

New Business Creation through Networking and Building Social Capital in

Fishermen's Communities

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Abstract: This paper presents some cases of new business creation in fishermen communities, and examines the networking process and the structure of networks both inside and outside of the communities by using the theoretical framework of social capital. The research method is qualitative research through case studies. The object of the case studies is new business creation in three fishermen communities: Sanriku fishery production union in Okirai, a youth group of the fishermen's cooperative association in Yui, and a public sector cooperation "Furusato Ama". Several findings were made by those three case studies. Firstly, a new network has been built both inside and outside of the community though new business creation. Secondly, the new network has been constructed among people and organizations that had never come across each other before. Thirdly, the outer network of the community is not derived from the internal network. Finally, instead of a strong inner network, the new network is not closed off. The structural holes are bridged by a person such as a broker (the external human resources led type), the leader of the young fishermen group (the internal human resources led type) and a staff of the administrative organization (the government led type). They acquire resources such as information or tips for new product development, sales channels, customers, and funding through the network.

Key words: fishermen's communities; networking; social capital; weak tie; structural holes; hub; bridge **JEL code:** Z130

1. Background: Objectives and Goals

New business creation is a critical but difficult issue in the agriculture, forestry and fishery industries in Japan. In particular, there are few successful cases of new business creation in the fishery industry. Their production is unstable because it is strongly influenced by the natural environment's condition. Most of the producers (fishing people) are small and medium size enterprises; therefore, it is difficult to establish a stable production process. In addition, the distribution channel is complicated and information such as fishermen's profiles, where they catch and how they catch, is hard to reach end users. In addition, the fishing system controlled by fisheries cooperatives is getting out of order in contemporary society. Especially, the distribution chain through a fishermen's cooperative association is not functioning, by a change of the entire distribution system.

This paper shows some successful cases of new business creation in fishermen's communities, and examines

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the networking process and the structure of networks both inside and outside of the communities by using the framework of social capital. Social Capital explains the importance of social connections and social relations in achieving goals. Social capital, or resources accessed through such connections and relations, is becoming a more important element for the community. Granovetter (1973) indicates that a "weak tie" facilitates access to completely new and different resources from the familiar. On the contrary, it often happens that a place for living and a place for working are the same in a fishing community. Therefore, the relationship of the members is strongly connected and mutually beneficial. Since its intimate relationship is "strong tie", it contributes to the maintenance and reproduction of existing resources in the community.

Lin indicated that "the stronger the tie, the more likely that the social capital accessed will positively affect the success of expressive action. The structural principle is that accessible resources are positively related to social ties to those alters with whom ego shares stronger sentiment" (Lin, 2002). Lin presented seven propositions about social capital. Figure 1 shows the Strength-of-Strong-Tie Proposition. Figure 2 shows the Strength-of-Weak-Tie Proposition.



Figure 1 The Strength of Strong Tie Proposition

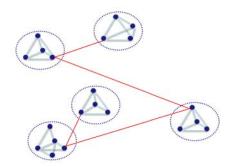
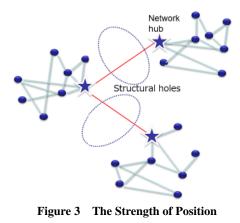


Figure 2 The Strength of Week Tie Proposition Source: Adapted from Lin (2001), Fig. 5.5

Burt (1992) proposed the idea called "structural holes" in the social capital framework. The person who locates the bridging of the structural holes will get an advantage or benefit compared with other members, because s/he will have more freedom and flexibility to reach outside resources through their weak ties (Figure 3).



Source: Adapted from Lin (2001), Fig. 5.5

Lin (2002) defined Social Capital as that capital which is seen as a social asset by virtue of the actors' connections and access to resources in the network or group of which they are members. Kanemitsu (2003) also

defined Social Capital as relational assets acquired through the efforts of building a social network. Social capital provides benefits to the individual, group and organization. Aldridge (2007) points out that the accumulation of social capital contributes to the result of the business.

It is often difficult to acquire business resources, such as financial, material, human, and informational resources, in order to create new businesses only within fishermen communities. Even though information infrastructures such as the Internet have developed and physical distance does not affect acquiring of resources as it used to, the opportunity and frequency of access to information, and the degree of information literacy, affect the acquirement of resources and discovery of new markets. Furthermore, the output brought from new business creation is not only for the success of the individual business, but also for the activation of the regional industry.

In this article, I focus on three propositions, which I previously mentioned, from seven theoretical propositions about the Social Capital of Lin (2002).

2. Research Questions and Methods

This study investigates the function of Social Capital related to new business creation in the fishermen's community. The research question is the following three.

(1) What kind of network was formed?

(2) What is the structure of the network?

(3) What kind of resources do fishermen acquire through the network, and what effect did the resources have on business creation?

The research method is qualitative research by using case studies. I carried out qualitative research such as interviews and participant observation.

The object of the case studies is new business creation in the following three fishermen communities. The first case is Sanriku fishery production union in Okirai, Ofunato city, Iwate Prefecture. This area was strongly damaged by the Great East Japan Earthquake in 2011. The second case is a youth group of the fishermen's cooperative association in Yui, Shizuoka Prefecture. Fishermen are running a small shrimp, called "Sakuraebi", fishery in this area. The third case is a public sector cooperative called "Furusato Ama" which was sponsored and co-operated by the local government in Ama-cho, Oki Island in Shimane Prefecture. All three cases succeeded in creating new products and finding new sales partners.

For Case study 1, interviews were carried out with fishermen and officials, for a total of 20 people and 10 field visits from 2011 to 2015. For Case study 2, I carried out interviews with fishermen and officials for a total of 50 people and 60 field visits from 2012 to 2015. For Case study 3, I carried out interviews with fishermen and officials for a total of 10 people and one field visit (5 days) in 2013. I did an additional literature survey for secondary materials.

3. Case Studies

3.1 Sanriku Fishery Production Union in Okirai, Iwate

The first case is Sanriku fishery production union, located in Okirai, Ofunato, Iwate Prefecture. The fish industry has completely collapsed from the tsunami attack in Tohoku, which also applies to in Okirai. In this case, ten fishermen (thirteen members at the moment) established a new production union after the Great East Japan earthquake in 2011. The members of the new union are different in fishing method. They catch different sorts of

fish and the Crustacea, such as small shrimp, crab, octopus, salmon, trout, Sailfish tuna and so on. Almost all of the fishermen lost ships and equipment for fishing due to the tsunami. In addition, the distribution chain was also cut off and didn't work. They needed to reconstruct the business themselves.

Before the earthquake, fishermen just caught fish and landed them on the market. They never thought to sell fish by themselves, but now they had to. Many people and companies wanted to donate some money and equipment and to help with recovering from the disaster. Some of them introduced new customers to fishermen. Using those connections, they visited the fish wholesale markets, restaurants, and expensive supermarkets in Sendai, Tokyo, and Yokohama. They tried to find new customers and to build new distribution channels. The new networks were formed within the fishermen community, and they discovered the new markets through the human networks which built those activities.

On the other hand, it was Mr. A, not the fishermen themselves, who became a window of those activities of the production union. Mr. A was from Shizuoka prefecture. He graduated from a university located at the same area in Okirai, Iwate and he lived there as a broker of marine products for several years. Mr. A bought fish from one of the core members of the fishermen union, but had almost no contact with the other members. After the earthquake, Mr. A was asked by the fishermen to help with writing application forms for subsidies from both the federal and local governments. His IT literacy was very high, and he had previous experience with applying for those subsidies. He also became the spokesperson when the fishermen were taken up by mass media such as TV programs and newspapers.

Fishermen who had only sold through the fishery cooperatives started to sell seafood on the Internet through the support of Mr. A. At the same time, they developed new products by using unused seafood (such as mussels, which had been discarded as the parasites to scallops), and expanded their sales. Those sales were a fund of the production union, and became a new source of income for fishermen.

3.2 Young Sakuraebi Fishermen's Group in Yui, Shizuoka

The second case is a young fishermen's group in Yui, Shizuoka Prefecture. Yui is famous for "Sakuraebi" (a small shrimp named after the cherry tree) shrimp fishing. The fishing started 120 years ago. The shrimp is a natural resource that lives from about 200 to 300 meters in the deep sea; therefore, no one can farm artificially. Since the serious pollution of the Suruga Bay in the 1960's, Sakuraebi fishermen, 120 ship-owners in total, made a rule called the pool system.

The pool system is the rule to pool the whole of sales money from catching Sakuraebi, which is to be divided equally to all the ships and crews by a fixed ratio. Because of this pool system, Sakuraebi fishing is a representative of fisheries oriented for proper resource management by fishermen themselves. The reason of the pool system is to prevent collapsing the price of Sakuraebi from excessive competition among fishermen.

It is often said that collaborative work between fishermen is difficult, because fishermen are independent business owners and their interest doesn't match sometimes. Nevertheless, the youth group started a new business together under the 40-year history of the pool system.

The members of the young fishermen group (about 50 people in their 20's to 40's) are sons of Sakuraebi ship owners. They started to develop the equipment to keep Sakuraebi alive on the ground with a professor of a university and a company in 2007. Sakuraebi will die soon after they are caught by the net. Sakuraebi live in the deep sea; therefore, nobody knows what kind of food they eat. One of the young fishermen, who became the first leader of the youth group, was thinking about how they could keep Sakuraebi as fresh as possible. Freshness is the first priority to the consumer in the fishery industry.

The young fishermen repeated an experiment with experts such as a university professor and some engineers of a company for more than three years. As a result of the experiments, they developed a special equipment for keeping Sakuraebi alive. Most Sakuraebi fishermen were very surprised. The youth group also developed a special package to pack Sakuraebi and deliver to hotels and restaurants. Now they have started to export Sakuraebi overseas. A living Sakuraebi is very beautiful. It has had a large advertising effect.

Triggered by the bid boycott in the autumn of 2011, a new network has been built between a youth group of fishermen and a manager of a restaurant chain in Tokyo. The bid price of Sakuraebi jumped up in the spring of 2011; in reaction, the bidding price slumped in the autumn fishery. As a result, Sakuraebi brokers rebelled against the limit price which the fishermen association decided, and the brokers did boycott the bid.

Approximately 50 tons of Sakuraebi landed in the market with no place to go. Eventually, a person bought the Sakuraebi. He was a purchasing manager of a Japanese-style fine restaurant chain in Tokyo. He wanted to help fishermen because he heard about the fishermen crisis from the director of the marine bureau local government.

The young fishermen and the purchasing manager of the restaurant started thinking about the new product, They were especially interested in keeping Sakuraebi as fresh as possible. The new product originated from the traditional method of eating Sakuraebi in local community. They dipped the living Sakuraebi into a special sauce called "Sakuraebi no Okiduke". The fishermen served "Sakuraebi no Okiduke" as a rice bowl in a small restaurant run by the fishery association. Soon after they sold the new product, it became very popular. Customers ate the "Sakuraebi no Okiduke" rice bowl at the restaurant and often bought it in the shop of the fishery association. They have sold more than 20,000 packages (approximately 20 million Japanese yen) in two years.

It's Mr. B who was a leader of the young fishermen group and played an important role by developing the new product. He is a captain of the famous ship called "Oomasa maru" in Sakuraebi fishery. He also had many friends and acquaintances besides fishermen and people working for the fishery industry. An encounter between Mr. B and a professor became a trigger for the development of living Sakuraebi. The idea of "Sakuraebi no Okiduke" was also born from a talk between Mr. B and the purchasing manager at the drinking party. Mr. B widely involved not only the members of the young fishermen group but also other people in producing and promoting sales for the new products.

3.3 Furusato Ama: A Public Sector Corporation in Amacho, Oki Island, Shimane

The third case is a public sector corporation called "Furusato Ama" at Ama-cho in Oki Island, Shimane Prefecture. Oki is a small island located 60km from mainland Japan, and its population is about 2,500. Ama-cho fell into a serious financial crisis in 1999, and people were anxious about financial default in 2002.

The town mayor is from the island, but used to work for a private enterprise for quite a long time. He was managing a hotel after he returned to the island. When the town fell into the financial crisis, in order to overcome the situation, he performed his own wage cut voluntarily. The staff of the town hall followed him and returned a part of their wage in the same way. The actions of the town mayor and staff brought about a feeling of crisis and solidarity as a town. Young staff of the town office changed their way of thinking and actions. They made various plans and promoted change.

Even though the main industry in Ama-cho is fishing, they had a handicap to deliver the marine products to the market. A whole day was required to carry seafood to the wholesale market, and then it would take one or two days more to the big cities. From the thought of how to preserve the freshness of the marine products, they funded and established a public sector corporation called "Furusato Ama". They got a subsidy from the government and bought a special refrigeration system called CAS, introducing a new freezing system which kept the freshness of

white squid and natural oyster shells. Since they succeeded in branding and creating the network with restaurant chains in Tokyo and Osaka, the annual income of some of fishermen has doubled from what it used to be.

Main players in the new business creation were the young staff of the town hall. Mr. C was one of the core members of the staff and finally became a director of Furusato Ama. The young staff looked for equipment for keeping and even improving the quality of the seafood. They also tried to establish new sales channels and discover new customers. It was Mr. D who helped one of the fishery associations which went almost bankrupt. He was an owner and CEO of a local construction company and a stock-raising company.

The person who started faming oysters first in Ama-cho was Mr. E He used to work for a manufacturing company as a sales manager, but he quit the job and opened a diving shop in Ama-cho. When he heard that a fisherman had succeeded in farming excellent quality of oyster, he decided to farm oyster himself. He also visited many places such as restaurants and oyster bars for promoting his oyster in Tokyo. He succeeded in branding the oyster "Haruka" as a top quality raw Oyster. The information about the special refrigeration system which Furusato Ama introduced came from Mr. E. He obtained that information when he visited Tukiji big fish market in Tokyo.

4. Results

4.1 Case Analysis on Sanriku Fishery Producers' Union in Okirai, Iwate

(1) The Strength-of-Strong-Tie Proposition

Because of the Great East Japan earthquake, ten fishermen established a new production union in order to reconstruct their business themselves. They shared the feeling of crisis after the earthquake. The production union was a group which was high in homogeneity. The members were tied in strong relations in order to recover from the disaster. On the contrary, the fishermen community "Okirai" is pretty closed to outsiders. So was the Union. Therefore, it seems to have been difficult to build an intimate relationship with the outsiders and trust each other.

(2) The Strength-of-Weak-Tie Proposition

Many people and organizations accessed and wanted to help them to rebuild their lives and business. Mr. A, a broker of the marine products, became a window for the production union instead of fishermen. The people and organizations had many kinds of resources. The resources helped the union, especially in finance. The union was able to receive more than a billion yen in total as financial support from outsiders. Mr. A located a strategic position and showed particularly high ability in the acquisition of economic resources.

(3) The Strength-of- Location Position

Mr. A was in a position that was easy to access from the outside. Because he became a window into the fishermen's occupation, taken up by the mass media such as TV programs and newspapers, and had high IT skills for sending information from the tsunami-hit area, he became a hub that bridged fishermen and outsiders.

In summary (Figure 4), the earthquake disaster gave Mr. A a chance to expand the network because he worked for fishermen. Since the hub, Mr. A, controls the information and resources, as a result, it became difficult for fishermen to build a network with external players. The members of the new production union should build a relationship with outsiders to access various resources necessary for reproduction of the fishery community. The hub (Mr. A) with a high capability to acquire external resources is bridging internal to external, but at the same time, he is a barrier of connecting fishermen to outsiders.

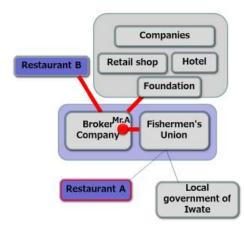


Figure 4 Network in Fishermen Union in Okirai

4.2 Case Analysis on Young Sakuraebi Fishermen's Group in Yui, Shizuoka

(1) The Strength-of-Strong-Tie Proposition

The members of the young fishermen group are tied in strong relations because of the pool system and the conflict against the brokers, even though fishermen are independent business owners and their interests don't match sometimes. Sakuraebi fishing is permitted to limited fishermen at a limited area exclusively by regulation; a new entry is very rare. That exclusiveness sometimes appears as an eliminating action toward outsiders. On the contrary, the structure of the Sakuraebi association is flat, and the intimate relations promote sharing knowledge and information among fishermen.

(2) The Strength-of-Weak-Tie Proposition

The president of the fishermen association is also a chairman of a credit union bank for fishermen, and he has a lot of formal connections with the outside. Mr. B, a leader of the young fishermen group, also has a lot of weak ties with outsiders such as university professors and a purchasing manager of a restaurant chain in Tokyo. He is located in a position of access to external resources, which doesn't exist in the internal community.

Some of the core members of the young fishermen group also build networks with outsiders. Comprehensively, the young fishermen group formulate multiple networks through which they access the external resources. By using the networks, they develop new technologies, products and markets.

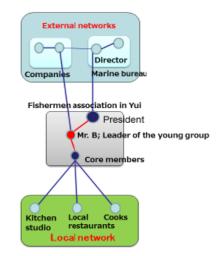


Figure 5 Network in the Young Fishermen Group in Yui

(3) The Strength-of-Location Position

Mr. B is playing the role of hub and bridging internal and external. He also pays a cost to maintain the network by visiting people and exchanging information. He has a positional advantage to access multiple channels easily because of his formal position as No. 2 in the association.

In summary (Figure 5), the young fishermen group has both internal and external networks in balance, and they use the networks as social capital. The reason why they make networks social capital is because Mr. B is not only bridging the structural holes, but also building trust with outsiders. The members of the young fishermen group access the resources easily by the networks. Those connected networks promote the small world effect.

4.3 Case Analysis on Furusato Ama, a Public Sector Corporation in Amacho, Oki Island, Shimane

(1) The Strength-of-Strong-Tie Proposition

People in Amacho shared a feeling of crisis if they kept to the community forever, because they live in a small island isolated from the mainland and no major industry exists. Even though the island is isolated and people have strong relations with each other, they are open to outsiders. They have accepted many people from various areas and let them live in the community.

(2) The Strength-of-Weak-Tie Proposition

The main players of the new business creation were the young staff of the town hall. They looked for equipment for preserving better quality of seafood. They also tried to establish new sales channels and to discover new customers. They were able to build many networks with outsiders as a result of their activities. There are many different people, such as the staff of town hall, Mr. E, the CEO of the local company, and the person who came from outside and stayed and worked in Amacho, connecting the network with the outside. They gave useful information to the town.

(3) The Strength-of-Location Position

Mr. C is playing the role of hub and bridging internal and external. The cost of building and maintaining the network is paid mainly by the staff of town hall and the mayor. Mr. E was a person who gave the information about the special refrigeration system which Furusato Ama introduced. Those people filled the gaps of structural holes and brought a lot of useful resources into the town.

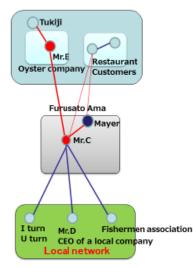


Figure 6 Network in Furusato Ama

In summary (Future 6), there are both internal and external networks in balance in Amacho, and they are able to use the networks as social capital. The reason why they make the networks social capital is because of the actions of the mayor and young staff of town hall. They share the feeling of crisis from existing in the town, therefore, they are able to break through the closed nature to outsiders in a homogeneous community.

5. Conclusion and Discussion

The research questions in this study are the following:

(1) What kind of network was formed?

(2) What is the structure of the network?

(3) What kind of resources do fishermen acquire through the network, and what effect did the resources have on the business creation?

Regarding research question (1), there are some common features of three cases. Firstly, a new network has been built both inside and outside of the community though new business creation. The particular feature of the outer network is diversity and heterogeneity. Secondly, new networks have been constructed among people and organizations which had never come across each other before a crisis occurred, such as the big earthquake disaster, severe conflict against brokers, and bankruptcy of the town. Thirdly, the outer network of the community is not derived from the internal network. Finally, instead of a strong inner network, the network is not closed off. They supply various kinds of resources effectively and effectively through a new outer network.

Regarding research question (2), the structural holes were bridged by a person. Those key persons are different in three cases. In the first case, a fish salesman (broker) who works with the fishermen's union has become a node for a bridge of the new network. We name it the external human resources led type. In the second case, the leader of the young fishermen's group has become a node for a bridge of the new network. We name it the internal human resources led type. In the third case, a staff of the administrative organization becomes a node for a bridge of the network. We name it government led type.

Regarding research question (3), through the network, they acquired resources such as information or tips for new product development, sales channels, customers, and funding. The resources were brought by companies and individuals who helped with recovery from the earthquake, who helped to develop equipment or business plans, and who introduced sales channels. The networks built through new business creation in fishermen communities became social capital for those actors.

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