

# The Anatomy of an Entrepreneur

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## Are Successful Women Entrepreneurs Different From Men?

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## Introduction and Findings

Entrepreneurs are arguably the most important actors in our economy: the creators of new wealth and new jobs, the inventors of new products and services, and the revolutionizers of society and the economy. Yet despite their centrality, little is known about entrepreneurs: what motivates them, how they emerge, why they succeed. We know even less about *who* becomes an entrepreneur, and why.

Too often, we take for granted that entrepreneurs simply emerge, driven by some internal motivation or “little voice.” That assumption may be true to some extent. But can we, or should we, simply take for granted that entrepreneurs can’t be made—that they can’t be identified, recruited, mentored, and encouraged?

Women are one particularly understudied group of entrepreneurs. We know very little about female entrepreneurs, and our ignorance of this important demographic is a serious blind spot in any effort to increase the total number of entrepreneurs participating in our economy. What little we do know suggests that women are not nearly as active in the entrepreneurial space as they could be. For instance, according to the Kauffman Firm Survey (Robb et al. 2009, 20) which followed a cohort of firms founded in 2004, only about 30 percent of the primary owners were women. Only 3 percent of firms that have a primary owner that is a woman are high tech while the same figure for men is 7 percent.<sup>1</sup>

The Kauffman Foundation has attempted to address this knowledge gap through the following study. The data were collected in 2008-2009 from 549 respondents, or about 40 percent of the founders from randomly selected high-tech companies who were invited to participate.<sup>2</sup> In this study group,

women were overrepresented relative to the Dun & Bradstreet findings: 7 percent of the tech firm founders<sup>3</sup> in our sample were women.<sup>4</sup>

The value of this study is its detailed exploration of men and women entrepreneurs’ motivations, backgrounds, and experiences. The people included in this sample were all successful entrepreneurs, 59 percent of whom had founded two or more companies.

The data made it possible to compare apples to apples as few, if any, studies of entrepreneurs have done before; the men and women surveyed turned out to be quite well-matched in key respects. Because of our sampling methodology, they were in the same types of industries: More than half the respondents of each gender classified themselves as working in computing or some other highly technical field. The study subjects also had founded their current companies at about the same age and at around the same time.

Our findings show that these successful women and men entrepreneurs are similar in almost every respect. They had equivalent levels of education (slightly less than half earned graduate degrees), early interest in starting their own business (about half had at least some interest), a strong desire to build wealth or capitalize on a business idea, access to funding, and they largely agreed on the top issues and challenges facing any entrepreneur.

The data also identify some small but potentially informative gender differences among successful entrepreneurs. For instance, motivations for starting a business differed slightly between men and women. The latter were more likely to cite a business partner’s encouragement as a key incentive to take the plunge. Women also were more likely than men to get early funding from their business partners.

1. These figures were compiled using the D&B data on page 20 of the cited study.

2. The primary data source for this study is a subset of an existing data set of corporate records included in the OneSource Information Services Companies database. To construct the sampling frame, records were extracted for companies in the industries listed in Appendix A. Company records were then stratified by geographic region and selected randomly. Visits to the selected companies’ web sites ensured that they were still in business and provided the names and contact information for founders. Founders were contacted by e-mail as many as four times and invited to complete an online survey. In some cases, e-mail invitations were followed up with phone calls.

3. Founders were defined as very early employees, typically having joined the company before the products or business model were fully developed.

4. Despite their relatively higher representation in our sample, women still represent only forty-one of the 549 total study respondents. This small number is not surprising given women’s scarcity among high-tech entrepreneurs, but it could affect the generalizability of the results reported here. For the population of 1,373 founders identified as eligible participants for this study, with women’s true representation between 1 and 7 percent of that population, we needed responses from between fourteen and eighty-seven women to be 95 percent certain (plus or minus four points) that our results accurately represented the true population.

Prior experience looms larger in women’s own estimation of their chances for success than it does for men. Women also rated their professional and business networks more highly as important contributors to that success than did men. Finally, when asked about the most important potential difficulties facing entrepreneurs, women were more likely to cite the challenge of protecting their company’s intellectual capital, while men tended to worry about the inherent fiscal insecurity of being part of a startup and the lack of available mentors.

Several of the identified gender differences indicate that support and encouragement from key people can especially benefit women in their efforts to found successful technical companies. This finding suggests that efforts to promote women’s entrepreneurship should ensure that women have access to the mentoring and support networks that they view as important contributors to their success.

Our findings and their implications are presented in more detail in the following sections.

We know very little about female entrepreneurs, and our ignorance of this important demographic is a serious blind spot in any effort to increase the total number of entrepreneurs participating in our economy.

## Detailed Findings

### Top Factors Motivating Women to Become Entrepreneurs

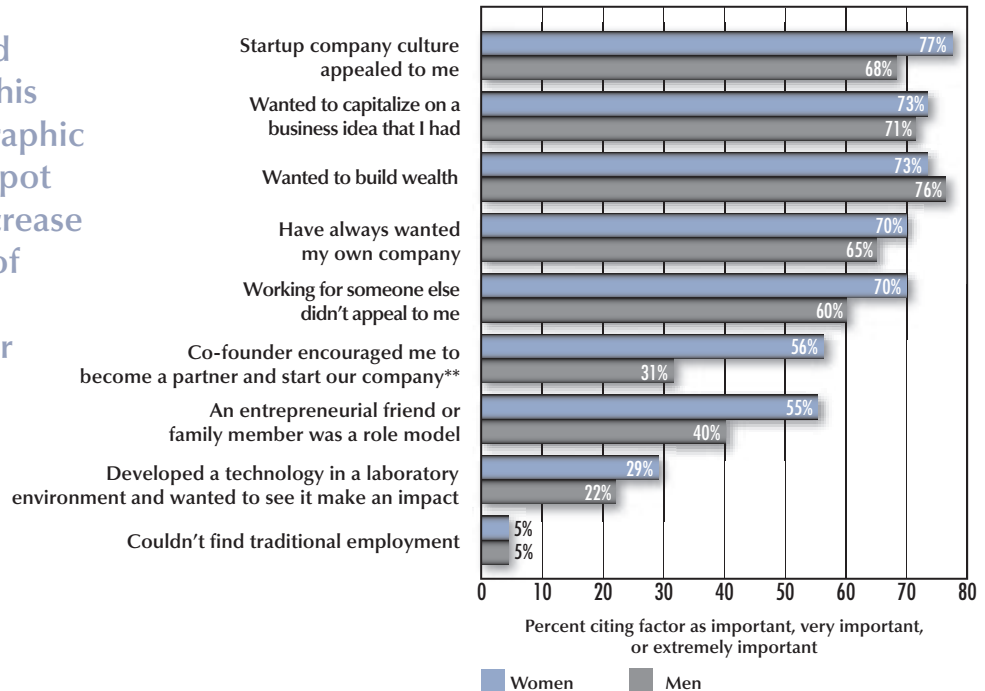
Overall, women who choose to become entrepreneurs are motivated primarily by five financial and psychological factors, specifically:

1. The desire to build wealth
2. The wish to capitalize on business ideas they had
3. The appeal of startup culture
4. A long-standing desire to own their own company
5. Working for someone else did not appeal to them

More than half of all respondents of both sexes cited all five of these reasons as factors in their becoming entrepreneurs (see Figure 1).

Encouragement was especially important to women compared to men. More than half the women (56 percent), but less than a third of the men (31 percent), were motivated to become entrepreneurs by a

Figure 1: Motivations for Starting Business: How important were the following in motivating you to start your businesses?



\*\* Statistically significant gender difference at .01 level

company founder's recruitment efforts. This gap was the largest difference in motivation between the two sexes. A family member or entrepreneurial friend served as a role model for more than half the female respondents and many of the men.

Thus, when seeking to recruit potential female entrepreneurs, heavy emphasis should be placed on common factors such as the desire to build wealth and be part of startup culture. Special care also should be taken, however, to match women with mentors and company co-founders who offer them personal encouragement to take the entrepreneurial path.

### Secondary Motivations for Becoming an Entrepreneur

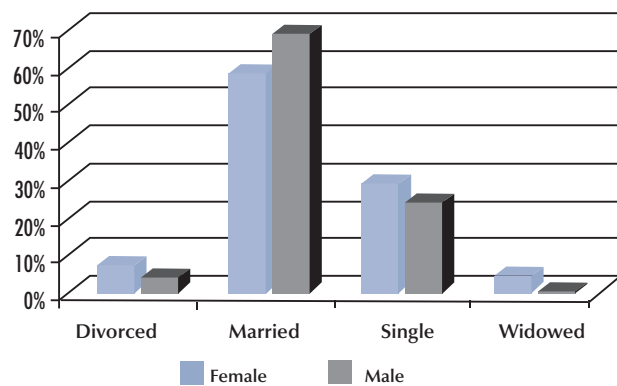
Few men or women entrepreneurs were motivated to start their business simply because they were out of work. As Figure 1 shows, a mere 5 percent of both sexes cited this as a reason. Substantially higher percentages said that they wanted to see technology that they had developed make an impact in the marketplace, but this was still the second-least-cited reason.

Life-balance issues have been noted as a reason for women's low representation among entrepreneurs (DeMartino & Barbato 2003). Our data show no statistically significant gender differences in the life circumstances of these successful men and women. Their average ages when founding their first companies were early 40s. Likewise, successful men and women entrepreneurs founded their first companies when they had similar numbers of children living at home: one. Men were more likely than women to be married, as shown in Figure 2. These observations suggest that successful entrepreneurs of both sexes tend to have similar life conditions.

In addition to wanting a balanced life, some studies indicate that women want fair treatment and improved compensation, and that these desires motivate moving from management to entrepreneurship (Hardesty and Jacobs 1986, as reported in Powell and Mainiero 1992, 215). This rationale may well be reflected to some extent in the response to the statement "working for someone else didn't appeal to me."

**Our data show no statistically significant gender differences in the life circumstances of these successful men and women.**

Figure 2:  
Marital Status When Starting Business



We saw that a slightly higher percentage of women than men were motivated by this reason, but the difference was not statistically significant, so may not represent a real gender difference in the population of successful high-tech entrepreneurs.

### The Importance of Human Capital

On average, both men and women rated their prior industry and work experience as a very important factor in determining their startups' success. Both sexes rated experience highest, with lessons learned from previous successes and failures rated slightly less important. In addition to experience, human capital in the form of a university education was rated, on average, important to very important (see Figure 3).

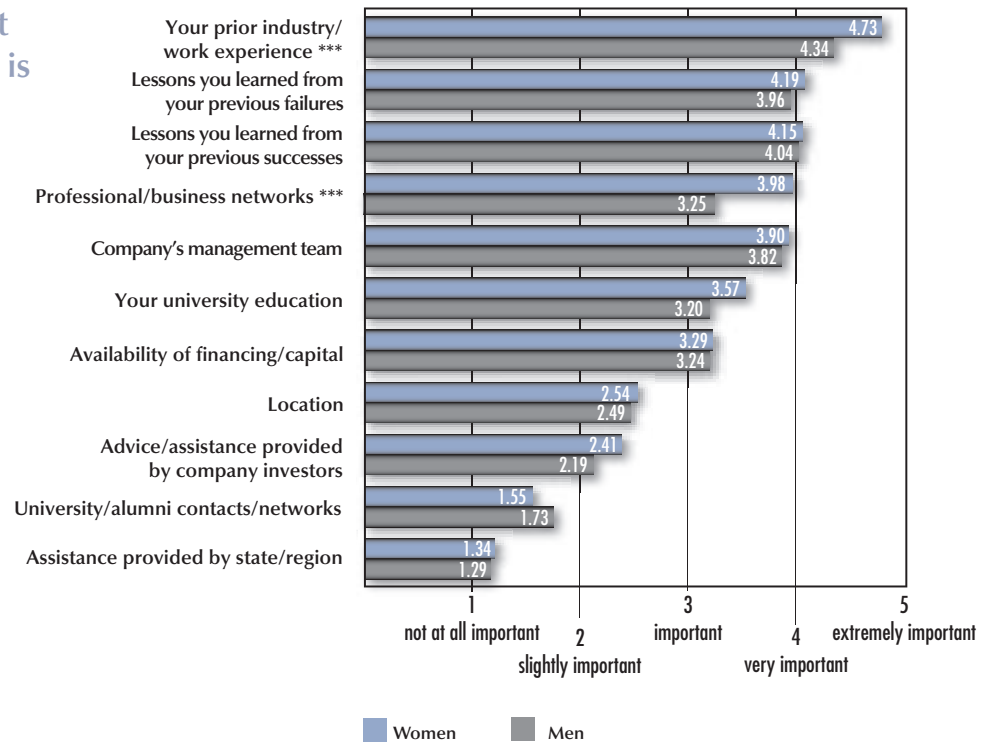
In a statistically significant difference, women, more than men, believe that prior experience is crucial. Reasons for this are not clear, but we speculate that one cause could be gender stereotypes that reduce women's self-confidence,<sup>5</sup> especially in male-dominated technical fields. Many women believe that a track record is particularly valuable under these conditions because it demonstrates their competence.

5. See H. Peterson's forthcoming paper, "Gendered Construction of Technical Self-Confidence," for an interesting discussion of women's double bind with respect to expressing confidence in their technical abilities.



In a statistically significant difference, women, more than men, believe that prior experience is crucial.

Figure 3: Important Factors in Startup Success (Mean Ratings): How important were the following in the success of your most recent start-up?<sup>6</sup>



\*\*\* Statistically significant gender differences at .001 level

### The Importance of Social Capital

Social capital is an essential resource for the efficient conduct of business, and it contributes to the success and survival of an entrepreneur's venture. Social capital may be defined as the benefits derived from an individual's personal and professional networks. The people in those networks provide essential legal, financial and accounting advice; are often the source of needed financing; and can give specialized counsel crucial to an entrepreneur's particular industry or firm. Many studies suggest, however, that women may have less or different access to social capital than men.

(For example, see Carter 2000; Buttner 2001; Greene et al. 2001; Menzies et al. 2004; Moore 2004.)

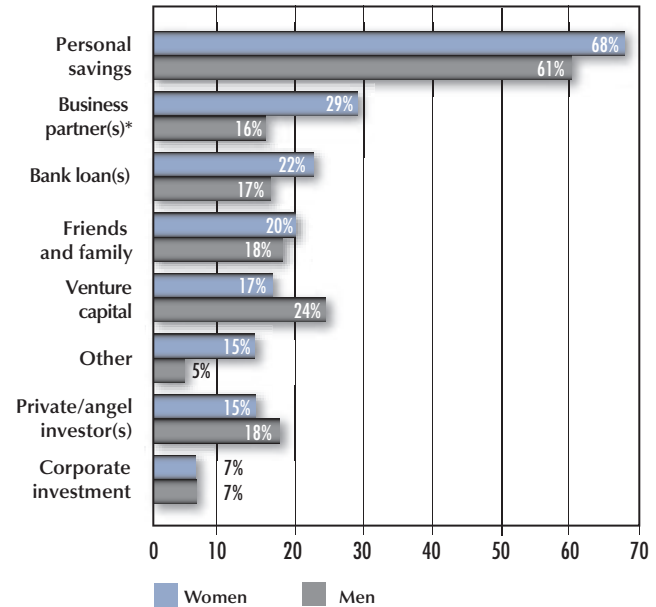
Consistent with our finding that co-founder encouragement is more important to women than men, we also found that women especially benefit from other types of social support and encouragement. Though both sexes rated their professional and business networks as very important to the success of their most recent startups, women emphasized it more. Thus, the role of social capital is another key gender difference, the understanding of which can help inform effective recruitment efforts.

6. See Appendix B for standard deviations and numbers of responses.



Women were much more likely than men—almost twice as likely—to secure their main funding from business partners.

Figure 4:  
Main Sources of Funding



\* Statistically significant gender difference at .05 level

### Financial Capital Sources

The majority of the successful entrepreneurs surveyed for this study founded their current company with money from personal savings. Less common sources included business partners, bank loans, friends and family, venture capital, private/angel investors, and corporate investment (see Figure 4).

It has long been believed that women entrepreneurs have less access to capital than men (Aspray and Cohoon 2007, Robb and Coleman 2009). We found no differences in the types of funding sources tapped by male and female entrepreneurs, with one

exception: Women were much more likely than men—almost twice as likely—to secure their main funding from business partners. The apparent gender differences we found in the use of bank loans and venture capital are not statistically significant, although that result could be due to an insufficient number of responses to this question.<sup>7</sup>

7. See Appendix C for respondent counts.

### Successful Women Had the Resources They Needed

Men and women mostly see the challenges facing entrepreneurs in the same way. Large percentages of both groups said the amount of time and effort required to start a business was a key difficulty. As Figure 5 illustrates, more than half also found it difficult to recruit a co-founder. Financing, the consequences of failure, health insurance, and lack of experience or industry knowledge were lesser concerns, although shared by both sexes.

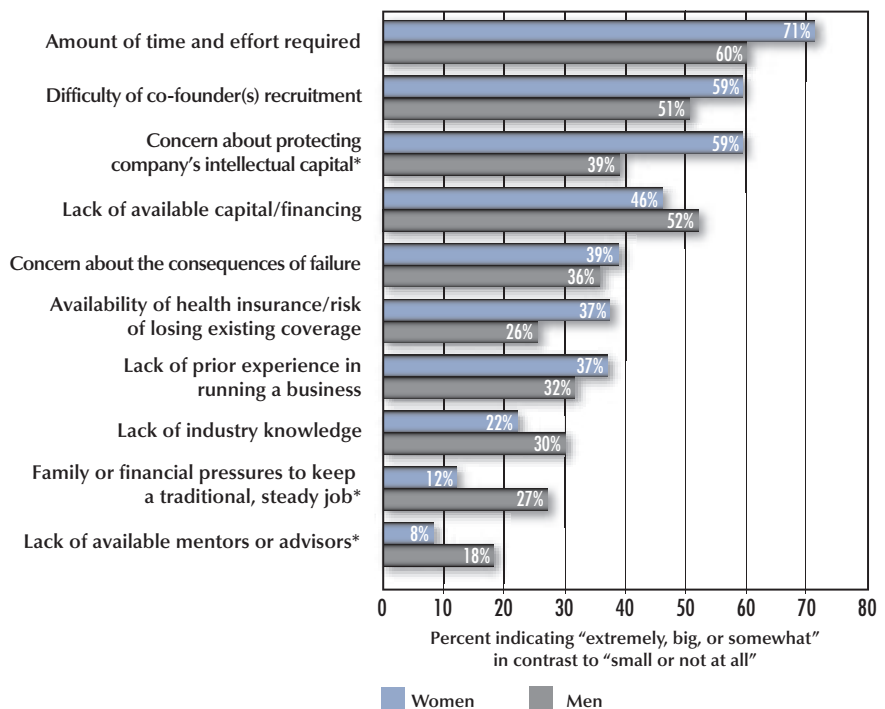
Lack of mentors was not a problem for either group: Only 8 percent of the responding women and 18 percent of the men considered finding (or lacking) mentors or advisors to be a challenge. Successful women entrepreneurs perceived lack of mentors to be even less of a problem than did the men. Their access to mentors probably contributed to success.

While the survey did not specifically ask about work/life balance, some respondents cited the pressure to keep a traditional job as one difficulty facing a potential entrepreneur. Interestingly, more than twice as many men as women mentioned this reason.

More women than men are concerned about protecting their company's intellectual capital. We can only speculate about what accounts for the gap. One possibility is that women entrepreneurs may tend more often than their male counterparts to have ties to academic institutions that might lay claim to their innovations. This possibility, however, was not investigated by our survey.

Finally, while the survey did not specifically ask about work/life balance, some respondents cited the pressure to keep a traditional job as one difficulty facing a potential entrepreneur. Interestingly, more than twice as many men as women mentioned this reason. This observation suggests that, at least among entrepreneurs, men feel greater pressure than women to be traditional breadwinners. This difference could indicate women's potential for greater career flexibility, creating another dimension on which to recruit and encourage more female entrepreneurs.

Figure 5: Perceived Challenges: How much of a challenge have the following been for you in starting your businesses?



\* Statistically significant gender differences at .05 level

## Summary

Entrepreneurs have a stereotypically masculine image—assertive, achievement-oriented, risk-taking (Baron, 1999)—and women’s low representation among company founders reflects that stereotype. This study, however, shows the limits of that stereotype. In fact, successful men and women entrepreneurs share similar motivations, see the reasons for their success in largely the same way, secure funding from the same types of sources, and face many of the same challenges. These similarities suggest that, under the same conditions, both men and women can be successful entrepreneurs.

The differences evident in these data call attention to factors that could help inform a determined effort to promote entrepreneurship among women, even in technical industries where they are particularly underrepresented. Certain findings require further investigation; in particular, we need to know why women are so much more concerned than men about protecting intellectual capital. Other findings point to clear strategies that could help recruit women as entrepreneurs. Mentoring is clearly very important to women, as are the encouragement and financial support of business partners, experience, and well-developed professional networks. An effort focused on those proven success factors for women entrepreneurs could enhance efforts to recruit more of them, and help make those who take the plunge more successful.

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## Appendix A

Industries in which sample companies were identified were selected from the OneSource Information Services, Inc. database.

- Automotive & Aerospace
- Aerospace & Defense
- Computers & Electronics
- Audio & Video Equipment
- Computer Hardware
- Computer Networks
- Computer Peripherals
- Computer Services
- Computer Storage Devices
- Electronic Instruments & Controls
- Scientific & Technical Instruments
- Semiconductors
- Software & Programming
- Health Care
- Biotechnology & Drugs
- Health Care Facilities
- Medical Equipment & Supplies
- Services
- Computer Services
- Engineering Consultants
- Software & Programming

## Appendix B

*How important were the following factors in the success of your most recent startup?*

### Standard Deviations and Number of Responses

	FEMALE			MALE		
	Mean	Standard Deviation	Valid N	Mean	Standard Deviation	Valid N
Your prior industry/work experience**	4.73	0.63	41	4.34	0.91	467
Lessons you learned from your previous failures	4.19	1.20	32	3.96	1.20	421
Lessons you learned from your previous successes	4.15	1.05	34	4.04	1.02	450
Professional/business networks**	3.98	1.19	40	3.25	1.32	460
Company's management team	3.90	1.29	39	3.82	1.21	446
Your university education	3.57	1.36	40	3.20	1.29	457
Availability of financing/capital	3.29	1.35	38	3.24	1.39	451
Location	2.54	1.23	39	2.49	1.20	452
Advice/assistance provided by company investors	2.41	1.43	29	2.19	1.19	384
University/alumni contacts/networks	1.55	1.03	31	1.73	1.11	419
Assistance provided by the state/region	1.34	0.77	29	1.29	0.75	388

\*\*Statistically significant gender difference in mean response at the .05 level

## Appendix C

*Please select the main sources of funding for starting these businesses.*

### Response Percentages and Counts

	FEMALE	MALE
Current business – Personal savings	68.30%	60.80%
Current business – Business partner(s)*	29.30%	16.10%
Current business – Bank loan(s)	22.00%	17.30%
Current business – Friends and family	19.50%	17.50%
Current business – Venture capital	17.10%	23.80%
Current business – Private/angel investor(s)	14.60%	17.70%
Current business – Other	14.60%	4.50%
Current business – Corporate investment	7.30%	6.70%
N responses	41.00	508.00

\* Statistically significant gender difference in percent of respondents selecting business partner(s) as their main source of funding; significant at .05 level





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