basically how ECAD got started. It was pretty much a flukey deal; I don't know many others that have come on like that. We retained so much ownership that I think when we went public in 1987, the founders and employees still owned about 79% of the company after the offering–it was very unique. And then when the crash happened shortly after we went public–the stock went from I think $13.50 to $3.50 in one day—and after it hit bottom, the bottom feeders, Mentor Graphics, came around looking to buy us and we looked around to see who else they might buy that could cause us trouble down the road. And that was SDA. And so I called up Jim and he and I started meeting …and that got it rollin' and then Mike and Don worked it all out. [Laughter]
Dave	Jim, why don't you tell us about founding SDA.
Jim Solomon	Yeah, I think Glen's story is more exciting. It is interesting–don't give him any money and he ends up owning most of the company. It's not a bad thing. But we were lucky enough–I was lucky enough to find Don Lucas. At that time I was working at National Semiconductor and Don was on the board there…
Don Lucas	Actually, I had resigned from the board. I was the founder of National, one of the two, and we started back east–a complicated history–we were padlocked, etc.–our guys came from Sperry Semi and Sperry sued us and a judge in Danbury, Connecticut asked one of our engineers, "What's this blue goo you put on that alloy junction transistor?" and he said "I don't know, it's the same thing we did at Sperry." End of story. So I was out here at the time and we ended up with Charlie Spork from the group at Fairchild. And those of you who know Charlie know that he didn't need much help, so I resigned from the board to go onto other things.
Jim	So Charlie had the highest respect for Don and I actually had this idea for the company which became SDA, but I wanted actually to design it inside National Semiconductor. I was happy running design groups, it was what I loved. I didn't particularly want to start a software company. Although in the back of my mind I did love software. I had already started a small software company on the side, which was only modestly successful; It paid the rent, that was all it did, paid the house payment. In any event, Charlie Spork sent me to Don–and it wasn't only Don, he sent me to–it was–your side kick from New York–Wheeden–Don Wheeden–two extraordinary guys–Wheeden and Lucas. And they put together a deal that, even though Glen did amazingly well with his, Don figured out a way where the employees actually owned two-thirds of the company. Roughly that–by bringing in half the money from industrial partners and half from venture capitalists. And of course the industrial partners were amazingly helpful because they were the first users and they gave us a lot of guidance. The founding members of the company were world-class guys. I used University of California, Berkeley and Bell Labs as the sources. Rich Newton, who unfortunately died just a few months ago–at too early an age –was extraordinarily helpful in getting us started. He did two things. He helped me work out the plan–because I was a designer, not a software guy–helped me work out the software plan–we actually spent 3 years doing this, so if you talk about the speed at which people move today, this was a very carefully thought through plan–the whole idea was to come up with an approach which would unify the software through a common database. There were many other aspects such as portable operating systems like UNIX and common GUIs and things like that. But the second big thing that Richard did is that he gave me a list of the best people in the world in each of the disciplines he wanted to attack, and I just climbed on a plane and flew around the world and recruited these guys and I got most of them. The only one I didn't get was a guy in Germany who to this day wishes he had come–a famous routing guy–instead of him I got a famous routing guy from Bell Labs. So we had a world-class group of guys and I had world class help from Lucas, primarily Don and our accounting guy from Arthur Anderson, Jim Benson. Don and Jim Benson would brainstorm with me and we came up with a capital structure which was quite unusual where the industrial partners didn't get a lot of equity but the VCs got more equity. It was actually the right thing. Today I would give them no equity.
Don	They got a convertible preferred, obviously senior, with a dividend.

Jim	Which we actually paid a dividend. That I thought was kind of silly later on, but Don liked that and what the hey, it all worked. So the upshot of that is we put the company out with world class people, had a product out within 18 months, revenue ramped lightning fast. The last two years before the merger we tripled our revenue went from $6 million to $18 million. Glen and Paul Huang of ECAD had started ECAD a year sooner, and their revenue was on a ramp about a year earlier so they were about at $24-25 million when we came together; we were about $18 million. But our growth rate was very high. And the profit was very high. And we didn't need cash–I don't know exactly know why we did the IPO–Don just said it's time to do an IPO. We're big enough. [laughter] You know, there is a question, even in my head to this day about that. Of course most VCs would just want to cash out. I don't think that was quite as simple with Don, but that was obviously a factor.
Don	No, Jim, it was to have the liquidity so we could buy ECAD cheaper [laughter] and get the money in the till. You're talking like you're still an engineer, Jim.
Jim	I am still an engineer, so you will probably hear from me the counterpoint to the way a financial guy would approach things, but you are exactly right, Don. I did not think acquisition at that time. I thought about growing from within, building a quality company. The reason I thought that, by the way, is our architecture worked if you developed the tools only within your own company that were compatible with the database. Things that were compatible ran fast. It didn't work very well if you acquired companies and glued them in afterwards. And in fact, that's what proved to be true. The company–and we'll talk about this more–the company clearly grew and became dominant because of acquisition, but, at this stage when I look at the company, it's not in great shape and the reason is partly–not entirely–but partly because we did too many acquisitions, some of which weren't so good. There's a whole topic wrapped up in that, that we'll touch back on. I won't go any farther.
Dave	Don, can you tell us the story about the IPO that almost was–on the SDA side?
Don	This is very painful. The guys–Jim and Joe–did a fabulous job at the road show in New York, back east particularly. And we had a full book all ready to price Friday–Friday of '87. And Jim was just telling me–I didn't remember this–but they couldn't find anybody to talk to, they were all at the bars. I mean it was a bad day. So they said, oh, we'll price Monday. Well Monday came around and no one was pricing. It was very simple–we didn't make it.
Jim	The week we were doing the road show the stock market was flopping around up and down 300 or 400 points. In fact 400 in those days was a huge, huge flop. And Monday was just unbelievable. And it's true–everyone went to bars. Nobody had any idea what to do. They certainly weren't about to be investing in anything. They had no way to get out of anything–it just tumbled.
Don	Well, this is a true story–on that Saturday–I invest with a group of guys and we felt more like little children, and so we asked Dr. Mario Belotti from Santa Clara University to come tell us whether the world had come to an end, Saturday at the Menlo Country Club. And he assured us that it had not come to an end–but he didn't convince us.
Dave	Mike, given the competitive situation that ECAD was in, and that the whole industry was in, where you essentially had Glen coming to you and saying, okay, we have to compete with these really big guys, and we have to change how customers have traditionally done business, didn't it seem like a high risk investment to you? I mean how did you look at this as an investment? It turned out to be an incredibly good investment for you, I assume, but a lot of VCs when you come with that story these days would say there's too much risk, too many unfavorable assumptions–despite the quality management team.
Mike	I think making an investment in ECAD was very easy because we invest in profitable companies. The company had a proven business model. They had great gross margins; they had great customers. We were able to call the customers. And there was a transition going on from people using an older technology platform to using software with mini computers in those days–I think we ran on DEC VAXs in those days.
Glen	We ran on everything.
Mike	Whatever was running,–I think we were also on IBM machines. But there was clearly a transition going on from a system level product to software. When you talk to the IC designers, there was a productivity increase of about ten times. They could run a simulation, run an analysis and could do that in 30 minutes instead of six hours. So the benefits to the IC designers were dramatic. There was a good technical team. I'm not sure about the marketing guy, though…
Glen	We didn't have any marketing. That's why we had to get SDA!

Mike	But it was a pretty simple investment.
Dave	Don, would you do the ECAD-SDA deal differently today, or still do a merger of equals?
Don	I'd do the same thing. It was a great deal. I think that we could see their side and hopefully they must have seen our side, so I think that it was the appropriate way to structure in retrospect.
Dave	Fleshing that out, Don. This clearly was a merger of equals. It's hard for a public company to give up half of itself to buy a private company, although you guys were essentially a public company because you were ready to go. I mean, right, you were on the verge of your IPO, so it was like merging two public companies in that sense–you had your disclosure and so forth. So, how did it come to be that we ended up agreeing on a 50-50 valuation?
Don	Well, I think it was–and this is no kidding–I think Glen was a wise CEO and he saw the advantages of the two and two equals five business and we were a *hot* company with *great* technology and a *great* future and so they got that because they were public and we weren't. So I think it's not complicated.
Mike	I think the other thing that was so compelling was that ECAD had brought in the Regis McKenna marketing firm to help us with strategy. And we had a great point product but we were going to have to flesh that out. And I think there was a strategy to do that. SDA has some very complimentary products. So I think that the simple thing was that you looked at the fact that without the merger you'd have had ECAD's engineering staff basically developing SDA type products and SDA was going to be developing ECAD type products. But with the merger, suddenly we had twice the engineering talent not competing with each other. And it was not anti-competitive–actually I think it allowed the industry to evolve faster by having the teams work together. And so there was *such* a compelling reason to do it, that despite some personality differences, we were able to pull things together.
Jim	I would have to say that Glen was really the master of this whole thing. He came in without ego trying to do the best thing. And I've been involved in a lot of mergers where that isn't necessarily what happens. And in fact you go into a merger today and you study the two CEOs and you study their psychology and you ask, is this–can this really come together? And if you don't get past that first hurdle, you just don't go anywhere. Glen had to make some really tough decisions and he did so. And he did them just by thinking and deciding to do what was right and what was best. And my hat's off to him. We didn't compromise as much as he did, I don't think. Although we gave him kind of the ace in the hole–we made him CEO of the new company and the deal was he would stay if he felt he was needed, but if he felt–and we were pushing [our then President and COO] Joe Costello as the sort of up and comer–if Joe looked promising to him, he said that he would step aside, and he had no problem doing that. And those were big, big decisions that he made. And he acted exactly as he said he would. He watched Joe for a while and said, you know this guy is great, I'm going to step aside and he did that. Rare does that happen in my experience. Usually there is so much ego at the top that it's hard to get past it. I think everything was done with great logic, and then the ensuing–the next moments, as they put the companies together, were handled better than I have ever seen a merger handled. It truly was equality. When you get right down to the working people there were a few cases of overlap and a tiny bit of pain, but generally, everyone felt good about it. And that rarely happens in mergers. Generally mergers are the reverse. And Joe Costello gets much of the credit for that. Joe just absolutely reached out to the other side and did whatever was necessary to make them feel good. And that's just a *huge* thing. And many, many companies never figure that out. Many companies just have a hard time seeing how to do a merger and make the people who get acquired feel good. Nobody felt acquired in this deal.
Don	But Jim, I think you're understating the role of both you and Glen because both of you guys really took a very, what do you call it, enlightened view of the facts of this situation. I think that was *really* important.
Dave	Glen, you mentioned that you think that one of the benefits of bringing the companies together was the ability to make the right acquisitions going forward, but you have also said to me that you think had you stayed stand-alone you could have made those same acquisitions, so how did you view why you needed to do the ECAD-SDA deal and why it made sense.
Glen	Well, I think that if SDA and ECAD had not merged… Mentor was out there fishing around and they would have figured out a way to buy SDA and that would have been disastrous for us. Maybe …
Don	No way!

Not Invented Here or "NIH" Syndrome as an M&A Impediment

Dave	So let's talk about some lessons learned. Let's talk about this issue of not invented here or "NIH", Jim. You and I talked about this a little bit in terms of–and you alluded to it a few minutes ago –why it's so hard, as a technologist, to merge with other companies when you would rather see your technology come to full vision and fruition rather than trying to paste things together. So from that viewpoint do you think M&A is the right growth strategy or is it an unnatural growth strategy?
Jim	Well, every case is unique, and if you look at Cadence, I don't know how many companies we acquired–Don may know–but we probably acquired 20 some companies, maybe 30. I mean, I lose track of them. And of that number of companies, about half of them were great companies. They were good acquisitions, well thought through; they made sense, they were complimentary. The quality of the acquisition was good, etc. The other half–and this came later on–I think in the 90's probably, the first issue I feel was the other half generally were not of high quality. And what does that mean? That means the software engineering wasn't very good, for example. A lot of acquisitions have been done where you buy the company, you didn't look carefully enough at what you're buying, and you get it and you discover really you've got nothing, especially, by the way, if the people leave immediately, which is what usually happens in software acquisitions. So to me the very first rule–and it's a very broad kind of rule–is **quality**–you've got to look at that very carefully. Now, about the NIH thing–there's no question, I originate from that. I'm a technologist. I'm very proud of what I do. I've run great teams all my life. We always thought we were the best in the world, the other guys couldn't be as good as us–that's the NIH part. But we had an extra special issue at Cadence in that we had–and Richard Newton was the author of this–we had a system which, as I said earlier, only worked if you developed tools on top of it internal to your company and if you acquired companies you screwed it all up. Now we're not talking about NIH, we're talking about something very different, we're talking about the cost of integrating a company that you bought. And what Cadence discovered later on when they had bought a few bad companies, was that the net gain from these acquisitions was negative on many of these–and again, these were the bad companies. The net gains were negative. And the reason was mainly because the cost of integration was too high. It took years of work before you actually got these things integrated. So it's a funny thing–if you stand way back from the Cadence history, Cadence set an amazing record of growth by acquisition, even though our original architecture was specifically designed not to grow by acquisition. So it was painful. Then in the 90's Cadence went into what I call great pain trying to absorb the acquisitions, and by then acquired technology was half the company. So NIH aside there is simply a matter of analyzing the acquisitions very carefully and seeing if you can afford to absorb all the cost that comes later.
Don	Dave can I interject, I think, I'd like to ask Jim this and make it more of a question. Do you think that the later acquisitions by Cadence were [more driven by financial rather than technical considerations]?
Jim	Well let's say a couple of things about the later acquisitions. The half that were good saved the company. So I don't even worry about the half that were bad because there was so much good done by the ones that were acquired that were positive for the company that they way off-set the bad ones. Now, on the other hand, when people look at this financially they said, "Whoa, a bunch of these acquisitions made no sense financially," and so–in fact, Cadence soured on acquisitions, and today they say they don't want to do anymore. So there has been a big change largely based on the high cost of integration of the ones that were poor, but on balance acquisitions have worked for Cadence.
Don	I think it was the difference in the time. I think the later acquisitions like Simplex, were made more for financial reasons. In fact, we stood on our head structurally, and maybe you want to come back to that David, on some of the earn outs, in order to coax the sellers to do that deal. So, I think some deals were more financially driven as opposed to technology driven.
Jim	Simplex is a perfect example of an acquisition that looked like a good financial deal and also brought some strong management into the company, which I think Cadence was looking to get and they did get some strong managers out of it, but as it turns out the software quality was not so good. So what they bought was not a great bargain, it wasn't a great deal. Cadence tended to over pay in the mid 90's.

Dave	Don, can you comment relative to Oracle in terms of this–Ray Lane was a prior panelist here and he made the comment that Larry Ellison would always want to spend his money on Oracle's own developers rather than putting it in some target investors' pockets, so therefore, he resisted doing as many acquisitions in the early years.
Don	Earlier on, Larry didn't want to buy anything. Really.
Glen	Do you think Oracle had a "non-invented here" issue or not?
Dave	They used to have, and they don't now, or you don't agree with that characterization at all?
Don	Absolutely, it was worse than that, it was "no". I tried for many years to get Larry to buy. Where are you going with that?
Dave	Why did he come to heed your advice, aside from the wisdom of it?
Don	It's so obvious!
Jim	Ellison was a believer in great technologists, number one, and I'm the same, so Larry and I are similar in that regard and he would do anything to get a great guy, he'd buy a company to get a great guy, but it was about the great guy it wasn't so much about financials so he just looked at it differently.
Dave	Okay, Mike do you want to follow up on terms of this "non-invented here" issue or in terms of whether it makes sense to always seek out the strategic goal rather than technology goal?
Mike	My tenure at Cadence was relatively short after the merger. But my sense was that we had invested in our sales force. We had an international sales force that had good relations with customers, so the key challenge was to get more product that our sales force could sell. We were out trying to buy things that we could sell. Personally, I was disappointed and, because we lost some key engineering people, I don't think our engineering team did as good as it could in coming out with new products. So we were searching and the one I remember was that we bought Valid Logic. It wasn't clear to me why we bought that, other than to get market share because the technology was not good. I guess it gave us some more products, and maybe there were one or two products we ended up using, but I think the economics were to try to get more product than our sales force could sell. That is a challenge faced by start ups today, that you have a great point product–how do you sell it? You have go out and build a sales force and build support. It's very difficult. So, if people like Cadence, Mentor or Synopsys can go buy these point products and get a lot of leverage and keep doing it, I think that's what's going on. But as Jim says you must make sure after you buy it you've got something you can support and can continue to invest in going forward.
Jim	Valid was acquired because we were trying to get into the systems sector of the market place. We were strong in ICs not in systems. It was a big mistake. It backfired on us badly. The revenue was not in good shape; the financials weren't great. There were some really good people that came with it so it wasn't a total disaster but it sure put a hiccup in the company and it came during a weak time during the economy.
Dave	But the Valid deal was probably a good example of a target that was not integrated well in the sense that Cadence alternated messaging on whether Valid customers would have to adopt Cadence technology or would continue to be supported on the Valid technology and so Cadence lost some of the customers that it thought it was buying. So that is a good example of what not to do.
Jim	Yeah a lot of the customers did go away–it was a big problem.

Benefits of Merging Competitors

Dave	Yes. So, Glen you had a colorful comment that "competition is overrated." Let's talk about the PiE–Quickturn deal. That was another example of two competitors merging and perhaps in that case it was two competitors bashing each others heads in. So why don't you tell us that story and what you mean in saying that competition is overrated and tell us about the benefits of consolidating market share.
Glen	Fine. PiE and Quickturn were both in the emulation business. Basically Quickturn sued PiE for patent infringement, so we were spending a lot of money on lawyers [David interjects: "always a bad idea"] and trying to get product into the market as fast as we could and the quality was going to hell–in fact, I think we had a machine catch on fire. So I called [Quickturn's new CEO, Keith Lobo] and told him my story about how I didn't want to be CEO of a new company and we should put these together and quit spending so much money on lawyers and so we did; we got it put together. PiE had a real good software group, probably better than the Quickturn group, and Quickturn had a much better mechanical group than PiE did so there was another case where the two came together and the sum was a lot better–two plus two is five again.

Criticality of an Effective M&A Strategy

Dave	Don, you made the comment to me that there are very few examples of companies that became the leader in their space without using M&A as their growth engine and that having a good M&A strategy is really a key for growth. Cadence and Oracle are certainly examples of that. Do you want to comment on that?
Don	I think a good M&A strategy can help most any company. I mean even somebody as powerful as Google, although they went a little far maybe with YouTube. But I think a well thought through M&A strategy is critical–there have got to be things that you need or capabilities of some sort that you don't have and it's a quick way to obtain them.
Dave	Okay, Glen do you want to comment on what you think is a good M&A strategy in your view?
Glen	Well there are lots of reasons to make an acquisition but also in M&A it depends on your size. I mean if you are a $20 million dollar company and you want to be a $40 million dollar company real quick you better go buy something. You know, because you are not going to go and develop it in-house. The smaller companies have a hard time spending the money required to do in-house development. It just kills your earnings and lowers your currency. There's a size issue involved I think with M&A and I think until you get critical mass or if you want to get to critical mass real fast then you have to do M&A–there is no question about it.
Jim	A lot of the little companies especially in EDA are no longer big enough to do an IPO. So the major driver for M&A for those companies is just what Glen is saying–getting to a critical mass. They are trying to get up to $100 million dollars or even $50 million dollars in revenue where they have a chance of doing an IPO because other exits are not as easy today. So there are a whole bunch of funny drivers going on today because of the warps in the financial system. And some of those acquisitions may not be the same ones you would have done if there weren't that pressure on you.
Mike	Well I have worked with some companies that have done a pretty poor job of doing acquisitions and I think the general rule of thumb is 9 out of 10 technology acquisitions don't work; and Don, I am interested in whether at Oracle you have a business development group that's doing the acquisitions or is it really operating management. One of the challenges is that operating managements are very busy and I am not sure they always do a very good job of doing acquisitions.
Don	I agree and that is really a good point Mike. Absolutely we have a separate group and you don't want to deflect their full energies from accomplishing business objectives. But once you have broken the ice so to speak and have seen and bought a couple of companies, you see what is right and what is wrong and you stop doing what's wrong and amplify what you do right. And you build on your wins, your experience. I think, for example, that Wall Street has been very slow to come around and agree that maybe Oracle does know what they are doing. But it really is counter-intuitive, because the more you do something the more it would seem reasonable that the better you'd do it. I think that's maybe what you were suggesting.

Keys to M&A Success

Dave	Don you mentioned perhaps with respect to Oracle or Cadence you felt that aggressiveness and decisiveness were two key elements of success in M&A. Did you want to comment on why you believe that?
Don	Well it's obvious. One of the key areas of course is that the G&A folks are often the ones fired, let go. And you've got to know before you close the deal what you are going to do. You don't just buy something and then wait around to make personnel decisions because people are all anxious and you have to, or want to, bring certainty to their future and that is the only considerate and appropriate thing to do. So where does the new team fit in and where don't they fit in. If you do it right, like this Seibel deal, everybody knew what was going to happen, and it happened on closing. That lets you realize both the cost savings and the synergies quickly. That is what I am getting at.
Dave	Mike can you comment?
Mike	Well we were investors in Datek, which was an on-line brokerage firm. There were a bunch of companies in the Internet [bubble days] who were trying to do on-line trading and that company was able to get a certain scale but the market was getting more competitive and so they ended up merging with a company called AmeriTrade which had some bricks and mortar and recently merged with TD Waterhouse. I think that they are the largest on-line brokerage firm today and the synergies that they were able to realize were on the order of hundreds of millions of dollars by putting those companies together and now they are competitive with Schwab and others and so the only way in that case for them to get to that scale was to merge. They were lucky in that there was someone there that was very strong-minded about putting those companies together and was responsible for it and I think in that case that was a critical element.
Don	In all cases, the CEO has to know what he's doing and if he or she doesn't it is a real problem.
Mike	Right, and in the case I mentioned, the CEO was really committed to doing the integration and making it work.

Changing M&A Environment

Dave	Let me ask you this, given that you are all directors of numerous companies. Arguably, the M&A environment has changed. There's a lot more M&A litigation particularly in public–public deals and even in public private deals, and you've got Glass Lewis, ISS and other proxy advisors advising institutional shareholders how to vote on M&A deals and criticizing deals and deal process, so one could argue that there's more risk for directors when doing M&A. So, do you think that as a general rule directors are a bit more risk adverse in looking at M&A or that that's just me talking. Glen, do you want to start with that one?
Glen	I don't think we're more risk adverse. I really don't. I think these changes do help to keep directors' total focus on what's best for shareholders. I haven't seen any indication that directors have backed away from M&A.
Mike	I think public to public is a particularly tough area because there are these requirements and you risk putting a company into play and losing control of the process but I think you can get around that by defending deals based on their strategic reasons. But I agree with Glen that public-private deals are still going on.

Strategic vs. Private Equity Buyers

Mike	I think the challenge these days is that it used to be that only strategic buyers could pay a higher price and they pretty much had these companies to themselves. But now, with all this leverage that is available there are PE firms that will pay prices that are EBITDA multiples higher than even the public is willing to pay. I don't know what that's going to mean, but I don't think it can have a good ending.
Don	Well, Oracle never lost a deal and so I don't agree with you on that.
Mike	[Don't you think private equity firms can outbid the strategic buyers now?]

Don	The strategic buyer by definition should be able to pay more and it's not a function of leverage, because most of these company's have excess cash that we can lever. So that's not a big deal. But your assertion, I just don't agree with it Dave. I have been involved in many discussions and no one has brought up the issue of M&A litigation, so I really don't think that's an issue in my judgment. Separately, I heard a speaker yesterday at the Stanford summit commenting on expertizing compensation (which must prove he must not know much about it) and the value of pressuring boards and management to do what such commentators think. What that does and the end result of all that is forcing companies right into the hands of the private equity people and it's not going to be the worst companies, it's going to be the best companies, because the best companies are going to get the highest leverage so I think that it has its significant downside. Now, clearly, the option scandal is horrible and that was very embarrassing and ok that's all bad, but let's not throw the baby out with the bath water and let's be careful what we legislate as far as governance goes because that's a little bit like what Europe does and if you all want to trade the system in Europe for our system, go to Europe.

Integration-Cultural and Operational Fit

Dave	Well…..that's a good segue to cultural fit, the need to integrate people trained in different work environments and traditions in the M&A context. Jim, give us your comments on that, particularly as it came together in the Cadence context.
Jim	Cultural fit is a big point and it gets tougher and tougher these days. [For example, ECAD's R&D team] was largely Chinese. The good news is that we had a lot of Chinese people inside of SDA and we were able to bridge that gap but there still existed within Cadence for years after the merger a Chinese subculture that lasted forever. I mean the language was Mandarin and if you were an outsider and drifted into that realm you had a little difficulty doing it. So you can cross cultures. I think what worked there was that the underlying principles in both of the cultures were similar and both were good. That's the key thing. Whatever culture means. Somehow we had a match and it did work. But I've seen cases where the opposite is true and you really must watch out for that because that can be a disaster.
Dave	Glen, can you comment about the importance of strategic and operational fit and in terms and how important it is for the CEO to be really focused on the integration effort?
Glen	No. [laughter.] Seriously, that really is hard to comment on. If you have an overall strategy for your company then you've already figured out how M&A is going to plug into that. So, then hopefully you have a business development group, like the one Don noted Oracle has, that views M&A from a strategic viewpoint and you take that disciplined approach and you go looking for what you want.
Mike	One of the things that Joe did to ensure cultural fit was to rename the company as Cadence after the ECAD-SDA merger. Joe even made it a contest as to who could pick the best name. That made it something to get excited about, made it a company of equals, emphasizing that it's going to be our company now, not your company or my company. That was very successful.
Glen	The other thing Joe did is when we acquired Gateway and got Verilog, he spent a lot of time on the airplane going back and forward making sure that those people felt like they were really a part of the company not just stuck in an outpost. He was outstanding at that.

Valuation (and Strategic vs. Private Equity Buyer Views Thereon)

Dave	So let's turn to valuation: Don, you said that valuation is "all about the numbers" and that it was pretty easy to value target companies–do you want to comment on that and how you think about valuing companies?
Don	Well it is pretty easy. You've got to look at the company and what it's going to look like afterwards and so you've got to have the ability to know to what degree you can eliminate some of the redundant G&A functions. Hopefully a whole bunch. If you don't have the significant synergies, I'm not sure you should be buying. So it's not the process or the philosophy that's difficult, it's the implementation that's difficult. You need people who know what they are doing and as I said before after you've done a few of these you kind of get the knack of it.

Dave	What about discounting the target's next twelve months projections and so forth and what's a conservative way to do that or you don't do that conservatively and you implement that in a different way?
Don	Well, first of all you don't believe them-you don't. That's not realistic; you must make your own projections as buyer, as you know pretty well what the market is for their products and services…. Let's take Oracle's acquisition of Hyperion, as an example, even though it is not closed. A lot of people never heard of Hyperion. But when you've got all of these salesmen throughout the world who will be selling Hyperion with Oracle's stamp of approval it's only realistic to expect sales to increase, and it's only a question of how much. And we're better able to say that than Hyperion, just to use that as an example.
Dave	The classic target argument is yes, because my product is going to drive so much revenue on your side because of your massive channel, I should get some synergy credit for that in the valuation. Do you agree with that?
Don	Well they do. I mean these deals are anywhere from 15% to 50% over market and that's why there is a premium. But you better be able to realize those synergies quickly.
Dave	Mike, what do you think of valuations and how to go about that.
Mike	Well, I think the strategic buyers have an advantage, as with a company like Hyperion. They can look at incremental revenues, no extra cost and high gross margins, whereas a private equity group has to look at it differently. I do think the private equity groups today are saying that we can leverage companies more than a company like Oracle or public companies are willing to leverage and so because of that they're saying we can pay higher prices. If I were cynical you'd say that the very large private equity firms today are just leveraging the S&P, so they are going to say the S&P can grow at 11 or 12 percent and I can borrow money at 7 or 8 percent and I can leverage that one to one, so I can earn 15 or 16 percent return which unfortunately, is probably all that they are trying to earn today. And so there is a challenge. I think there are sectors today, like the media sector, where the private equity prices are higher than the public prices, which seems odd to me because we always thought of the public as being the one who would pay the highest prices for these assets.
Don	Well, there's a couple of points. One is that most companies are not levered near to their maximum, near to what is possible.
Mike	How much cash do you have on the balance sheet at Oracle?
Don	$8 billion. But we could go up easily to $10 or 20 billion dollars and not get a junk bond rating. I have nothing to do personally with any of the private equity firms. I'm not going to give them a commercial. But their position is that they add value. And I think that a number of the PE firms such as KKR, TPG, Blackstone and Silver Lake in fact do add value, in addition to just leverage. They get a bad rap in my opinion in the press.

Earnouts as a Valuation Gap Bridge

Dave	Ok, so let's move on to bridging valuation gaps through earnouts. Glen, you have been on the right side of a number of earnouts, so why don't you talk about how you think about earnouts.
Glen	Well, the first one I ever saw was SPC, and I wasn't really involved in negotiating that but it turned out pretty good for SPC and I think it turned out good for Cadence too. They got what they wanted. I don't like earnouts. I think, like it says in your summary, it's a good retention tool. But then you get into arguments about how it was priced and how it was sold and how it was bundled and they didn't keep the product separate and that creates a little tension, but if that's the only way it can get done then most of them are worth doing I guess.
Dave	Don, you want to comment on earnouts?

Don	Well they are good and bad. An earnout is, I think, appropriate when you've got a company for example with no revenues. At that point it's like a number of the companies in EDA who now have small to no revenues and in that case it's pretty speculative to give a fixed price, so how do you get there? An earnout. I spend a lot of time on accounting and so I think that I totally agree with Glen that you want to make it crystal clear that you get an earnout on revenues on this, not that, this, and so it minimizes those arguments. The downside, and there is no way to get around it, is you've got "his" and "hers." You've got the guys with the earnout and you've got the rest of the company. You have buyer employees who'll say, so why should I help these turkeys –they are getting extra money for it. You've got a clear division and incentive of others to not cooperate. And worse than that, when the 3 year earnout period expires for example, target employees get their money and then often leave. So, do earnouts only at great peril.
Dave	Jim do you want to comment on earnouts?
Jim	Well the counterpoint is look at the companies that have not done many earnouts, such as Synopsys. They also have had serious retention problems. But I agree completely with Don that if the company is small and has little or no revenue I think an earnout is the only way to approach it, there's just no other way. You just can't value on speculation.

Effect of Timing; Exchange Ratios

Dave	Ok, so, let's just talk about how important good timing is when doing M&A deals. Glen, you want to tell us about your experience negotiating the Cadence-Verplex deal or the Cadence-Quickturn deal relative to the impact of timing.
Glen	About 80%. The ECAD-SDA deal would never have happened if the market didn't crash and that's nothing anybody can control. The Verplex deal was different in that we had been talking to Cadence for a while and they had made what we had considered a very low offer so we all went away for about six months and then when Verplex was doing better we came back together and got the deal done which included an earnout because we had some pretty bullish bookings forecasts that they obviously didn't believe. Right Don?
Don	No, you made that deal with somebody else. No, I think Glen is understating it. I think when you have a person who's straight and gives it to you straight I think that's a great advantage to both the seller and the buyer.
Dave	Let me just ask one question. Don, you are very sophisticated in thinking about exchange ratios and so forth and there's kind of an element of betting whether your stock is going to go up or down and things like that. Do you have any kind of rules of thumb in terms of how you like to set your deals up? Do you like fixed cash, fixed stock, floating exchange ratios? Any particular ways you like to think about it?
Don	No, I think you want to do what's fair for both parties because that's the way you are going to close the deal. If you've got a meeting of the business and financial minds then it's just implementation. I would never bet the stock market. Just look at the market, even just today, the market's down about 195 points, so if you priced a deal today, you lost the bet. That is and should be in the noise in your transactions.
Mike	I remember one opportunity where we had a public company that we were going to merge with another public company that was much larger and we did go in and do some diligence and I think discovered that they probably had not taken the reserves they needed to on inventory so it was going to be at some point a $50 or $100 million dollar announcement adjusting inventory. And our investment banker, who was from a very good firm, advised us that we should take the risk on that announcement and I think as shareholders of the target we said no we are not going to take that risk because they weren't prepared to announce that until the deal was announced. So in that case we had to put a collar in place to cover that. So I think the lesson learned is don't always listen to your investment banker because they don't always have your interests at heart.
Don	How about ever! [laughter]

Advice to Founders in Various Market Segments

Dave	Ok, so if you were advising some guys who were starting up companies now and thinking about the right area to start their company in, how should I position myself to be acquired down the road, or said another way what is a fundable company from your point of view, what advice would you give such founders?
Jim	Are you entrusting that to me? [Sure.] OK. Every market sector is different. Now, I'm playing in both the EDA and the entertainment sectors. Two very opposite sectors. Entertainment is exploding right now in certain areas and EDA is maturing. In EDA, luckily I'm an expert and I wouldn't play if I weren't really an expert because you have got to find a few places, and there are only a few, where there are opportunities to make large improvements. So, for example, there are some things happening right now in EDA–there's open access and there's multicore computing and in software in general those same types of things are happening. Open access is a discontinuity, every customer has got to change and move to it in the next couple of years, so you can make a play that is open access based and we've got a couple of companies that do that where they are entirely playing on this discontinuity. We have another company that's playing on the multicore discontinuity –they've got an algorithm that parellelizes a difficult problem that nobody could ever solve in the last 30 years, now with multi-core coming on, that product is hot. They can come on the scene not with 2X or 3X but with a 100X improvement over competing products. Even in a mature market place a 100X differential can change things nicely and you can generate a nice market. But the counterpoint to that is that if you go frontal with major vendors in a mature market, your odds of succeeding are not very good, so you really have to watch out for any frontal attacks in a mature market place. Generally you have to do a side attack and then expand your side attack and hopefully, they don't notice what you're up to until you've made a lot of traction. In the entertainment areas, the risk is a whole different kind of risk. There are explosive things happening. Where they are exploding you have got to be really careful because a lot of people are jumping on that same thing. It gets obvious. So, for example, we are launching something in the virtual world space. Something similar to Second Life. Second Life hit the front page of *Business Week* 6 or 9 months ago and their revenue has done nothing but go up and up and up since then. And this is the thing, it was not fundable just five years ago–we were in the same sector five years ago and you couldn't raise money even though the bubble was still cooking–but now there is this new Second Life phenomena where you get virtual commerce going on, they've already got a billion dollars a year in virtual commerce and they're still tiny and barely functioning. Imagine if that gets a lot of traction and is done well. Well, a lot of people are imaging that. I'm sure Google is imaging that, Microsoft is imaging that, a bunch of venture capitalists are imaging that. So if you go into that area, it actually is the same rule as I'd use in EDA. You better really understand it. You better be able to move crisply and fast with the best solution and you better be able to make deals. And here's where the deal making is a little more complicated. It's young technology moving fast. You gotta make deals. You can't possibly raise enough money or have enough talent to do everything yourself. So you got to look around for partners who can bring critical pieces to the table and you've got to be like Glen was, open to being very flexible about what kind of deal you make. And that's because it's fast moving and if you don't do it somebody else will put together this group of things and they'll be there. It's very similar to what we did in EDA but the speed of change is much, much higher. It is very, very risky if you don't move crisply and the way you move crisply is by deal making.
Dave	Ok, Don what about the enterprise software space–would you tell somebody they're nuts to go into that space with all the consolidation there and customers increasingly looking to the large players as the only viable providers to them?
Don	No, software as a service (SAS) is great.
Dave	Do you think it would be prudent to start a company in the enterprise software space?

Don	Absolutely. I just attended the pacific securities conference in the city on Friday and we probably had 20 companies. And 10 to 15 were public. Of course, Salesforce.com has a market cap of over $4 billion. I wouldn't say it's wide open. But again, it's in the vertical markets where there is great opportunity. Vertical expertise, and you give that narrow set of customers what they're looking for and they will sign up quickly. Now the problem with software as a service (SAS) is the accounting. You can get to cash flow break even, but you won't be profitable because of the deferred revenue, which is a revenue recognition issue. But fortunately, the market is looking past that. An example is Salesforce.com which basically doesn't have any earnings, but its market cap is $4 billion, so I'd say absolutely there is opportunity. Now to go in ERP, no, there is zero opportunity there.
Dave	Ok, Mike what about the spaces that your fund focuses on consumer, healthcare, etc.
Mike	I think for TA probably we've invested across a broad range of industries and I think since 2000 the percentage of our investments are going into tech has fallen. I think partly because tech has matured–in the 70's, 80's, 90's, there were high growth rates and that created lots of opportunities; today I think it is tougher but we're continually seeing good companies in the Internet space and in the software as a service space. We're seeing companies still coming up with interesting things in the storage space. I think the semiconductor space is probably a little bit tougher than then it used to be and semiconductor capital equipment is now a tougher area. In EDA, you still do read about companies getting started doing different point products but as Jim said you have to know something very specific and do it very, very well.
Dave	Glen, what do you think in terms of EDA or semiconductor startups? Do you think that's a fool's errand or smart?
Glen	I think there's probably some areas of interest. I'm not expert in what those areas are, but I think as fast as the technology is moving now, I'm sure that there will be some areas that Cadence doesn't have or Synopsys doesn't have and somebody will be able to capitalize on. The problem is that no EDA startup will ever be able to be a stand-alone company. So, anytime you start an EDA company, you're starting it up to sell it to Synopsys or Cadence, probably just those two; they won't sell it to Mentor.

Semiconductor Startups; Growing Influence of China

Mike	I heard a statistic that the U.S. venture industry used to finance 80% of semiconductor startups, but in the last couple of years, because of the emergence of China and India, today the U.S. venture industry might only be financing 25% of the semi startups. Only 50 to 200 semiconductor startups get funded a year. I think that makes it harder for the U.S. industry to feel confident about understanding where the competition is coming from. So There's a big startup in the semiconductor capital equipment industry which was a group of guys from China, very well educated, who had worked at Applied Materials and other companies. Rather than starting a company here in the U.S. they started in China, and they obtained substantial governmental financing. I think that to me is very discouraging. The U.S. used to be the place that semiconductor startups happened.
Don	If you are doing a semi deal, and you don't take China into consideration, you are nuts.
Dave	Speaking of China, Don, 51Job had a pretty hot IPO and that was one of the first in China and you were involved of course, so do you want to comment on your views on China and where that's going and how's that's going to impact the U.S. economy and how venture capitalists are thinking about China?
Don	How long have you folks got? This is a very big subject and surprisingly I have a view. 51Job is strictly a domestic company so it really doesn't have a great impact on America. The question is–in fact I was just meeting with the other outside director and the founder David Chao at DCM. He discussed forming a new semiconductor company in China, because it is much easier; engineers cost about 25% of what they do in the US, so you can throw a lot of engineering talent and they're good, a lot of them are trained here. The founders of Vimicro include 4 Ph.D.s from Berkeley and one from Stanford. And the Chinese government will put in money, and give you multiple, significant tax holidays. China is being very aggressive in soliciting these companies. It is not a level playing field.
Dave	Do you think that a lot of venture money will continue to flow to China?

Don	It's already happened. There's a lot of venture money. There are many funds of funds. Carlyle's got a big fund. There's an abundance of money and there will probably be too much money chasing to few good deals just like here.
Mike	I agree. What we've seen in our manufacturing companies is that we used to move manufacturing over there and hire a couple of manufacturing engineers. Now we're hiring key design engineers in leading technologies and China graduates more Ph.D.s now than the United States does and they're very good. You know I'm glad I'm as old as I am because I wouldn't want to have to compete in that environment, because it's going to be very difficult. There is some chance the [Chinese] government will, at some point, implode and that that will be overdone, but it's going to be something to be reckoned with if not.
Don	But there is an opportunity to cooperate. At Oracle we have 10,000 folks plus in India; I can't say how many we have in China but you can bet it's quite a few. I would say it's an opportunity to cooperate with them and thus be stronger and to take on, of course, the rest of the world.

Effect of Private Equity on the M&A Environment

Dave	Right. Mike do you want to comment on private equity in general and the effect that's having on the M&A environment, valuations and so forth?
Mike	I put some statistics together from a recent conference that Harvard had. They had all the leading funds represented. Private equity sponsored M&A in '05 was about $340 billion; last year it was $600 billion, so it's grown dramatically. The statistic was that 24% of the U.S. M&A was driven by private equity controlled companies in '06 and that's up from 5% back in the late 80's and 90's, and 15% recently. It has also had a large effect on LBOs. I think there were 6 LBOs last year that were over $10 billion in size; previously, the largest was RJR back in 1988 which was $30 billion dollars. We're eclipsing those numbers–money just seems to continue to flow and the challenge is that these institutional investors want to put money in these alternative assets and the venture industry per se has not been able to grow rapidly enough to take that capital in, so it's got to go somewhere, so it is flowing into these private equity funds. There are now sixty firms that have funds of over $2 billion, so the amount of money that's out there that needs to be put to work is tremendous. I think the fee structures–these firms are getting a 2% or a 1.5% fee on the money they raise over the life of a fund, essentially 20% of the capital that they raise they are going to get in fees whether the funds perform or not– so it's very difficult for them to say no. The other big driver right now is the amount of leverage—there are these collateralized debt obligations where people are taking pools of debt and essentially striping it and taking the most secured part and selling it to people who want secure debt and then there's a layer down at the bottom that is really equity that they are leveraging that up and I think that's where the problems will occur and it has occurred in these second tier mortgages as well because they've done the same there. Right now we'll go out and bid, we'll say gee, we think this company is worth seven or eight times and the banks will be bringing in a financing, a stapled financing, a debt financing, and say, we'll lend you seven or eight times. This morning we heard one of our companies talking about being able to borrow 12 times EBITDA, which is ridiculous. I think unfortunately the private equity funds are just doing what frankly the venture funds did in 1998-99. The public was screaming for internet deals and the venture guys gave it to them. The debt markets are screaming for deals right now and the private equity guys are going out and looking to find any company that they can leverage and they are buying it. It's a frenzy. I think there is going to be some backlash. I think in Europe right now the private equity funds are under a lot of pressure. I think the *New York Times* on Sunday had a piece that talked about changing the taxes to eliminate– most of the funds get capital gains treatment on their profit interests and apparently some politicians are going back and saying you know maybe you really haven't invested anything and we should treat that profits interest gain as ordinary income. One PE executive had a lavish birthday party and that got a lot of bad press, so there is some backlash directed at perceived excesses of PE firms. I don't know what will stop [PE driven M&A], but certainly it can't continue at the rate that it is right now.
Dave	Don, do you want to comment on private equity in general. For example do you think it's too dependent on re-structuring?

Don	I don't, but I don't disagree with what Mike was saying. I'm very concerned about the proposed tax change—wouldn't that also apply to venture capital funds? If so, that's not good. I really think in all candor that venture capital has been good for America and certainly has been good for Silicon Valley and I think that if they changed the tax structure, it really would be disadvantageous for the country. I think that's really serious. I can see it happening, because the private equity funds are dealing with such big amounts of money and when they have a big success, it generates a lot of money and people of course are envious.
Jim	[I think it's important that buyers] think very carefully about how companies fit together and whether they can fit together and will they grow well. I'm very leery of the criticism of private equity firms to the effect that "they are just going to buy these companies, put them together, pretty them up and flip them right away." Some private equity people don't say that. Ray Bingham [of General Atlantic], for example, says, no that's not the way I'm going to approach this, I'm going to try to put something together–of quality–try to build something the way the venture community tries to build it.
Mike	I think one of the most recent trends is that the large sponsors are now going to the large investment banks and telling them that they need to commit capital essentially on a bridge loan basis so that if my firm alone can't speak for 3 billion dollars, I go to Merrill Lynch and I say my firm will put up a billion and a half, so you need to put up a billion and a half to get the debt deal, and then we'll figure out who to lay it off on, so rather than me calling up Silver Lake and partnering ahead of the deal, that method allows me to compete, and the banks are now willing to do this. I think it's reminiscent of bridge loans, remember in earlier days people used to do bridge loans, and that was a sign that people were getting overly aggressive.
Don	Absolutely. Mike used the term "staple." You can get an investment bank and then they'll want to "staple"–to provide the money in addition—and charge three times the fee of the bank that's doing the transaction, so those who supply the money, on a stapled basis, are really getting the best part of the business.

The Key Value Driver is a Mix of Organic and M&A Growth

Dave	Any parting comments that any of you care to make in terms of tips on M&A deals or anything like that?
Don	I should have said this earlier. I was also involved with Macromedia, and I don't know how many acquisitions we did–maybe 30 or so. We started out there too with a merger of equals. Later, we took a company that was selling for $20 initially and eventually Adobe paid us like $3.5 billion, so I consider that very successful. I think that if you overlay a good acquisition program on top of good organic growth, it can enhance shareholder values significantly.
Dave	With that, I would like you to join me in thanking our great panel.