Research Report

Identifying Critical Risk Factors in the Decision-making

Process of Angel Investors and Venture Capitalists:

An Executive Summary

Presented to

by

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The Purpose of the Study

Entrepreneurs perceive and manage risk differently than investors. As a result, entrepreneurs may underestimate the extent to which their ventures are perceived to be risky by a potential investor. Consequently, the entrepreneur is left with making assumptions that could be detrimental in obtaining the necessary capital to launch and grow the business. The purpose of this study was to determine if there is a common set of perceived critical risk factors among a group of experienced investors that would cause them to reject a deal out of hand.

What We Know

The odds of getting an investment are reported by the Angel Resource Institute to be a mere 3-4%. There is a long-held belief that entrepreneurs are risk takers. However, research has shown that entrepreneurs are not predisposed toward risk any more than most people, yet they tend to frame an opportunity in context of its potential to change things for the positive. Investors, on the other hand, seek to manage their risk by applying an analytically intense process commonly known as due diligence, but that process is time consuming and expensive. In order to filter interesting opportunities worthy of due diligence, investors tend to rely on more subjective measures. Investors, it seems, deploy a certain amount of decision making based on their gut. But what we have is a gap between perspectives of how entrepreneurs view risk in contrast with investors.

There are a number of frameworks and best practices to implement a more structured approach to evaluating risk in the early stages of an investment deal. But implementation of structured frameworks early in the process can be problematic, if for no other reason than sheer volume of deals. In 2016, Angels completed over 71,000 deals (Angel Capital Association, 2016). Yet, up to 97% of entrepreneurial funding deals were rejected. Investment deals can take anywhere from three to 18 months to close. The problem is not one of strategy or process. It is purely one of time management and focused attention. There are models that suggest how investors can weigh and score potential deals, but typically, they use cognitive short cuts, or *heuristics* to reduce the total number of potential deals down to a manageable level. Although some accuracy may be sacrificed for expediency, investors tend to use heuristics, and they often develop them subconsciously. For the purposes of this study, the term Critical Risk Factors was used to refer to these heuristics or mental short cuts.

While many critical risk factors can be analyzed objectively, such as market size and management team experience, the research also found that there is an interplay between the objective and the more subjective factors such as relationship and trustworthiness. Little research has looked at the interplay between these two types of critical risk factors.

Research Methodology

The research methodology chosen for this dissertation was the Delphi Method, developed in the 1950's by Norman Dalkey, who worked for the Rand Corporation. The application was a military project in which Dalkey was developing a way to estimate or predict the number of atomic weapons needed to achieve a certain outcome. It was designed as a group communication tool used to achieve convergence of opinion among a group of experts. The strength of the method is in its framework to reach consensus among an expert panel without the bias or undue influence of one person over the another. Panelists participate in several rounds of surveys where they indicate their opinion on a given topic and are allowed compare their conclusions anonymously with the median of the group. Using Delphi, a researcher can determine which opinions were held by a consensus of the group and which hold disagreement among the participants; each with a high degree of certainty.

This research study consisted of three rounds of surveys with a group of 18 experienced Angel Investors and Venture Capitalists. The first survey simply asked the participants to list all the factors that would cause them to reject a potential deal upon first contact. From that list, a second survey was constructed asking the participants to rate each factor on a scale of 1 to 5 in importance. The third survey compared the individual's rating to the median rating of the group and the participants were allowed to alter their original response. Those factors rated ± 1 ranking of the median by 70% of the group were considered to be in consensus.

The Data

The process identified 82 critical risk factors across 7 categories. Over half of these factors were rated between 'Important' and 'Critically Important' at a consensus rate of greater then 70%. The research suggested there are both conscious and subconscious factors involved in the decision process. Subjective factors such as relationship were rated with higher importance than more objective measurable factors such as revenue or market share. Venture Capitalists, as a group, had higher rates of consensus than the Angel Investors and there were distinct differences between each group regarding which factors were most important.

What We Learned

Investors use their own set of critical risk factors in their decision-making process to a great extent. This research pointed out that there are more critical risk factors involved with investors' decision-making process than came to mind when they were initially asked to list them.

Clearly relationship based critical risk factors form the most important and claim the highest consensus as a category of all the other, more objectively based measures. What is striking about this analysis is the profound difference of the Relationship category compared to all the others. The Relationship category consists of the "soft" characteristics that are typically more subjective such as "Trustworthiness", "Character", or "Integrity", whereas the other categories can be evaluated typically by some objective measure. Among all the prior research reviewed, there were studies that focused on one (subjective) or the other (objective) approach but none were found that combined subjective categories with the more objective categories. This study placed the two together and Relationship factors rose to the top of importance among the objectively measured factors.

The Venture Capitalists were much more aligned as a group than the Angel Investors, and there were distinct differences among the critical risk factors rated most important between the two groups. This indicated that Angel Investors tended to think more independently as a group and between each other.

The study is significant because it rated subjective based factors along with objective factors showing that investors tend to place more importance on trust and relationship building in the early stages of the investment process. The study also provided a framework for understanding the complexity of investment decision-making for the benefit of investors, entrepreneurs, and those who educate and mentor entrepreneurs. Finally, the study is significant for helping entrepreneurs understand the differences in perspective between Angel Investors and Venture Capitalists.

Conclusions

The fact that the Relationship based factors proved to be more important than objectively measured factors, coupled with the finding that these two types of factors are in play at the same time, shows the complexity of decision making in early stage investments. Unfortunately, these factors cannot be distilled into a simple checklist for the benefit of either investor or entrepreneur. This research does provide some definition to this complexity. The relative high degree of consensus within the most important factors may bring confidence to individual investors that their experience is confirmed by their peers and affords them an opportunity to review their biases in light of how they rate against their peers.

Unfortunately, for entrepreneurs, this study did not result in a concise, 5-point checklist or framework they can use to help guarantee an investment. Despite any clarity this study brings to the process, there will still be a fraction of funding resources available to all who are seeking it. Investors will still have to decide to decline far more investment deals than they will close. But what this study does for entrepreneurs is document how complex the process is, with all the variables that come into play. The consensus effect underscored this reality and should provide a more realistic alternative to all the “Top Ten Things Investors Look For” that show up in ubiquitous blogs on the subject. The other implication for entrepreneurs is the fact that there are dual/parallel tracks of critical risk factors at play: those related to relationship and those related to more objective, measurable factors. Much attention is currently given to constructing financial statements and business models, backed by market research, founder’s experience and technology. Relationships take time to build, which helps in part to explain why invest deals take such a long time.

Entrepreneurs, and those who advise and teach them, would do well to consider and apply the risk factors identified in this research as a measure of overall risk to the business, regardless of their need to raise equity based capital. A company that is in a good position to raise money, should they need it, is better off than one that needs funding and cannot attract it due to a perceived high level of risk.

Ranking of Important Critical Risk Factors at 70% Consensus

Critical Risk Factors	Category	Mean Value
Ability to execute	Founders and Management Team	5
Trustworthiness	Relationship	5
Ethics/Honesty	Relationship	4.94
Founder(s) commitment to startup	Founders and Management Team	4.89
Integrity	Relationship	4.89
Coachability	Relationship	4.82
Perseverance	Founders and Management Team	4.76
Character	Relationship	4.72
Competitive Advantage	Intellectual Property	4.71
Passion	Relationship	4.67
Understanding of Competitive Landscape	Competitive Factors	4.67
Potential for Good Return	Exit	4.67
Management 'skin in the game'	Relationship	4.61
Transparency	Relationship	4.59
Clear and Unique Value Proposition	Value Proposition	4.56
No Pending or Existing Litigation	Legal	4.56
Strategy for Growth	Scaleability	4.53
Ability to Scale	Scaleability	4.50
Demonstrated Customer Discovery	Value Proposition	4.44
Founder's mindset toward growth	Founders and Management Team	4.41
Go-to-market Strategy	Market	4.39
Investment Terms	Investment	4.39
Sales Strategy	Scaleability	4.33
MVP identified and available (Prototype)	Technology	4.33
Follow-on Funding Needed	Investment	4.29
Revenue Model	Traction and Revenue	4.28
Reasonable Burn Rate	Financial	4.28
Other Barriers to Entry	Intellectual Property	4.28
Problem, Not Solution Focused	Value Proposition	4.25
Strategic Metrics and Milestones	Founders and Management Team	4.22
Relationship between founders	Relationship	4.18
Company/Investor cultural fit	Relationship	4.18
Investment Stage - Seed, Early Growth	Investment	4.18
Valuation	Investment	4.17
Development Timeline	Technology	4.12
Founder's Experience - Industry	Founders and Management Team	4.11
Total Addressable Market (Size)	Market	4.11
Clean Cap Table	Investment	4.11

Resources

For a detailed summary of the research, including literature review and all data tables, follow this link:
https://www.dropbox.com/home/3%20Roots%20Research%20Report?preview=Carson+Dissertation+Summary+-+Short+Version.pdf

For the full dissertation, please follow this link: https://dc.etsu.edu/etd/3360/

The Panelists

Shawn Carson

Mr. Carson is the Director of Advisory Service for 3 Roots Capital and is also a fulltime Lecturer at the Haslam College of Business, teaching Entrepreneurship in the Management Department. Carson recently completed a doctoral dissertation researching the decision-making process of investors in entrepreneurial startup companies. Since 2005, he has been involved in developing programs helping technology based entrepreneurs develop business models, pitch presentations and funding strategies. He is involved with pitch competitions at the Anderson Center for Entrepreneurship and Innovation at UT, Knoxville and among his latest initiatives is directing the National Science Foundation's Regional I-Corps Node, a program highlighting Customer Discovery for technology and research based startups.

Tony Lettich

Mr. Lettich is a partner in Sheehan, Lettich M&A Advisors and is co-founder and CEO of Funding Sage. Since 2012, he has served as Managing Director of The Angel Roundtable, a select network of successful entrepreneurs, investors, and community and business leaders in the NE Tennessee / SW Virginia / Western North Carolina region providing investment capital, strategic advice and mentoring to early-stage companies. Lettich has an extensive background in finance, and mergers & acquisitions (M&A). He previously served as Vice President & CFO of CP Kelco, an Atlanta based specialty chemical company with sales approaching $1.0B, overseeing the company's global financial operations. Mr. Lettich served as Director, Corporate Financial Analysis & Division Controller, Developing Businesses at Eastman Chemical Company and has also worked within Eastman's Corporate Venturing, M&A and Licensing groups and with Union Carbide Corporation.

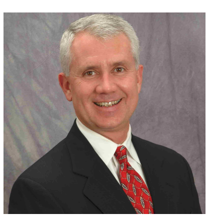
John Morris

Mr. Morris is the Executive VP for The Lighthouse Fund, a Knoxville angel fund providing capital for emerging businesses and he serves as the Director of Business Development for Smart-RIA, a cloud-based SaaS platform for Registered Investment Advisors to maintain compliance with regulatory authorities. Mr. Morris founded Clearpath Ventures, a venture focused company, engaging with multiple companies providing strategic experience, guidance, and direction. These companies range from seed to early stage, with special emphasis on the IT and healthcare sectors. Mr. Morris was the President and CEO of Technology 2020, a venture development organization focused on the development of entrepreneurs and start-ups in the Tennessee Valley Corridor. He holds degrees in Electrical Engineering and Computer Science, and has been instrumental in forming five technology commercialization ventures, utilizing technology from five different disciplines.

Grady Vanderhoofven

Grady Vanderhoofven has 25 years of experience in company creation and financing. He co-founded and invested multiple private investment funds through Meritus Ventures, the first Rural Business Investment Company (RBIC) in the United States, and Southern Appalachian Fund (SAF), a New Markets Venture Capital Company (NMVCC), raising approximately $53 million invested in 16 companies, and attracting approximately $300 million of investment in aggregate. The companies are located primarily in rural and/or low-income areas throughout central and southern Appalachia and have created more than 500 jobs. The funds have provided more than $4 million of technical and operational assistance. Mr. Vanderhoofven has led an effort to create the TennesSeed Fund as an evergreen, seed-stage, investment fund focused on proof of concept investments in Tennessee-based companies. In 2016, he founded Three Roots Capital, a certified Community Development Financial Institution (CDFI) established to make debt and equity investments in companies in predominantly low-income areas of East Tennessee and the broader Appalachian region. Three Roots Capital has raised more than $50 million to date and has deployed and committed approximately $20 million to companies in Tennessee and Kentucky.

Ken Woody



Ken is a US Army Veteran who served honorably as an Infantry Captain and General's Aide. He was also an entrepreneur and a Fortune 500 Executive. He worked for GE for over 16 years, serving as a VP and General Manager and he served as VP of Sales for DePuy Spine, a Johnson and Johnson company. Ken was Senior Vice-President for Global Sales with Smith and Nephew Orthopedics. In his executive roles, Ken worked extensively in the mergers and acquisitions side of biotechnology, medical device and IT businesses. Ken has a history and a passion for helping startup businesses achieve success. He founded Innova Memphis, an early-stage Venture Capital Firm, in 2007, investing in over 100 Medical Device, Healthcare, Technology and AgTech companies from their four Funds. In addition to his multiple portfolio company Board roles, Ken serves as Board Chairman for the ZeroTo510 medical device accelerator.

Thank You

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