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Study on the Declining Internal Factors of the City Center Shopping District - Case Study of Uto City, Kumamoto Prefecture

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ABSTRACT

"The Previous Act" came into effect in 1974. Regulations on opening stores in the central shopping area of large-scale stores were strengthened. However, "the previous act" was changed to deregulation in the years 1991 and 1994. In the suburbs, after the amendment of this deregulation, the social environment deteriorated due to noise, traffic congestion and industrial waste. In 2000, "The Previous Act" was abolished. Instead of that, "Act on the Measures by Large-Scale Retail Stores for Preservation of Living Environment" was enforced, facilitating the opening of large stores in the suburbs. Owing to the policy change of this large-scale retail store regulation law, local shopping districts in the city center were declined. External factor of the decline is the opening of large stores and the like. Meanwhile, the internal factor is caused by the product composition and the like. In this study, we focus on internal declining factors and clarify the declining factors. In addition, the results of the Questionnaire Survey of store owners in 7 blocks of the shopping district were analysis and evaluation by text mining.

Keywords: *Act on the Measures by Large-Scale Retail Stores for Preservation of Living Environment, central business district. decline. customer.*

INTRODUCTION

Regional city center shopping districts often have small stores, which has fewer than 10 employees depend on family workers. "The Previous Act" was enforced in 1974, with the aim of protecting this small store. The enforcement of this "The Previous Act" was to strengthen the regulation of large-scale retail stores' opening in shopping districts. However, "The Previous Act" was revised in 1991 and 1994, and turned policy change to deregulation.

In 2000, "The Previous Act" was abolished, and "Act on the Measures by Large-Scale Retail Stores for Preservation of Living Environment"was enforced instead. This is the Act which does not restrict to the store floor area. The change of policy relating to the opening of large retail stores and the phenomenon of declining central shopping streets are the context of this research. We consider declining principal shopping districts as a factor other than the opening of large-scale stores. Therefore, this study aims to clarify this factor by the investigation and analysis the area around the central shopping district.

THE SITUATION OF UTO CITY CENTRAL SHOPPING DISTRICT

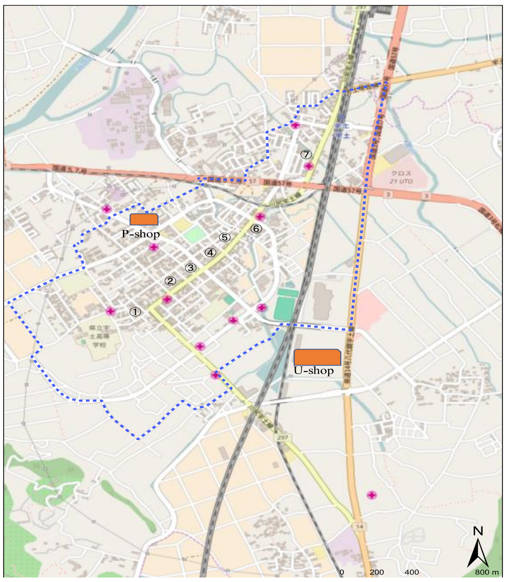

Figure1.*The central area of Uto city and the location of large-scale store P-store, U-store.*

250ha surrounded by the blue dotted line shown in Figure 1 is the center area of Uto city. In 1987, the first large-scale retail store with 2,656 m^2 area was opened in the North West of Uto city central area, while the second one with 42,321 m^2 area in the South East was first launched 8 years later[1]. Hereafter, weabbreviate them as P-store and U- store. At the same time two large-scale shops was opened, close down shops, and vacant shops became prominent in the central shopping district. Six stores in 1993 and 3 stores in 1997 have been verified to be shut down and closed. In 1997, it was confirmed that the vacant store ratio was 15.0%. The phenomenon of decline of such a central shopping district became noticeable from 1991 when the revision of “The Previous Act” was made at the beginning of the 2000s when “Act on the Measures by Large-Scale Retail Stores for Preservation of Living Environment” took effect.

Due to the duplication of the U-shop which opened in 1995 and the decline of the central shopping district, the decline of the central shopping area in Uto city is thought to be caused by the opening of large-scale stores. In the central shopping district shown in Figure 2, 157 stores were operating around the year 1990, forming a crowded streetscape.

However, job change and job closure continued after 2000. From December 2014 to the present, the total number of stores decreased to 103 stores, 54 store change jobs, and business waste disappeared. The job change and the closed shop ratio actually reached 34.4%, and the central shopping street is in a state of losing bustle so far.

The total number of stores in 1990, indicated in table 3-1 was 157 stores. It decreased to 103 stores in 2016, 54 stores closed in 26 years, the closing rate has reached 34.4%. In this study, the central shopping district of Uto City was divided into 7 Blocks, numbered from 1 to 7 as shown in Figure 1. In Block 7 shown in Figure 1, stores that closed after 1995 when the bypass road in front of the JR station was opened. In addition, the number of closures has increased in Block 1 and Block 2 since 1997, when a part of the city circulation path was opened.

Table 1 is the number of shops that change a job and closure in the 26 years from 1990 to 2016. For the Block and unemployment rate by Block shown in Figure 1, 44.8% of Block 1, 37.5% for Block 2, and 60.6% for Block 7 are particularly high conversion and reclamation rates. By industry, 41.1% of retail trade was responsible for a remarkably high rate of clerical reclamation. We analyzed the retail business of Block 1, Block 2, Block 7 by field survey. In Block 7, after opening the bypass road in Figure 1, three fruit and vegetable shops, three grocery stores and two fresh fish shops closed one after another with a "collapse phenomenon".

Also in Block 1 and Block 2, two grocery stores, one fruit and vegetable shop, two fresh fish shops, and one meat shop are "a collapse phenomenon" after a part of the city circulation route in Figure 1 opens in the same way as in Block 7, we could not form the nearest merchandise area, and we are moving around. This phenomenon is characterized by declining local cities because it forms a commercial area at three stores of fresh foods (fruit and vegetable shops, fresh fish shops, meat shops) of groceries centered on nearest products, not items to buy due to poor customer attractiveness, retail stores, mainly foodstuffs, are easily subject to sharing in neighboring shopping districts due to access and convenience. This analysis revealed that this situation shrinks the shore by the impediment to the approach route to the central shopping district and the traffic volume in the surrounding area.

Table1. *Number of shops that change a job and closure in the 26 years from 1990 to 2016.*

Block / Year	①		②			③			④		
	2016	subtotal	1990	2016	subtotal	1990	2016	subtotal	1990	2016	subtotal
Building						1	1	0	1	1	0
Manufacturing	1	-1	2	2	0						
Information and communication						1	1	0			
Transfortation									1	1	0
Wholesale//Retail	9	-8	7	2	-5	6	5	-1	10	6	-4
Finance/Insurance									2	2	0
Estate bussiness	1	-1							2	2	0
Academic/Technical service	1	0									
Restaurant/Accommodation	0	-1				4	2	-2	5	5	0
Service Entertainment	1	-1	4	3	-1	4	3	-1			
Education and learning support			1	1	0						
Medical/Welfare	2	0	1	1	0	1	1	0			
others	1	-1	1	1	0	1	1	0	1	1	0
TOTAL	16	-13	16	10	-6	18	14	-4	22	18	-4

Block / Year	⑤ 2016	⑤ subtotal	⑥ 1990	⑥ 2016	⑥ subtotal	⑦ 1990	⑦ 2016	⑦ subtotal	Total of ①～⑦ 1990	Total of ①～⑦ 2016	Total of ①～⑦ subtotal
Building						2	2	0	4	4	0
Manufacturing						3	0	-3	7	3	-4
Information and communication						1	1	0	2	2	0
Transfortation									1	1	0
Wholesale//Retail	7	-1	13	12	-1	12	2	-10	73	43	-30
Finance/Insurance									2	2	0
Estate bussiness			1	0	-1	1	1	0	6	4	-2
Academic/Technical service	1	0				1	1	0	3	3	0
Restaurant/Accommodation	1	-3	1	1	0	1	1	0	16	10	-6
Service Entertainment	2	0	1	1	0	4	1	-3	17	11	-6
Education and learning support						1	1	0	2	2	0
Medical/Welfare	2	0	3	2	-1	5	3	-2	14	11	-3
others	1	0	2	2	0	2	0	-2	10	7	-3
TOTAL	14	-4	21	18	-3	33	13	-20	157	103	-54

ANALYSIS OF INTERNAL DECLINING FACTOR

In this phenomenon, immediately after the new route No. 3 line opened in 1992 as showed in Figure 2, the number of vehicles that passed the former route No. 3 line of entry into the central shopping area decreased by 20%.

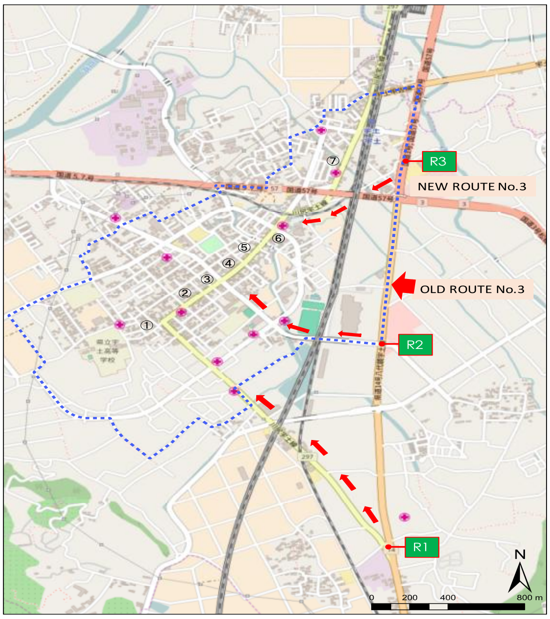

Figure2. *The new route No.3 and old route No.3 line*

In the data of the Ministry of Land, Infrastructure and Transport, 22,053 units in 1990 became 17,831 in 1994, the number of vehicles passing 4,222 vehicles has reduced. In addition, in the survey in May 2018, the number of vehicles entering the central shopping area is 3,683 vehicles from R1, 828 vehicles from R2 and 1,914 vehicles from R3, respectively. Rate of entry into each Block is R 25.5%, R 2 61.2%, R 3 13.3%. As a result, in Block 1 and Block 2 shown in Figure 2, JR's shielding railroad crossing is an obstacle to the approach route, the entering rate is as low as 25.5%, and stores related to food products enter the entry rate of the elevated approach route It has flown to 61.2% of R2 and is shrinking customers. Also in Block 7 JR's shielding railroad crossing constitutes an obstacle to the approach route, the entry rate has remained at 13.3%, and grocery-related stores are deprived of customers. In Block 3, Block 4, Block 5, Block 6, fresh food products related to food items and sundries shops from the nearest commercial area, expanding shore. This analysis revealed that the central shopping district in the local city is influenced by the traffic volume in the vicinity and the rate of entering vehicles as an internal decline factor that cannot form the nearest commercial area.

INTERNAL FACTOR ANALYSIS AND EVALUATION OF DECLINING BY TEXT MINING

Questionnaire Survey Regarding the Business Situation was conducted from June 13 2018. 35 store owners in 7 blocks of the shopping district of Uto city were interviewed in form of face-to-face method. The following interview content included queries relating to evaluations on the current situations of the shopping district and appropriate solutions that could serve to revitalize the attractiveness of the district.

(Q1) What is the reason for the decrease in the number of stores in the shopping district?

(Q2) What is needed for you to continue the store in the future?

(Q3) What has a problem with the purchase items of your store?

(Q4) Which store is competing or related to your store?

(Q5) Do you need 3 fresh items (fruit, fresh fish, meat shop) and sundry shop?

(Q6) What think we need to improve the shopping area?

For each interview contentis analyzing and evaluating by text mining based on natural sentences recorded and testified by hearing surveys. It divides natural sentences of natural language processing technology, analyzes its occurrence frequency and appearance trend using statistical analysis technology data mining technology, visualizes trends and features. The software KH-COREDER is used for text mining in our research. The results of each interview content are as following.

Consideration of (Q1)

Because of the recession, many people believe that it is difficult to continue the store even if subsidies are obtained. Also, it seems that what young people want is not in the shopping district but in large stores and specialty shops. As for the problem of the parking lot, there is a limit to respond to one retail shop, and there is a problem of boosting the selling cost. Declining the central shopping district is not only an unusual internal factor but also a decline in the number of entering vehicles is an external decline factor.

Consideration of (Q2)

Because there are many elderly people in shopkeepers, it is considered that the current situation is that the Internet cannot be utilized for work. Also, it is thought that declining is progressing because we cannot grasp what kinds of goods are actually in other shops only with the desire to offer things that are not in other shops. Also, it is considered that not only thinking for the elderly but also having ideas for young people will lead to revitalization of shopping streets.

Consideration of (Q3)

There are many opinions that there is no problem for purchasing. Most store managers are satisfied with the current situation without the idea of developing a better supplier.

Consideration of (Q4)

In order to avoid isolation of shops, respondents think that cooperation between stores and competition are necessary. There are numerous opinions that there is no competing store. Because there is no competing store, sales in the entire shopping district are deemed to be worse. Also, it is thought that few people are facing problems inside the shopping district, concerned about the outside of Uto city.

Consideration of (Q5)

It is said that convenience stores are playing the role of shops handling fresh three items. But for convenience stores they cannot be obtained cheaply and there is little product lineup. Many people think that fresh 3 goods and sundries are necessary. Fresh three stores in shopping districts are delayed in responding to changes in the population composition by suburbanized residents, and retail stores, mainly foodstuffs, are closed due to a joint phenomenon. The charm of the shopping district is in the formation of the nearest product commercial area by fresh three goods, and thinks it is necessary for revitalizing the shopping district.

Consideration of (Q6)

Some respondents said that shopping streets should be as big as U - shop, but there are also some respondents who think that shopping districts will be unable to improve their appeal. Some respondents consider that Uto shopping district needs a different form from U - shop. For example, palpability of sidewalks that the elderly are seeking, sidewalks with roofs, etc. First of all it is necessary to start reconstruction from the earthquake.

CONCLUSION

In Uto city central shopping district, 157 stores were in operation in 1990. It fell to 103 stores in 2016, 54 stores closed, the closing rate reached 34.4%. By region 44.8% of Block 1, 37.5% of Block 2 and 60.6% of Block 7 have particularly high closed rates. By industry, 41.1% of the retail trade mainly focused on foodstuffs is prominent. In Block 1, Block 2, and Block 7, JR's shielding railroad crossing is an obstacle to access and the entry rate of vehicles is as low as 25.5% and 13.3%, and retail stores, mainly food items. We are depriving customers and increasing the closing rate. Block 3, Block 4, Block 5, Block 6 are highway entrance routes with a high vehicle entry rate of 61.2%, 3 items and sundry goods shops focus on foodstuffs from the nearest commercial area to form customers are expanding.

As an internal decline factor due to the analyzes above, it was revealed that by regional industry type, the formation of the nearest commercial area owing to three perishable products, mainly foodstuffs, is influenced by the surrounding traffic volume.

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