Efforts for the Sixth Industry and its Issues in Japan

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Abstract

In Japan, the sixth industry has been established to revitalize rural areas and raise farmer incomes. The term "sixth industry" refers to efforts that combine agriculture with secondary and tertiary industries to create new value, such as farmers' markets, direct selling, food processing, tourist farms, bed and breakfast by farmers, and farmers' restaurants. National and local governments, agricultural extension centers, and specialists support farmers and stakeholders in developing the sixth industry. However, many such activities have been suspended or terminated. Therefore, it is necessary to identify the issues plaguing the sixth industry. In this study, we categorize the activities of the sixth industry using text mining and self-organizing maps. We then identify the issues that tend to occur for each type through a questionnaire survey among the departments in charge of the sixth industry in prefectural governments and agricultural extension centers. We conclude that the sixth industry can be categorized into five types according to their activities and purpose of their efforts; success or failure trends and the attributes of farmers differ depending on the type; and different types have different issues. Therefore, support measures for the sixth industry must vary according to the issue and type.

Keywords: Sixth industry, typification, text mining, self-organizing map, questionnaire

Introduction

To support the development of the sixth industry, this study categorizes its activities based on their objectives, and identifies the issues related to each type of activity from the perspective of support and extension organizations.

In Japan, the sixth industry has been established to revitalize rural areas and boost farmer incomes. The sixth industry refers to efforts that combine agriculture with secondary and tertiary industries to create new value, and includes farmers' markets, direct selling, food processing, tourist farms, bed and breakfast (B&B) by farmers, farmers' restaurants, and so on. The term "sixth industry" is coined by Imamura (1992), who defines it as primary industry times secondary industry times tertiary industry. In some cases, the farmer also processes and sells the products, while in other cases, the farmer, processor, and distributor work together. Sales from the sixth industry have been increasing slowly; overall sales have crossed ¥2 trillion ($1.8 billion) since 2017 (Japan Ministry of Agriculture, Forestry and Fisheries, 2021)[1].

Other countries have also taken measures to set up the sixth industry. In Asia, Korea has been implementing projects related to the sixth industry since the enactment of "the Special Act on the Equal Development of the Nation" in 2005. Support is provided by the extension officer who provides technical guidance and consulting services for agricultural management (Lee, 2013). In the United States, value-based supply chain (VBSC) is an integrated approach encompassing production, processing, and marketing with the aim of supporting small and medium-sized farmers and creating new value for agricultural products. The VBSCs are supported by food hubs and aggregators (Feenstra and Hardesty, 2016)[2]. In the European Union,

[1] For reference, the total annual sales of agriculture are about ¥9 trillion($7.9 million), and ¥2 trillion($1.8 billion) is about the same size as the annual sales of the robotics or animation industries in Japan (Japan Ministry of Internal Affairs and Communications, 2021).

[2] A food hub is a company or individual that serves as the core of an initiative. An aggregator is an individual or organization that gathers management resources to promote a coherent approach. In many cases, food hubs take on the role of aggregators (United States Department of Agriculture, 2013).

regional managers in Germany and rural animators in France are making an effort to combine local human, natural and financial resources (Matsuda, 2013).

Meanwhile, in Japan, support, guidance, and response to the sixth industry are provided by national and regional support centers, in addition to the departments in charge of sixth industry and extension agents in prefectural governments. Rogers (2007) describes the change agents responsible for introducing innovation. If we consider the changes that result from addressing the sixth industry as an innovation, then those in charge of developing a sixth industry in prefectures and support centers as well as extension workers would fall in the category of change agents. According to Rogers (2007), the role of the change agent is to raise the need for change, build an informational relationship, identify the issues, motivate the client to change, convert the desire to change into action, prevent disruptions, and terminate the relationship.

As described above, national and local governments, agricultural extension centers, and specialists support farmers and stakeholders in developing the sixth industry in Japan. Despite this, many activities related to the sixth industry have been suspended or terminated[3]. Therefore, it is necessary to identify the issues plaguing the sixth industry, especially from the perspective of support and extension organizations. However, this has largely been ignored in previous studies.[4]

In this study, we identify the issues through a questionnaire survey among the departments in charge of the sixth industry in prefectural governments and agricultural extension centers in Japan. At that time, we categorize sixth industry into types in terms of their nature and purpose, and identify issues for each type.

[3] According to the Ministry of Internal Affairs and Communications (2019), about 20% of the initiatives have been discontinued or terminated.

[4] The issues plaguing the sixth industry identified by previous studies are summarized in another section.

Efforts to create new value and support small- and medium-scale farmers are also being promoted by the Food and Agriculture Organization of the United Nations (Food Links, 2013) and the United Nations Industrial Development Organization (United Nations Industrial Development Organization, 2020). Therefore, it is important to identify the issues facing the Japanese sixth industry from the perspective of support and extension agencies.

Methodology

First, we try to identify the issues faced by the sixth industry by summarizing previous studies. While it has been reported that issues arise in individual activities, the issues that tend to crop up under the jurisdiction of each prefecture are not known.

Second, we categorize the activities of the sixth industry by analyzing "the comprehensive business plan" using text mining and self-organizing maps. The comprehensive business plan describes the activities, nature, and objectives of the efforts. Text mining encodes text-type qualitative data and enables them to be analyzed quantitatively (Higuchi, 2004); sentences are decomposed into morphemes, which are the smallest units of meaningful expression. The first step in the text-mining process is to translate "the comprehensive business plan" from Japanese into English by using Rozetta Corp's T-400 service. Next, we use the Stanford POS tagger to decompose the sentence into morphemes, which are arranged by the number of occurrences. By focusing on the words that appear frequently in the text (frequently appearing words) and the words that appear together with these words, we classify the efforts into different types. We use the KH Coder (Higuchi, 2014) for text mining.

The results of text mining are visualized by a self-organizing map, which is an unsupervised neural network algorithm proposed by Kohonen (1982). It is a data analysis method that maps high-dimensional data onto a two-dimensional plane in a non-linear fashion (Figure 1)[5]. Suppose that the input layer contains the feature vector of individual j to be analyzed, x_j $(x_{j1}, x_{j2}, \ldots, x_{jp})$, and the output layer contains one unit. As shown in Figure 1,

[5] Refer to Kohonen (1982) and Mingzhe Jin's Home Page.

any one unit in the output layer is linked to all variables of the feature vector in the input layer. In the initial stage, weights m_i $(m_{i1}, m_{i2}, \ldots, m_{ip})$ are attached to each variable by random numbers. As shown in Equation (1), among all the units in the output layer, find the unit m_c that is most similar and make it "the winner."

$$\|x_j - m_c\| = min_i\{\|x_j - m_i\|\} \quad \cdots (1)$$

Next, the weight vectors m_i of the winning unit and its neighboring units are updated according to Equations (2) and (3).

$$m_i(t+1) = \begin{cases} m_i(t) + h_{ci}(t)\left[x_j(t) - m_i(t)\right] & i \in N_c \\ m_i(t) & i \in N_c \end{cases} \cdots (2)$$

$$h_{ci}(t) = \alpha(t) exp\left(-\frac{\|r_c - r_i\|^2}{2\sigma^2(t)}\right) \cdots (3)$$

$h_{ci}(t)$ in the equation is the neighborhood function, which adjusts the effect of x_j according to the proximity of unit c and its neighbor unit i. In the equation $h_{ci}(t)$, $\alpha(t)$ is the learning rate coefficient, and r_c and r_i are the coordinate vectors of units c and i on two dimensions. $\sigma^2(t)$ is a function that decreases the range of units c and i. $\alpha(t)$ is a monotonically decreasing function with learning frequency (or time) as a variable, and is the variance of the $\sigma^2(t)$ coordinates. The simplest monotonically decreasing function with the number of learning times as a variable is $1 - \frac{t}{T}$. t is the number of training sessions (or times, 1, 2, 3, ..., T), and T is the total number of pre-defined training sessions. Repeat (1) to (2) for all input feature vectors (= 1 , 2 , ... , m).

Self-organizing maps can be used to reveal the similarities between words. In this study, a high degree of word-to-word similarity indicates that some extracted words often occur in the same sentence. Unlike principal component analysis, self-organizing maps can be used to analyze all data, and compared with multidimensional scaling methods, they can analyze niche data. In addition, the words are clustered based on their similarities. Clustering facilitates the typing of the sixth industry.

Third, a questionnaire was mailed to people in charge of the sixth industry in Japan's prefectural governments and extension agencies[6] in March 2020 to identify the trends in the success or failure of each type of activity; the bearers; and the issues that tend to arise. A total of 453 questionnaires were distributed, of which 139 (30.7%) were answered. The results of the questionnaire were analyzed statistically.

Results

Issues for the sixth industry based on previous studies

Previous studies discuss the issues plaguing the sixth industry. In this study, we organize the issues pointed out in the following studies: [1] Japan Ministry of Internal Affairs and Communications (2019), [2] Japan Ministry of Agriculture, Forestry and Fisheries (2018), [3] Japan Finance Corporation (2013), [4] Nomura Agri Planning & Advisory Co. (2018), [5] Kiyohara (2016), [6] Sato (2017), [7] Sakurai (2015), [8] Konno and Kudo (2015), [9] Nomura Agri Planning & Advisory Co. (2012), [10] Muroya (2013), [11] Uehara (2019), [12] Kobayashi (2019), [13] Japan Ministry of Agriculture, Forestry and Fisheries (2020), and [14] Ohashi et al. (2020).

In previous research, the following 12 issues are identified: (1) issues related to facilities and equipment, such as difficulty in procuring facilities and machinery[1] (hereafter "facilities and equipment"); (2) issues in securing raw materials, such as difficulty in securing agricultural products[1][2] (raw materials); (3) economic issues such as worsening profitability and increased expenses[1][2][4] (economy); (4) issues with the partner, such as requests from the partner to lower the transaction price or reduce the transaction volume[1][2] (relationship with partners); (5) issues with business management skills, such as inadequate business management skills of the business owner[5][9] (management skills); (6) issues with long-term vision, such as lack of long-term perspective and lack of clarity and sharing of vision[10][11][13] (long-term vision); (7) marketing issues, such as lack of understanding of consumer needs and gathering information

[6] The extension agency is an agency of the prefectures.

on competing products[5][9][13] (marketing); (8) issues related to securing human resources and workforce with expertise[1][2][5][6][7] (human resources); (9) knowhow-related issues, such as the development of technology and the acquisition of knowhow[2][5] (knowhow); (10) issues of increased burden, such as labor and trouble-shooting (burden) [1]; (11) issues related to the diversity of businesses, such as unbalanced businesses[1][10][14] (diversity of business); and (12) issues related to the regional spread of the initiative, such as lack of ripple effects in the region[7][10][12] (regional spread).

Typification of the sixth industry

We categorize the activities of the sixth industry by analyzing "the comprehensive business plan" using text mining and self-organizing maps. As of July 2020, there were 2,569 projects certified as "the comprehensive business plan." Text mining is conducted on the "outline" of the comprehensive business plan that describes the activities and objectives of the efforts. The results of text mining are shown in Table 1.

Table 1 shows that the most frequently occurring word is "product," with a term frequency of 2,879, followed by "sale" (2,653), "be" (2,582), "develop" (1,973), and "sell" (1,895). However, the frequently appearing word is not enough to create a typology. On the other hand, the results of text mining include data on word-word relationships. Therefore, the next step was to create a self-organizing map from the text-mining results. The self-organizing map in Figure 2 is the result of 1,000 iterations of Unsupervised Learning[7].

The frequently appearing words in Cluster 1 of the self-organizing map are "sale" (2,653), "aim" (699), "expand" (631), "channel" (616), "business" (466), "establish" (385), "brand" (246), and so on[8]. Therefore, Cluster 1 is defined as the sales channel expansion type. In other

[7] Unsupervised learning is a type of machine learning in which the algorithm is not provided with any pre-assigned labels or scores for the training data (Hinton and Sejnowski, 1999).

[8] The numbers in parentheses indicate the number of times the word appears (see Table 1).

words, in this type, the farmer sells the agricultural products. The word “brand” indicates that farmers are working to brand their agricultural products and processed agricultural products to expand their sales channels.

The frequently appearing words in Cluster 2 are “company” (1,872), “direct” (626), “addition” (532), “own” (467), “restaurant” (440), “processing” (430), “facility” (319), and so on[9]. The words “restaurant,” “Internet,” “customer,” and “direct” suggest that farmers are selling directly to restaurants and customers, or through the Internet. Hence, Cluster 2 is defined as the direct sales type. In the direct sales type, the word "processing" appears. From this word, we can see that processed agricultural products are being sold. In other words, in this type, the farmer handles the processing and marketing.

The frequently appearing words in Cluster 3 are “management” (1,512), “new” (1,470), “improve” (1,188), “agricultural” (1,047), “increase” (563), “value” (561), “income” (534), and so on. In particular, from the words management and improve, Cluster 3 can be defined as the management improvement type.

The frequently appearing words in Cluster 4 are “local” (703), “production” (658), “development” (238), “order” (226), “promote” (212), and “cultivation” (209). Looking at Figure 1, we can see that cluster 4 is a type related to local promotion, as “local” and “promote” are located close together. Therefore, Cluster 4 is defined as the local revitalization type. Cluster 4 has the fewest frequently appearing words. This suggests that the number of activities of the local revitalization type is lower compared with other types.

The frequently appearing words in Cluster 5 are “product” (2,879), “develop” (1,973), “sell” (1,895), “use” (1,818), “produce” (1,497), “process” (1,001), “manufacture” (777), and so on. Since “process” and “product” are located near each other, and “manufacture,” “raw,” and “material,” are located close to each other, it indicates that Cluster 5 is a type related to the processing of agricultural products. Hence, Cluster 5 is defined as the product processing type.

[9] Pronouns are omitted.

In other words, in this type, the farmer processes the agricultural products. Since the number of frequently appearing words in Cluster 5 is the highest, the product processing type is considered to have the highest number of activities.

As described above, the activities for the sixth industry can be divided into five types based on the contents of the activities and the objectives of the efforts: sales channel expansion type, direct sales type, management improvement type, local revitalization type, and product processing type.

Success or failure trends and attributes of farmers

Based on the results of the questionnaire survey, we reveal whether there are differences in the tendency of success or failure and in the attributes of the farmers by each type. Table 2 shows the trends of success or failure, age, and gender of the bearers.

In the trend of success or failure, each type was asked whether they had "many successful actions" or "many unsuccessful actions." As a result, more respondents answered that it "tended to succeed" in the direct sales type, product processing type, and sales channel expansion type. The local revitalization type had a slightly higher tendency to fail.

Next, we asked about the age of the bearers. For each type, "activities are made by people aged 20–59 years" or "activities are made by people aged 60 years or older."[10] There were significant differences between the two groups for each type. In the case of management improvement type, product processing type, and sales expansion type, "20–59 years" is higher. Meanwhile, in direct sales type and local revitalization type, "over 60 years" is higher.

In terms of gender, the questionnaire asked whether "women's actions are more" or "men's actions are more." The results showed that there were significant differences at the four types. "Women" is higher in the direct sales type and local revitalization type, while "men" is higher in the management improvement type and sales channel expansion type.

[10] In Japan, 80% of the agricultural workforce is over 60 years old.

In the case of the direct sales type and local revitalization type, the bearers tend to be older women. Meanwhile, in the management improve type, product processing type, and sales expansion type, the bearers tend to be younger men. Thus, it can be said that the bearers of the sixth industry differ by type.

Issues for each type

A questionnaire was distributed to reveal the issues that tend to arise for each type. In the questionnaire, 12 issues pointed out in previous studies were presented, and the respondents were asked about the issues that tend to occur in the prefecture to which they belong[11]. Table 3 summarizes the results of the survey.

When the issue of "human resources" was compared by type, the highest percentage of respondents was of the direct sales type (51.2%), followed by the local revitalization type (43.3%). In the free answer column, the direct sales type and local revitalization type indicated a lack of successors, while the product processing type and sales expansion type indicated a lack of marketing experts.[12]

As for the issue of marketing, the highest percentage of respondents answered direct sales type (58.1%), followed by sales channel expand type (44.6%). As mentioned earlier, in these types, the farmers conduct the sales activities. According to the free answer column, there were few marketing experts in the prefectural institutions and it was difficult to deal with the issue of marketing.

Meanwhile, the percentage of respondents who chose "raw materials" was small except for the local revitalization type. This type tends to have a larger scale of business, so securing raw materials is bound to be an issue.

[11] There was no significant difference in the responses by prefecture.

[12] In this case, the successor refers to the successor of the sixth industry. Lack of successors has become a serious problem, especially in efforts by older women.

Next, we organize the issues that tend to arise for each type. In the direct sales type, "facilities and equipment" (59.7%) had the highest percentage of responses. As mentioned earlier, in this type, the farmer processes the produce. In the free answer column, several respondents indicated that they were struggling to comply with the Hazard Analysis Critical Control Point (HACCP), which is a tool to assess, evaluate, and control food safety hazards.[13] This suggests that the issues of facilities and equipment are related to the issue of "knowhow."

In the management improvement type, "management skill" (44.0%) had the highest response rate. One of the reasons is that business management became more complicated because of the shift to the sixth industry. In addition, managers who aim to improve their business management skills may be lacking in business management skills to begin with.

In the product processing type, "human resources" (35.9%) had the highest percentage of responses, followed by "marketing" (32.1%), "facilities and equipment" (25.6%), and "knowhow" (25.6%). This type also has the farmer processing the agricultural products same as the direct sales type. Although there is a slight difference in the rankings, the product processing type and direct sales type face similar issues.

In the sales channel expansion type, the highest percentage of respondents cited "marketing" (44.6%) as an issue. Furthermore, "relationship with partners" (27.7%), in which the partner asks for lower transaction prices or reduced transaction volume, was also a top concern. This is because in this type, a relationship with partners is always required, whereas in other types, collaboration and transactions with different industries are not essential.

In the local revitalization type, the highest percentage of respondents cited "securing human resources" (43.3%) and the second highest percentage of respondents cited "marketing" (35.8%). "Regional spread" (32.8%) had the third-highest response rate. It is clear that this type of initiative has a goal of local revitalization but faces challenges in achieving the goal.

[13] In Japan, from June 2021, hygiene management in line with HACCP has become essential for farmers to process agricultural products and serve meals in restaurants.

Conclusion

In Japan, the sixth industry has been undertaken to revitalize rural areas and raise farmers' incomes. But despite support from national and local governments and agricultural extension centers, many such efforts have been suspended or terminated. In this study, we categorize these efforts by the content of their activities and purpose of their efforts, and identify the issues by type.

We first identify 12 issues by summarizing previous studies: 1) facilities and equipment, 2) raw materials, 3) economy, 4) relationship with partners, 5) management skills 6) long-term vision, 7) marketing, 8) human resources, 9) technology, 10) burden, 11) diversity of business, and 12) regional spread.

Second, we use text mining and self-organization maps to categorize the activities of the sixth industry based on the content of their activities and objective of their efforts: 1) sales channel expansion type, 2) direct sales type, 3) management improvement type, 4) local revitalization type, and 5) product processing type.

Third, we identify the success or failure trends, age, and gender of the bearers. According to the results of the questionnaire, more respondents answered that it "tended to succeed" in the direct sales type, product processing type, and sales channel expansion type. In addition, in the case of the direct sales type and the local revitalization type, most of the bearers were older women. Meanwhile, in the case of the management improvement type, product processing type, and sales expansion type, many of the bearers tended to be young men. Thus, the results showed that the bearers of Japan's sixth industry are different by type.

Finally, we identify the issues that tend to arise for each type. In the direct sales type, the issue of "facilities and equipment" elicited the highest percentage of responses. In the management improvement type, "management skill" recorded the highest response rate. In the product processing type, "human resources" received the highest percentage of responses, followed by "marketing," "facilities and equipment," and "knowhow." In the sales channel expansion type, the highest percentage of respondents cited "marketing" as an issue. In the local revitalization type, "regional spread" had the third highest response rate.

To conclude, the sixth industry can be categorized into five types according to the content of their activities and purpose of their efforts; success or failure trends and the attributes of farmers differ depending on the type; and different types have different problems. Therefore, support measures for the sixth industry by national and local governments and agricultural extension centers must vary according to the type. However, the support measures required to address the issues must be investigated and discussed in future research.

In addition, as described above, text mining and self-organizing maps are useful for analyzing descriptions. However, it is worthy to note that these alone are not sufficient. It is necessary to scrutinize the comments obtained.

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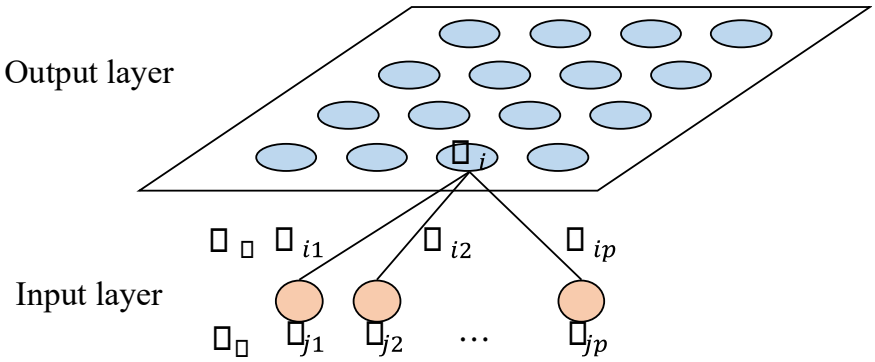
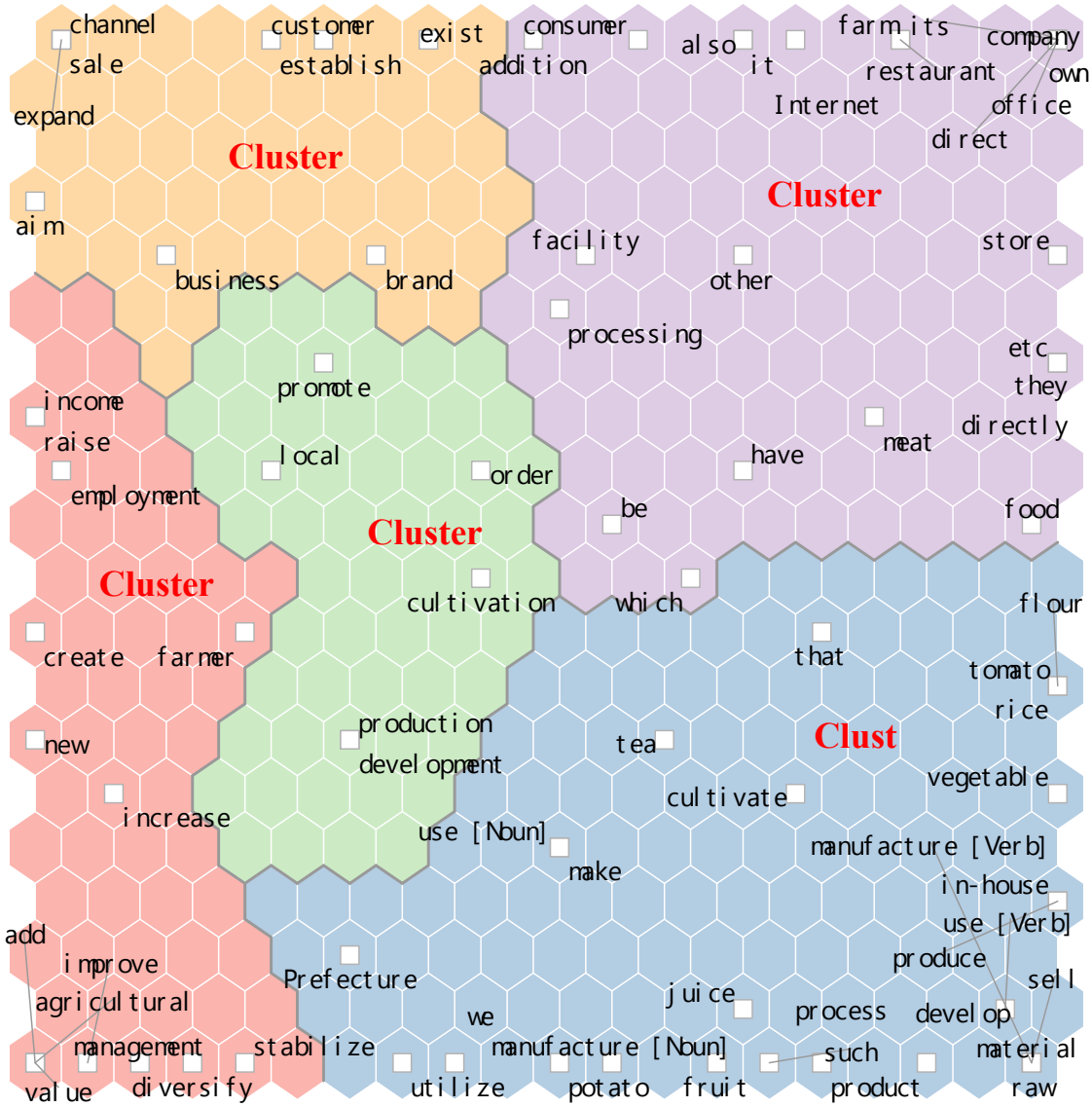
Figure 1. Kohonen's model



Source: Kohonen, T.（1982）Self-organized formation of topologically correct feature maps

Figure 2. Self-organizing map for “the comprehensive business plan”



Source: Results by KH Coder

Note: Red letters are filled in by the author.

Table 1. Frequently appearing words

	Word	Cluster	TF		Word	Cluster	TF		Word	Cluster	TF		Word	Cluster	TF
1	product	5	2,879	21	vegetable	5	684	41	it	2	439	61	employment	3	248
2	sale	1	2,653	22	its	2	672	42	processing	2	430	62	farmer	3	247
3	be	2	2,582	23	production	4	658	43	cultivate	5	419	63	brand	1	246
4	develop	5	1,973	24	expand	1	631	44	stabilize	3	416	64	consumer	2	240
5	sell	5	1,895	25	direct	2	626	45	establish	1	385	65	development	4	238
6	company	2	1,872	26	make	5	625	46	fruit	5	370	66	flour	5	234
7	use	5	1,818	27	channel	1	616	47	food	2	361	66	meat	2	234
8	management	3	1,512	28	such	5	598	48	also	2	359	68	customer	1	233
9	produce	5	1,497	29	they	2	585	49	utilize	5	355	69	diversify	3	232
10	new	3	1,470	30	increase	3	563	50	material	5	330	70	order	4	226
11	improve	3	1,188	31	value	3	561	51	raise	3	321	71	directly	2	221
12	agricultural	3	1,047	32	which	2	556	52	facility	2	319	72	farm	2	219
13	process	5	1,001	33	income	3	534	53	store	2	305	73	juice	5	218
14	rice	5	890	34	addition	2	532	54	create	3	297	74	Internet	2	216
15	that	5	785	35	add	3	521	55	tomato	5	291	75	potato	5	214
16	manufacture	5	777	36	etc	2	498	56	tea	5	287	76	exist	1	212
17	in-house	5	724	37	own	2	467	57	use	5	284	76	promote	4	212
18	we	5	706	38	business	1	466	58	have	2	273	78	cultivation	4	209
19	local	4	703	39	raw	5	454	59	other	2	263	79	Prefecture	5	204
20	aim	1	699	40	restaurant	2	440	60	office	2	255	80	manufacture	5	200

Souce :Resurts by KH Koder
Note1 :Cluster of table 1 equals cluster of fig.2.
Note2 :TF means term frequency

Table 2. Success or failure trends and attributes of farmers

		Type				
		Direct sales n=129	Management improvement n=50	Product processing n=78	Sales channel expansion n=65	Local revitalization n=67
Success or failure trends	Tend to success	32.6% **	14.0%	26.9% **	24.6% **	13.4%
	Tend to failure	16.3%	10.0%	10.3%	7.7%	16.4%
Age	20~59	38.8% **	32.0% **	50.0% **	40.0% **	13.4% **
	over 60	55.0%	2.0%	15.4%	9.2%	35.8%
Gender	Women	69.8% **	10.0% *	24.4%	13.8% **	35.8% **
	Men	20.9%	26.0%	30.8%	38.5%	14.9%

Source： Results of questionnaire

Note： The results of Fisher's exact probability test showed that ** was significantly different at the 1% level and * was significantly different at the 5% level.

Table 3. The issues for each type

Issue	Type									
	Direct sales n=129		Management improvement n=50		Product processing n=78		Sales channel expansion n=65		Local revitalization n=67	
Securing human resources	51.2%	3	36.0%	2	35.9%	1	41.5%	2	43.3%	1
Marketing	58.1%	2	28.0%	3	32.1%	2	44.6%	1	35.8%	2
Facilities and equipment	59.7%	1	26.0%	4	25.6%	3	15.4%	9	19.4%	8
Business management skills	35.7%	7	44.0%	1	24.4%	5	20.0%	5	26.9%	6
Long-term vision	40.3%	5	24.0%	5	19.2%	7	20.0%	5	31.3%	4
Economic issues	40.3%	5	24.0%	5	24.4%	5	13.8%	10	29.9%	5
Technology-related issues	44.2%	4	24.0%	5	25.6%	3	13.8%	10	19.4%	8
Increased burden	26.4%	8	18.0%	8	17.9%	8	24.6%	4	17.9%	10
Regional spread	17.8%	9	12.0%	9	17.9%	8	20.0%	5	32.8%	3
Securing raw materials	15.5%	11	2.0%	12	14.1%	10	16.9%	8	25.4%	7
Relationship with partner	11.6%	12	6.0%	11	14.1%	10	27.7%	3	9.0%	11
Diversity of businesses	17.8%	9	8.0%	10	6.4%	12	6.2%	12	7.5%	12

Source: Results of questionnaire

Note1: The numbers to the right of the percentages are the rankings in order of the number of responses for each type.

Note2: The percentage was calculated by dividing the number of responses by the number of respondents of each type.