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Study of Role of Technology in Entrepreneurial Venture Success

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I. INTRODUCTION

Entrepreneurship refers to a planning and practical execution of a business plan which is profitable though with margin of risk involved. Entrepreneurship makes people think out of box driven by ambition and fuelled by opportunities to remould risk into productive opportunities helpful to boost economy. In many countries it provides major share in job provision (Fölster, 2000, Heyman et al., 2018). Entrepreneurship is main factor in development of a country's economy as it's a leading source of revenue, foreign exchange and jobs for people. Necessary policies are mandatory to ensure successful execution of new ventures to ensure sustainable economic growth (McMullan et al., 1986; Tunali and Sener 2019). Based upon type, extent and urgency of various problems, entrepreneurship offers sustainable, exclusive and ground applicable solutions matching market needs and wants using information-technology. Technology based ventures are dominant in this regard as they offer number of solutions based upon latest information technology models (Kummitha, 2018). People world over are frequently facing new and diverse issues which needs creativity and innovations to resolve for which technology can play vital role (Macke et al., 2018). New business models involving innovation, IT and having problem solving attitude is more likely to get sustainable sooner compared to other ventures as entrepreneurship works on intentions to actions (Souitaris et al., 2007).

Various issues regarding primary success of entrepreneurship are of various types involving technology and non-technology issues. Among non-IT, capital constraints (Evans and Jovanovic, 1989), founding experience of project/business leads (Cumming et al., 2016) and previous successful completed projects of entrepreneur (Hsu, 2007) are major constructs as experienced leads can help succeed business (Hsu, 2007; Gompers et al., 2010). Work conducted by Hsu, 2007 has shown that experienced serial entrepreneurs have ability to gain funds, construct a skilled lead but pre-exposure experience (preferable in same field) is also key factor in success of venture (Eggers and Song, 2015; Lafontaine and Shaw 2016). Involvement of experienced staff in business venture thus can decrease its failure risk as well as increase chances of success. Question arises that whether only serial entrepreneurs having diverse experiences have leverage to negotiate better terms? Probably not! as habitual entrepreneurs are more likely to succeed MacMillan (1986). Success in business ventures is very important but failure also provides needful experience which can be leveraged in next business plan and model (Nahata 2019). Besides these non-technology factors, tech-based factors are also involved in success of entrepreneurial ventures.

Entrepreneurs which have close insight of market situations tend to introduce products as per available opportunities and gaps which tend to be catchy for customers, this type is called innovative entrepreneurship and involved technology for survey and need determination (Collinson & Shaw, 2001). Innovations in market has a leverage over conventional entrepreneurs who prefer to traditional norms of market. Technology, logistics and innovation-based market purchase and business/product set up is key in business success in modern day (Fairlie & Fossen, 2018). Business ideas and entrepreneurship is a source of wealth, stimulate economies and generate economic stability thus a lot of individuals (476,000 to be exact) annually in US according to Kauffman Foundation (Fairlie, 2014). From the same sources its reported that, 64 million people worldwide and millennials/generation Y/echo-boomers/Generation nest (Weber, 2017) having high affinity in innovative entrepreneurship.

In technology boom of entrepreneurship, internet is main factor involved worldwide providing various opportunities and can act as a card out of poverty (Williams, 2018). Web development, ecommerce and affiliate marketing on internet involving millions of online devices has contributed heavily in booming entrepreneurial ventures. For such work to be done effectively, business environment, resources (financial and technical) and skilled team are required (Timmons and Spinelli (2007). The US is considered as hub of string entrepreneurial ecosystem having related people, resources and events (Regele & Neck, 2012; Roundy, 2017). Literature has shown that entrepreneurial education, legal framework, and country polices are also key factors in business support and start-up booming (Hechavarria & Ingram, 2014; Regele & Neck, 2012). Involvement of and expert person which has keen knowledge of complex network development is crucial for sustainability of entrepreneurial ventures as technology based complex frameworks are difficult to interpret (Alvarez & Busenitz, 2001; Barney, 1991). Skills sets needed for launch of successful bossiness venture involve

various aspects varying dramatically with keen approaches involving sight, psychological and technology-based skills (Kirby 2004; Brown & Hanlon, 2016; Giannantonio & Hurley-Hanson, 2016) as digital technology is essence of business success (Von-Briel et al., 2018). Technical knowledge and ICT can help enhance entrepreneurship education program in individual identity and profitable ventures (Al-Atabi & DeBoer, 2014; Smith et al., 2017). Technical based knowledge, crowdfunding and crowd investing online platforms are key ICT features for entrepreneurial success (Cumming & Schwienbacher, 2018; Haddad & Hornuf, 2018) and digitalization itself has generated several opportunities in business models as well sharing growth in economical ventures (Richter, Kraus, Brem, Durst, & Giselbrecht, 2017). This era of technology has given birth to several opportunities acting as an input factor to create new products and services on internet itself (Giones & Brem, 2017; Sussan & Acs, 2017).

In technology-based business ventures, advent of social media has changed the prospects of people and organizations and has completely changed business ventures mode of business lately and social media marketing is latest modern face of entrepreneurial business success (Martín-Rojas et al., 2019). Though a business is just based upon an idea of one individual (Davidsson, 2015) but not all ideas can work and move forward (Mcmullen and Dimov, 2013). We must take into count supply demand interaction (Dey and Mason, 2018) but initial positive believe can also be significant in this regard (Chen et al., 2018). Proper physiological activities of team involved, and rest of active brains are also necessary for success of a new business ventures (Gish et al., 2019). Technology based entrepreneurial ventures are more likely to succeed compared to conventional ventures due to various reasons like:

A. Grasp of need
B. Huge tech users aiming to increase customers
C. User friendly and convenient
D. Easy to expand
E. Leverage of Artificial Intelligence & Machine Learning

1) *Gap of Study:* Though various investigations are available citing role of technology in business success, but little scientific work has been published. A special issue summarized by Bruton et al. (2008) has reported that scientific community need to work on this issue to understand effect of digitalization on business success and job market. Keeping in mind importance of technology-based entrepreneurship a vast research on digital transformation is well needed as it can boast entrepreneurial ventures (Nambisan, 2017). That's why current project is proposed to investigate quantitative effectiveness of technology and entrepreneurial venture success.
2) *Hypothesis:* The more technology Entrepreneurial Venture uses, more is chances of success

II. REVIEW OF LITERATURE

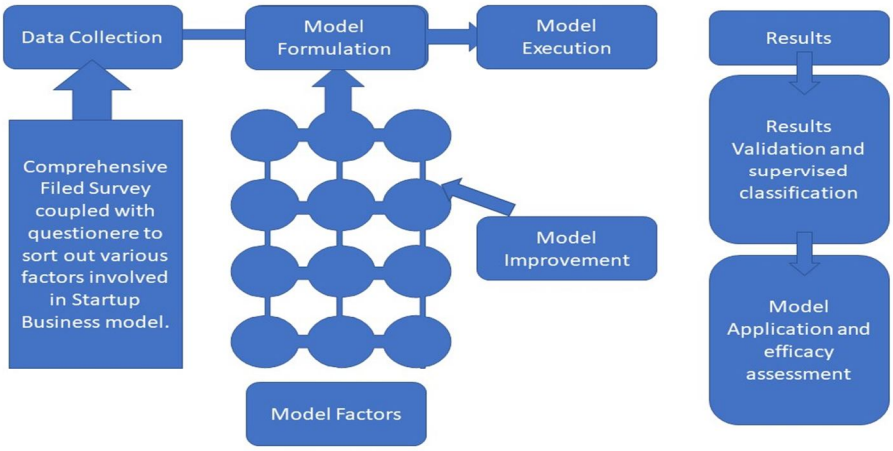
Market need driven product and business planning is a key point in modern day advanced entrepreneurship. A research work summarized and conducted by Ali and co-workers (Ali et al., 2019) has shows similar results of datasets. They investigated the relation between market driven entrepreneurship and product screening/delivery addressing market opportunities and customer needs. Novel products and offers are attractive in this regard. Their results shown an effect of organization, their activities-corporate work. Analysis of 44 parameters has shown that basic economic conditions, infrastructure, market strategy, rates of innovative/corporate entrepreneurship are negatively linked to foster innovation and external contexts while positively related to corporate work aiming to involve technology. Digital technology is an important expect and facilitator for bossiness success process as reported by (Von-Briel et al., 2018). Digitalization of bossiness plan reduces its risk as it dilutes various barriers thus can help boast healthy entrepreneurship. Digitalization financial capital, crowd funding and credit economical can be better handled with. Technology based efforts (information and technology ICT) by various means like cloud computing. Digital entrepreneurship can not only reduce financial risks but also can decrease human labour cost involving artificial intelligence and machine learning. (van Praag & Versloot, 2007). A study reviewed by Fossen and Sorgner (2019) has provided and insight on comparison and relationship among new wave in digitalization of work in US with two different types of entrepreneurship ventures in same country. With reference to population survey (2011-2018) with several measures considered has shown a destructive impact on conventional workforce and occupation and digitalization is positively corelated with entrepreneurial activities on individual levels. Their results have summarized that, high skilled personals if get affected by destructive digitalization tend to go towards entrepreneurship as an unincorporated business. For low skilled persons, destructive digitalization is final nail in coffin and AI has huge potential to capture vast majority of job market. Though various countries (like China) are known for their entrepreneurial excellence/research but their methods are not understood lately (Chen, 2001).

A work conducted by Larsson et al., (2019) has shown effectiveness of open source software providing opportunities for knowledge creation and business success. They compared entrepreneurs and non-entrepreneur behaviours in order to investigate comparative effectiveness within an OSS community. In face of current problematic scenarios faced by new and old business ventures, role of OSS is very significant and helpful in entrepreneurial business ventures (Larsson et al., 2019). The entrepreneurs prefer to join those organizations which are closely related to sole cause and close fit of individual and organization (Dvir et al., 2010). In operation management and management research, technology-based tools are very important (Sabahi et al., 2020). The work published by Ahmad et al., (2020) has shown that an insight experience of a person can enhance its capabilities to work independently as well.

III. MATERIAL AND METHODS

A survey study will be conducted in which extensive sampling and information collection will be done keeping in mind all factors responsible for success of business ventures. Collected datasets will be put through model development and machine learning to formulate a model which can predict effectiveness of technology in business success. Exploratory factor analysis will be done to access role of technology execution on business success followed by confirmatory factor analysis.

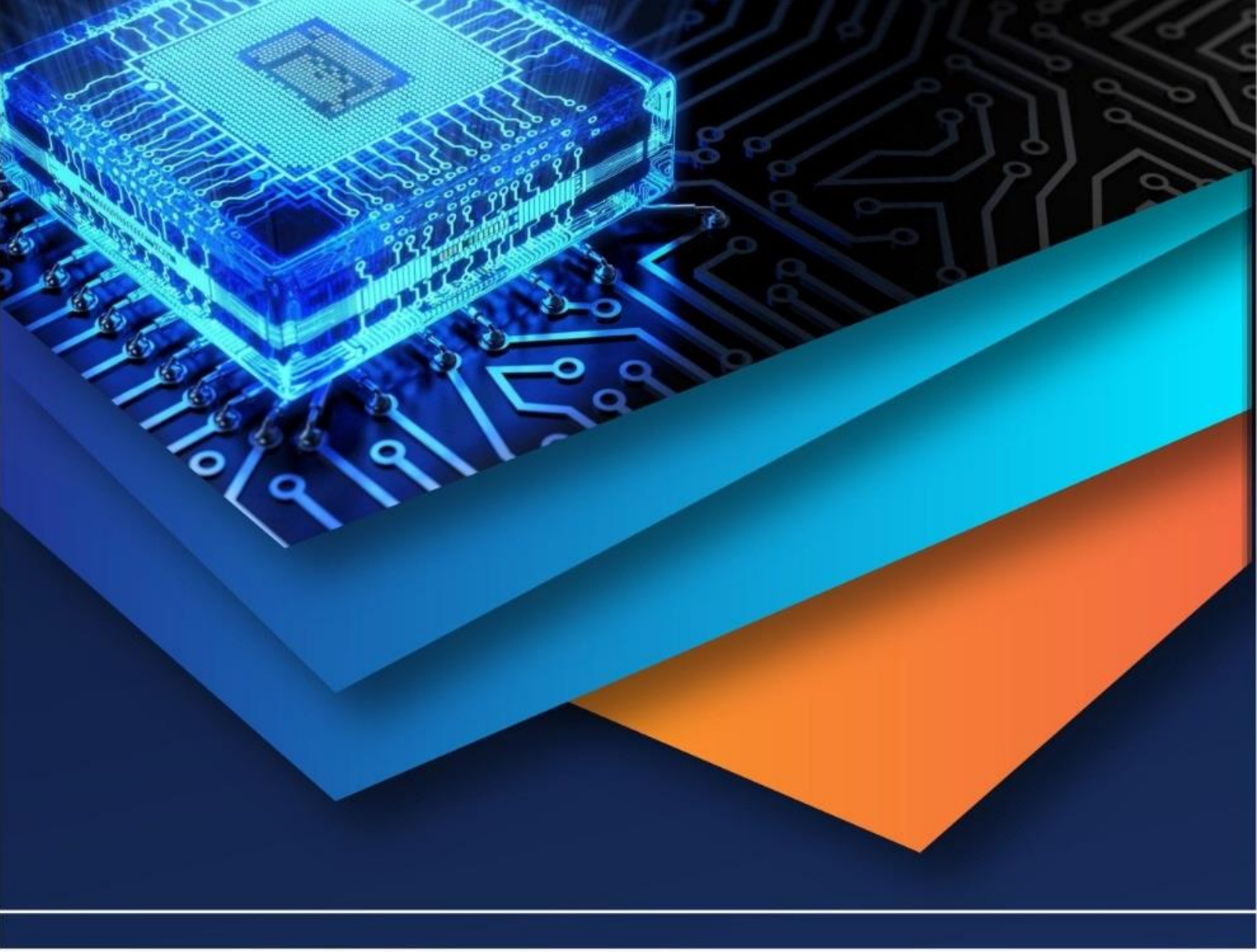
Tentative Design of Artificial neural Network



REFERENCES

[1] Ahmed, T., Chandran, V.G.R., Klobas, J.E., Liñán, F. and Kokkalis, P., 2020. Entrepreneurship education programmes: How learning, inspiration and resources affect intentions for new venture creation in a developing economy. The International Journal of Management Education, 18(1), p.100327.
[2] Al-Atabi, M., & DeBoer, J. (2014). Teaching entrepreneurship using Massive Open Online Course (MOOC). Technovation, 34(4), 261–264
[3] Ali, A., Kelley, D.J. and Levie, J., 2019. Market-driven entrepreneurship and institutions. Journal of Business Research.
[4] Alvarez, S. A., & Busenitz, L. W. (2001). The entrepreneurship of resource-based theory. Journal of Management, 27(6), 755–775.
[5] Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99–120.
[6] Brown, T. C., & Hanlon, D. (2016). Behavioral criteria for grounding entrepreneurship education and training programs: A validation study. Journal of Small Business Management, 54(2), 399–419.
[7] Bruton, G. D., Ahlstrom, D., & Obloj, K. (2008). Entrepreneurship in emerging economies: Where are we today and where should the research go in the future. Entrepreneurship Theory and Practice, 32, 1–14.
[8] Chen, H.S., Mitchell, R.K., Brigham, K.H., Howell, R., Steinbauer, R., 2018. Perceived psychological distance, construal processes, and abstractness of entrepreneurial action. J. Bus. Ventur. https://doi.org/10.1016/j.jbusvent.2018.01.001.
[9] Chen, N. (2001). SMEs in China: Development and Projection. Beijing: Mingzhu he Jiangshe Publisher (in Chinese).
[10] Collinson, E., & Shaw, E. (2001). Entrepreneurial marketing–a historical perspective on development and practice. Management Decision, 39(9), 761–766.
[11] components of business creation. www.papers.ssrn.com
[12] Cumming, D. J., & Schwienbacher, A. (2018). Fintech Venture Capital. Corporate Governance: An International Review, 26(5), 374–389.
[13] Cumming, D., Walz, U., Werth, J.C., 2016. Entrepreneurial spawning: experience, education, and exit. Financ. Rev. 51, 507–525.
[14] Davidsson, P., 2015. Entrepreneurial opportunities and the entrepreneurship nexus: a re-conceptualization. J. Bus. Ventur. 30 (5), 674–695. https://doi.org/10.1016/ j.jbusvent.2015.01.002.
[15] Dey, P., Mason, C., 2018. Overcoming constraints of collective imagination: an inquiry into activist entrepreneuring, disruptive truth-telling and the creation of 'possible worlds. J. Bus. Ventur. 33 (1), 84–99. https://doi.org/10.1016/j.jbusvent.2017.11.002.
[16] Dvir, D., Sadeh, A. and Malach-Pines, A., 2010. The fit between entrepreneurs' personalities and the profile of the ventures they manage and business success: An exploratory study. The Journal of High Technology Management Research, 21(1), pp.43-51.
[17] Eggers, J.P., Song, L., 2015. Dealing with failure: serial entrepreneurs and the costs of changing industries between ventures. Acad. Manag. J. 58, 1785–1803.

[18] Ekkayokkaya, M., Pengniti, T., 2012. Governance reform and IPO underpricing. J. Corp. Finan. 18, 238–253.
[19] Evans, D., Jovanovic, B., 1989. An estimated model of entrepreneurial choice under liquidity constraints. J. Polit. Econ. 97, 808–827.
[20] Fairlie, R. W. (2014). Kauffman Index of entrepreneurial activity 1996–2013. Ewing Marion Kauffman Foundation.
[21] Fairlie, R. W., & Fossen, F. M. (2018). Opportunity versus necessity entrepreneurship: Two
[22] Fossen, F.M. and Sorgner, A., 2019. Digitalization of work and entry into entrepreneurship. Journal of Business Research.
[23] Giannantonio, C. M., & Hurley-Hanson, A. E. (2016). Entrepreneurial characteristics and careers: American high-tech entrepreneurs. Journal of Business Management, 22(2), 59–75.
[24] Giones, F., & Brem, A. (2017). Digital technology entrepreneurship: A definition and research. Technology Innovation Management Review, 7(5), 44–51.
[25] Gish, J.J., Wagner, D.T., Grégoire, D.A. and Barnes, C.M., 2019. Sleep and entrepreneurs' abilities to imagine and form initial beliefs about new venture ideas. Journal of Business Venturing, 34(6), p.105943.
[26] Gompers, P., Kovner, A., Lerner, J., Scharfstein, D., 2010. Performance persistence in entrepreneurship. J. Financ. Econ. 96, 18–32.
[27] Gompers, P., Kovner, A., Lerner, J., Scharfstein, D., 2010. Performance persistence in entrepreneurship. J. Financ. Econ. 96, 18–32.
[28] Hechavarria, D. M., & Ingram, A. (2014). A review of the entrepreneurial ecosystem and the entrepreneurial society in the United States: An exploration with the global entrepreneurship monitor dataset. Journal of Business and Entrepreneurship, 26(1), 1–35.
[29] Heyman, F. , Norbäck, P.-J. , Persson, L. , 2018. Who creates jobs and who creates produc- tivity? Small versus large versus young versus old. Econ. Lett. 164, 50–57.
[30] Hsu, D., 2007. Experienced entrepreneurial founders, organizational capital, and venture capital funding. Res. Policy 36, 722–741.
[31] Kirby, D. A. (2004). Entrepreneurship education: Can business schools meet the challenge? Education + Training, 46(8/9), 510–519.
[32] Kummitha, R.K.R., 2018. Entrepreneurial urbanism and technological panacea: why smart city planning needs to go beyond corporate visioning. Technol. Forecast. Soc. Change 137, 330–339.
[33] Lafontaine, F., Shaw, K., 2016. Serial entrepreneurship: learning by doing? J. Labor Econ. 34, 217–254.
[34] Larsson, Z.Y., Di Gangi, P.M. and Teigland, R., 2019. Sharing my way to success: A case study on developing entrepreneurial ventures using social capital in an OSS community. Information and Organization, 29(1), pp.23-40.
[35] Macke, J., Casagrande, R.M., Sarate, J.A.R., Silva, K.A., 2018. Smart city and quality of life: citizens' perception in a Brazilian case study. J. Clean. Prod. 182, 717–726.
[36] MacMillan, I., 1986. To really learn about entrepreneurship, let's study habitual entrepreneurs. J. Bus. Ventur. 1, 241–243.
[37] Martín-Rojas, R., Garrido-Moreno, A. and García-Morales, V.J., 2019. Fostering Corporate Entrepreneurship with the use of social media tools. Journal of Business Research.
[38] McMullen, J.S., Dimov, D., 2013. Time and the entrepreneurial journey: the problems and promise of studying entrepreneurship as a process. J. Manag. Stud. 50 (8), 1481–1512. https://doi.org/10.1111/joms.12049.
[39] Nahata, R., 2019. Success is good but failure is not so bad either: Serial entrepreneurs and venture capital contracting. Journal of Corporate Finance, 58, pp.624-649.
[40] Nambisan, S. (2017). Digital entrepreneurship: Toward a digital technology perspective of entrepreneurship. Entrepreneurship Theory and Practice, 41(6), 877–1085.
[41] Regele, M. D., & Neck, H. M. (2012). The entrepreneurship education sub-ecosystem in the United States: Opportunities to increase entrepreneurial activity. Journal of Business & Entrepreneurship, 23(2), 25–47.
[42] Regele, M. D., & Neck, H. M. (2012). The entrepreneurship education sub-ecosystem in the United States: Opportunities to increase entrepreneurial activity. Journal of Business & Entrepreneurship, 23(2), 25–47.
[43] Richter, C., Kraus, S., Brem, A., Durst, S., & Giselbrecht, C. (2017). Digital entrepreneurship: Innovative business models for the sharing economy. Creativity and Innovation Management, 26(3), 300–310.
[44] Roundy, P. T. (2017). "Small town" entrepreneurial ecosystems: Implications for developed and emerging economies. Journal of Entrepreneurship in Emerging Economies, 9(3), 238–262.
[45] Sabahi, S. and Parast, M.M., 2020. The Impact of Entrepreneurship Orientation on Project Performance: A Machine Learning Approach. International Journal of Production Economics, p.107621.
[46] Smith, C., Smith, J. B., & Shaw, E. (2017). Embracing digital networks: Entrepreneurs' social capital online. Journal of Business Venturing, 32(1), 18–34.
[47] Souitaris, V. , Zerbinati, S. , Al-Laham, A. , 2007. Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. J. Bus. Ventur. 22 (4), 566–591.
[48] Sussan, F., & Acs, Z. J. (2017). The digital entrepreneurial ecosystem. Small Business Economics, 49(1), 55–73.
[49] Timmons, J. A., & Spinelli, S. (2007). New venture creation, entrepreneurship for the 21 century(7th ed.). New York: McGraw-Hill Education.
[50] Tunali, C.B. and Sener, S., 2019. The Determinants of Entrepreneurship in Turkey. Procedia Computer Science, 158, pp.648-652.
[51] van Praag, C. M., & Versloot, P. H. (2007). What is the value of entrepreneurship? A review of recent research. Small Business Economics, 29(4), 351–382.
[52] von Briel, F., Davidsson, P., & Recker, J. C. (2018). Digital technologies as external enablers of new venture creation in the IT hardware sector. Entrepreneurship Theory and Practice, 42(1), 47–69.
[53] Wahba, S., 2002. Propensity score matching methods for non-experimental causal studies. Rev. Econ. Stat. 84, 151–161.
[54] Weber, J. (2017). Discovering the millennials' personal values orientation: A comparison to two managerial populations. Journal of Business Ethics, 143(3), 517–529.
[55] Williams, K. (2018). BUSN10: Introduction to business. Cengage Learning.



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