# **Management Issues Analysis Team Research Report**

Case Study of Resilient Ability of Japanese Companies and Resilient Ability of Da Nang City, Vietnam

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#### Introduction

Following the launch of a research project of the Center for Research on Asian Industry, the project members actively deepened their research exchanges, paying particular attention to Vietnam, from 2014 to 2015 by carrying out a home visit survey and holding a public symposium in Tokyo, etc.

Under these circumstances, the Management Issues Analysis Team in this project has been discussing several issues regarding the entry of medium and small Japanese companies into Vietnam, such as what opportunities and risks are involved when they enter into Vietnam and what are the promising industries for Japan at the time of their entry? The survey was based on, among other things, a home visit—survey conducted several times and the exchange of opinions at the public symposium above.

When companies advance into a new overseas market in the midst of globalization, it is necessary to examine the attractiveness of the target country and city in a practical manner by paying attention to not only aspects such as the market and marketing, including the growth potential, risks and opportunities of the market and logistics and supply chains as well as legal regulations, but also factors such as consumer behavior, lifestyle, leadership, infrastructure, health and welfare, and the natural environment risks of the country and city. In other words, when Japanese companies enter into the global market, it is important to determine whether the market has the power to quickly recover when it faces a threat in some form by having a comprehensive understanding of the above aspects of the country and city.

In this paper, we will define the concept of whether the market has the power to recover when it faces a threat as a resilient ability. In this paper, we will first discuss the concept of resilient ability briefly, and we will then outline some case studies about resilient ability in the business field, and we will finally note the factors that constitute resilient ability at a city level. We will also discuss the fact that Da Nang City in Vietnam, which is a city with a strong resilient ability worthy of international attention in this regard, and will add a remark on the significance of paying attention to the resilient ability of Japanese companies.

#### 1. What is resilience?

#### **Definition of resilience**

The origin of the word "resilience" is "resilire" in the Latin, which means a power or an ability to return to the original shape or position. "Resilire" is also translated as elasticity, repulsion and buoyance, etc. It is also said that "restoring force," or the power to overcome adversity, could apply in a psychological sense. (In psychology, "resilience" seems to have been used for the meaning of resistance to a difficult situation such as poverty and child abuse in terms of or in relation to psychological/mental development.) In ecology, it is used to mean the power to recover from devastation due to climate change and overdevelopment. At a company level, the concept of the business continuity plan (BCP) in crisis situation is closest to resilience, but it contains a deeper concept than BCP, such as stress and a sense of the happiness of employees.

Following are the definitions of resilience that the author has found.

- Oxford Dictionary:
- "An ability to endure a difficult situation or recover quickly from that situation"
- Professor Valikangas in Finland
- "An ability to recover quickly and efficiently from a situation of experiencing a danger without feeling a significant psychological shock" (Lisa Valikangas, "*The Resilience Organization*," McGraw-Hill, 2010)
- Kazuo Ueda
- "The ability of a company to regain the same management uniqueness and competitiveness as before by managing the causes of adversity and creating favorable opportunities through the combination of risk management (RM) tools"

The author's definition is created from a business perspective and focuses on the recovery of a loss and the regaining of management uniqueness and competitiveness before the loss. In other words, it emphasizes the importance of recovering from all economic and psychological losses suffered by a company and regaining its competitiveness for the future at the same time. For this purpose, linkage between a corporate vision or mission and strategies is important, as explained below.

I have been paying attention to the concept of resilience. I have been asserting the importance of soft control (the accepted notion of soft control does not necessarily exist, but it refers to a risk control approach that emphasizes intangible assets such as the fostering of trust voluntarily by building relationships with interested parties through sharing objectives and values and focusing on the trust and cooperation of people, rather than hard control, or a tangible and compulsory approach such as systems, procedures, manuals and checklists), as a measure for controlling various risks surrounding companies. This is because I think that the strengthening of this soft control and an improvement in resilience have a mutually complementary relationship.

### 2. Fundamental elements of resilience – Cases of resilience at a business leveli

I have already discussed the fundamental factors for the resilient companies that were on the verge of a crisis through the following case studies<sup>ii</sup>. Here, I will compile the factors for the resilient companies by stating the key points of the case studies of four Japanese companies once again.

#### 1) Ikeuchi Organic

Ikeuchi Organic Inc., a towel manufacturer in Imabari city( Ehime prefecture) that was founded in 1953, was succeeded by the founder's son due to the founder's sudden death in 1983. Its business was mostly subcontracting production for other brands (original equipment manufacturer=OEM), but the company went bankrupt with debt of about one billion yen in 2003 as a result of the chain-reaction bankruptcies of a wholesaler. Mr. Ikeuchi, the second president, had strongly rebuilt the business by 2013, 10 years after the bankruptcy, by aiming for sales of one billion yen by taking the following measures.

- (i) Looking squarely at the risks: Changing from an OEM company to a business model of selling its own brand products.
- (ii) Maintaining the corporate vision: "Delivering safety towels for babies, who are more precious to their mother than her own life" and its "own brand of eco-friendly towels."
- (iii) Strategies based on flexible thinking:
- Strategy of selling high-priced products of its own brands
- Implementation of hand work
- Systemization of the production process by computer
- Advancement into the global market through the production of a small quantity of single products
- Focus on web selling

#### 2) Suisen Shuzo

The predecessor of Suisen Shuzo is Kisen Shuzo, which came into existence in 1944 through the merger of eight sake breweries in the two cities of Rikuzentakata and Ofunato, Iwate. Its primary product, Suisen, received the gold award at the National New Sake Tasting Appraisal in 2007 and 2008. Recently, it ventured into a new business by expanding its sales channels in China. However, seven of a total of 60 employees and officers died in the Great East Japan Earthquake on March 11, 2011. It was compelled to make its employees redundant on March 31. The physical damage was catastrophic, because the wooden four-story store and all the buildings containing 150 sake tanks became submerged under water.

However, the company is restoring its business by taking the following measures.

(i) Looking squarely at the risks: Reviewing daily crisis management and becoming fully prepared against

an emergency.

- (ii) Maintaining the corporate vision: Handing down its technologies and culture of sake to future generations through the manufacture and sale of sake. Suisen Shuzo aims for two things: To make good sake and continue to pass on its technologies and heart from person to person so that customers who drink its sake will feel good.
- (iii) Strategies based on flexible thinking:
- Resumed selling its own brands by significantly narrowing its brand products from 200 items before the Earthquake to 20 main products including Yukikko, Josen, Junmaisake, and continuously distilled Shochu.
- Use of the disaster area support funds

#### 3) Komatsu

Komatsu Ltd., a construction machinery manufacturer, has faced two financial crises in the last 10 years. In the first crisis, it made an operating loss of 13 billion yen in 2001 in an external environment where adverse incidents occurred such as the burst of the IT bubble in around 2000, the occurrence of the terrorist attacks in the United States in 2001, falling crude oil prices, and the stronger tendency of curbing investment in public works in Japan. However, Komatsu achieved income of 30 billion yen in 2002, a year and half later, by taking the measures described below.

The second financial crisis happened in around 2008. The global financial crisis had a significant impact on the world, and even Toyota fell into deficit during this period. The construction machinery market is very strongly affected by the economy, and sales of construction machinery declined sharply from the second half of 2008 to 2010. In the fourth quarter of 2008, demand for construction machinery decreased by 70%.

The measures taken by Komatsu in this environment can be summarized as follows.

- (i) Looking squarely at risks:
- Looking squarely at internal factors of the company.
- Not asking parts supplier outside of Komatsu to reduce prices.
- Not reducing expenses in the research and development division, which is the strength of the company.
- Reducing fixed costs-inside-the company that were too high: Reviewing unprofitable businesses, consolidating and eliminating subsidiaries and soliciting voluntary retirement.
- Discovering and visualizing the fact of management risks.
- (ii) Corporate vision: Pursuing quality and reliability.
- (iii) Flexible thinking and strategies:
- Measures taken on the hardware side
  - a. Assimilation of production lines for two machines

- b. Standardization of design documents and specifications since the 1990s → Cost reduction, the building of compatibility and shipment based on demand and exchange rates (flexible response)
- c. Understanding of the operation status and fuels, etc. based on an information system named "KOMTRAX" → Worldwide inventory management → Free and flexible selection of shipping destination → Integration of IT and management RM
- d. Development of innovative products by clear lead (in terms of sound, fuel and the environment)
- Measures taken on the software side
  - a. Measures based on trust and bonds with the Midorikai of cooperative companies (active outsourcing, guidance, information disclosure and profit distribution, etc.)

#### 4) Eagle Bus

Eagle Bus Co., Ltd. was established in 1980. It is a small bus company with its head office and sub-head office located in Kawagoe City, Saitama, three sales branches, 180 employees and capital stock of 50 million yen. Following the withdrawal from operations of the Hidaka/Hanno Route Bus, which was operated by a leading Seibu Bus that was in the red, Eagle Bus took it over in 2006 to meet the strong demand from the local community. Although there was a large housing apartment with 1,900 units on its bus line, the number of users was steadily declining due to the aging population. Since the operation area was not an underpopulated area, no subsidy was received from the government. It was certain that the Hidaka/Hanno Route Bus would make a loss every year if it was operated as it had been previously. In fact, it is said that profits in other businesses (the sightseeing bus and the courtesy bus businesses) of Eagle Bus were blown off by the loss of up to 70 million yen a year of the route bus business.

In this severe management environment, the measures taken by Eagle Bus can be summarized as follows.

#### (i) Looking squarely at the risks

Once it leaves the carbarn, a route bus faces invisible risks such as the following: Is it operating on schedule? What is the congestion situation? Is the schedule efficient? What are the needs of the users for buses? Accordingly, the improvement began with the visualization of these risks. Specifically: a) Visualization of operation: Obtaining bus data by GPS and a sensor on the platform and conducting a questionnaire survey inside the bus in cooperation with Saitama University; b) Visualization of customer needs: a questionnaire survey inside the bus and an awareness survey of residents; c) Visualization of costs: Making a change from the cost unit for one bus and one schedule to the unit by one minute and one kilometer and implementing other risk control measures. These risk control measures included those on the hardware side as in a) and those on the software side as in b).

#### ii) Corporate vision

Eagle Bus has established the following five policies: a) creation of customers (creating a new market and added value from thorough market research), b) innovation (increasing customer convenience by improving efficiency through the input of advanced technologies and services), c) social contribution through work, d) philosophy of making a positive impression through complete service education, with the first priority given to the safety training of the crew, and e) credibility (building up the track record and trust sincerely based on many years' experience and track record).

To realize the social contribution through work in c) in particular of these principles, the company entered into a new business with high uncertainty by increasing customer convenience through the creation of a new market and added value from thorough market research as in a) and improving efficiency through the input of advanced technologies and services as in b).

#### iii) Flexible thinking and strategies

To increase the number of operating buses without increasing costs, the company established a hub bus stop next to the town office. Based on the same mechanism as that of a hub airport, the company now shuttles small buses and wagon buses on demand (on-time operation during commuting hours) in underpopulated areas such as Ono and Kunugidaira, as well as on bus lines to the main stations.

As a result of these corporate efforts, visible accomplishments began to appear after 2009, three years after the entry in the route bus business, and passenger numbers increased by 100 from 750 one day before the takeover to 850. For residents in the underpopulated areas, the company has realized a spectacular frequency of one bus every 30 minutes from one bus every hour on the lines where the number of bus services is the largest. In addition, the number of passengers has jumped by 20% from before the restructure, coupled with success in attracting tourists. Recently, the company has been invited to provide its know-how all over the country. For example, it has begun providing consulting to a local bus company in Kawagoe City and another bus company in Hokkaido since September last year, and also receives inquiries from Laos.

Looking at the fundamental factors for the recovery of each company based on the case study of the four companies above, it seems that the three factors shown above, which are (i) an ability to look squarely at the risks, (ii) how to maintain the corporate philosophy and vision and even under adversity and (iii) the linkage between flexible thinking and strategies became the source of resilience of each company. The influence of these three factors on resilience probably differs, but I think these three factors will be consist of resilient companies as shown in Table 1 in my analysis.

Table 1: Fundamental Factors for Resilience of Four Companies

Company name	Looking squarely at the risks	Corporate vision/mission	Flexible thinking/strategies
Ikeuchi Organic	**	* * *	**
Suisen Shuzo	**	***	*
Komatsu	**	*	***
Eagle Bus	*	**	***

Note: \*\*\* = Strong significant, \*\* = Considerable significant, \* significant

#### 3. Resilience of Da Nang City, Vietnam and Its Indicators – Resilience at a City Level

To this point, I have discussed the concept of resilience, some case studies and the fundamental elements for resilience, but in this chapter I will consider the resilience of Da Nang City, Vietnam, of which our project team takes particular note.

The Rockefeller Foundation carries out research into the resilience of cities around the world under the framework described below and publishes its results. Our project also needs to have an understanding of the opportunities, risks and resilient ability of the relevant partner country based on this framework.

Figure 1 below is information from the first page of the Viet Nam News published on August 29, 2014, reporting that Da Nang City was ranked 33rd of 100 resilient cities among 400 cities worldwide.

Figure 1: Da Nang joins Resilient Cities

Da Nang has been included among the first 33 cities selected from nearly 400 applicants across six continents to join the 100 Resilient Cities network, the Rockefeller Foundation announced yesterday.— File Photo

Source: Viet Nam News published on August 29, 2014

A trial of measuring the resilient ability of cities was undertaken by the Rockefeller Foundation, and it says the following about city resilience: "City Resilience is the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience."

In other words, it says that "resilience is the capacity (receptiveness) of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses (due to unemployment, heavy taxes, inefficient traffic networks, infectious diseases, endemic diseases, water shortages, etc.) and acute shocks (due to earthquakes, epidemics, terrorist attacks, etc.) they experience."

It encourages cities to address stresses and shocks more efficiently with proactive actions and integrated plans when they are exposed to any specific stress or shock, by acquiring a resilient ability. That is to say, resilience makes countries and cities better in the short term and the long term, and the Rockefeller Foundation regards resilience as important even for city residents.

I am particularly interested in the indicators for measuring city resilience. They use only visible indicators, but here I will first show the characteristics of high-quality resilience and then discuss the related indicators. Figures 2 and 3 provide an overview of these indicators and characteristics.

In the framework of resilience at a city level, there are four macro indicators ((1) health & wellbeing, (2) economy & society, (3) infrastructure & environment and (4) leadership & strategy) and the following 12 sub-factors related to these macro factors.

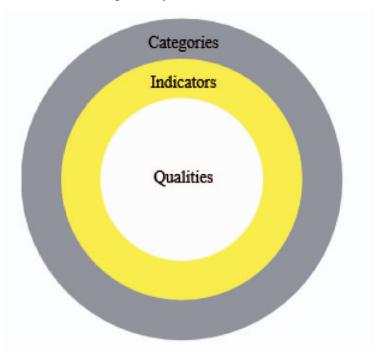


Figure2: City resilience framework

Source: City Resilience Framework City Resilience Index April 2014, P.8 Arup & Partners International Limited 2014

Characteristics of high-quality

resilience

Learning ability

Adaptability

Tolerability

Redundancy

Flexibility (alternatives)

Broad range of communication

Tolerability

Redundancy

Flexibility (alternatives)

Broad range of communication

Fosters economic

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Figure 3: Indicators for Measuring the Resilience of Da Nang City

Source: The City resilience framework and index by Arup&Parteners April 2014, and the author corrected it.

- (1) Health & wellbeing (meets basic needs, supports livelihoods and employment, ensures public health services)
- (2) Economy & society (promotes cohesive and engaged communities, ensures social stability, security and justice, fosters economic prosperity)
- (3) Infrastructure & environment (provides and enhances natural and man-made assets, ensures continuity of critical services, provides reliable communication and mobility)
- (4) Leadership & strategy (promotes leadership and effective management, empowers a broad range of stakeholders, fosters long-term and integrated planning)

Regarding resilience measurement indicators, there are also studies by Paton and Affinity Health at Work, Research Insight as shown below other than the City Resilience Framework of Arup with support from the Rockefeller Foundation.

Paton (2007) thinks that factors such as the frequency of thinking and talking about community issues at the level of the individual, community, institution and environment (critical awareness), a belief in an ability to overcome difficult situations (self-efficacy), belongingness (a sense of community), participation in and commitment to community issues and subsumption as a member who makes important decisions (community competence), and an ability to make representative decisions and take collective actions to overcome difficult situations (collective efficacy) constitutes societal resilience by interacting with each other at multiple levels (Figure 4).

Paton's study argues that these factors interact with each other at the three levels of individual, community and organization to form resilience, which is very interesting.

Personal Institutional Community Critical Awareness Collective efficacy Empowerment Self efficacy Participation Trust Sense of Community Commitment Resources Outcome Expectancy Information exchange Mechanisms for Coping Social Support assisting community

Decision making

Resources

Figure 4: Multi-level Resilience Model

Source: Satoshi Fujii and others (2012) "Prospect of Studies on Economic Resilience," RIETI Policy Discussion Paper Series 12-P-008, p. 7.

Problem solving

In Developing Resilience in Research Insight May 2011 produced by Affinity Health at Work, a perspective at a community level is lacking, although it views resilience at multiple levels such as the individual level and the organization level similarly to Paton's thinking, as shown below.

#### Personal resilience:

- A. Personality of individuals
- (1) Conquer negative thoughts to overcome adversity

Resources

- (2) Relaxation technique to accept reality rather than change it (mindfulness)
- (3) Change negative thoughts to positive thinking
- (4) Devices for changing negative thoughts
- (5) Training to improve self-efficacy
- B. Change in social and environmental contexts
- (1) Evaluate workload, scope of work and compensation, etc.
- C. Interaction between individual attributes and environmental factors
- (1) Training on psychological factors: Positive emotions, cognitive flexibility, life meaning, social support
- (2) Commitment
- (3) Synergetic effects between social support and internal attributes
- (4) Optimism
- (5) Personal and social confidence, communication

#### Organizational resilience:

- (1) Job design: Role in a company, compensation and motivation
- (2) Leadership
- (3) Structure and culture
- (4) Risk management and risk assessment

#### Conclusion

When Japanese companies enter into overseas in the midst of globalization, their entry will involve risks if they focus solely on the possibility of market growth and its short-term possibility. It will be a problem if only risk aversion takes the lead, but they need to make a decision on the risks by looking squarely at these risks and taking into account their risk capacity when the risks, including the possibility of loss, become a reality.

As you can see from the concept of resilience and the studies of its framework discussed in this paper, the content of resilience is diverse. Resilience will be formed when the resilient ability of employees in the partner country and Japanese employees, the resilient ability of the community and the resilient ability at an organizational level affect one another. In this process, the keys are important factors such as consideration for the psychological, communication and social issues of the community and the country as well as the leadership, corporate culture, risk culture, philosophy and mission there and the presentation of solutions about the social issues. It is important to build a corporate culture in which the characteristic factors for high-quality resilience (learning ability, ability to take appropriate measures suited to the occasion, tolerability, redundancy, flexibility (ensuring of alternatives) and a broad range of communication) in the City Resilience Framework of Arup with support from the Rockefeller Foundation are reflected for each factor.

Because the focus of this paper is on the concept of resilience, its indicators, the discovery of common elements that constitute business resilience, and the significance of the concept and indicators of resilience for Japanese companies, etc., a detailed discussion of the resilience of Da Nang City is omitted, pointing out only the fact that the resilience of Da Nang City is ranked 33rd in the world. A detailed discussion of the resilience of Da Nang City is a task for the future.

#### **Note and References**

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#### Note

i For discussions about the case studies, the following papers and book is used as a reference.

Kazuo Ueda (2015) "Overcoming Crises and Resilience – Fundamental Factors for Resilience and Sustainability and Risk Management" on pages 1 through 13 of the *Risks and Management* No. 46, the Japan Risk Management Society

ii Kazuo Ueda (2014) Introduction to Risk Management: Learning from Case Studies – Risk Management Thinking that Creates Resilience, Second Edition, Dobunkan,.

#### References

- · Lisa Valikangas, "The Resilience Organization," McGraw-Hill, 2010.
- Satoshi Fujii and others (2012) "Prospect of Studies on Economic Resilience," RIETI Policy Discussion Paper Series 12-P-008, p. 7.
- The City resilience framework and index by Arup&Parteners, April 2014.