

# A Study of the Way to Increase Entrepreneur in Japan Who Is the Subject of Entrepreneurship Education?

Koichi Sakoda, Takao Nomakuchi, and Masakazu Takahashi

**Abstract**—Japan, is a country where entrepreneurs are in an extreme shortage, has been recognized in the world. The purpose of this paper is a trial to consider the clues to solving the future of entrepreneurship shortage problem. The approach of the present study is to extract the relationship of the problems by review of the prior research on entrepreneurship theories, and a software system approach. As a result, there is the transformation of a closed secure society, and education in business and creativity for NEET (Youth Not Educated, Employed or Trained) has been suggested as a solution. In previous research, views of NEET as an unemployed are found. But views of NEET as a candidate for entrepreneurship cannot be found. This paper focused on NEET as a candidate for entrepreneurship.

**Index Terms**—Company in manorial system, internal labor market, NEET, negative liberty, positive liberty, society of peace.

## I. INTRODUCTION

According to the small and medium-sized enterprises White Paper Japan (2014) [1], changes in the economic and social structure of the region have emerged due to changes in the population and regional industrial structure. In 1986 when most of the municipalities in the country, except for those in Hokkaido, had as their central industry responsible for the employment for a region was manufacturing. However, around 2012, the number of employees in the manufacturing industry decreased, and other industries (retail, service industry, health care and welfare) increased. Due to these changes related to different social structures in each region, diversification of industry to support the employment of the region should be progressive.

On the other hand, decreases in regional area populations, especially in several municipalities in mountainous areas, the population significantly decreased. In order for small and medium-sized enterprises of the region that faced economic and social structure changes to develop sustainably, there is a need for new business development through the use of regional industry-specific production factors (regional management resources). Additionally, a variety of initiatives

for regional activation of regional residents have been required to support the demand of the region to insure vitality in living. In recent years, the number of businesses closed and that continues to increase. In 2003, 16,255 companies were closed, which increased to 28,943 in 2013. The reasons for closures include the following: Aging and health problems of the management (48%), uncertainty of the business(12%), major trader or customer goes bankrupt including the case of transfer (7.8%), family problems within management (nursing care, aging, education, etc.)(4.9%). The avoidance of further deterioration of business management exists (4.4%), with the lack of a successor (4.2%). In addition, the number of entrepreneurs, which was 292,000 in 2002, has declined to 223,000 people in 2012. The following reasons are included in the low rates of entrepreneurs:

- 1) Low level of entrepreneurial-oriented: "An insufficient educational system," "consciousness of seeking stable employment," and "the lack of recognition of entrepreneurship as a profession"
- 2) Instability of life and income after entrepreneurship: "Life anxiety may become unstable," "lack of a safety net," and "difficulty with re-employment"
- 3) Procedures and costs for entrepreneurs: "entrepreneurial business development cost," "complicated entrepreneurial procedures"

According to the IMD World Competitiveness Yearbook (2014) [2], Japan was in 1st place of all 59 survey subjects countries until 1993. However, since then there has been a gradual decline with Japan being in 21st place as of 2014. This result shows that for some time now Japan has not been considered a competitive international country. This survey indicated a lack of entrepreneurship (55th place as of 2014) as one of the factors for the declining international competitiveness of Japan. The world evaluates Japan as lacking entrepreneurship. Porter (1990) [3] indicated the entrepreneurship of Japanese companies as follows: A new generation of corporate managers is now taking the lead in the industrial world of Japan. In many cases, they are replaced with the former corporate founders and entrepreneurs that established their companies after World War II. In this process there exist risks that foresight and a good atmosphere for business establishment could be lost and that bureaucracy and conservatism could emerge. He also indicated the following issues for Japan.

- 1) Absence of corporate managers with entrepreneurship
- 2) Organizational design where talented individuals are not utilized
- 3) Rigid organizations
- 4) Fragile system architecture

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### 5) Inconsistency in the total business strategy

Currently, Japan is not out of the era where it has been said that it has lost 20 years. It cannot find any direction so as to advance or have a clear standing position, but is covered in the sense of stagnation. The causes are serious job insecurity, the expansion of personal income disparity, an urban and rural income gap, and an increase for NEET. NEET is an abbreviation of "Not in Educated, Employed or Trained" in England. NEET is the designation of the young people that make their living by a daily or hourly wage which is the main source of income after graduating from university. Many also do not work as regular employees. An increase of entrepreneurs is desired, but NEET is increasing. In Japan, sometimes "NEET" is said to be "Freeter". In this paper we use the designation "NEET".

Therefore, in this paper we review the previous studies on entrepreneurship theories having a bird's-eye view. Based on this review, we consider whether we can make contributions to enhance the entrepreneurship environment of Japan. Afterwards, we will consider how and who can carry out entrepreneurship education. This study takes a soft system methodology in order to examine the relationships in issues on entrepreneurs by reviewing previous studies.

## II. BIRD'S-EYE VIEW OF ENTREPRENEUR THEORY

This chapter reviews the previous research on entrepreneur theories. Based on this, chapter 3 discusses how to increase entrepreneurship in Japan and how entrepreneurship education can be carried out and by whom.

According to McClelland & David (1961) [4], entrepreneurs are defined as "those who organized a company or business unit, enhancing its productivity." Nishida [5] concludes that "there is no comprehensive definition of the word Entrepreneur" Brockhaus & Horwitz (1986) [6], which is common at present time.

According to the Organization for Small & Medium Enterprises and Regional Innovation JAPAN (later abbreviated as SMESJ) (2014) [7], regional industries have faced changes to their situation where the traditional business base is lost. Therefore, it has been forced to adapt to a new situation. This transformation is a process of innovation, including the development of new markets. For many, it has become a subject of a variety of intermediate organizations, including the cooperation between companies to promote innovation. It should be recognized as an intermediate organization. Intermediate organizations take a variety of forms in accordance with the respective regional characteristics. As a result, intermediate organizations play a function of reorganizing management resources of the region in accordance with the change in the situation. Functions of intermediate organizations in accordance with the respective regional characteristics are intended to address the challenges facing industry integration, with the goal of achieving a transformation. On the other hand, intermediate organizations are faced with the need to resolve the dilemma problem. Interest coordination between members and the building of cooperative relationships must be performed by an intermediate organization. Based on four cases of local industrial regeneration, successful conditions for

intermediate organizations that promote innovation and to overcome these problems has been extracted as follows: "1. Resolving the dilemma between the creation and proprietary value", "2. Openness of the network", "3. Management of the intermediate organization", and "4. Innovation is not completed in the internal area." They have to focus on the function and role of an intermediate organization as a factor for local industrial regeneration.

Additionally, according to SMESJ (2013) [8], qualifications of the leader as an intermediate organizational management are as follows: 1. Organization management strategy (leadership), 2. Community development, brand strategy, 3. Presentation, 4. Marketing, 5. Consensus and cooperation in system making, and 6. Network construction. Then, according to the actual leader case analysis, the problem faced by regional leaders is as follows.

- 1) An insufficient grasp in the marketability by taking advantage of regional resources
- 2) Lack of marketing knowledge (human resources)
- 3) Lack of steady income for the activities as a regional leader
- 4) Regional leader burnout
- 5) Lack of coordination of elements
- 6) Lack of networking of regional leaders
- 7) Shortage of the next generation of regional leaders

According to Matsuda (1998) [9], the important experiences for successful training of entrepreneurs are as follows:

- 1) Experience in the community and in the home (the importance of understanding the society as a human) experience in education (the need for entrepreneurial education)
- 2) Workplace experience (a provision for the opportunity to gain experience through entrepreneurial practice)
- 3) The incubator experience exists.

According to Tanaka (2006) [10], what is required in the era of change in terms of the Japanese companies and the Japanese economy is the realization of economic growth through innovation and entrepreneurship. For that purpose, it is necessary to increase an individual's ability, and it is required to increase the "new player" to entrepreneurship. Under such a background, and mechanisms that generates the entrepreneurs of the local industrial regeneration, is considered as the image of the entrepreneurs in the community during a period of change. Entrepreneurship is one choice when it comes to a job career. However, compared to other careers, there is considerable risk. Certainly, entrepreneurship puts one's entire life at risk, while an event that pulls the trigger is required. In addition, the road to entrepreneurs depends significantly on the personal qualities and the environment. Environments where entrepreneurs grow includes the space where you are living on a daily basis, for example the home, school, or workplace. It is the arena of interaction with a variety of people, such as parents, relatives, and friends. Many of the parents of entrepreneurs are business owners, self-employed, specialists, and administrative executives. Therefore, entrepreneur consciousness can easily be fostered naturally within a family circle. In addition, they have the experience as an employee of a small or medium-sized enterprise. The following factors

are considered. 1. Because of a concern for the future of the company, they aim to enhance their own capabilities while considering their career progression, 2. They have a lot of direct opportunities to come into contact with company owners (existence of close role models), 3. They can receive experience through a wide variety of occupations that might not be provided by large companies.

With respect to disruptive innovation ability that is required for entrepreneurs, Christensen et al. (2011)[11] indicated the importance of the following five skills: "Associating skill," "Questioning skill (to ask questions about objections to the actual conditions while being passionate to explore objects)," "Observing skill (to observe the surrounding world carefully in order to get insight or ideas that bring about new Strategies)," "Networking skills (to find out or attempt new ideas through a broad range of networks with others having diverse backgrounds and thoughts)," and "Experimenting skill (to challenge a new experience and attempt new ideas)." They are referred to as the five skills of "Innovator DNA" in order for entrepreneurs to produce innovative ideas.

According to Shibayama and Tange (2010) [12] entrepreneurs from the outside (are referred to as "Strangers") should be noted. They bring new ideas into the regional industry. By accepting the regional outsiders or entrepreneurs from different industries and different fields, there are many cases where activation of regional industry and success in new product development has been achieved. According to these, the idea of entrepreneurs did not directly produce the innovation. A new perspective that strangers bring, urges reconsideration of stereotypes and to changes the consciousness of the people responsible for regional industry. As a result, a variety of experiences that have been cultivated in the regional industry are released within a new context, in order to open the possibility of regional industry revitalization. In addition, as to the conditions of Strangers in this role, it has been found that the following three conditions work:

- 1) Provision of authority for strangers
- 2) The presence of a "mediator" to control the dilemma
- 3) The presence of a place to encourage vigorous communication

The essence of the innovation process that was triggered by the Stranger's point of view is the transformation of the consciousness of the people responsible for the regional economy.

As a theory related to entrepreneurship, there is an internal labor market and companies within the manorial system. According to Doeringer and Piore (1971) [13], Internal labor markets (ILM) are an administrative unit within a firm in which pricing and allocation of labor is governed by a set of administrative rules and procedures. The remaining jobs within the ILM are filled by the promotion or transfer of workers who have already gained entry. ILM are shielded from the competition of external labor markets. Features of the internal labor market are new hires which are limited to the entrance, the formation of the firm-specific skills through intensive educational training, promotion system in the carrier personnel evaluation that in the workplace ladder by the organization and by raising the retirement age of

long-term employees. The Features are a system that guarantees stability and economic richness of employment and the life that workers have wanted. In addition, according to Jacoby (1997) [14], ILM has been providing a variety of benefits such as retirement benefit, corporate pensions, health insurance, employee holdings, company housing and recreation facilities. And according to Mito (1996) [15], the internal labor market, became the "the house to spend a Japanese life" by providing a relationship of Win-Win between workers and management. And, Sano (1992) [16] called it the company in the manorial system. This is a world that has been isolated from the outside, such as the medieval castle. And the freedom of individuals in the organization in the manorial system companies is of course necessarily limited. In addition, within the manorial system companies, it is like a golden chain with extensive welfare. For this reason entrepreneurship become very risky because individuals will only select to live within the manor. There, workers carried out the "deal of the free and the golden chain". And, Berlin (1964) [17] defined this as negative liberty to pursue its own demand in the manorial system companies. In contrast, according to the Rindova et al (2009) [18], the essence of entrepreneurship is the pursuit of "positive freedom." Entrepreneurial activity is not a passive freedom to aspire to release from a variety of restraints and bondage, but "positive freedom" to aspire to transform the unreasonable world and to realize the world dreamed for a long time ago.

Then, there is a "safe society" theory that considers the factors of weakening the "risk taking" mind and enhancing the "company in manor system". "Secure society" is a characteristic of Japanese society. According to Yamagishi (2008) [19], cooperative behavior of the Japanese is strictly limited to the time the person is among "relatives", and they do not completely trust the "outsiders". Therefore, in Japan, because the closed society guarantees "peace of mind", there is the mechanism in place that sees no need for a contract among "relatives". In a closed society those that take action to betray or oppose the society become outcast (ostracism). Additionally, since it seems that most Japanese are placed in a "safe society," they live without worry about risk taking. Because of this there is a lack of confidence or even ability to take risk. The core of entrepreneurship is "risk-taking" but the Japanese mind weakens this idea and wants to strengthen the dependency of the "company in the Manorial system." In addition, in order to spend life in peace in the closed society, it is necessary to eliminate the diversity of values. This also leads to the exclusion of entrepreneurs as a heterogeneous Stranger. In addition, Western society can tolerate a wide variety of values, is called a "trust society" to trust the people by contract.

### III. DISCUSSION

In this chapter, based on previous research about the entrepreneurship theory, by soft systems methodology, the mutual relationship theory will be discussed. Soft systems methodology (SSM) is an approach methodology to the organizational process by modeling (business process modeling) and it can be used both for general problem solving and in management for change. It was developed in

England by academics at the University of Lancaster's Systems Department through a ten year active research program. [20] The primary use of SSM is in the analysis of complex situations where there are divergent views about the definition of the problem — "soft problems" (e.g. what to do about homelessness amongst young people?). In such situations even the actual problem to be addressed may not be easy to agree upon. To intervene in such situations the soft systems approach uses the notion of a "system" as an interrogative device that will enable debate amongst concerned parties. In its 'classic' form the methodology consists of seven steps, with initial appreciation of the problem situation leading to the modelling of several human activity systems that might thought to be relevant to the

problem situation. In this paper, initial appreciation of the problem situation is a method for finding problems in the Soft system methodology is used. It is a diagram for searching for clues that considers visualizing the structure of the question. In this paper, initial appreciation of the problem situation is a method for finding problems in the Soft system methodology is used. It is a diagram for searching for clues for the resolution by visualizing the problems structure.

If Japanese people want to change the state of the world's top level from the state of lack of entrepreneurship in Japanese society, it is that the structure of society that is upside down. That is where the dilemma for change occurs. If the dilemma occurs, cognitive dissonance is the constraint to the behavior of the people.

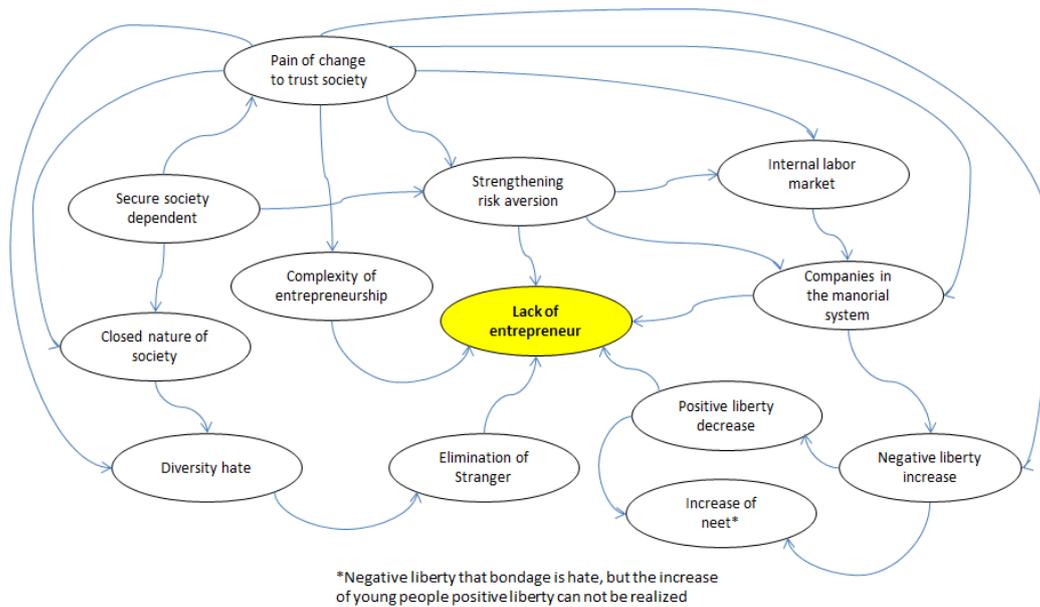


Fig. 1. Rich picture for discovering entrepreneur problem.

Cognitive dissonance is a theory of human motivation that asserts that it is psychologically uncomfortable to hold contradictory cognitions. The theory is that dissonance, being unpleasant, motivates a person to change his cognition, attitude, or behavior. This theory was first explored in detail by Festinger (1965) [21]. Dissonance and consonance are relations among cognitions that is, among opinions, beliefs, knowledge of the environment, and knowledge of one's own actions and feelings. Two opinions, or beliefs, or items of knowledge are dissonant with each other if they do not fit together; that is, if they are inconsistent, or if, considering only the particular two items, one does not follow the other. Festinger (1965) [21] argued that people may try to forget or reduce the importance of those cognitions that are in a dissonant relationship in order to deal with cognitive dissonance. This suggests the following, the greater the badness of the current situation is, the more people will ignore the terrible situation, continue to remain in the status quo.

Fig. 1 suggests the followings as results from analysis by the Soft system methodology. Secure societies strengthened risk aversion and the closed nature of society is strengthened. The closed nature of the society eliminates diversity. Because the Strangers that disagree are excluded, entrepreneurship does not grow. Risk aversion to facilitate choosing the

internal labor market and corporate manorial system is also a carrier. Under such circumstances, if entrepreneurship education is carried out, wise college students become aware of the magnitude of the risk, they determine that they should not be an Entrepreneur. Transformation from a secure society to a trust society is painful. Although a society of closure and risk aversion and negative liberty needs to be change, the pain has strengthened them in reverse. In entrepreneurship, the complexity of the procedure is not a big problem, but it is a problem that exists all over Japan. Then, from entrepreneurship education, university students notice that to be entrepreneurs is high-risk under the social structure of the current situation. As a result of entrepreneurship education, college students do not choose to be an Entrepreneur as a carrier. This phenomenon is the paradox of entrepreneurship education. And, there is a commonality between the entrepreneur's mind and NEET's mind. Both of them refused the negative liberty of company in manorial system. In other words, the entrepreneur and the NEET both have dreamed of positive freedom. However, the NEETs have no ability to achieve positive freedom to undergo the changes necessary in their own businesses. Therefore, by providing business education, the NEETs will acquire the ability to achieve a positive freedom, and thus become entrepreneurs.

#### IV. CONCLUSION

In this paper, previous research on entrepreneurship theory is reviewed from a bird's-eye view. Considered is whether to try and increase entrepreneurship in Japan, and if that is the case, where the focus of future research should be. According to Figure 1, as a result it was found that the complex and intertwined problems becomes the cause of yet other problems, resulting in the stagnation of Japanese entrepreneurship. In such a situation, the individual solutions to problems appear to have been approached superficially, but actually a paradox exists that further strengthens the current problems. Therefore fundamental solution for an increase in entrepreneurs, while relieving the pain of transformation into a trust society, is to throw away the dependence on a closed secure society.

In addition, an increasing of NEET suggests the possibility of entrepreneurs increasing by education. Business management education that was the target becomes the prescription for the increase of entrepreneurs. They do not select negative liberty, but dream of positive freedom. However, they do not know how to achieve a positive freedom. Rather than being trained of the job to accept negative liberty, entrepreneurs will increase if the business education and creativity education, such as the MBA for entrepreneurs targets the NEETs. The subject of entrepreneurship education should be on the NEET.

And finally, there are two future work. First, a roadmap to rebuild the Japanese society from closed secure society to open trust society is needed. Second, measurement of the effect of increasing entrepreneurs on business education to the NEET is also necessary. They are the future research objectives of this study.

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#### REFERENCES

[1] The small and medium enterprise agency Japan. [Online]. Available: <http://www.chusho.meti.go.jp/pamflet/hakusyo/H26/h26/>  
 [2] (August 10, 2015). The IMD world competitiveness yearbook. [Online]. Available: [http://www.conicyt.cl/wp-content/uploads/2014/07/IMD\\_WCY-2014.pdf](http://www.conicyt.cl/wp-content/uploads/2014/07/IMD_WCY-2014.pdf)  
 [3] M. Porter, *The Competitive Advantage of Nations*, Free Press, 1990.  
 [4] C. David, *The Achieving Society*, Princeton, N. J.: D. Van Nostrand, 1961.  
 [5] N. Toyooki and O. Makoto, "Entrepreneur of the characteristics and business environment and corporate performance: International comparison of Japan, the United States, and China," *Management Behavioral Science Annual Meeting: Papers Collection*, pp. 60-72, 2005  
 [6] B. H. Robert and P. S. Horwitz, *The Psychology of the Entrepreneur*, Cambridge, MA: Ballinger, pp. 25-48, 1986.  
 [7] The organization for small and medium enterprises and regional innovation Japan (SMESJ), "Strategic and Reliability" as a Regional Leader Qualities - Study on the Regional Development and the Role of the Reader. [Online]. Available: [http://www.smrj.go.jp/keiei/dbps\\_data/\\_material/\\_b\\_0\\_keiei/chosa/pdf/h24chiikileader.pdf](http://www.smrj.go.jp/keiei/dbps_data/_material/_b_0_keiei/chosa/pdf/h24chiikileader.pdf)  
 [8] M. Osamu, *Venture Company*, Nikkei Bunko, 1998.

[9] T. Fumito, *Toward the Industrial Development and New Venture Creation of Regional Community: The Exaltation of Entrepreneurship and the Practice of Innovation*, Development Studies, no. 78, pp. 83-113, Hokkai Gakuen University, 2006.  
 [10] C. M. Clayton, D. Jeff, and G. Hal, *The Innovator's DNA: Mastering the Five Skills of Disruptive Innovators*, Harvard Business Review Press, 2011.  
 [11] S. Hideaki and T. Kiyohiko, "Point of view of the "stranger" is encourage innovation - Terms and conditions for implementing the innovation resulting from diversity," *Japan Finance Corporation Journal*, no. 8, pp. 53-73, 2010.  
 [12] P. B. Doeringer and M. J. Piore, *Internal Labor Markets and Manpower Analysis*, Lexington, Mass.: Heath, 1971.  
 [13] S. M. Jacoby, *Modern Manors: Welfare Capitalism since the New Deal*, New Jersey: Princeton University Press, 1998.  
 [14] M. Tadashi, *What Is Company? -It is a Lifetime "House" Where Japanese Are Living*, Tokyo, Bunshindo Publishing, 1996.  
 [15] S. Yoko, *The Labor Market in Companies*, Yuhikaku Publishing, 1988.  
 [16] I. Berlin, *Two Concepts of Liberty*, in Isaiah Berlin, *Four Essays on Liberty*, London: Oxford University Press, 1969.  
 [17] V. Rindova, D. Barry, and D. J. Ketchen, *Introduction to Special Topic Forum: Entrepreneurship As Emancipation*, Academy of Management Review, vol. 34, pp. 477-491, 2009.  
 [18] Y. Toshio, *Why "Secure Society" of Japan was Disappeared? - Contemporary Japan Problem Point As Viewed from the Social Psychology*, Shueisya International, 2008.  
 [19] P. B. Checkland, *Soft Systems Methodology*, Chichester: Wiley, 2001.  
 [20] L. Festinger, *A Theory of Cognitive Dissonance*, Stanford, CA: Stanford University Press, 1957.  
 [21] S. Chen, B. Mulgrew, and P. M. Grant, "A clustering technique for digital communications channel equalization using radial basis function networks," *IEEE Trans. on Neural Networks*, vol. 4, pp. 570-578, July 1993.



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