Who Runs Silicon Valley

In this edition, Mark Lonergan profiles the board directors of the Silicon Valley 150.
Foreword

"I welcome this report from Lonergan Partners in examining a relatively under-studied group of company boards and directors in the Silicon Valley. Their data-rich analysis will provide board directors and readers with valuable information for discussion and debate. I am pleased to have provided input and advice to this educational effort."

David Larcker

David is a Stanford GSB Professor and Advisor to “Who Runs Silicon Valley: Board of Directors Edition”

"The Silicon Valley Directors Exchange is pleased to sponsor this report on the board directors of the Silicon Valley. We hope this information will be useful in understanding our local brand of high tech governance, and contribute to the efforts of SVDX to educate boards."

Christine Russell

Christine Russell is Chairman of SVDX. CFO of the Evans Analytical Group, she currently serves as audit committee chair for QuickLogic Corporation (NASDAQ:QUIK), and has held numerous other board positions for technology companies as well as non-profit organizations.

Notices

The people on our cover are all members of Silicon Valley 150 boards. A key to the SV150 boards they sit on is included at the end of this report. Their photographs on the cover are provided for informational purposes and do not represent an endorsement or recommendation of this report, its opinions, authors, advisors, or sponsors.

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Silicon Valley companies lead the world in innovation. Apple, Google, Hewlett-Packard, Intel, Facebook, Twitter, and eBay are household names around the world. They taught us all how to dress for work, how to lay out the office, how to post and tweet and blog—and they can also teach us about how to govern a corporation.

Behind the innovation and value creation, a group of relatively anonymous individuals are the watchdogs of trillions of dollars of market value: Silicon Valley public company boards of directors. In 2015 alone, their board decisions resulted in such diverse outcomes as the appointment of Jack Dorsey as CEO of Twitter, the spin-off of PayPal from eBay, and the acquisition of Aruba Networks by Hewlett-Packard.

Our report shines a spotlight on the largely unknown world of Silicon Valley corporate directors. With this profile we hope to make this little known community easier to understand, and at the same time make a positive contribution to board governance in the Silicon Valley.

Preview

In our profile we found the boards of the Silicon Valley reflect their unique cultural and business environment. A preview of some Silicon Valley distinctions we will explore in this report:

- Relatively few women board directors
- Widespread involvement of Stanford degree holders
- Overlapping network populating Silicon Valley boards
- Founder-technologists as day-to-day leaders
- High concentrations of founder voting power at companies with dual class stock structures
INSIGHTS

Silicon Valley Board Population

Who are the board directors who run the Silicon Valley? We took as our population the 1,156 directors, both independents and insiders, who sit on the boards of the 150 largest publically traded companies headquartered in the Silicon Valley. The San Jose Mercury News calls this list the Silicon Valley 150 (hereinafter simply the SV150). These companies all have headquarters in the five Bay Area counties: San Francisco, San Mateo, Santa Clara, Contra Costa, and Alameda.

The Companies in the SV150 compete in multiple tech industries, vary in age from over fifty years old to less than one year as a public company, and span multiple revenue brackets.

Our profile looked into the backgrounds and board service of each of the 1,025 individual people in this dataset. We wanted to know—are they men or women, how old are they, where do they come from, and how were they educated? We also wanted to know how long had they served on their boards, how well were they compensated, and did they sit on other SV150 boards?

Our information is all based on publically available data, from government filings (our primary source has been the DEF 14A proxy statement), the company websites, press releases, business press bios, and news articles. We did not run any "background checks" on these folks, so we only know what they have been willing to tell the world. The dataset is also a snapshot in time, with our population being directors listed on their company websites as of August 15, 2015. Changes since that date are not reflected in our data.

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The typical SV150 board director:

Is a man
No surprise here, 1,003 of 1,156 total director seats were filled by men—that’s 87%.

Is a baby boomer
The average (and median) age is 59 years. That means the average director was born in 1956 under President Eisenhower, was 13 years old when men landed on the moon, and used a typewriter to write college term papers; by the time the World Wide Web was launched in 1991, they were 35 years old.

Is US in “origin”
82% of directors are US in origin\(^2\) versus 73% of SV150 CEOs. Top countries of origin for non-US natives are India and the United Kingdom.

Is an active executive
602 (60% with all CEOs removed) are active\(^3\) executives outside of board service.

Is well educated
99.9% have an undergraduate degree. 38% of directors have a degree from a Top 10 ranked US University.\(^4\) See sidebar for number of director degrees awarded by each University in the ranking.

Is a graduate degree holder
73% of directors have a graduate degree. The MBA is the most typical graduate degree with 38% of directors earning one. In total, there were 152 PhDs, 57 JDs, and 12 MDs.

Director Education Breakdown

<table>
<thead>
<tr>
<th>Degree Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have an Undergraduate Degree</td>
<td>99.9%</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>72.7%</td>
</tr>
<tr>
<td>Masters (non-MBA)</td>
<td>38.1%</td>
</tr>
<tr>
<td>MBA</td>
<td>38.0%</td>
</tr>
<tr>
<td>PhD</td>
<td>13.1%</td>
</tr>
<tr>
<td>JD</td>
<td>4.9%</td>
</tr>
<tr>
<td>MD</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

\(^1\) Red indicates number of degrees awarded to SV150 directors
\(^2\) Top 10 ranked national universities per US News & World Report
\(^3\) See sidebar for number of director degrees awarded by each University in the ranking
\(^4\) Data from 2015
Board Service Profile

The typical SV150 board director:

Receives average\(^6\) compensation of $293,961
This compensation is derived from the latest proxy statements and is composed of 23% cash, 53% equity, 21% options, and 3% other. The value of equity and options is the grant date fair market value.

Serves with an insider\(^6\) Chairman
56% of SV150 companies have an insider Chairman. 47 companies have the current CEO as Chairman, and 26 have a former CEO serving as Chairman.

Serves with a founder on the board
68 of SV150 boards had at least one founder filled seat, with an average founder tenure of 16 years on the board (this includes pre IPO tenure as well as post IPO tenure). To learn more about a founder serving on a SV150 board, see the sidebar on Jack Dorsey of Twitter.

Meets with their full board 7.4 times per year
This is an average of roughly once every 50 calendar days.

Serves with 6 other board directors, and the CEO
The average board size including the CEO is eight members.

Sits on an average of 1.3 committees
Each committee has a typical membership of three directors.

Has served on their board 7.7 years
However when CEOs, founders, and all other insiders were removed, the average tenure of an SV150 director dropped to 7.1 years. 28% were appointed during the period from 2006-2010, with a peak one-year period in 2013 with 110 independent director seats filled that year.

Largest SV150 Boards

<table>
<thead>
<tr>
<th>Boards with 13 Members</th>
<th>Boards with 11 Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adobe Systems—SV#27</td>
<td>Advanced Micro Devices—SV#18</td>
</tr>
<tr>
<td></td>
<td>Google—SV#3</td>
</tr>
<tr>
<td></td>
<td>KLA-Tencor—SV#31</td>
</tr>
<tr>
<td></td>
<td>Lam Research—SV#21</td>
</tr>
<tr>
<td></td>
<td>Cisco Systems—SV#5</td>
</tr>
<tr>
<td></td>
<td>Salesforce.com—SV#20</td>
</tr>
<tr>
<td></td>
<td>Intel—SV#4</td>
</tr>
</tbody>
</table>
The typical SV150 board director:

**Joined the board after the IPO**

Not surprisingly, most SV150 directors (66%) joined the board after the year of the IPO. For those directors who joined prior, the average time they spent on the board prior to the IPO was just under five years.

**Serves on an unclassified board, but just barely**

Just over half the boards in the SV150 are unclassified (75 of 144), meaning all directors are up for re-election each term. Classification, which staggering the election of the directors across years, is seen as a means of defending a company from takeover bids, and is used more often in smaller and younger companies in the SV150, than among older and larger companies, whose size may provide them with an inherent defense against takeover bids.

**Rate of Classified Boards In SV150**

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPO before 2010</td>
<td>28%</td>
</tr>
<tr>
<td>New IPOs</td>
<td>93%</td>
</tr>
</tbody>
</table>

**Serves with directors who sit on other SV150 boards**

20% of SV150 board seats are filled by directors who serve on multiple SV150 boards. 105 of these companies had at least one director who sits on another SV150 board, and a few companies had the majority of their members sitting on another SV150 board. To learn more about a director with more than one SV150 board seat, please see the sidebar on Marc Andreessen.

**Serves with directors who have been on the board 10+ years**

105 boards had at least one member (not including the CEO) who had filled the seat more than ten years. 27% of non-CEO seats were filled by directors with over ten years of service.

**Rate of Non-CEO Directors with Over Ten Years Board Service by Company 2014 Revenue**

<table>
<thead>
<tr>
<th>Revenue Range</th>
<th>Average % of Seats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $500M</td>
<td>21%</td>
</tr>
<tr>
<td>$500M – $4B</td>
<td>27%</td>
</tr>
<tr>
<td>Over $4B</td>
<td>33%</td>
</tr>
</tbody>
</table>
Now that we have profiled the typical board, we have to admit all boards are unique. However, they tend to be different in some predictable ways. The dimensions we found most useful to predict the size, composition, and make-up of SV150 boards were the size of the company (based on revenue bands), and the time elapsed since the IPO. Within the largest SV150 companies, those in the S&P 500 stood out as having much in common.

**Here are our observations:**

**The Mature SV150 Company in the S&P 500**

Thirty of the largest SV150 companies are also in the S&P 500. They are all tech giants with an average $22 Billion in 2014 annual revenue, although within this group no company can compare to Apple, with $199.8 Billion in 2014 revenue. Their average age as companies is over 20 years.

The boards at these companies come out of central casting. They are filled with statured CEOs, finance experts, academics, and former government bureaucrats—the mix dependent on how each business defines its key skill requirements. In addition:

- They are most likely to be large (the average is 11 directors each), with a high degree of board structure as befits stewards of trillions of dollars of market cap. These boards are the least likely to be classified (only 4 of 30) and they also are the most likely to have more than the three standard committees.

- They are the least likely to have a CEO as Chairman (only 20% of the time).

- When the CEO is Chairman, they have a Lead Independent Director formally denominated.

- Their directors tend to be older (the average age was 61).

- They are the most likely to have multiple women members serving alongside male directors (18% of the seats at these companies are filled by women, and more than half the boards in this group have two or more women directors).
The Newer IPO

Forty-three of SV150 companies have had an IPO since 2010. These companies by definition have had extraordinary growth trajectories and enjoyed high investor enthusiasm. In fact, when we looked back over 2010-2015, an impressive roster of 42 companies hit the SV150 list the year they went public.

Here are our observations:

- In this group of companies, the founder is often the CEO, and the CEO is often the Chairman of the Board as well (the CEO is called a founder 40% of the time, and is Chairman 49% of the time. The CEO is also a founder and the Chairman 30% of the time). When the CEO is the Chairman, there is a Lead Independent Director named 62% of the time.

- The CEO may also enjoy significant voting power either through majority ownership of common stock, or through a dual class stock ownership structure. Two-thirds of SV150 companies with dual class stock ownership structure are among these newest IPOs (for more on this topic see page 27).

- The average board size is 7.5 members, with co-founders often serving in a board capacity as well (11% of seats). The board is classified 93% of the time.

- Members of these boards are younger (average age is 54).

- Women are not as well represented (only 12% of seats); in fact, 13 of these 43 companies have no women directors at all, and when a woman is serving on the board she is typically the only one.

These last two demographic descriptors may reflect the composition of the board during the company’s private era, when private investors manned the board of directors—Silicon Valley private investors are demographically younger and more male than the typical corporate board director.

Young company boards are most likely still evolving. As experienced former SV150 CEO and board director Robin Abrams notes: "It is the rare private company board that prepares for its post IPO phase with more than one independent director added before it goes public." As such, the first few years of the new board’s tenure will see opportunities to add membership, and potentially address issues of independence and diversity.

On the following page we provide a side-by-side comparison of the two board models using Intel and Tesla Motors to illustrate each type.
## Side-by-Side: a Mature S&P 500 Company Versus a New IPO Company

<table>
<thead>
<tr>
<th></th>
<th><strong>Intel</strong></th>
<th><strong>Tesla Motors</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IPO</strong></td>
<td>1971</td>
<td>2010</td>
</tr>
<tr>
<td><strong>SV#</strong></td>
<td>4</td>
<td>20</td>
</tr>
</tbody>
</table>

### Total Board Members
- **Intel**: 11
- **Tesla Motors**: 7

### Chairman of the Board
- **Intel**: Andy Bryant, former Intel CFO/CAO, since 2012
- **Tesla Motors**: Elon Musk, founder Chairman since 2004

### Lead Independent Director
- **Intel**: Susan Decker, former President of Yahoo (SV#24), on board since 2006
- **Tesla Motors**: Antonio Gracias, CEO Valor, on board since 2007

### CEO
- **Intel**: Brian Krzanich since 2013
- **Tesla Motors**: Elon Musk since 2008

### Classified Board
- **Intel**: No
- **Tesla Motors**: 3 classes with staggered 3 year terms

### Average Director Age
- **Intel**: 59
- **Tesla Motors**: 46

### Average Tenure
- **Intel**: 9.6 years
- **Tesla Motors**: 7.3 years

### Cumulative Board Tenure
- **Intel**: 106 years
- **Tesla Motors**: 51 years

### Female Directors
- **Intel**: 2
- **Tesla Motors**: 1

### Directors with MBAs
- **Intel**: 5
- **Tesla Motors**: 3

### Directors with PhDs
- **Intel**: 2
- **Tesla Motors**: 0

### Chair of Audit Committee
- **Intel**: Frank Yeary, former Global Head of M&A for Citigroup
- **Tesla Motors**: Robyn Denholm, Chief Financial and Operations Officer, Juniper Networks (SV#23)

### Chair of Compensation Committee
- **Intel**: David Pottruck, former CEO Charles Schwab
- **Tesla Motors**: Ira Ehrenpreis, General Partner, Technology Partners

### Chair of Corporate Governance and Nominating Committee
- **Intel**: David Yoffie, Professor, Harvard Business School
- **Tesla Motors**: Ira Ehrenpreis, General Partner, Technology Partners

### Chair of Finance Committee
- **Intel**: Charlene Barshefsky, former US Trade Representative
- **Tesla Motors**: NA

### Other Directors
- **Intel**: Aneel Bhusri, CEO Workday (SV#65)
- **Tesla Motors**: Brad Buss, CFO SolarCity (SV#126)
- **Intel**: John Donahoe, former CEO eBay (SV#8)
- **Tesla Motors**: Steve Jurvetson, Draper Fisher Jurvetson
- **Intel**: Reed Hunt, former Chairman of FCC
- **Tesla Motors**: Kimbal Musk, CEO of Medium, Inc and brother to Elon Musk
- **Intel**: James Plummer, Professor, Stanford University
Chairmen are increasingly influential figures in the Silicon Valley. Legislation such as Dodd-Frank and Sarbanes-Oxley requiring new governance and reporting policies, especially around audit and compensation, has compelled many Chairmen to become increasingly directive regarding the selection of directors for their boards.

That being said, their role is often misunderstood. "People sometimes believe the other directors 'report' to the Chairman, and they don’t," observed report advisor Chuck Kissner, an experienced SV150 board director and Chairman at ShoreTel (SV#105). While the Chairman is usually very involved in board membership planning and decision making, he does not in fact act as the other directors’ boss.

Many companies in the SV150 have Chairmen who are founders, or who combine their role with being the CEO. Twenty-six Chairmen are in fact what we call the Trifecta: Founder-CEO-Chairman. They tend to be active visionary technologists with a strong personal stamp on all aspects of their company. An example is Nick Woodman of GoPro (SV#51): he is the creator of the product, founder of the company, and now its CEO-Chairman. This lifestyle branded company is closely identified with Woodman’s personal story.

The SV150 is also distinct for the high rate of former CEOs serving as Chairmen. Twenty-six Chairmen are the former company CEO, and six of these are also founders. Larry Ellison, founder and former CEO of Oracle (SV#6) and its current Chairman, is an example of this. While the experience base of a former CEO-Chairman may prove valuable in companies with highly complex technologies, it is also likely that his presence on the board is a complicating factor for the new CEOs and the other directors. As one of our report advisors said, "You don’t want the old CEO in the boardroom with a remote control unit over the new CEO.”

The role of Chairman varies greatly by company and individual, but in a nutshell, the Chairman makes sure the board is doing its job. Chairmen set the meeting calendar, prepare agendas, ensure key decisions are discussed and voted upon, and oversee long range membership planning. They should be able to deal effectively with the CEO, perhaps even mentor him or her when necessary, and they must make sure the CEO knows what the board requires the company to do. In return, the Chairman should help the CEO get timely value from board meetings.
The Typical SV150 Chairman:

Is an insider

The majority (81 of 139) of SV150 Chairmen are insiders. Forty-seven are the company CEOs, and twenty-six are the former company CEO (for a total of seventy-three current and former CEOs). Of the remaining sixty-six Chairmen who never were CEO of the company, six are considered founders.

There are fifty-eight independent Chairmen who are not founders or former executives at the company—that’s 42% of the time.

Chairmen: Insider Breakdown

When an insider, serves alongside a Lead Independent Director

While there are only 58 directors called Lead Independent Director (LID) in the SV150, 52 of them serve in situations where the Chairman is an insider. There is often a LID when the Chairman is the current CEO (32 LIDs, or 68% of the time), former CEO (13 LIDs, or 50% of the time), or other insider (7 LIDs, or 88% of the time). Since all boards are required to have executive sessions in the absence of the CEO, boards where the CEO is Chairman typically have a LID to preside over these sessions.
**The Typical SV150 Chairman:**

**Is a man**
No surprise here, 97% are men.

**Is a baby boomer**
The average age is 59 years, which is same as the overall director average.

**Is US in "origin"**
Eighty Percent of Chairmen are US in origin (versus eighty-two percent of directors overall), versus seventy-three percent of the SV150 CEOs. The country where the most foreign born Chairmen came from was China, with five, followed closely by India with four.

**Is well educated**
But not more so than directors overall. Forty-six possess an MBA, and eleven have PhDs. Chairmen were slightly less likely to have a degree from an elite school (35% versus 37% for all directors who are not chairmen). This reflects the population of founder-CEO individuals among Chairmen, who were less likely to go to an elite US school (perhaps a result of both the much higher proportion of foreign born individuals among founders—40% of founders were of foreign origin—and a more risk taking/entrepreneurial mindset which might not be as credential seeking).

**Has educational ties to California**
Forty-nine Chairmen do (36%), more proportionally than all Directors who are not Chairmen (33%).

**Is an “active” executive**
Sixty-three percent are not retired, although they are unlikely to be a sitting CEO elsewhere. Only 12 Chairmen are actual sitting CEOs at other companies. One example is Kenneth Kannappan, Chairman at Mattson Technology (SV#141), who is CEO of Plantronics.
The Typical SV150 Chairman:

**Has spent an average of 13 years on the board and 8 as Chairman**
This means the average Chairman has had five years on the board before assuming Chairman responsibilities—although in the case of CEOs serving as Chairmen, many (21) assumed both roles simultaneously. While assuming both roles simultaneously could be a big challenge for someone new to the board, we found 13 independent Chairmen who assumed both roles in the same year.

**If assigned to a committee, most likely serves on nom & gov**
Only 63 Chairmen had a formally assigned committee role, and the most likely place for them to serve was on nom & gov, with 39 Chairmen serving on this committee.

**Is compensated slightly higher than other directors**
The average compensation of all Chairmen who are not and never were the CEO of the company, excluding a few Chairmen with zero comp, is $301,559 (as opposed to $284,228 for all non-Chairmen).

**Possesses an average of 6.17% shareholder voting power**
Voting power of directors with greater than 1% is reported in the proxy on the table “Security Ownership of Certain Beneficial Owners and Management.” Sixty-three Chairmen of the companies in our sample appeared on these tables. The average voting power of all Chairmen, including the 76 Chairmen who were not reported in the tables, came to 6.17%. This reflects the significant portion of Chairmen who are founders, and also the multiplying effect of SV150 companies with dual stock ownership structures (see page 27).

### Number of Chairmen by Voting Power Band

<table>
<thead>
<tr>
<th>Voting Power Band</th>
<th>Number of Chairmen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported as Zero</td>
<td>76</td>
</tr>
<tr>
<td>1% to 10%</td>
<td>43</td>
</tr>
<tr>
<td>11% to 20%</td>
<td>7</td>
</tr>
<tr>
<td>21% to 50%</td>
<td>7</td>
</tr>
<tr>
<td>Over 50%</td>
<td>6</td>
</tr>
</tbody>
</table>

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The Board “Social Network”

The boards of SV150 companies have considerable director overlap. One-in-five SV150 board seats is filled by someone who fills another SV150 board seat. This is true across all industry sectors, company sizes, and company ages.

Some boards are so well-connected that more than half their members sit on another SV150 board. At LinkedIn (SV#37), four directors out of seven sit on another SV150 board. At SanDisk (SV#12), the number is six of eight. We observed that quite a few very successful companies had high rates of SV150 networked directors.

The director network is broader than overlapping seats alone. Many directors went to the same schools (the graduate programs of the top five schools awarded 40% of directors’ graduate degrees: Stanford, Harvard, UC Berkeley, Santa Clara, and UPenn) where no doubt even those who were not contemporaries would have developed overlapping networks of classmates, professors, mentors, and friends. The programs of the Stanford Graduate School of Business and the Harvard Business School awarded 40% of director MBAs, educating 15% of the individuals serving on SV150 boards.

Top Degree-Awarding Universities for SV150 Directors

<table>
<thead>
<tr>
<th>University</th>
<th>Undergraduate Degree Holders</th>
<th>Graduate Degree Holders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stanford University</td>
<td>58</td>
<td>151</td>
</tr>
<tr>
<td>UC Berkeley</td>
<td>35</td>
<td>36</td>
</tr>
<tr>
<td>Harvard University</td>
<td>29</td>
<td>103</td>
</tr>
<tr>
<td>University of Michigan</td>
<td>25</td>
<td>13</td>
</tr>
<tr>
<td>Princeton University</td>
<td>23</td>
<td>5</td>
</tr>
<tr>
<td>UCLA</td>
<td>16</td>
<td>23</td>
</tr>
<tr>
<td>Santa Clara University</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>Cornell</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>University of Pennsylvania</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>Carnegie Mellon</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>MIT</td>
<td>3</td>
<td>16</td>
</tr>
</tbody>
</table>

This table illustrates the importance of California-based universities in a demographic profile of SV150 directors. Overall, 35% of directors had at least one degree from a school located in California. Local education may provide an entry point for many directors into the Silicon Valley.
Is the board social network a strength or weakness of Silicon Valley?

What we heard in the development of this report is that director overlap on the boards of the SV150 is a result of the unique nature of the Silicon Valley technology world.

Tech markets and technologies are complex to understand, and having at least some board directors with a deep understanding of the specific technologies of their companies is considered an asset to a board. Where better to find directors with this knowledge than in the Silicon Valley itself? In addition, the culture of Silicon Valley may reject outsiders with a different style—one director we spoke to with nom & gov experience put it this way: "I strongly prefer to recruit Silicon Valley based directors because the culture is a better match. We are more entrepreneurial here, less formal. People from outside the Silicon Valley can end up not working out so well.” The result is a board network of overlapping and interconnected individuals with many common demographic attributes (see section on Board Diversity starting on page 23).
The CEO Board Network

In our work in executive search, we find one of the most requested attributes for new board members is to be a sitting tech sector CEO. Just under 50% of the CEOs in the SV150 sit on another (usually only one) public company board.

At the largest SV150 companies over $4 Billion in revenue, 11 of 28 CEOs served on other public boards, but the companies served were frequently non-tech S&P 500 boards such as Nike (Tim Cook of Apple), Procter & Gamble (Meg Whitman of Hewlett-Packard), Wal-Mart (Marissa Mayer of Yahoo), Nordstrom (Brad Smith of Intuit) and Pfizer (Shantanu Narayen of Adobe Systems). They did not for the most part serve on boards for companies in the tech sector.

In general, it was the CEOs of mid-range SV150 companies who tended to serve on other SV150 boards. And it was the smallest SV150 companies that tended to benefit from external SV150 company CEOs serving on their boards (see sidebar).

While the experience of serving on another public board is considered an asset for CEOs, especially if relatively inexperienced, there were few SV150 CEOs in the sample who served on more than one public company board. Report advisor Robin Abrams put it this way: “As the work of board service commitments has increased, most boards have a ‘one outside board’ policy now—they want the CEO focused on their own business.”

SV150 CEOs Serving the SV150 as Directors

<table>
<thead>
<tr>
<th>CEO</th>
<th>Company Where CEO</th>
<th>External SV150 Board Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanjay Mehrotra</td>
<td>SanDisk SV#12</td>
<td>Cavium SV#100</td>
</tr>
<tr>
<td>Elon Musk</td>
<td>Tesla Motors SV#28</td>
<td>Solar City SV#126</td>
</tr>
<tr>
<td>Thomas Werner</td>
<td>SunPower SV#30</td>
<td>Silver Spring Networks SV#136</td>
</tr>
<tr>
<td>Richard Wallace</td>
<td>KLA-Tencor SV#31</td>
<td>NetApp SV#16</td>
</tr>
<tr>
<td>Jeff Weiner</td>
<td>LinkedIn SV#37</td>
<td>Intuit SV#25</td>
</tr>
<tr>
<td>Gary Guthart</td>
<td>Intuitive Surgical SV#39</td>
<td>Affymetrix SV#106</td>
</tr>
<tr>
<td>Aart de Geus</td>
<td>Synopsys SV#40</td>
<td>Applied Materials SV#11</td>
</tr>
<tr>
<td>Lothar Maier</td>
<td>Linear Technology SV#46</td>
<td>Formfactor SV#122</td>
</tr>
<tr>
<td>Jeff Housenbold</td>
<td>Shutterfly SV#59</td>
<td>Chegg SV#115</td>
</tr>
<tr>
<td>Aneel Bhusri</td>
<td>Workday SV#65</td>
<td>Intel SV#4</td>
</tr>
<tr>
<td>Frank Slootman</td>
<td>ServiceNow SV#73</td>
<td>Imperva SV#145</td>
</tr>
<tr>
<td>Greg Lang</td>
<td>PMC-Sierra SV#84</td>
<td>Intersil SV#79</td>
</tr>
<tr>
<td>Keith Grossman</td>
<td>Thoratec SV#88</td>
<td>Zeltiq SV#143</td>
</tr>
<tr>
<td>Peter Gassner</td>
<td>Veeva Systems SV#113</td>
<td>Guidewire Software SV#101</td>
</tr>
<tr>
<td>Dan Rosensweig</td>
<td>Chegg SV#115</td>
<td>Adobe Systems SV#27</td>
</tr>
<tr>
<td>William Jenkins</td>
<td>Barracuda Networks SV#125</td>
<td>Nimble Storage SV#128</td>
</tr>
<tr>
<td>Anthony Bettencourt</td>
<td>Imperva SV#145</td>
<td>Proofpoint SV#135</td>
</tr>
</tbody>
</table>

13 of the CFOs serving the SV150 also sit on another SV150 board, although we found only one that had a seat on his own company’s board: Bob Swan, CFO of eBay (SV#8)
SV150 Super Directors

Most SV150 directors occupy only one seat (89% of individual directors). However, within the subset that occupy multiple seats, there are a very few we call "SV150 Super Directors" who may fill three (15 directors), four (3 directors) or five (2 directors) seats. This person almost always has a special background or expertise, often financial in nature, which is greatly valued. A few significant investors also sit on multiple SV150 boards.

The Super Audit Chair

A great audit chair is a special breed of individual. He or she works closely with the company’s finance executives, auditors and the General Counsel to ensure that the company’s financial statements are accurate and timely.

The SV150 re-uses audit chairs at a high rate. Thirteen individuals serve as audit chair on 29 different SV150 boards. The individuals most frequently seen as audit chair in the SV150 are listed to the right along with their audit chair assignments.

Profile of a SV150 Super Director

Ann Mather is both a top SV150 Super Director (tied for first place with five total seats) and a SV150 Super Audit Chair (three seats out of her five). In addition to her audit chair assignments listed above, Ann is also a director at Shutterfly (SV#59) and Glu Mobile (SV#129). Ann’s financial expertise includes having served as CFO of Pixar from 1999-2004, as well as having held senior positions at Village Roadshow and The Walt Disney Company.

Originally from England, she has a Master of Arts degree from Cambridge University and is a chartered accountant. Ann is 55 years old.

Prominent Investor Directors

Palo Alto Networks—SV#68
Barracuda Networks—SV#125
Nimble Storage—SV#128
Jive Software—SV#140

Jim Goetz

Jim Goetz of Sequoia Capital sits on the boards of four of his investment successes. His board compensation is reported as zero for all four boards.

Google—SV#3
Chegg—SV#115
Zynga—SV#72
Jive—SV#140

John Doerr & Ted Schlein

John Doerr (left) and Ted Schlein (right) of Kleiner Perkins Caufield & Byers, the well known venture firm, sit on two SV150 boards each.
Women Directors

Last year in our CEO study, only four SV150 companies were led by women CEOs. Oh what a difference a year makes! In this year’s SV150 group there are now eight women, who by definition sit on their own boards. The eight boards below with women CEOs include 17 of 153 total women-filled director seats in the SV150 as of our study date—that’s 11% of the total. Note that when a woman is CEO, there is usually at least one other woman-filled seat on the board.

Aside from these eight CEOs, there are 125 other individual women serving on SV150 boards. These non-CEO women fill 145 seats on 102 boards. Four of these seats are held by insiders, such as Sheryl Sandberg, COO of Facebook (SV#10), who sits on her own board. The remaining 121 seats (79% of women-filled seats) are considered independent.

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Profile of a SV150 Woman Director

Yelp – SV#99

Mariam Naficy

Mariam has been a director at Yelp since 2014 and is also founder and CEO of Minted, an internet based marketplace for artists and designers. She is age 44.

Her first entrepreneurial success came with Eve.com, sold before she was age 30.

Mariam graduated Williams College with a BA in Political Economy and worked in investment banking prior to obtaining her MBA from Stanford’s Graduate School of Business in 1998.

Because there are so few women, we will group them all together (CEOs, insiders, and independents) in this profile of the typical woman director.

The Typical Woman Director:

Is younger than the men
The average age for women is 57 years as opposed to 59 for men. That means the average woman director was born in 1958. The average age of the “new class” of women directors elected in 2014-15 is 54 years.

Is US in “origin”
Fifteen percent of women-filled seats were held by directors who were not of US origin as compared to nineteen percent of men-filled seats. Women not of US origin were most likely to come from Canada or the United Kingdom. Only four women directors of 125 individuals came from countries we classified as non-English speaking: 1 woman each from Israel, Taiwan, Argentina, and Japan.

Is more likely to have an elite education than the men
Forty-five percent have a degree from a Top 10 US Ranked University, while only thirty-seven percent of men do.

Is a Graduate Degree Holder
Eighty percent have a graduate degree versus seventy-one percent of men. Women were more likely to get an MBA—fifty percent of the women had earned an MBA as opposed to thirty-eight percent of the men. Only eight percent of women had earned PhDs versus twelve percent of men.

Board Service of Women Directors:

Women represent 13% of the directors on the SV150 boards—which is lower than the 19% of seats they fill in the S&P 500. However, this rate of representation varied by size of company. At SV150 companies with revenues over $4 billion, women filled 19% of seats.

Rate of Women-Filled Seats by Company 2014 Revenue

<table>
<thead>
<tr>
<th>Revenue Range</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $500M</td>
<td>11%</td>
</tr>
<tr>
<td>$500M – $4B</td>
<td>13%</td>
</tr>
<tr>
<td>Over $4B</td>
<td>19%</td>
</tr>
</tbody>
</table>

Note: this breakdown includes CEOs
Women serve on the majority of boards (102 of 144) in our sample. Sixty boards (42%) have only one woman director and forty-two boards (29%) have no women members at all. *The Washington Post* reports that only 2% of S&P 500 boards do not have any women members.  

Thirty-nine percent of women sit on their board as the “lone woman”

This was more likely to happen at newer IPOs where 49% of company boards had only one woman, as opposed to boards whose IPOs were before 2010, where 39% had only one woman. However, whenever the CEO is a woman, in all but one case the board had at least one other woman independent director.

Women are no more likely to sit on multiple boards than men

Both men and women average 1.1 boards served per individual performing board service.

Women have served an average\(^{13}\) of 5 years on their board

22% percent of women-filled board seats were filled in 2014-2015, as compared to 12% for men-filled seats. The proxy year when a currently serving woman director was most likely to have started board service was 2013.
Women receive higher board compensation than the men
The average compensation for women directors is $300,483 versus $283,804 for men. A significant factor in why women’s average compensation is higher than men’s is size of company served. The largest SV150 companies offered 67% more compensation per seat than the smallest companies. Women’s seats were 33% likely to be at one of the largest SV150 companies, as opposed to men’s seats which were only 22% likely to be so, which heavily impacted the calculation of average compensation.

Women are poorly represented in leadership positions on the board
Women make up a low percentage of leaders—less than 13% of the CEOs, Chairmen, and LIDs. The one role which is the exception is committee chairmen, of which they represent 13.8% (see graph below).

The most likely role for women directors is as member of the audit committee
We tallied committee assignments by gender and found 48% of women directors serve on the board audit committee (as opposed to only 38% of men), 40% serve on nom & gov, and 33% serve on compensation. Men had more even rates of membership across the three committees (38% on audit, 39% on compensation, 36% on nom & gov). This disparity may reflect the current population of experienced business women available for board service, in which there are seemingly more women with backgrounds as accounting partners, CPAs and CFOs than there are women with other C-Suite experience in technology. We speculate that if the available pool of experienced women with non-finance C-Suite backgrounds in technology were to grow faster than the pool of women with finance backgrounds, the assignments of women to committees might become more evenly distributed.

Women’s Rate of Leadership on Boards

<table>
<thead>
<tr>
<th>Role</th>
<th>Women</th>
<th>Average Seat Representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Seats</td>
<td>153 women</td>
<td>13.2%</td>
</tr>
<tr>
<td>Committee Chairs</td>
<td>62 women</td>
<td>13.8%</td>
</tr>
<tr>
<td>LIDs</td>
<td>7 women</td>
<td>12.1%</td>
</tr>
<tr>
<td>Chairmen</td>
<td>4 women</td>
<td>2.9%</td>
</tr>
<tr>
<td>Founders</td>
<td>2 women</td>
<td>2.5%</td>
</tr>
<tr>
<td>CEOs</td>
<td>8 women</td>
<td>5.5%</td>
</tr>
</tbody>
</table>

Profile of a SV150 Woman Director

Apple—SV#1
Andrea Jung
Andrea Jung is director at Apple, where she has served on the board since 2008. Apple has 2 women board directors.

Andrea, age 56, is formerly CEO of Avon Products. She was the first female CEO and Chairman of Avon.

Andrea is currently CEO of Grameen America, a nonprofit microfinance organization. She is a graduate of Princeton University.
Board Diversity of Thought

What Is Board Diversity?

"Boards that don’t have any diversity can be unattractive to new board candidates," according to report advisor Kambiz Hooshmand, an experienced SV150 CEO and director who is currently Chairman at Infinera (SV#74). "People want to join a board where there are constructive differences in perspective," he added.

Diversity of thought on boards was valued by the directors we interviewed. While diversity of thought cannot readily be measured, we discuss several relevant demographic and service-related factors below.

Country & Culture of Origin

One feature of diversity of thought rarely discussed, perhaps because there is no domestically based special interest group to champion it, is the rate of participation of foreign born directors. An unusually high number of successful tech entrepreneurs have been found to be foreign born (see ‘Welcome to the Unicorn Club, 2015; Learning from Billion-Dollar Companies’). In our dataset we found that 40% of founders sitting on SV150 boards were foreign in origin, with China (inclusive of Taiwan) and India being the most likely countries of origin.

When you exclude founders, only 16% of board directors are foreign born. The groups most likely to be foreign in origin were Founders (40%), CEOs (27%), and Chairmen (21%), with significant overlap across these three groups.

Google—SV#3

Sergey Brin

Google’s co-founder and director Sergey Brin is from Russia.

Workday—SV#65

Jerry Yang

A co-founder of Yahoo (SV#24), Jerry Yang is from Taiwan. He has served as a director at Workday since 2013.

Lam Research—SV#21

Abhijit Talwalkar

The former CEO of LSI Corporation, Abhi Talwalkar is from India and has served on the Lam Research board since 2011.

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Race & Ethnicity

Proxies do not assign board members to a race, and since it is difficult to accurately assign race without the subject’s cooperation, we chose not to report the rate of racial inclusion on SV150 boards. However in October 2014, a Rainbow PUSH Coalition survey of race on the boards of 20 major technology companies reported that out of 189 directors, three were black and one was Hispanic; they found that eleven of the 20 companies (including Facebook, Twitter, Yahoo, eBay, Chegg, Intuit, and Google) had no one of color on their boards. The tech sector seemed to lag other businesses in this area, according to an Alliance for Board Diversity study reported in USA Today, which found that in the Fortune 500, 7.4% of directors were black and 3.3% were Hispanic.

The dialogue on racial inclusion on boards has been a call to action in the SV150. On October 2, 2015, Apple (SV#1) announced the appointment of an African American to its board: James Bell, former CFO of Boeing. He is not the first African American to serve on the Apple board, but at this time he will be the sole one. Also, in September 2015, Hewlett-Packard (SV#2) announced that it will add two African Americans—one each—to the new boards that will be formed when it splits into two companies in November 2015.

James Bell

James Bell is a newly appointed director at Apple and is the former CFO at Boeing. He is the second African-American to sit on the Apple board. The first was former National Public Radio CEO Delano Lewis in the early 1990s.

Hector Garcia-Molina

Hector Garcia-Molina has been a director at Oracle since 2001. He is a professor at Stanford University in the departments of Computer Science and Electrical Engineering. He is the only SV150 director we found known to be born in Mexico.

Colin Powell

Former US Secretary of State Colin Powell has been a director on the board of Salesforce.com since 2014. The October 2014 Rainbow PUSH survey on race found Salesforce.com had two out of the three African-American directors they claimed to find serving on large tech company boards in their survey.
Board Diversity of Thought continued...

**Age**

Board directors need to show maturity of thought as well as independence, so years of business and life experience have value. However, being older is not necessarily the same as having more to contribute.

“I think it is important to recruit directors under age 45 to get a more risk-tolerant mindset as well as relevance to R&D,” suggests report advisor Robin Abrams. “This is the demographic I am most interested in recruiting to boards.”

SV150 boards are not particularly diverse along the dimension of age. The average director is age 59, and 83% of directors are older than age 50. Only 6% of seats are filled by directors under age 45.

**Extended Board Tenure**

Tenure on a board can be an asset, especially in a tech company. "In technology companies, since it takes longer to understand the cadence of the business, it takes longer for a new board member to make a strategic contribution,” according to report advisor Kambiz Hooshmand. "For the first few years on the board, the director is learning the business. However, after a period of some years," he continued “the director runs out of new ideas, and it is time to refresh the board.”

On SV150 boards, 27% of seats are filled by directors who have served over ten years. At 46 companies in the SV150, there were three or more non-CEO directors with over ten years of tenure on the board. On boards with such a heavy dose of experience, despite its potential benefits, it is critically important to pay attention to the refreshment rate of board membership.

Report advisor David Larcker, professor and governance expert at Stanford University, asked the question: “Is someone who has been on the board over ten years likely to show independence of thought, or are they more likely to have adopted existing management paradigms for the business?”

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© 2015 Lonergan Partners. Who Runs Silicon Valley: Board of Directors Edition
While no one knows for sure if having women on tech boards contributes to company success, some studies support this conclusion. According to a recently released study by global accounting firm Grant Thornton, titled “Women in Business: the Value of Diversity,” S&P 500 companies committed to diversity outperformed rivals by nearly 2%. The report’s authors claimed American publically traded companies with all-male executive boards missed out on $567 billion in 2014. However, for purposes of this study, we do not have any means of directly addressing the value creation potential of having more women on SV150 boards.

What is clear is the dialogue about women’s “under representation” on boards is having an impact on recruiting women to boards. In 2014-15, women-filled seats represented 22% of the total new SV150 board appointees. Of these appointments, 39% became the lone (we assume first in most cases) woman on the board, which is something of a mixed success—if these boards stop at one woman on the board at any one time, the natural tendency of women’s representation on boards in the SV150 will remain at roughly the current 13% (since one woman on a board of eight members—the average of the SV150—will represent 13% of the board).

Our study cannot predict which types of diversity are most valuable to boards or shareholders. We do feel safe in recommending, however, that tech boards facing the swiftly changing marketplaces of today should systematically refresh the membership of their boards in order to prevent the entrenchment of old ideas and business models.
Dual Class Stock Structure

How would you feel if you discovered that in the next election some citizens had ten times the voting power of other citizens? These "super-voters" would have a bigger say in deciding the outcome of elections.

Well, in at least eleven SV150 companies, there are in fact "super-voters" whose control over a separate class of stock confers disproportionate voting rights. These companies have a "dual class stock structure" in which the voters of the "super-vote" class of stock have many multiples (usually ten times) the voting power accorded to voters of other classes of stock. The stock class with favorable voting rights typically does not trade in the market, but is instead controlled by insiders, founders, or other shareholders friendly to management.

Google (SV#3), Facebook (SV#10), LinkedIn (SV#37), GoPro (SV#51), and an increasing number of other SV150 companies utilize this structure to offer founders and the pre-public owners a means to retain control over key board decisions such as the selection of the CEO and the response to takeover bids. The common opinion is that investors are more likely to go along with IPOs with this stock structure when the company is being led by a visionary founder with significant pre-public ownership upon whom future growth expectations rest. In the set of companies with dual class stock structures in the SV150, we found members of the board of directors whose voting power was as high as 84% and whose percent voting power exceeded the percent of stock actually owned by greater than 40%.

The Wall Street Journal\textsuperscript{21} reports that 14% of IPOs in 2015 (through August 17) are dual class in stock structure, as opposed to only 1% of IPOs in 2005. Recent tech IPOs such as Alibaba, Groupon, Zillow, Fitbit, and Box are high-profile examples. While no one has been able to prove whether this is predominantly a tech phenomenon, what is clear from the trend data is that this structure is becoming increasingly popular both within the S&P 500 (where it is reported that 8% of companies are dual class in structure) and outside the S&P 500 (where the rate is reported to be 10% and growing).\textsuperscript{22}

A 2012 report from The Investor Responsibility Research Center\textsuperscript{23} found that governance at dual class stock structure companies around audit and review of capital expenditures was less rigorous. They also concluded that in their sample these companies underperformed. Given that this structure is now being used at some of the "hottest" new IPOs around, it is not going to be easy to make that argument in the SV150; however, it is safe to say that the directors at companies with this structure are put in an unusual position. They represent all shareholders, but the fact of dual class stock structure ownership means the ones whose opinions matter most in a shareholder vote are generally serving on the board alongside them.\textsuperscript{24}

<table>
<thead>
<tr>
<th>SV150 Companies with Dual Class Stock Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed in order of SV150 rank</td>
</tr>
<tr>
<td><strong>Google</strong>—SV#3</td>
</tr>
<tr>
<td><strong>Facebook</strong>—SV#10</td>
</tr>
<tr>
<td><strong>VMware</strong>—SV#17 (owned by EMC Corporation)</td>
</tr>
<tr>
<td><strong>LinkedIn</strong>—SV#37</td>
</tr>
<tr>
<td><strong>GoPro</strong>—SV#51</td>
</tr>
<tr>
<td><strong>Dolby Labs</strong>—SV#58</td>
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<tr>
<td><strong>Workday</strong>—SV#65</td>
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<tr>
<td><strong>Zynga</strong>—SV#72</td>
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<tr>
<td><strong>Yelp</strong>—SV#99</td>
</tr>
<tr>
<td><strong>Veeva</strong>—SV#113</td>
</tr>
<tr>
<td><strong>RingCentral</strong>—SV#131</td>
</tr>
</tbody>
</table>
Director Compensation

Company proxies are required to report the cost of director compensation in a standardized table, making it straightforward to collect and compare these figures. The standard table dictates that compensation be shown in four categories: cash, equity, options, and other, although not all companies offer directors all four components. For proxy purposes, equity and options are required to be valued at the grant date fair market value, and depending on firm stock performance and eventual timing of monetization, would most likely have a different actual realized value to the director.

Accepting the uncertainty inherent in this valuation of equity and options, the average director total compensation was $293,961. The compensation type breakdown was 23% cash, 53% equity, 21% options, and 3% other. While the trend among public companies is towards equity and away from options, the SV150 differs from the S&P 500 in the options based portion of director comp.

Director Compensation Averages: SV#150 vs S&P 500 IT Sector

<table>
<thead>
<tr>
<th></th>
<th>SV150</th>
<th>S&amp;P 500 IT Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>$295K</td>
<td>$294K</td>
</tr>
<tr>
<td>Options</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: company proxy tables with adjustments

Cash Compensation

The average director cash compensation was $68,772. This is the average of a wide range of cash paid, from zero (seven SV150 companies did not report any cash compensation to directors) to an average of over $100,000 in cash at several SV150 companies.

Equity Compensation

The average director equity compensation was $156,357—or more than twice the average cash value. The purpose of compensating directors with equity is primarily to align director financial interests with shareholders. Equity in the company is intended to be held long term by the director. Some SV150 companies require a certain equity stake be held for the director’s tenure and ensure the director achieves the required stake through equity compensation in the first several years of board service.
Options
The value of options in director compensation makes up 21% of the total value, or an average of $60,359. This number tended to be much higher at the more recent IPOs (valued at an average of $121,079 versus $40,729 at companies which went public pre 2010), and represented a bigger proportion of the total value being paid to directors. Options simply understood have no actual value until exercised, and can expire with no value if the company stock price does not increase.

The flipside of this is that under scenarios in which the company’s future value is much higher than the strike price of the options, the realized value of the options could represent big upside from the “nominal” value on the grant date. While we do not know how often that happens with SV150 company director options, we speculate that the possibility of this occurring in the SV150 is greater than amongst non-tech public companies in general, and could be an incentive to directors in choosing to serve an SV150 board which offers option based compensation over companies that do not.
Concluding Observations

The Traitorous Eight
Founders of Fairchild Semiconductor

From left to right:
Gordon Moore
C. Sheldon Roberts
Eugene Kleiner
Robert Noyce
Victor Grinich
Julius Blank
Jean Hoerni
Jay Last
(1960)

“Silicon Valley is a mindset not a place.”
Reid Hoffman
Co-founder of LinkedIn
(SV#37)

The Silicon Valley is all about risk taking. Its birth can be traced to the “traitorous eight” (see photo above) who founded Fairchild Semiconductor in 1957, in an attempt to break away from the rigid rulebooks of traditional tech employers such as IBM, Bell Labs, and Philco.

With the founding of Intel in 1968, a business super-culture formed in Silicon Valley where failure did not brand you for life, capital was readily available for new ventures, company loyalty was a relic of the past, and the next big idea could come from anywhere in the company, not just the executive suites. It is not surprising that when the unique culture of the Silicon Valley intersects with the world of corporate governance, the decisions that result can change the world.

*Everything in the SV150 changes except change itself.*

Tech companies blaze onto the scene in a burst of investor enthusiasm. But the market is an unsentimental grader: of the 139 tech companies in the San Jose Mercury News list of the Silicon Valley 150 for 2009, only 61% are still on the list five years later in 2014. That means 54 companies disappeared. Some went away through acquisition—the largest of these was Sun Microsystems (ranked #7 by 2009 sales) which was acquired by Oracle in 2010. Most of the 54 limped into M&A outcomes because they failed to thrive.
2015 Board Agenda Highlights

7 completed acquisitions of SV150 companies

- Informatica—SV#57
- Riverbed Technology—SV#56
- Aruba Networks—SV#61
- Pharmacycics—SV#69
- Advent Software—SV#96
- Micrel—SV#127
- Thoratec—SV#88

3 spinoffs with new public companies created

- eBay and Paypal – officially split in July 2015
- Hewlett-Packard split into Hewlett Packard Enterprise and HP Inc as of Nov 1, 2015
- JDSU split into Viavi and Lumentum as of July 2015

12 CEO positions filled

- Cisco Systems—SV#5
- eBay—SV#8
- Agilent Technologies—SV#15
- NetApp—SV#16
- Twitter—SV#50
- Align Technology—SV#67
- Zynga—SV#72
- Extreme Networks—SV#78
- Ultra Clean—SV#86
- Rocket Fuel—SV#95
- Silver Spring Networks—SV#136
- Jive Software—SV#140

One important agent of change in the Silicon Valley has been investor activism. Jesse Cohn, head of US equity activism at Elliott Management, was quoted in the Financial Times in 2014 saying: “Tech still remains a club, where the view is ‘We’re different from other boards, we can have clubby boards.’ For us, that is an opportunity.” Cohn’s firm has successfully targeted SV150 companies such as Riverbed Technology (SV#56—now acquired), Informatica (SV#57—went private in a LBO), and Juniper Networks (SV#23—which reached a deal with Elliott Management which included adding 2 new directors to the board). In the SV150, the fast pace of investor activism does not appear to be slowing down.

The setting for these remarkable changes is the corporate boardroom. No matter how you look at it, SV150 boards have had a busy 2015. We list some highlights of their 2015 agenda in the sidebar. In recent months the boards of the SV150 have been overseeing an unprecedented level of structural and strategic change. In light of this, the quality of SV150 boards and their decision making will have a far-reaching impact on the landscape of the Silicon Valley going forward.

In my professional life I have often compared the Silicon Valley to Florence under the Medici: as that great city was during the Renaissance, so today the Silicon Valley is the setting for a great flowering of talent, capital, and an expansion of humankind’s capabilities through new technologies. With this study, we hope we have made a contribution to the dialogue around governance in the Silicon Valley at a critical time of change.
Acknowledgments

The report you have read is a team effort. I want to thank my Report Advisors for reviewing our analysis and providing their insight. They are all unselfishly dedicated to improving board governance, and I admire their efforts to provide an ongoing contribution to board education. Each of our advisors has extensive leadership experience that when profiled could easily fill pages of this report. I ask their pardon if we focus their profiles below solely on their governance and SV150 related experience.

Report Advisors

Robin Abrams
Robin is an experienced tech executive and board director who currently serves as director at HCL Technologies, Sierra Wireless, Lattice Semiconductor, and FactSetResearch Systems (and formerly as a director at ZiLOG and Openwave Systems (now Unwired Planet) of the SV150). She has also served as a SV150 CEO, at VeriFone Systems (SV#42) from 1998-99, among other tech executive positions.

Kambiz Hooshmand
Kambiz is an experienced tech executive and board director who currently serves as Chairman at Infinera (SV#74). He has also served as a SV150 CEO, at Applied Micro Circuits Corporation (SV#138) from 2005-09, among other tech executive positions.

Charles Kissner
Charles is an experienced tech executive and board director who currently serves as Chairman at ShoreTel (SV#105), board director at Aviat Networks (SV#109)—and its former Chairman; and director at Rambus (SV#116). He is also a former CEO and Chairman of Stratex Networks, and has served as a SV150 CEO, at Aviat Networks (SV#109) from 2010-11, among other tech executive positions.

David Larcker
David holds the James Irvin Miller Professorship at the Stanford Graduate School of Business. He is the director of the Corporate Governance Research Initiative at the Stanford GSB and senior faculty of the Arthur and Toni Rembe Rock Center for Corporate Governance at Stanford University.

Other Acknowledgments

I would also like to acknowledge the contributions of my staff at Lonergan Partners. In particular, I want to thank my firm co-founder and supervisor of this project, Susan Lonergan; my partner, Dotty Schaffer; our summer intern, Alexandra Sudomoeva; and our report design partner, Wayne Creekmore of Creekmore Behasa.
## SV150 Boards by the Numbers

Number of companies in this study: **144**  
Study cutoff date: **August 15, 2015**

### 1056 Total Board Seats  
Last proxy adjusted for company website lookups

<table>
<thead>
<tr>
<th>Role</th>
<th>Filled by Men</th>
<th>Filled by Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEOs</td>
<td>1003</td>
<td>153</td>
</tr>
<tr>
<td>Chairman</td>
<td>139</td>
<td>133</td>
</tr>
<tr>
<td>LIDs</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>Committee Chairs</td>
<td>466</td>
<td></td>
</tr>
<tr>
<td>Founders</td>
<td>81</td>
<td></td>
</tr>
</tbody>
</table>

### 1025 Total Individual Directors

<table>
<thead>
<tr>
<th>Role</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO</td>
<td>892</td>
<td>133</td>
</tr>
</tbody>
</table>

**Board Roles**

(Oracle and Synopsys each have 2)
Board & Director Superlatives

Largest Board
Adobe Systems (SV#27)—13 members

Smallest Board
Ubiquiti Networks (SV#75)—4 members

Oldest Board
Gilead Sciences (SV#7)—average age 71, according to age information in last proxy

Youngest Board
Yelp (SV#99)—average age 46, according to age information in last proxy

Longest Serving Director
Alice Schwartz, founder of Bio-Rad Laboratories (SV#39)—since 1967 (48 years of service, according to information in last proxy)

Youngest Director
Mark Zuckerberg, Facebook (SV#10)—age 31

Most Female Non-CEO Directors
The following SV150 companies all have three non-CEO women directors: Google (SV#3), Cisco Systems (SV#5), Symantec (SV#13), Netflix (SV#19), VeriFone Systems (SV#42), Netgear (SV#52), and Medivation (SV#71)
Footnotes

1. The Mercury News SV150 is ranked by 2014 revenues. Our dataset excluded 6 companies on the SV150 list whose acquisitions were completed as of our study cutoff date of August 15, 2015. This meant we said goodbye to our friend and longest serving SV150 CEO—Ray Zinn of Micrel (SV#127). The six companies we excluded from the SV150 are: Informatica (SV#57), Riverbed Technology (SV#56), Aruba Networks (SV#61), Pharmacyclics (SV#69), Advent Software (SV#96), and Micrel (SV#127).

2. In our study, country of origin was considered country of birth; when country of birth could not be biographically determined, origin defaulted to country of undergraduate education—hence the use of quotation marks around the word ‘origin.’ This methodology is believed to skew the origin data towards countries with undergraduate offerings with international popularity, such as the United States and the United Kingdom. However, since the period of undergraduate education can be assumed to be a significant milestone in professional development, labeling the country where the education was received as one’s place of ‘origin’ is not entirely unwarranted where other information is not available.

3. Assessing the active status of directors is as much art as science, and many classifications were difficult to make and case-by-case judgment calls were numerous. However, we did follow clear general guidelines. Executives were considered ‘not active’ if the word ‘retired’ was part of their primary title on the SV150 company website (e.g. John Jones, retired CEO of Tech Company) where they serve as director, and if they were not currently employed in an executive role by a different public company; if they were employed at a private consulting or advisory firm, at a self-run firm, or as a private investor, their status was kept as inactive. If they were employed as a senior executive at a for-profit private firm, as long as it did not qualify as a consulting/advisory firm, a self-run firm, or a private investment firm, they were counted as active.

Any director whose current business activity was listed as other board service and/or non-profit advisory work was considered ‘not active.’

If the director’s primary professional experience was in investing, consulting, or non-profit management (that is, they were not a former senior executive at a company outside of these categories) and if they were described as still actively employed in these fields, then their status was counted as active.

Lastly, if the director’s primary role was as a senior executive managing a non-profit (not advisory only) they were considered active.


5. The compensation value of all stock options and stock based awards are taken directly from SV150 company proxies; proxy values are stated using FASB Accounting Standards Codification Topic 718.

All compensation averages in this report were calculated excluding Jan Koum of Facebook (SV#10), whose proxy compensation was reported as $1.9 Billion. Jan Koum is the WhatsApp co-founder and CEO; his proxy compensation is a feature of the sale of WhatsApp to Facebook.

The average compensation computation in this report is the average of all directors receiving greater than $0 in compensation (865 of the 1,156 seats). Of the 291 seats for which no compensation was reported, many were filled by executive management whose service on the board is not compensated beyond their executive pay. Of the rest, almost all were newly appointed directors for whom no compensation had yet been reported.

6. Our study expanded the proxy definition of insider to include ‘ever’ insiders and all founders (exchanges allow former employees to be classified as independent after three years since employment have passed).
Footnotes continued...

7 Sarbanes-Oxley (2002) requires certification of company financial reports, establishment of independent audit committees on the board, increased reporting and disclosure of stock transactions involving management and board directors, as well as other reforms; Dodd-Frank (2010) requires increased shareholder reporting, changes to the composition and operation of compensation committees, and increased shareholder advisory input on compensation, among other reforms.

8 According to reported data, under 20 S&P 500 chairmen are former CEOs of the company whose board they chair.

9 Founders were far more likely than other types of directors to have a non-US origin. See page 23 for more breakdowns.

10 Adjustments to exclude outliers were made to compute the average cost of compensation to Chairmen, necessitating the exclusion of two Chairmen from the average. In one case, a $5 million charitable contribution in the Chairman’s name was reported in total compensation and was excluded from the average.

11 As of November 1, 2015, Hewlett-Packard split into two public companies: Hewlett Packard Enterprise and HP Inc. According to company press releases, Meg Whitman will be the CEO at Hewlett Packard Enterprise, which will have 13 directors (up from 12 at current Hewlett-Packard), made up of 8 men and 4 women; Patricia Russo will be Chairman of the Board. Meg Whitman will be Chairman of the Board of HP Inc, which will have 12 directors, made up of 8 men and 4 women. Dion Weisler will be CEO of HP Inc.

12 According to Catalyst. Information retrieved from: http://www.catalyst.org/knowledge/women-sp-500-companies

13 McGregor, J. (2015, August 12). These are the 12 major companies that still don’t have women on their boards. The Washington Post. Retrieved from https://www.washingtonpost.com/news/on-leadership/wp/2015/08/12/these-12-major-companies-are-the-only-ones-that-still-have-no-women-on-their-boards/ The article reports that the number of companies was at 18 ten months before the article date, so had dropped rapidly in recent months. Information in the article was based on Capital IQ data.

14 This average tenure calculation excludes Alice Schwartz of Bio-Rad (SV#38) and Sara Liu at Super Micro Computer (SV#43), who as founders have 48 and 22 years on their boards respectively. Because there were so few women held seats, the inclusion of these two founders skewed the average and they were removed to more closely represent typical director tenure.

15 Numbers add to more than 100% as women sit on multiple committees.


Footnotes continued...


19 The 10 companies included in the graph “Racial Breakdown for 10 Large SV150 Companies” are: Hewlett-Packard (SV#2), Google (SV#3), Intel (SV#4), Facebook (SV#10), Nvidia (SV#22), Yahoo (SV#24), Intuit (SV#25), LinkedIn (SV#37), Twitter (SV#50), and Yelp (SV#99).

The 11 companies included in the graph “Women by Level at 11 Large SV150 Companies” are the same as above plus SanDisk (SV#12).

The sources for the gender and race breakdown of the categories labeled “All Employees” and “Executives” in both these graphs are dated 2013-2014 (mostly 2014) and we make no claims that this data reflects current 2015 breakdowns. The source used for the percentages used in the “All Employees” and “Executives” breakdowns is company EEO-1 reports as retrieved from public sources.

Employment by certain gender, race and ethnicity categories is reported to the US Equal Employment Opportunity Commission on the EEO-1 report, which while not generally considered public data, has been voluntarily released by some SV150 companies. The data on these charts represents the most recent EEO-1 report information we found available on the 11 SV150 companies listed above. While Cisco (SV#5) has also released its EEO-1 data, it was not included in this analysis as it appeared to define executive management far more broadly than the other companies in this grouping (the “Executives, Senior Officials and Managers” category accounted for 13.5% of all Cisco employees; at the 11 companies in the list above, this category accounts for only 1% of overall employment).

On the graph titled “Racial Breakdown for 10 Large SV150 Companies,” the board director breakdown by race comes from the 2014 Rainbow PUSH Coalition survey referenced in footnote 17.

On the graph titled “Women by Level at 11 Large SV150 Companies,” the board director breakdown by gender is also from the Rainbow PUSH survey, supplemented by proxy data on the gender of board directors at SanDisk, which was not one of the companies included in the Rainbow Push survey.

Note the Hewlett-Packard board director changes after the November split into two companies is not reflected in this analysis. Press releases indicate each new Hewlett-Packard spun-off board will include an African-American director. The pace of change in the demographics of SV150 boards is rapid and this information is limited by being a snapshot in time.


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Footnotes continued...

24 There are single class stock structure companies in the SV150 where founders are reported in proxy information to have relatively high voting power (over 10%) as well. Some examples include Larry Ellison at Oracle and Elon Musk at Tesla Motors.

25 The compensation value of all stock options and stock based awards are valued using FASB Accounting Standards Codification Topic 718; the exercise of stock options and vesting of stock awards is also reported in the table “Option Exercises and Stock Vested,” and is not discussed in this report.

26 Cost of options based compensation on date of grant using the Black-Scholes option pricing model requires assumptions including: term, risk-free interest rate, dividend rate, and expected volatility.


This page is a key to the photographs of SV150 board directors on our report cover. Their photographs here and on the cover are provided for informational purposes and do not represent an endorsement or recommendation of this report, its opinions, authors, advisors, or sponsors.