

Network Capital as a Success Factor for Entrepreneurs: Beyond the Buzzword

Eva-Yasmine Kaiser and Jan Schikofsky

Department Business, Design, Technology, Macromedia University of Applied Sciences, Stuttgart, Germany

eykaiser@macromedia.de

ja.schikofsky@macromedia.de

Abstract: Startup success has long been a point of interest within entrepreneurship discussions and ecosystems. Startup and entrepreneurial success have often been based upon and measured by hard factors such as performance and sales volume. Although these hard factors are important, there is increased discussion surrounding the topic of networking. Particularly, the topic of social capital and weak ties. There is often acknowledgement that social contacts and networks help shape the success of an entrepreneur equally. Network capital research supports the vitality of social relationships in the growth and sustainability of startups. This paper thus explores the role of network capital and weak ties in building ecosystems as a success factor, analyzing how these factors shape entrepreneurial endeavors. This research paper includes theories from the Expectancy-Value-Cost Theory. The research follows a quantitative method. Data was collected via a survey with 200 participants within the entrepreneurship community. The data was analyzed using Structural Equation Modeling (SEM) and SmartPLS. This research identifies significant influencing motivational factors behind network-oriented behavior patterns. The findings also demonstrate mental tradeoffs between expectations and costs (time and effort) associated with networking activities. In this regard, self-expected competence can be identified as an important influencing factor on network-related activities. Furthermore, the results show that network activities significantly affect startup success in different ways (i.e., access to external investors and funding, internal startup performance, and identification of new business opportunities). Our findings contribute to entrepreneurship research by explaining important interrelations between motivational influencing factors on networking activities and building supportive ecosystems for progressive startup development. Practical implications include making a concerted effort to invest in social capital, network and maintain relationships. This may not only positively affect startup success, but in turn can lead to a positive return on investment in terms of crucial resources such as knowledge, expertise and opportunities.

Key words: Entrepreneurs, Startups, Social Capital, Weak Ties, Expectancy-Value-Cost Theory, Success

1. Introduction

The success of startups has long been a focal point of academia, policy makers and investors (Alvarez-Salazar, Seclen-Luna and Vasquez Neyra, 2025) within entrepreneurship discussions and innovation ecosystems. Traditional frameworks for analyzing entrepreneurial performance and success have often focused on quantitative aspects such as a founder's individual capability and skillset. Further key success determinants have been the innovativeness and potential market opportunities of the startup. However, the past decade has seen an increasing awareness that who you know matters just as much as what you know. The rise of network and social capital as a concept in entrepreneurship studies highlights the transformative power of social relationships, weak ties, and network effects in the growth and sustainability of early-stage ventures. This is in part due to the supportive ecosystem, not only quantitative factors. This paper offers relevant insights into how entrepreneurs' ecosystem shapes access to resources, opportunity discovery, funding, and knowledge, which in turn aides in success. From financing and innovation to talent acquisition and market access, networks uphold and support core entrepreneurial processes. Entrepreneurial networks function as catalysts connecting entrepreneurs to opportunities and resources (Frid, Wyman and Shaver, 2025) and influence startup funding outcomes (Abakah, Kim and Somé, 2025). Data emphasizes the scale of this challenge since roughly 90 percent of early-stage startups fail within five years, most often due to capital shortages, product-market-fit or poor ecosystem connections (Agarwal, 2025; Calloway, 2025). These figures reinforce the importance of intangible network resources extending beyond technical knowledge. While recent studies highlight the growing importance of entrepreneurial ecosystems (Babar, 2025) research remains limited on the interplay between social capital, networking, and the associated trade-offs. In particular, expectancy-value cost theory has been underused in explaining networking decisions. The cost component is often neglected, as noted by earlier scholars who argue that researchers have "forgotten" this dimension (Flake, 2012, p. 1), a gap that persists in startup research. Existing studies tend to treat costs as mediators or enablers rather than as core motivational factors (Chammassian and Sabatier, 2020). As a result, entrepreneurship research still lacks models that incorporate perceived costs in networking and relationship-building decisions, despite the significant time investment and opportunity costs faced by founders.

1.1 A Brief History of Entrepreneurship Theory

Entrepreneurship as a field of study has evolved from classical economic discussions of innovation and profit to multifaceted perspectives which include, but not limited to, sociological, psychological, and strategic perspectives. The earliest beginnings of entrepreneurship theory can be traced to Richard Cantillon (18th century), who characterized entrepreneurs as risk-bearers navigating market uncertainties (Dias, Rodrigues and Ferreira, 2019). Later, Joseph Schumpeter (1934) furthered this perspective, deemed entrepreneurs as innovators, and introduced the notion of “creative destruction”—the process through which entrepreneurs disrupt existing markets through innovation (Tülüce and Yurtkur, 2015). In the mid- to late-20th century, scholars like Drucker emphasized opportunity identification and „Theory of Business” (Felin and Zenger, 2017, p. 262), while later research such as Felin and Zenger positioned entrepreneurs as theorists who generate knowledge of markets and create value.

1.2 Entrepreneurship vs. Startups

The distinction between entrepreneurship and startups has drawn growing scholarly attention. Abdelghani (2024) notes that recently there has been a surge in startups alongside small and medium-sized enterprises (SMEs). These two words are frequently inferred synonymously, although key differences exist. Abdelghani points out that while both involve opportunity orientation and innovation, startups tend to exhibit scalability and high-growth intent, whereas SMEs focus on stability and incremental development. Abdelghani also refers to startups as “aspiring entrepreneurs” (p. 2499), reflecting their ambition-driven, innovative, adaptive, and dynamic nature within the entrepreneurial ecosystem. Ehsan (2021) underscores the economic importance of startups, emphasizing that they foster innovation, job creation, and economic diversification. Yet Ehsan observes that a lack of definitional clarity persists. Ehsan’s refers to startups at one point referred to as “budding entrepreneurs” (p. 1), further highlighting their emerging identity and evolving nature within broader entrepreneurial classifications. Startups can therefore be conceptualized as a specific subset of entrepreneurial ventures characterized by high-growth ambitions, innovation orientation, and scalability potential, often under conditions of extreme uncertainty (Arinkina, 2025). They can be temporary in nature and are designed for scalability. Startups create value and solve problems with many risks Alvarez-Salazar et al. (2025). For this research paper, startups and entrepreneurs will thus be used interchangeably.

1.3 The Importance of Networking

Networking is an important and strategic resource available to entrepreneurs. According to Singh and Basri (2024) „The process of building, cultivating, and mobilizing network links is known as networking” (p.6), which can provide information, resources, legitimacy, or opportunities. According to Eyo-Udo et al. (2025), networking not only improves visibility but also facilitates collaborative learning and information exchange that enhances survival and growth. Eyo-Udo et al. (2025) note that „the transformative power of connections in shaping the trajectory of enterprises” (p.824). Entrepreneurial networks encompass personal, professional, and organizational relationships—ranging from mentors, stakeholders and investors to customers and partners. These connections perform multiple roles in a startup’s life cycle. Some examples include but are not limited to access to funding, knowledge transfer and resource access along with legitimacy. Startups embedded in strong networks are more likely to secure financing due to enhanced trust and investor confidence (Abakah et al., 2025). Networks transmit tacit knowledge and other informational resources (Peng, Li and Liu, 2022). Networks may connect startups to early adopters, suppliers, and strategic partners, which could expand their ecosystem. Perotti and Yu (2015) discuss the role of social networks in terms of „startup tribes” capturing how entrepreneurial connections join communities to create support. The intertwined ecosystems enhance collective resilience, performance, and probability of success. Singh and Basri (2024) note that entrepreneurial networking behavior is an antecedent of business performance. Moreover, the networking landscape has shifted dramatically toward digital environments. Online networking can extend network reach and transform traditional social capital, reaching potential contacts and connections that would not be possible in traditional settings.

1.4 Social Capital: Definition and Role in Entrepreneurship

Social capital is defined by Nahapiet and Ghoshal (1998) as the „sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social capital unit” (p. 243). It encompasses trust, shared norms, and relationships facilitating coordination

for mutual benefit and shared advantage. Social Capital can also be seen as „the size of a founder’s network” (Frid *et al.*, 2025, p. 29). Within entrepreneurship, it constitutes the infrastructure and platform through which founders access knowledge, legitimacy, and opportunity. Do *et al.* (2025) argue that social capital promotes innovation by supporting knowledge combination—where insights from diverse stakeholders can merge to create new offerings. Rijal, Utomo, and Ramdhani (2024) agree that social capital enhances collaboration and provides emotional and practical support for entrepreneurs. It can also be a vital resource particularly for nascent entrepreneurs (Mickiewicz *et al.*, 2025).

1.5 Weak Ties: Origins of the Concept

An important concept to mention within the topic of networking and social capital is the strength of weak ties (Granovetter, 1973). Granovetter posits that weak acquaintances, defined as acquaintances or casual contacts, often provide richer and newer information than close friends. De Witte (2023) observes, the theory’s relevance has only deepened amid digital connectivity. Dizikes (2022) confirms the importance of weak ties on LinkedIn and Fronczak, Mrowinski and Fronczak (2022) confirm the strength of weak ties theory within scientific collaborations. Further advancing this area, Feehan, Hai Son, and Abdul-Quader (2022) introduced refined empirical methods for gauging and evaluating the scope of weak-tie networks. This demonstrates the continued interest and importance of the weak tie theory.

1.6 Weak Ties in Entrepreneurial Contexts

For startups, weak ties function as bridges between isolated social clusters. Nozawa and Kang (2024) note that as ventures mature, they increasingly rely on weak ties for novel insights and external referrals and are thus more influenced by weak ties. They deliver diverse knowledge access across industries, certain skillsets, capital and labor which are vital to startups and their business activities. Cheng (2025) extends Granovetter’s theory into the digital era, showing that weak-tie interactions on online platforms underpin successful startup funding. Likewise, Ricciardi, Cerrato, and Antoldi (2025) demonstrate that in micro-firms, collaborators and informal contacts spark innovation by bridging knowledge gaps. Weak ties and informal networks offline and online can create a connectivity that helps startups grow, especially in the beginning phases.

1.7 Network Capital and Entrepreneurial Success

Network capital—combining the structural and relational elements of social capital—has emerged as a decisive factor for startup performance. It represents not merely the number of contacts but the ability to mobilize and convert those relationships into actionable resources. Abakah *et al.* (2025) confirm that network proximity predicts early-stage investment success. Frid *et al.* (2025) find that “emerging gazelles,” or high-growth startups, flourish within supportive network infrastructures. Alvarez-Salazar *et al.* (2025) likewise identify networking as a leading stimulus and factor of growth and collaboration. Specifically, they demonstrate that in Peruvian startups, networking, experimentation, and financing jointly drive rapid expansion—which is central to startup ecosystems. Ricciardi *et al.* (2025) show that micro-firms use network collaboration to sustain continuous innovation through social proximity and professional diversity—dynamics mirrored by tech startups seeking agility. Similarly, Perotti and Yu (2025) note that the network structure of the startup is essential to business success. Entrepreneurs can leverage network capital through several mechanisms such as accelerators and incubators, meetups, mentorship programs and digital ecosystems. These layered systems generate network effects, where each additional connection enhances shared opportunity. As such network capital can be an input for growth and an outcome of sustained entrepreneurial collaboration (Frid *et al.*, 2025; Ricciardi *et al.*, 2025).

2. Theory and Research Model

Expectancy-Value-Cost Theory (EVC) is used for analyzing the motivational factors behind social capital-oriented network activities and building weak ties (Eccles *et al.*, 1983). According to EVC, human motivation is based on three main factors: 1) expectancy (a feeling of competence regarding a certain task, perception of having the skills to be successful in the activity), 2) perceived value (involvement and perceived personal benefit regarding the task), as well as 3) cost (the intention to avoid effort and time associated with the task) (Kosovich *et al.*, 2014, Eccles *et al.*, 1983). In addition to these core factors, it has been shown that intrinsic motivation (perceived emotional value and a feeling of self-fulfillment) represents a promising extension of the theory for predicting human behavior (Marlek, Sarin and Haon, 2020).

2.1 Hypotheses

If one follows the EVC, then one can assume that entrepreneurs are more motivated to invest in social capital, because they then perceive themselves as competent in successfully engaging in these activities. Furthermore, we assume that startups will be motivated to show network-oriented behavior if respective entrepreneurs value social capital building activities. On the other hand, they may avoid network-oriented activities associated with high perceived effort, thus leading to the following hypotheses:

H1a/b: “the higher entrepreneurs’ expectations of success regarding networking activities”...

H2a/b: “The more value entrepreneurs associate with networking activities”...

...“the more likely they are to invest time and effort in (a)social capital/(b)building weak ties.”

H3a/b: “The more effort entrepreneurs associate with networking activities, the more likely they are to avoid investment in (a)social capital/(b)building weak ties.”

Finally, research shows that intrinsic motivation can also play a crucial role in explaining human behavior, which goes beyond external influencing factors. In this regard, individuals are more motivated to show a certain behavior if they feel self-determined and have fun while showing this behavior. On the other hand, purpose can play a crucial role as a motivational driver. Thus, it can be assumed that perceived value can also affect intrinsic motivation leading to the following hypotheses:

H4a/b: “The more intrinsically motivated entrepreneurs are towards network-oriented activities, the more likely they are to invest time and effort in (a)social capital/(b)building weak ties.”

H5: “The more entrepreneurs value networking activities, the higher their intrinsic motivation regarding networking activities.”

Furthermore, this research analyzes the impact of network-oriented activities on startup success. In this regard, startups may profit from network-oriented activities due to improved visibility to external investors and higher credibility. Finally, startups may profit from better market information and identify business opportunities based on external networks. Finally, these advantages can also lead to higher performance of the startup. This leads to the following hypotheses:

H6a/b: “The more entrepreneurs invest in (a)social capital/(b)build up weak ties, the higher the access to external investors (funding).” (success factor I)

H7a/b: “The more entrepreneurs invest in (a)social capital/(b)build up weak ties, the better the internal startup performance.” (success factor II)

H8a/b: “The more entrepreneurs invest in (a)social capital/(b)build up weak ties, the more business opportunities can be identified by the startup.” (success factor III)

Figure 1 summarizes the postulated research model.

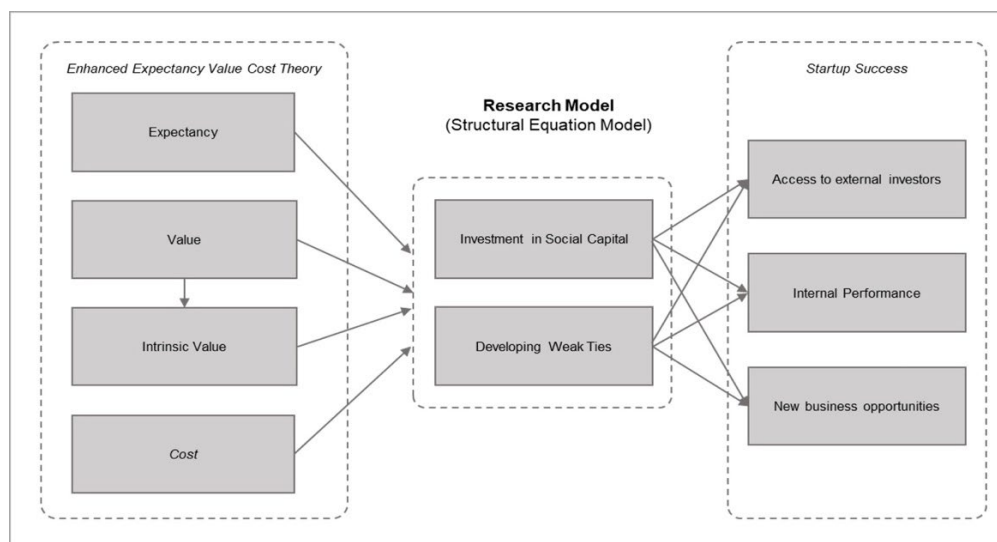


Figure 1: The research model.

3. Methodology

This study employs a quantitative research method. The quantitative approach enables the researcher to reach a wider audience with a varied background. Participants for this study were recruited via the Pollfish platform which is ISO-certified and aligned with ESOMAR standards. In total, 200 entrepreneurs participated in our survey with the following sample structure: owners of a startup, most of them (86,7%) with 1-5 years of startup experience, coverage of different branches, most of them (20%) Software and IT, E-commerce (15%), and service sector (15%). Since our study focuses primarily on examining fundamental construct relationships rather than on conducting a representative market survey or going into specific market segments, we did not apply any quotas with regard to the sample structure. Structural equations modeling, based on SmartPLS 4.0, was used to investigate the postulated interrelations and effects between the constructs of this study's research model (Chin, 1998, Ringle *et al.*, 2024).

3.1 Results for the Measurement Model

For measuring the constructs of the Expectancy-Value-Cost Theory and intrinsic motivation, established indicators from the literature (Kosovich *et al.*, 2014; Marlek, Sarin and Haon, 2020) were used and applied. The Theory of planned behavior was applied and adapted to this research context (Madden, Ellen and Ajzen, 1992) to measure behavior-related constructs "Investment in social capital" and "Developing weak ties". Three self-developed single items (the indicators are shown in table 1), were used to measure three different areas of startup success. We used 7-point Likert scales (with 1="I strongly agree" to 7="I strongly disagree") for each of the items. For all the indicators, high factor loadings for each of the intended constructs can be certified which exceeds the recommended threshold > 0.7 (Hair *et al.*, 2014). Furthermore, internal consistency reliability and convergent validity were investigated based on Cronbach's alpha, composite reliability, as well as average variance extracted (AVE). Regarding internal consistency, all values for composite reliability are above the threshold of 0.7 certifying high reliability (Chin, 1998, Hair *et al.*, 2014). The corresponding values for the measurement model can be seen in table 1.

Table 1: Outer loadings.

Item	Outer loading
Expectancy (EXP, reflective)	
"I know I can build substantial social capital/networks for supporting my startup."	0.89
"I believe that I can be successful in increasing relevant social capital/networks for my startup."	0.83
"I am confident that I have the competence for building up useful social capital/networks for my startup."	0.82
Value (V, reflective)	
"I think social capital/networks is important for startup success."	0.79
"I value building up social capital/networks for my startup."	0.83
"I think social capital/networking is useful for startup success."	0.79
Intrinsic value (IV, reflective)	
"I have the feeling that that investing in social capital/networking is a reward in itself."	0.74
"I have the feeling that investing in social capital/networking offers opportunities for growth and development to me."	0.79
"I have a feeling of self-fulfillment from being able to build social capital/networks."	0.84
Cost (CO, reflective)	
Despite other things that I do, I do have time to invest in social capital building/networking (inverse).	0.91
I'm able to put in the time needed to do well in social capital building/networking (inverse).	0.91
Investment in social capital (ISC, reflective)	
"I have actively invested in social capital/networks within the last 18 months."	0.89
"I have actively engaged in social capital building/networking within the last 18 months."	0.86
"I actively made an effort to invest in social capital/networks within the last 18 months."	0.88
Developing weak ties (DWT, reflective)	
"I actively build up weak ties within the last 18 months."	0.87
"I have actively engaged in building weak ties within the last 18 months."	0.86
"I actively made an effort to build up weak ties within the last 18 months."	0.92
Startup success I: Access to external investors (SUC1)	
"Social capital/network has played a key role in acquiring funding for my startup."	0.91
Startup success II: Internal Performance (SUC2)	
"Social capital building/networking led to measurable internal performance improvement of my startup."	(single item)
Startup success III: New Business Opportunities (SUC3)	
"Social capital building/networking led to more business opportunities of my startup."	(single item)
	(single item)

For AVE, all respective values are above the critical threshold of 0.5 which also supports the measurement model (Hair et al., 2022). For all the values see table 2.

Table 2: Construct reliability and convergent validity for the reflective measurement model.

Construct	Cronbach's Alpha (CA)	Composite Reliability (CR)	Average Variance Extracted (AVE)
Expectancy (EXP)	0.80	0.81	0.72
Value (V)	0.74	0.77	0.65
Intrinsic value (IV)	0.70	0.70	0.63
Cost (CO)	0.77	0.77	0.81
Investment in social capital (ISC)	0.84	0.85	0.76
Developing weak ties (DWT)	0.88	0.89	0.80

Based on the Fornell-Larcker Criterion discriminant validity can also be certified (Fornell and Larcker, 1981). Table 3 shows the respective values of the analysis (*square root of AVE on diagonal*):

Table 3: Fornell-Larcker Criterion.

	COS	DWT	EXP	IV	ISC	SUC1	SUC2	SUC3	V
Cost (COS)	0.900								
Developing Weak Ties (DWT)	0.447	0.894							
Expectancy (EXP)	0.704	0.349	0.847						
Intrinsic Value (IV)	0.633	0.373	0.568	0.790					
Investment in Social Capital (ISC)	0.591	0.524	0.609	0.560	0.871				
Success 1 (SUC1)	0.440	0.388	0.429	0.464	0.444	1.000			
Success 2 (SUC2)	0.599	0.463	0.551	0.584	0.557	0.460	1.000		
Success 3 (SUC3)	0.381	0.294	0.417	0.510	0.495	0.416	0.487	1.000	
Value (V)	0.567	0.303	0.638	0.575	0.515	0.342	0.457	0.371	0.804

3.2 The Structural Model

Path coefficients were estimated to analyze the structural interrelations between the constructs in this research model and for validating the hypotheses. Statistical significance was tested based on the bootstrapping procedure (with a resample size of 5000). The respective results for the structural model and hypotheses testing can be seen in table 4:

Table 4: Results of structural model assessment (*significant path coefficient).

	Path (Hypothesis)	Path Coefficient (β)	p-value	f ²	Result
H1a	EXP à ISC	0.285*	0.001	0.063	supported
H1b	EXP à DWT	0.026	0.822	0.000	not supported
H2a	V à ISC	0.096	0.196	0.009	not supported
H2b	V à DWT	0.021	0.816	0.000	not supported
H3a	CO à ISC	-0.198	0.062	0.031	not supported
H3b	CO à DWT	-0.331*	0.002	0.058	supported
H4a	IV à ISC	0.218	0.072	0.046	not supported
H4b	IV à DWT	0.137	0.179	0.013	not supported
H5	V à IV	0.575*	0.000	0.494	supported
H6a	ISC à SUC1	0.331*	0.001	0.103	supported
H6b	DWT à SUC1	0.214*	0.013	0.043	not supported
H7a	ISC à SUC2	0.433*	0.000	0.209	supported
H7b	DWT à SUC2	0.236*	0.003	0.062	supported
H8a	ISC à SUC3	0.470*	0.000	0.213	supported
H8b	DWT à SUC3	0.047	0.599	0.002	not supported

4. Discussion and Conclusion

The results provide new insights into the impact of entrepreneurs' self-perception and psychological factors on their networking behavior. The results demonstrate that expected networking skills affect entrepreneurs' investment in social capital building. From a practical standpoint, coaching on networking may help to boost entrepreneurs' perceived self-efficacy. Interestingly, on the other hand, perceived costs associated with networking activities (effort and time) do not affect entrepreneur's motivation to invest in social capital. However, perceived cost has negative effects on the creation of weak ties. This result underlines clear prioritization of entrepreneurial activities and differentiated networking behavior patterns. Thus, e.g. networking events should focus on fundamental social capital building and clear added value. Although value has a significant influence on intrinsic motivation, the latter does not appear to be a clear determinant of actual network behavior. However, these results indicate that intrinsic motivational factors may play a supportive role in networking activities. Thus, in practice, networking activities and supportive networking solutions (e.g. apps, cooperation websites, incubator and accelerator programs) should also consider emotional aspects or gamification. Finally, it can be demonstrated that investment in social capital significantly affects startup success (access to external investors, internal performance as well as the identification of new business opportunities). Weak ties can also support startup performance which may result from know-how exchange. Overall, this research shows that startup network activities are affected by a mental tradeoff regarding competence-related expectations and cost assumptions. Furthermore, it can be shown that network activities significantly affect startup success in different areas.

5. Limitations and Future Research

Our research estimates fundamental construct relationships with a focus on research contribution. Market-oriented research should follow, which also involves a comparative analysis of representative samples across different markets and regions. Additionally, further complementary data sources and also qualitative research would be suggested for investigating motivational factors to supplement our research findings. Finally, in our research, startup success was measured by single-items. Future additional research should also include multi-item (or multi-dimensional) measurement models for investigating startup success.

Ethics Declaration

The researchers obtained Institutional Review Board approval, although ethical clearance was not required for this study because it involved an anonymous, minimal risk online survey (Exempt category 2) of adult entrepreneurs and their perception of networking. This approval was granted. Participation was entirely voluntary, no vulnerable populations were targeted, and no sensitive topics (i.e. health, illegal behavior) were asked. The respondents could discontinue at any time without penalization. Data were analyzed in aggregate only. All data was anonymized with no personal identifiable information.

AI Declaration

AI was used in the 'Introduction' section and the section titled 'A Brief History of Entrepreneurship Theory' to improve readability. AI was also used to help translate the survey questions from English to German to ensure proper grammar. AI was not used for sources or references.

References

- Abakah, A., Kim, G. and Somé, H. (2025) 'Social networks and startup funding', *Finance Research Letters*, 64, pp. 1-22. Available at: <http://dx.doi.org/10.2139/ssrn.5375942>.
- Abdelghani, B. (2024) 'Exploring the distinctions between Startups and small and medium-sized enterprises (SMEs): A comparative analysis', *International Journal of Economic Perspectives*, 18(12), pp. 2499–2511. Available at: <https://ijeponline.org/index.php/journal/article/view/788>.
- Accenture (2025) *Collaborate to innovate – Making partnerships work in uncertain times*. Available at: https://startupverband.de/fileadmin/startupverband/mediaarchiv/research/sonstige_studien/Collaborate_to_Innovate_2025.pdf.
- Agarwal, P. (2025) *Why startups fail – A data-backed look at early-stage pitfalls*. Available at: <https://eximiusvc.com/blogs/why-startups-fail-top-10-reasons-failure-rate/>.
- Alvarez-Salazar, J., Seclen-Luna, J. P. and Vasquez Neyra, J. M. (2025) 'Networking, experimentation, and financing as drivers of accelerated growth in Peruvian startups', *Journal of Innovation and Entrepreneurship*, 14(110), pp.1-23. Available at: <https://doi.org/10.1186/s13731-025-00589-3>.

- Arinkina, M. (2025) *Startup success and failure rate*. Available at: <https://www.upsilonit.com/blog/startup-success-and-failure-rate>.
- Babar, S. (2024) 'Entrepreneurship ecosystems and start-up culture', in C. Fernandez, N. Kumar and S. Gayathri (eds.), *Bridging Disciplines: Exploring multidisciplinary Research Frontiers*, Red Unicorn Publishing PVT, pp.360-369. Available at: Doi: 10.25215/9358096381.39
- Bundesministerium für Wirtschaft und Energie (2026, 12.01) *Rekordjahr 2025: Startup-Gründungen in Deutschland erreichen neuen Höchststand*. Available at: <https://www.bundeswirtschaftsministerium.de/Redaktion/DE/Dossier/startup-rekordjahr.html>.
- Calloway, J. (2025). *41 Startup statistics – global numbers and success rates*. Available at: <https://www.limelightdigital.co.uk/startup-statistics/>.
- Chammassian, R.G., and Sabatier, V. (2020) 'The role of costs in business model design for early-stage technology startups', *Technological Forecasting and Social Change*, 157, available at: <https://doi.org/10.1016/j.techfore.2020.120090>
- Cheng, C. (2025) 'The Role of Digital Social Capital in Startup Funding', *The Transdisciplinary Journal of Management*. Available at: <https://tim.scholasticahq.com/article/142981-the-role-of-digital-social-capital-in-startup-funding-a-conceptual-exploration>.
- Chin, W.W. (1998) 'The partial least squares approach to structural equation modeling', in: G.A Marcoulides (ed.), *Modern Methods for Business Research*. Lawrence. Erlbaum Associates, Mahwah, pp. 295-336.
- De Witte, M. (2023). *50 years on, Mark Granovetter's "The Strength of Weak Ties" is stronger than ever*. Available at: <https://news.stanford.edu/stories/2023/07/strength-weak-ties>.
- Desjardins, J. (2017). *Here's why small businesses fail*. Available at: <https://www.visualcapitalist.com/why-do-businesses-fail/>.
- Dias, C., Rodrigues, R.G. and Ferreira, J.J. (2019) 'Agricultural entrepreneurship: Going back to the basics', *Journal of Rural Studies*. 70: 125-138. Available at: DOI: [10.1016/j.jrurstud.2019.06.001](https://doi.org/10.1016/j.jrurstud.2019.06.001).
- Dizikes, P. (2022) *The power of weak ties in gaining new employment*. Available at: <https://news.mit.edu/2022/weak-ties-linked-in-employment-0915>.
- Do, H., Nguyen, B. and Dao, M. (2025) 'Social capital and SME innovations. *Small Business Economics*', 66(1), pp. 323-360. Available at: DOI: [10.1007/s11187-025-01105-3](https://doi.org/10.1007/s11187-025-01105-3).
- Eccles J. S., Adler, T. F., Fetterman, R., Goff, S. B., Kaczala, C. M., Meece, J. L., and Midgley, C. (1983) 'Expectancies, values, and academic behaviors', in J. T. Spence (Ed.), *Achievement and achievement motivation*, pp. 75–146. San Francisco, CA: W. H. Freeman.
- Ehsan, Z.-A. (2021) 'Defining a Startup-A Critical Analysis', *SSRN Electronic Journal*, pp. 1-8. Available at: <https://doi.org/10.2139/ssrn.3823361>.
- Ehrig, T. and Schmidt, J. (2022) 'Theory-based learning and experimentation', *Strategic Management Journal*, 43, pp. 1287–1318. Available at: DOI: [10.1002/smj.3381](https://doi.org/10.1002/smj.3381).
- Eyo-Udo, N., Apeh, C., Bristol-Alagbariya, B., Udeh, C. and Ewim, C. (2025) 'Reviewing the role of networking in business success', *International Journal of Multidisciplinary Research and Growth Evaluation*, 6(1), pp. 820–826. Available at: DOI: [10.54660/IJMRGE.2025.6.1.820-826](https://doi.org/10.54660/IJMRGE.2025.6.1.820-826).
- Feehan, D. M., Hai Son, V. and Abdul-Quader, A. (2022) 'Survey Methods for Estimating the Size of Weak-Tie Personal Networks', *Sociological Methodology*, 52(2), 193–219. Available at: <https://doi.org/10.1177/00811750221109568>.
- Felin, T. and Zenger, T. R. (2017) 'The Theory-Based View: Economic Actors as Theorists', *Strategy Science*, 2(4), pp. 258–271. Available at: DOI: [10.1287/stsc.2017.0048](https://doi.org/10.1287/stsc.2017.0048).
- Flake, J.K. (2012) 'Measuring cost: The forgotten component of expectancy value theory', *Masters Thesis JMU Scholarly Commons*, 208, Available at: <https://commons.lib.jmu.edu/cgi/viewcontent.cgi?article=1221&context=master201019>
- Fornell, C. and Larcker, D. F. (1981) 'Evaluating Structural Equation Models with unobservable Variables and Measurement Error', *Journal of Marketing Research*, 18(1), pp. 39-50 Available at: DOI: [10.1177/002224378101800104](https://doi.org/10.1177/002224378101800104).
- Frid, C. J., Wyman, D. M. and Shaver, K. G. (2025) 'Cultivating Emerging Gazelles', *Journal of Small Business Strategy*, 35(3), pp. 29–40. Available at: <https://doi.org/10.53703/001c.138478>.
- Fronczak, A., Mrowinski, M. and Fronczak, P. (2022) 'Scientific success and weak ties', *Scientific Reports*, 12 (1), pp.1-11. Available at: DOI: [10.1038/s41598-022-09118-8](https://doi.org/10.1038/s41598-022-09118-8).
- Germany Trade & Invest (2025, Jan 14) *Number of Startups and Funding Rises in Germany*. Available at: <https://www.gtai.de/en/invest/number-of-startups-and-funding-rises-in-germany-1855184>.
- Granovetter, M.S. (1973) 'The Strength of Weak Ties', *American Journal of Sociology*, 78(6), pp.1360 - 1380. Available at: <https://www.jstor.org/stable/2776392>.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., and Sarstedt, M. (2022) *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 3rd ed. Thousand Oaks, CA: Sage.
- Hair, J.F., Sarstedt, M., Hopkins, L., and Kuppelwieser, V.G. (2014) 'Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research', *European Business Review*, 26(2), pp. 106–121. Available at: <https://doi.org/10.1108/EBR-10-2013-0128>.
- KfW Research (2024) *KfW Entrepreneurship Monitor 2024. Startup activity lacks macroeconomic impetus – self-employed people are becoming more important as multipliers* Available at: https://www.kfw.de/PDF/Download-Center/Konzernthemen/Research/PDF-Dokumente-Gr%C3%BCndungsmonitor/Gr%C3%BCndungsmonitor-englische-Dateien/KfW-Gr%C3%BCndungsmonitor-2024_EN.pdf.

- Kosovich, J. J., C. S. Hulleman, K. E. Barron and Getty, S. (2014) 'Practical Measure of Student Motivation: Establishing Validity - Evidence for the Expectancy-Value-Cost Scale in Middle School', *Journal of Early Adolescence*, 35(5-6), pp. 1-27. Available at: <https://doi.org/10.1177/02724316145568>.
- Madden, T. J., Ellen, P. S. and Ajzen, I. (1992) 'A Comparison of the Theory of Planned Behavior and the Theory of Reasoned Action', *Personality and Social Psychology Bulletin*, 18(3-9), pp. 3-9 Available at: DOI:[10.1177/0146167292181001](https://doi.org/10.1177/0146167292181001).
- Malek, S. L., Sarin, S. and Haon C. (2020) 'Extrinsic Rewards, Intrinsic Motivation, and New Product Development Performance', *Journal of Product Innovation Management*, 37(6), pp. 528-551 Available at: <https://doi.org/10.1111/jpim.12554>.
- Mickiewicz, T., Ri, A., Prashar, N. and Hart, M. (2025) 'The impact of local social capital on types of entrepreneurship', *Regional Studies*, 59(1), pp. 1-21. Available at: <https://doi.org/10.1080/00343404.2025.2502645>.
- Nahapiet, J. and Ghoshal, S. (1998) 'Social Capital, Intellectual Capital, and the Organizational Advantage', *The Academy of Management Review*, 23(2), pp. 242-266 Available at: DOI:[10.2307/259373](https://doi.org/10.2307/259373).
- Nozawa, H. and Kang, R. (2024) 'Changes in networks influencing entrepreneurial activity of startup founders', *Journal of the International Council for Small Business*, 6(3), pp. 1-9. Available at: DOI:[10.1080/26437015.2024.2411596](https://doi.org/10.1080/26437015.2024.2411596).
- Peng, H., Li, B. and Liu, Y. (2022) 'How social networks influence the growth of entrepreneurial enterprises', *SAGE Open*, 12(2), pp.1-16. Available at: DOI:[10.1177/21582440221108178](https://doi.org/10.1177/21582440221108178).
- Perotti, V. and Yu, Y. (2015) 'Startup Tribes: Social Network Ties that Support Success in New Firms', *AMCIS 2015 Proceedings*, 17. Available at: <https://aisel.aisnet.org/amcis2015/e-Biz/GeneralPresentations/17>.
- Ricciardi, A., Cerrato, D. and Antoldi, F. (2025) 'How micro-firms innovate: A qualitative study on the role of networks', *Journal of Small Business Management*, 63(2), pp. 620-652. Available at: DOI: 10.1080/00472778.2024.2336471.
- Rijal, S., Utomo, B. and Ramdhani, R. (2024) 'The Influence of Social Capital on Entrepreneurial Success', *International Journal of Business, Law, and Education*, 5(2), pp. 1686-1696. Available at: DOI:[10.56442/ijble.v5i2.678](https://doi.org/10.56442/ijble.v5i2.678).
- Ringle, C. M., Wende, S., Becker, J. M., (2024) 'SmartPLS 4', Boenningstedt: SmartPLS GmbH, retrieved from: <https://www.smartpls.com>.
- Singh, S. and Basri, S. (2024) 'Antecedents of entrepreneurial networking behavior [version 1; peer review: 2 approved]', *F1000Research*, (13)794. Available at: <https://doi.org/10.12688/f1000research.150032.1>
- Tülüce, N.S. and Yurtkur, A.K. (2015) 'Term of Strategic Entrepreneurship and Schumpeter's Creative Destruction Theory', *Procedia - Social and Behavioral Sciences*, 207(4), pp. 720-728. Available at: DOI:10.1016/j.sbspro.2015.10.146.