

Student Entrepreneurship Development Model at Universities in West Sumatera, Indonesia

Mona Novita¹, Muhammad Anggung Manumanoso Prasetyo²
Bashori³, Badarussyamsi⁴, Novi Nur Lailisna⁵

¹Natural Science Education Department, Institut Agama Islam Yasni Bungo, Jambi, Indonesia

²Islamic Education Management Department, Institut Agama Islam Negeri Lhokseumawe, Aceh, Indonesia

³Islamic Education Management Department, Universitas Islam Negeri Imam Bonjol Padang, Padang, West Sumatra, Indonesia

⁴Islamic Education Management Department, Universitas Islam Negeri Sulthan Thaha Saifuddin, Jambi, Indonesia

⁵Islamic Early Childhood Education Department, Sekolah Tinggi Agama Islam Badrus Sholeh, Kediri, East Java, Indonesia

Email: monanovita.staiyasni@gmail.com¹, anggung@iainlhokseumawe.ac.id², bashori2@uinib.ac.id³, badarussyamsi@uinjambi.ac.id⁴, nophy18@gmail.com⁵

DOI: <http://doi.org/10.33650/al-tanzim.v6i4.3394>

Received: 23 February 2022; Received in Revised Form: 24 March 2022, Accepted: 6 June 2022, Available online: 16 September 2022

Abstract:

This study aims to determine, understand and analyze the higher education entrepreneurship development model. The model implementation process is carried out in stages, from the strategic plan stage, implementation in higher education units to mobilizing the community to participate in entrepreneurial activities. This study uses a qualitative approach with the type of case study conducted at the Padang State University (UNP) West Sumatra Province, Indonesia. The results show that the development model refers to the System Theory, manifested in the VALUE concept (View, appreciate, lead, understand and evaluate). The key factor as the primary capital for the implementation of the model is the milieu of the Padang community, which is thick with the entrepreneurial spirit in a spiritual, religious frame – Muslimpreneur. This study implies that the VALUE concept leadership management process can produce output through Muslimpreneur-based student entrepreneurship development, ultimately increasing the value of innovation and independence for students.

Keywords: *Development Model, Entrepreneurship, Triple Helix Model*

Abstrak:

Penelitian ini bertujuan untuk mengetahui, memahami dan menganalisis model pengembangan kewirausahaan perguruan tinggi. Proses implementasi model dilakukan secara bertahap, mulai tahap rencana strategis, pelaksanaan pada unit perguruan tinggi hingga mobilisasi masyarakat untuk berpartisipasi dalam kegiatan kewirausahaan. Penelitian ini menggunakan pendekatan kualitatif dengan jenis studi kasus yang dilaksanakan di Universitas Negeri Padang (UNP) Provinsi Sumatera Barat Indonesia. Hasil penelitian menunjukkan bahwa model pengembangan dilaksanakan mengacu pada Teori Sistem yang termanifestasikan dalam konsep VALUE (*View, appreciate, leading, understand dan evaluate*). Faktor kunci sebagai modal primer efektivitas pelaksanaan model adalah milieu masyarakat Padang yang kental dengan spirit kewirausahaan dalam bingkai religius spiritual – *muslimpreneur*. Penelitian ini

memberikan implikasi bahwa proses manajemen kepemimpinan berkonsep VALUE dapat menghasilkan output berupa pengembangan kewirausahaan mahasiswa berbasis muslimpreneur yg pada akhirnya akan meningkatkan nilai inovasi serta kemandirian bagi mahasiswa.

Kata Kunci: *Model Pengembangan, Kewirausahaan; Model Tripel Helix;*

Please cite this article in APA style as:

Novita, M., Prasetyo, M. A. M., Bashori, B., Badarussyamsi, B., & Nurlailisna, N. (2022). Student Entrepreneurship Development Model at Universities in West Sumatera, Indonesia. *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 6(4), 1205-1218.

INTRODUCTION

The current problem of higher education is the gap between the competence of graduates and the needs of the industrial world. Empirical data shows that a high level of education does not guarantee that it is easy to get a job (Chalim, 2018). Central Bureau of Statistics (PBS) shows that open unemployment data fell by 5% (BPS, 2019). Ironically, from this number, the percentage of the unemployment category for college graduates had increased. Surveys in 2019 showed unemployment rates for diploma and university graduates were in the range of 6 to 7 percent, respectively (katadata.com, 2019), far above the unemployment rate for elementary school graduates (2,7 %) and secondary high school (5 %) (detik.com, 2019).

Local entrepreneurship in Padang shows excellent potential as an economic development strategy, especially for universities (Yulastri et al., 2018). For students, practicing entrepreneurship can improve economic conditions that are stagnant or declining. Universities can act as business facilitators; in this case, students can practice and actualize business ideas (Karmila et al., 2018). Society as a social infrastructure helps entrepreneurs achieve success. Finally, educational programs that support entrepreneurship can play an essential role in the regional economic development of the Padang city community (Phan, 2004) and Indonesia nationally.

Human resource development will be more successful if it is supported by entrepreneurship which can create jobs because the government's capacity is minimal. The pandemic undermines long-term financial sustainability, especially after covid-19 (Sparrow et al., 2020). If all components of the nation, the community, the private sector, government, and academia, have an entrepreneurial spirit, the number of unemployed will be significantly reduced (Rokhman & Ahamed, 2015).

Further education could create a variety of innovations through a policy of decentralized education. The actual application is realized through efforts to increase economic independence. Financial excellence is the university's main asset in improving the quality of educational services. Such as the procurement of learning facilities and recruitment of quality human resources.

One main point in the program Making Indonesia 4.0 is improving human resources (SDM) quality through entrepreneurship (Acs et al., 2015). At the higher education level, the policy was responded to by developing business units as a manifestation of the entrepreneurship education taught in class. Sorin-George Toma et al. (2014) revealed the role of universities in developing

entrepreneurship capable of increasing the competitiveness of graduates in facing global challenges.

As an anticipatory step, universities make a series of strategic policies related to the development of entrepreneurship; the objective is that the output of graduates is competitive and has the capacity, work performance, ability, professionalism, and competence in terms of innovation and creativity. (Bashori et al., 2020; Prasetyo et al., 2022). Another reason is that human talent and innovative value will be more valuable in the future than capital. Humans with creative ideas will be the scarcest resource (Dali, 2016).

As an organization, universities could not be separated from the contributions of leaders. Higher education leaders are required to know about leadership and change management. As a fundamental principle in management, the leadership aspect significantly determines the organization's direction. Universities with weak leadership patterns result in powerlessness in producing high-quality human resources, failing the nation to build itself.

Departing from these assumptions, studying entrepreneurship in universities is fascinating because it is a contemporary problem that must be understood in depth through scientific research. The problems of entrepreneurship are in line with research conducted by Sendouwa et al. (2019), Humprey et al. (2022), and Urve Vanesaar (2011).

This research was conducted at Universitas Negeri Padang (UNP), a university with the highest accreditation rating in West Sumatra. Most of the population who inhabit West Sumatra are the Padang tribe, famous for their profession as entrepreneurs. This allows research to be carried out in the context of entrepreneurship development in universities. This study aims to determine, understand and analyze the model of higher education entrepreneurship development on a regional scale to become a national reference.

RESEARCH METHODS

This study uses a qualitative paradigm. The research uses the field theory of community interaction with case studies of UNP community organizations to explore action models for the delivery of locality-based entrepreneurship education programs. The social situation in the scientific study of this dissertation is contextualized to State Universities (PTN) in West Sumatra Province with the research subject, Padang State University. The informants in this study were: the Rector, Lecturers, and the academic community who contributed to the development of entrepreneurship. The Snowball sampling technique was used to determine informants. This model has implications for the delivery of long-term community development programs. The researcher acts as a binding instrument. Data collection by interview, observation, and field documentation is then processed using data triangulation techniques (Milles & Huberman, 1994). The data analysis technique is carried out simultaneously, starting from collecting data from research results as a whole, presenting data, reducing data by sorting and

selecting data according to the research, and drawing conclusions as research findings.

RESULTS AND DISCUSSION

One of the efforts to improve the quality of education is through entrepreneurship development; the goal is that graduates have entrepreneurial competencies, can create jobs, and act as development generators (Handrimurtjahjo et al., 2015). Entrepreneurs in the educational management context are individuals who create or rebuild organizations to exploit opportunities (Chrisman & Kellermanns, 2015).

Entrepreneurship comes from the terms management and business in 1980. The definition of entrepreneurship, according to Drucker (1985) and Sergi (2019), is the ability to create something different. While Kasali (2017), entrepreneurship is a process of applying creativity and innovation in solving and finding opportunities to improve lives. At the same time, Rajiv et al. (2014) entrepreneurship is a dynamic process of vision change and creation that requires energy and passion for creating and implementing new ideas and creative solutions.

Entrepreneurship is the process by which a person is involved in designing, planning, and running a business to make a profit despite the risks in every business venture (Klenner et al., 2022). People who start a business are called entrepreneurs, while those who manage a business are many who are not entrepreneurs themselves but business managers. Business involves various aspects that require organizing, planning, forecasting, and executing skills (Spigel & Harrison, 2018).

The objectives of entrepreneurship education are related to developing various skills and attributes, such as the ability to think creatively, work in teams, and manage risk. What drives someone to become an entrepreneur is innate nature, environmental conditions, and educational support (Audretsch et al., 2011). However, in the case of Indonesia, the economic pressure encourages an attitude to become an entrepreneur (Kaijun & Sholihah, 2015). As an agent of change, higher educations play a significant role in forming an entrepreneurial spirit, so innovation is needed to remain competitive and efficient.

To maintain public trust, our higher education world must improve. A new model of higher education is needed that can keep up with the rapid development of the times, one of which is through the development of entrepreneurship (World Economic Forum, 2009). The entrepreneurship program differs from other educational standards because it requires a well-coordinated system between higher education components (Seneler et al., 2019). Entrepreneurship is a model to stimulate individuals to do better.

Micro, small and medium enterprises have shown resilience in the economic crisis (Fithri & Sari, 2012). Therefore, in higher education, this entrepreneurial spirit needs to be developed in such a way so that higher educations have business units that can generate profits to revive higher education and will also generate several assets and endowments for this higher education.

In order to facilitate understanding of the entrepreneurship development program in universities, it can be done using an ecosystem concept approach called the University-Based Entrepreneurship Ecosystems (UBEEs) (Marta Peris, 2017). One of the most efficient modes of collaboration is the 'Triple Helix' model, which regulates the university-industry-government relationship (Fayolle & Redford, 2014).

The Triple Helix paradigm proposes that universities have a prominent role in the innovation process of an economy. Entrepreneurship-based universities are universities that have essential or basic elements, namely; 1) a dominant role in terms of innovation; 2) a three-field joint movement between the government environment, industrial needs, and internal development, and (3) fulfillment of traditional social functions (Etzkowitz et al., 2008). The organizing principle of the Triple Helix is university-industry-government interaction. The industry is a crucial stakeholder for universities, as it represents the locus of production, whereas government is essential because it is a source of interaction with the country's economy and public policy.

Alain also revealed that the recommended hierarchy or form of collaboration for universities that want to develop student entrepreneurship is in the form of collaboration between universities and stakeholders such as researchers, national funding agencies, central government, Regional Representatives Council (LSM), other schools and universities, national and international academic institutions, media, business practitioners, associations and non-governmental organizations, local governments and communities, development agencies, international bodies, alums, parents, and students.

The 2008 OECD revealed that there are six dimensions to understanding entrepreneurship in higher education, namely; 1) educational scope; 2) program design; 3) program characteristics; 4) program model; 5) financing program; and 6) program evaluation (Cumming et al., 2016; Dyer et al., 2008). Entrepreneurial leaders must be flexible and have creative management that allows creative freedom. As a function, management will not run well if the five elements in the management of the leadership above are not based on a series of management functions Planning, Organizing, Leading and Controlling (POLC). Formal institutions, including mosques, schools, or universities, can mobilize entrepreneurship development by teaching entrepreneurship education.

Despite business planning education in entrepreneurship, there is little evidence that planning leads to success. After discussing the theoretical and historical underpinnings, three pedagogical models are compared, including two alternative experiential methods: simulation and contingency approaches. The contingency model, as introduced, uses Piaget's concept of equilibrium and is stated to provide cognitive tools and flexibility in accommodating the unforeseen environmental factors faced by future entrepreneurs. Aan (2019) and Muñoz (2013) assumed that openness to innovation is openness to change. The effectiveness of transformational change depends on the extent to which the organization innovates and the organizational culture (Machado et al., 2020). Higher education policies refer to government regulations that favor the development of entrepreneurial culture, including entrepreneurship courses,

business work courses, entrepreneurship internships, new entrepreneur incubators, business consultations, and work placements, and government intellectual business synergy then continued in 2009 by creating student programs entrepreneur (PMW) (Direktorat Jenderal Pembelajaran dan Kemahasiswaan Kementerian Riset Teknologi dan Pendidikan Tinggi, 2018).

The development of entrepreneurship programs is fundamental for improving soft student skills. All professions require digital access as the most effective means of socialization, which requires entrepreneurial skills to remain competitive (Maute, 2013). Within the college scope, it is essential to recognize the skills and attitudes that lead to the entrepreneurial nature of work without binding rules. Entrepreneurship is targeted at students who are still in higher education. Some activities within higher education entrepreneurship are categorized as personal and social skills development and skills needed to start a business and finance (Korn, 2014).

Model implementation requires strong and sound decision support. Several scales of higher education entrepreneurship are micro and small and medium enterprises (MSMEs, or UMKM in Indonesia). Healthy growing business units help the economy to thrive as there is job creation and more job opportunities as the business expand. Entering an increasingly competitive global era, entrepreneurship is a necessary skill in every institution (Mohanty, 2020).

Organizational factors and the increase in entrepreneurial competence are also determined by student motivation (Yousaf et al., 2014) and the student's vocational skills (Siswanto, 2018). Individual behavior that shapes student motivation based on the findings is the student's view of the prospects of entrepreneurship in the future, referring to the level of individual evaluation in assessing whether being an entrepreneur is beneficial (positive) or detrimental (negative) (Jennifer & Gareth, 2012). The applications of entrepreneurship development are also determined by social networks that can influence students' decisions to have a career as an entrepreneur. Social networks as facilitators in forming the entrepreneurial spirit are found in the external environment of the campus (family and community) (Rokhman & Ahamed, 2015)

Their entrepreneurial and leadership abilities will be meaningless without appropriate cultural support. The acculturation of Minangkabau culture and the development of entrepreneurship gave birth to the concept of a Muslim entrepreneur with several characteristics, namely piety: the spirit of sacrifice, sincerity and sincerity, honesty, responsibility, upholding high accountability, and competence and expertise. Human capital development is aimed at creating an entrepreneurial culture through education. The study's results which state that entrepreneurship is related to religious values, align with the research conducted by Jalil and Novita (Jalil, 2013) and (Novita, 2017).

Business actors need supportive community culture. Likewise, leadership policies are needed to formulate regulations, policies, and information for all jobs, from top managers to junior managers. Effective entrepreneurial practices can increase empowerment and welfare for those

around them. In addition, it is essential to continue to be applied and developed to facilitate the ongoing economic activity between users, especially the community in general.

Assumptions tend to lead to religious spirituality or a sense of religiosity that characterizes ethical behavior in implementing student entrepreneurship programs. The academic community is a follower of the Islamic religion, so the contents of Islamic teachings are enough to color the activities at the university. Supported by the strength of values originating from the socio-cultural Mining area, which is based on Islamic teachings with the slogan "adat basandi syara', syara' basandi kitabullah."

Aspects of spirituality are related to spirituality - related to religion - or things that are non-material (Yulanda, 2015). In the Mining ethnicity, the values of piety in Islam and love for their hometown are found. Religious teachings are not only lived as rituals but also part of their daily lives, including when entrepreneurship.

The great enthusiasm of students in the practice of entrepreneurship prompted the birth of a campus-scale entrepreneurship program called the Mining Entrepreneurship Award (MEA). The researchers' observations of these activities showed culture and its preservation in taking opportunities and policies related to student entrepreneurship. The students' products that enliven the stand also have Minangkabau characteristics, for example: The effort of Rancak Batik Scissors Cino and Minang debate, Rendang Pisang Krispy West Sumatra.

In addition, in terms of personal values, the Ihsan implementation shown by the leadership in the form of sincere, sincere, responsible intentions and willingness to strengthen self-concept also supports the emergence of this spiritual and religious indicator as the basis/perspective of the management of this university leadership. In the transformation of change, there is no comfort. However, it would be more uncomfortable if universities had to go out of business because they lost society's trust or could not compete. Informal religious events, including community gatherings, can be essential in promoting and raising awareness of Islamic entrepreneurship integrated with spiritual principles (Anggadwita et al., 2021). Fulfilling several characteristics of muslimpreneur by the leaders also shows a spiritual-religious element in the development of student entrepreneurship.

The development of higher education entrepreneurship management is adjusted to the unique characteristics of higher education. Internal service quality and external service quality can be fulfilled in the form of planning for entrepreneurial work programs, procurement of institutions or supporting units for entrepreneurial activities, and the formation of entrepreneurial character through the curriculum. The service capability factor is an aspect that requires more attention; the reason is that several development units (SMEs or UKM in Indonesia) have not moved optimally as well as the availability of mentors who are experts in certain types of business which is still minimal.

Management of educational resources eventually becomes a system in educational institutions, especially in higher education institutions. The system,

in this case, consists of parts that interact with each other in a process to transform input into output, commonly termed the input-output system (Lo-Iacono-Ferreira et al., 2017).

The leadership management model as a result of field research at UNP, there are still some weaknesses and the need for additional elements; 1) program sustainability refers to the long-term vision of the university which can later be shown in a cyclic sign (cycle); 2) making business legalities through the establishment of official business institutions so as to make it easier for students to issue products; 3) the effectiveness of funding through proposing the provision of a PMW budget ceiling, prioritized prospective graduates considering that 40-50% of them will continue their business even though they are already alumni; 4) the need for mentors in the development of student entrepreneurship in a university; 5) the application of the scrum method to overcome process barriers (time sharing) in the implementation of entrepreneurial activities; 6) Addition of an indicator of Spiritual Religion or Sense of Diversity as something that is unique in the implementation of student entrepreneurship development activities.

Aspects have a close relationship and operationally form a learning cycle in educational institutions; in this case, the campus applies a unique curriculum for entrepreneurship to its students. In the aspect of outputs, there are elements in the form of achievement, job satisfaction, absenteeism, and overall quality. This output aspect is by the implementation of the evaluation concept. All elements in the higher education system are the responsibility of the leaders or the Rector.

In general management flow, the Chancellor can provide direction, guidance, and supervision to improve competence and entrepreneurial culture, as well as being able to open two-way communication between himself and his followers and also provide space to delegate tasks. Therefore, analyzing its abilities can be seen from the personality, knowledge of education staff, the realization of the campus vision and mission of entrepreneurship through its work program, decision-making abilities, and communication skills.

Some say that a university leader with entrepreneurial character must be able to do several things, including a). encourage the emergence of a strong will with enthusiasm and confidence in lecturers, staff, and students -students- in carrying out the entrepreneurial spirit; b). provide guidance and direction to lecturers, staff, and students, as well as encourage them to spur and stand in front for progress and provide inspiration in achieving goals. However, this leadership pattern cannot be separated from the character of the Minangkabau tribal community, which represents the spirit of Muslim entrepreneurs -muslimpreneur-. Because the entrepreneurial spirit based on spiritual values is not only able to do these things, but it also does more than members expect.

Through the entrepreneurial development model, it is hoped that young entrepreneurs will be formed. The model needs to be implemented sustainably with a shared policy between the manager and the government. The synergy of these policies covers curriculum formation, implementation of

entrepreneurship education, and entrepreneurship development. Below is a model in leadership management to develop student entrepreneurship.

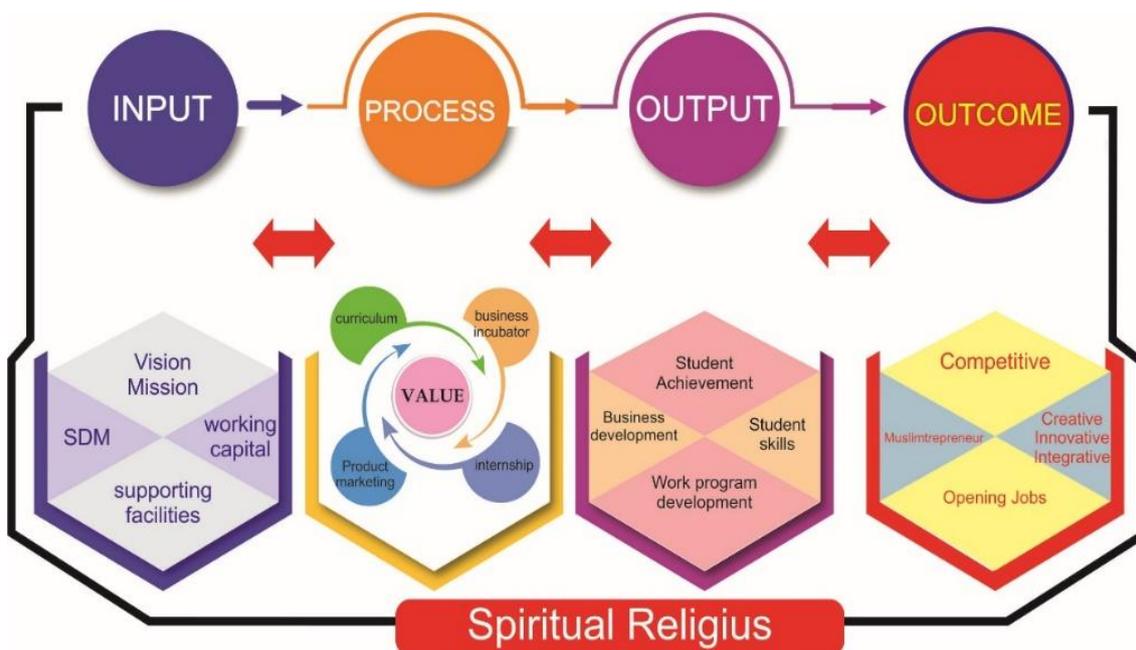


Figure 1: Novelty Model for Student Entrepreneurship Management Development

The novelty above shows that entrepreneurial management is a system. When educational institutions have been structured in a structured manner, educational organizations will automatically become a structured socio-technical system in interaction with the environment that makes entrepreneurial values a driving force and work ethic at universities. So, in this framework, leaders have an essential role in encouraging members of their organizations; through the concept of VALUE, leaders succeed in maintaining a pattern of professional performance and high mortality.

However, when the campus is viewed in detail, comprehensively, and structured, starting from inputs, transformation processes, to aspects of outputs, to outcomes, it will appear that it contains several elements that make up the anatomy of educational institutions with entrepreneurial characteristics that can be used as role models for other higher education institutions. Some of these aspects include: (a) education inputs include aspects of strategic planning starting from the vision, mission, goals, and availability of Human Resources as well as supporting facilities as well as providing working capital; (b) the transformation process includes the implementation of the VALUE concept.

Transformation of change through entrepreneurial knowledge has developed rapidly and can be taught. Unlimited access to information can be transformed into cultivating practical entrepreneurial attitudes and behaviors, so that graduating students can become talented entrepreneurs and bring benefits to the community. The urgency of entrepreneurship development in

the context of higher education is also supported by the research of Patricia (2016), Brown (2016), and Szostak (Szostak, 2021).

CONCLUSION

Entrepreneurship practices contribute significantly to the people and government of West Sumatra in various aspects of life. For the community, a successful entrepreneur can employ to reduce the number of unemployment, poverty, and social inequality. An entrepreneur can also produce valuable innovations for many people and satisfy needs or wants.

The implementation of the concept covers several areas in terms of structural system, political system, individual system, dan cultural system; Focus output analysis can be assessed on student achievement and student entrepreneurship skills as well as the development of higher education (universities) entrepreneurship work programs; while aspect outcomes can be seen from student graduates with indicators that graduates are accepted for work in companies, can compete on a global scale, and students can create jobs or work as entrepreneurs.

ACKNOWLEDGMENT

This research can be carried out well thanks to the help of various parties. Therefore, the researcher would like to thank the big family of Padang State University (UNP) as a university that became the research location for researchers (Rector, Vice Chancellor III, Head of UPT Entrepreneurship, Coordinator of Entrepreneurship and Career Development, Head of Business Incubator, Faculty of Economics, General Chairperson of UKM UPKK, General Chairperson of HIPMI PT UNP) who have provided data for research purposes. Moreover, through the Mora Scholarship 5000 Doctoral program, the Ministry of Religion has assisted in the operational financing of research and various parties involved in this research.

REFERENCES

- Aan, J. (2019). The Triple Helix as a Model for Innovation of Higher Education: Analysis of Institutional Logic in Entrepreneurship and Economic Development. *Al-Amwal: Jurnal Ekonomi dan Perbankan Syari'ah*, 11 (1), 121-138.
- Acs, Z. J., Szerb, L., & Autio, E. (2015). *Global Entrepreneurship and Development Index 2014*. SpringerBriefs in Economics. London: Springer. <https://doi.org/10.1007/978-3-319-14932-5>
- Anggadwita, G., Dana, L.-P., Ramadani, V., & Ramadan, R. Y. (2021). Empowering Islamic Boarding Schools by Applying The Humane Entrepreneurship Approach: the Case of Indonesia. *International Journal of Entrepreneurial Behavior & Research*, 27(6), 1580-1604. <https://doi.org/10.1108/IJEBR-11-2020-0797>

- Audretsch, D. B., Falck, O., & Heblich, S. (2011). *Handbook of Research on Innovation and Entrepreneurship*. UK: Edward Elgar Publishing. <https://doi.org/10.4337/9781849807760>
- Badan Pusat Statistik (BPS). (2019). Februari 2019: Tingkat Pengangguran Terbuka (TPT) sebesar 5,01 persen. Retrieved from Berita Resmi Statistik website: <https://www.bps.go.id/pressrelease/2019/05/06/1564/februari-2019--tingkat-pengangguran-terbuka--tpt--sebesar-5-01-persen.html>
- Bashori, B., Prasetyo, M. A. M., & Susanto, E. (2020). Change Management Transformation in Islamic Education of Indonesia. *Social Work and Education*, 7(1), 72–85. <https://doi.org/10.25128/2520-6230.20.1.7>.
- Brown, R. A. (2016). *Capital and Entrepreneurship in South-East Asia*. London: Springer.
- Chalim, A. S. (2018). Effect of Job-Insecurity, Organizational Commitment, Job Satisfaction on Turnover Intention: A Case Study of Newcomer Lecturers at Private Islamic Universities in East Java Province, Indonesia. *Jurnal Ilmiah Peuradeun*, 6(2), 199–214. <https://doi.org/10.26811/peuradeun.v6i2.284>
- Chrisman, J. J., & Kellermanns, F. W. (2015). Entrepreneur. In *Wiley Encyclopedia of Management*. Chichester, UK: John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118785317.weom030025>
- Cumming, D., Walz, U., & Werth, J. C. (2016). Entrepreneurial Spawning: Experience, Education, and Exit. *Financial Review*, 51(4), 507–525. <https://doi.org/10.1111/fire.12109>
- Dali, P. et. al. (2016). *Innovative Business Education Design for 21st Century Learning*. Switzerland: Springer International Publishing.
- Direktorat Jenderal Pembelajaran dan Kemahasiswaan Kementerian Riset Teknologi dan Pendidikan Tinggi. (2018). *Panduan Penyusunan Kurikulum Pendidikan Tinggi di Era Industri 4.0*. Jakarta: Direktorat Jenderal Pembelajaran dan Kemahasiswaan Kementerian Riset Teknologi dan Pendidikan Tinggi.
- Drucker, P. F. (1985). *Innovation and Entrepreneurship*. London and New York: Harper Business.
- Dyer, J. H., Gregersen, H. B., & Christensen, C. (2008). Entrepreneur Behaviors, Opportunity Recognition, and the Origins of Innovative Ventures. *Strategic Entrepreneurship Journal*, 2(4), 317–338. <https://doi.org/10.1002/sej.59>
- Fayolle, A., & Redford, D. T. (2014). *Handbook on the Entrepreneurial University (Elgar Original Reference) Research Handbooks in Business and Management*. Melbourne: Elgar Online. <https://doi.org/10.4337/9781781007020>
- Fithri, P., & Sari, A. F. (2012). Analisis Kompetensi Kewirausahaan Industri Kecil Suku Cadang di Kota Padang. *Jurnal Optimasi Sistem Industri*, 11(2), 279–292. <https://doi.org/10.25077/josi.v11.n2.p279-292.2012>

- Humphrey, S. E., Macy, R., & Wang, C. S. (2022). Teaching Entrepreneurial Negotiation. *Negotiation Journal*, 38(1), 93–110. <https://doi.org/10.1111/nej.12377>
- Jalil, A. (2013). *Spiritual Entrepreneurship: Transformasi Spiritualitas Kewirausahaan*. Jakarta: LKiS.
- Jennifer, G., & Gareth, J. (2012). *Understanding and Managing Organizational Behaviour: Sixth Edition*. New Jersey: Prentice Hall International.
- Kaijun, Y., & Ichwatus Sholihah, P. (2015). A Comparative Study of the Indonesia and Chinese Educative Systems Concerning the Dominant Incentives to Entrepreneurial Spirit (desire for a New Venturing) of Business School Students. *Journal of Innovation and Entrepreneurship*, 4 (1), 116. <https://doi.org/10.1186/s13731-014-0014-0>
- Karmila, M., Yulastri, A., & Syarif, W. (2018). Pengembangan Multimedia Interaktif Pada Mata Kuliah Kewirausahaan Program Studi Pendidikan Kesejahteraan Keluarga Universitas Negeri Padang. *E-Journal Home Economic and Tourism*, 14(1). 1-12.
- Kasali, R. (2017). *Disruption: Tak Ada yang Tak Bisa Diubah Sebelum Dihadapi, Motivasi Saja Tidak Cukup*. Jakarta: Gramedia Pustaka Utama.
- Klenner, N. F., Gemser, G., & Karpen, I. O. (2022). Entrepreneurial Ways of Designing and Designerly Ways of Entrepreneuring: Exploring the Relationship between Design Thinking and Effectuation Theory. *Journal of Product Innovation Management*, 39(1), 66–94. <https://doi.org/10.1111/jpim.12587>
- Korn, K. A. (2014). Facing Facebook in Higher Education: How and Why Students Use Facebook in College. In *Cutting-Edge Technologies and Social Media Use in Higher Education* (pp. 1–53). IGI Global. <https://doi.org/10.4018/978-1-4666-5174-6.ch001>
- Lo-Iacono-Ferreira, V. G., Torregrosa-López, J. I., & Capuz-Rizo, S. F. (2017). Organizational Life Cycle Assessment: Suitability for Higher Education Institutions with Environmental Management Systems. *The International Journal of Life Cycle Assessment*, 22(12), 1928–1943. <https://doi.org/10.1007/s11367-017-1289-8>
- Machado, Carolina, Davim, J. P. (Eds. . (2020). *Entrepreneurship and Organizational Innovation*. London: Springer International Publishing.
- Marta Peris, J. A. G. et. al. (2017). *Entrepreneurial Universities, Exploring the Academic and Innovative Dimensions of Entrepreneurship in Higher Education*. USA: Springer International Publishing.
- Maute, J. L. (2013). Facing 21st Century Realities. *Miss. CL Rev.*, 32 (2), 345374.
- Milles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis*. California: Sage Publication.
- Mohanty, M. (2020). Contemporary Trends in Education. In W. Leal Filho, A. M. Azul, L. Brandli, P. G. Özuyar, & T. Wall (Eds.), *Quality Education* (pp. 127–138). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-95870-5_35

- Muñoz, P. (2013). The Distinctive Importance of Sustainable Entrepreneurship. *Current Opinion in Creativity, Innovation and Entrepreneurship*, 2(1), 1-6. <https://doi.org/10.11565/cuocient.v2i1.26>
- Novita, M. (2017). Sumber Daya Manusia yang Berkualitas sebagai Harta yang Berharga dalam Sebuah Lembaga Pendidikan Islam. *Nur El-Islam*, 4(1), 40-64.
- Patricia, P., & Silangen, C. (2016). The Effect of Entrepreneurship Education on Entrepreneurial Intention in Indonesia. *DeReMa (Development Research of Management): Jurnal Manajemen*, 11 (1), 67-86. <https://doi.org/10.19166/derema.v11i1.184>
- Phan, P. H. (2004). Entrepreneurship theory: Possibilities and Future Directions. *Journal of Business Venturing*, 19(5), 617-620. <https://doi.org/10.1016/j.jbusvent.2003.09.001>
- Prasetyo, M. A. M. (2018). Peranan Perilaku Organisasi dan Manajemen Strategi dalam Meningkatkan Produktivitas Output Pendidikan. *Idarah (Jurnal Pendidikan Dan Kependidikan)*, 2(1), 80-101. <https://doi.org/10.47766/idadrah.v2i1.267>
- Prasetyo, M. A. M., Ilham, M., & Asvio, N. (2022). Lecturer Professionalism in Improving The Effectiveness of Higher Education Institutions. *International Journal Of Educational Review*, 4(1), 140-153. <https://doi.org/10.33369/ijer.v4i1.22406>
- Prasetyo, M. A. M., & Sukatin, S. (2020). Nilai Strategis dalam Meningkatkan Competitive Value Perguruan Tinggi Agama Islam Swasta di Provinsi Jambi. *Idarah (Jurnal Pendidikan Dan Kependidikan)*, 4(2), 121-134. <https://doi.org/10.47766/idadrah.v4i2.1037>
- Rokhman, W., & Ahamed, F. (2015). The Role of Social and Psychological Factors on Entrepreneurial Intention among Islamic College Students in Indonesia. *Entrepreneurial Business and Economics Review*, 3(1), 29-41. <https://doi.org/10.15678/EBER.2015.030103>
- Saira Yousaf et.al. (2014). Impact of Financial and non Financial Rewards on Employee Motivation. *Middle-East Journal of Scientific Research*, 21(10), 1776-1786.
- Sendouwa, R. H. E., Lonto, A. L., & Saroinsong, S. J. R. (2019). Entrepreneurship Development Program in The Higher Education in Indonesia. *International Journal of Recent Technology and Engineering*, 8(289), 1006-110. <https://doi.org/10.35940/ijrte.B1022.0982S919>
- Seneler, C., Dabic, M., Owaishiz, A., & Daim, T. (2019). Exploring Entrepreneurship in the Academic Environment. *PICMET 2019 - Portland International Conference on Management of Engineering and Technology: Technology Management in the World of Intelligent Systems, Proceedings*. <https://doi.org/10.23919/PICMET.2019.8893752>
- Sergi, B. S., & Scanlon, C. C. (2019). Entrepreneurship and Development in the 21st Century. Inggris: Emerald Publishing Limited. <https://doi.org/10.1108/978-1-78973-233-720191015>

- Shah, R., Gao, Z., & Mittal, H. (2014). *Innovation, Entrepreneurship, and the Economy in the US, China, and India, 1st Edition, Historical Perspectives and Future Trends*. UK: Elsevier. <https://doi.org/10.1016/B978-0-12-801890-3.00010-1>
- Siswanto, R., Sugiono, S., & Prasajo, L. D. (2018). The Development of Management Model Program of Vocational School Teacher Partnership with Business World and Industry Word (DUDI). *Jurnal Ilmiah Peuradeun*, 6(3), 365–384. <https://doi.org/10.26811/peuradeun.v6i3.322>
- Sorin-George Toma et al., Toma, S.-G., Grigore, A.-M., & Marinescu, P. (2014). Economic Development and Entrepreneurship. *Procedia Economics and Finance*, 8(14), 436–443. [https://doi.org/10.1016/s2212-5671\(14\)00111-7](https://doi.org/10.1016/s2212-5671(14)00111-7)
- Sparrow, R., Dartanto, T., & Hartwig, R. (2020). Indonesia Under the New Normal: Challenges and the Way Ahead. *Bulletin of Indonesian Economic Studies*, 56(3), 269–299. <https://doi.org/10.1080/00074918.2020.1854079>
- Spigel, B., & Harrison, R. (2018). Toward a Process Theory of Entrepreneurial Ecosystems. *Strategic Entrepreneurship Journal*, 12(1), 151–168. <https://doi.org/10.1002/sej.1268>
- Szostak, B. L. (2021). Design Thinking – Design Thinking and Strategic Management of Innovation. In *Innovation Economics, Engineering and Management Handbook 2*. New York: Wiley. <https://doi.org/10.1002/9781119832522.ch12>
- Urve Vanesaar, et. al. (2011). Evaluation of the Entrepreneurship Education Programme in University: A New Approach. *Journal The Knowledge Based Economy: Implications for Higher Education in Economics and Business*, 8(30), 377-381.
- World Economic Forum. (2009). *Educating the next Wave of Entrepreneurs: Unlocking Entrepreneurial Capabilities to meet The Global Challenges of the 21st Century*. Switzerland: World Economic Forum.
- Yulanda, N. (2015). Pengaruh Nilai Budaya Bisnis pada Masyarakat Minangkabau terhadap Perilaku Kewirausahaan Pedagang Perantau di Tanah Abang. *Journal of Applied Business and Economics*, 2(1), 95-108.
- Yulastri, A., Hidayat, H., Ganefri, G., Edya, F., & Islami, S. (2018). Learning Outcomes with the Application of Product Based Entrepreneurship Module in Vocational Higher Education. *Jurnal Pendidikan Vokasi*, 8(2), 120-131. <https://doi.org/10.21831/jpv.v8i2.15310>