

14.5 Branding universities and regions  
Regional Information site integrated with social media

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## Abstract

In recent years, there is serious disparity between city and rural areas in Japan. Not only population is the only evidence of disparity, but also the difference of business prosperity can be a good example. Therefore, more and more rural areas would be forgotten if this situation continued. Accordingly, there would be an evil cycle here. What is the crucial key to work out this problem? We thought it should be regional information providing as broadly as possible so that reduces the disparity between city and rural areas. In this point of view, we researched about the information providing way in rural areas for the reactivity. This paper mainly described about experimental model processed in rural area of Japan called "Asuke", mainly constructed regional portal site integrated with social media. This experiment processed 80 days, and got some precious finding through it.

Keywords: Social media, information providing, rural area

## I. Introduction

### 1.1 Current issues

There are serious regional disparities in Japan in recent years. Local communities and rural areas in Japan are losing their young people and most of their workforce to the large cities, leaving only the elderly. Therefore, regional disparity in Japan started to get bigger than before. Regional disparity refers to differences in living standards and life quality that exist in the different regions of Japan. While some well-known cities like Tokyo and Osaka are very prosperous, there are still many problems existing in development of many rural areas. For example, declining population in rural areas caused many other various problems that are important issues to be solved urgently. For example, medical services or educational services as the basis for human life have been reduced because of aging and depopulation. *Kaso* (Japanese word), or depopulation, is a big problem in the rural areas in Japan. Rural areas are shrinking as a result of migration to the cities, declining birth rates that have robbed rural areas of children and the trend for people to loose their bonds to their hometowns. Increased life spans have meant that the people that remain behind are getting older and older and dying off. Most young people find small town life boring and are anxious to get out, and migrate to urban areas mostly. For an example, in some rural areas, some schools have 150 students whereas one built for 400 students. The populations of some towns have dropped by 25 percent or more and the remaining residents wouldn't be there without government subsidies. Most of the residents in rural area are older people. Depopulation has caused the median age of Japanese farmers to rise from 42 in 1960 to 60 in 1990. In some areas and districts the hospital, school, stores and many homes have been reduced. The only place that is crowded is the cemetery. Figure 1 shows the population difference in each prefecture all over the japan.

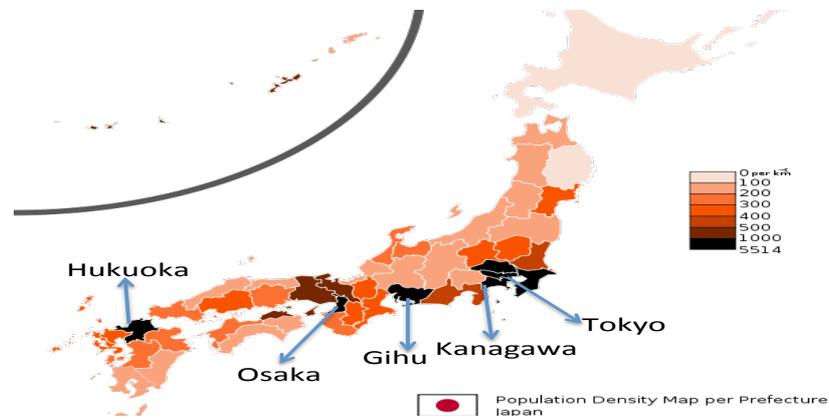


Figure 1. Population Density Map per prefecture Japan

Why happen these problems? One of the most important reasons is considered as distance barrier. However, information-providing tools are crucially important as a way of activating local areas' economy and culture. Utilization of information technology is not available only in city, but also in rural areas because ICT needs no distance gap. And rural areas need more of these tools than cities. When they want to attract more visitors, information providing by media is necessary. But just use the traditional media like newspaper; radio cannot broadly appeal the characteristics of areas. They need a tool of low cost and easily using so that everyone can take part in to share regional information and process timely communication with urban area or other countries. So that provide a completely new chance for rural areas to share their information with others in order to let more people learn their areas and pay close attention to their development and characteristics.

In view of this, regional information providing by ICT (Information Communication Technology) is processing across the Japan. Many research about the local information providing have come out to be attention in recent years.

## 1.2 Purpose of research

Under the circumstance mentioned above, the purpose of our research is to design an

effective and appropriate regional information-providing model based on social media. Because every one could take part in information providing by social media, rural areas would be more urgently need this tool. We want to through information providing between rural and city areas to reactivate rural areas. Firstly, because rural areas have few talented person and wealth, we want to use smart devices and computer to reduce the cost of information providing. And use open source CMS and original twitter site or application to lower the technology level. So that, we could appropriately use low cost and low technology to do information providing with outside of rural areas more effectively and more broadly than before. Secondly, twitter has vast volume of information so that we want to pick up just useful tweets to improve the quality of tweets for rural areas, which can obviously appeal the rural areas more. To sum up, our total goal is using twitter and smart device to easily process information providing in rural areas by low cost and technology level. As a secondly goal, we consider this information providing model as combination of traditional regional portal site which can not provide real time and original news.

## II. State of the art

### 2.1 Portal sites in rural areas

Maruta (Maruta, 2007) suggested that the Internet encouraged communication between rural and urban areas because it could solve problems without geographic barrier and he built a group-information network that had economic values as the media. In particular, he emphasized the promotion of public local information by local citizens. Under this circumstance, since 1990s, the Internet became more and more popular in the world. (Chiba, 2005) At that time, few people could access to Internet, and web designers created Internet culture by themselves to research, communicate and study from each other. Kobe earthquake (The Great Hanshin earthquake occurred at 5:46 a.m. on Tuesday, January 17, 1995.) exposed the vulnerability of hierarchy type portal sites, and personal information's ties started to have value. (Chiba, 2005) Thus, some regions started to have their own information site and accomplish information providing through it. Regional information site is mainly consisted of trip, food, and government news. Staffs will post information on regional site, and users can get them easily. Users also provide information on the site if they signed up to the sites. We can imagine the

general regional portal sites concept as following.

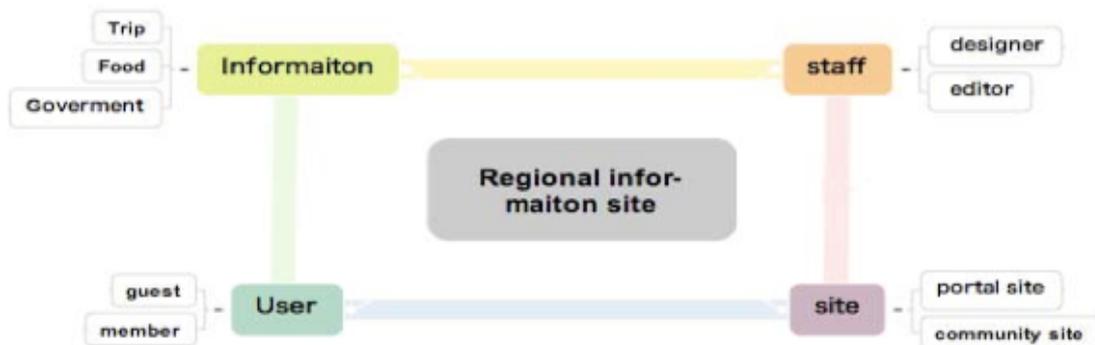


Figure 2. The system outline of traditional regional portal site

But few people live in rural areas so that high technology request and complicated maintenance work could be processed hardly. Thus, some blog owners in rural areas start to manage blog sites of regions to appeal the regional characteristics. These blog sites rapidly went through over the country and apparently had effect. As a good example, Mikawa in Aichi province Japan, have a traditional portal site called letters from Mikawa. This site introduces various news and information about Mikawa. The information separated by shopping, eating, sightseeing, and experiencing. In this blog, site special correspondents cover a variety of community-based information, which about festivals and life style or specialty attractions, make information dissemination every day. It has frequent update, and clear information classification. As a supplementation of this site, our twitter based regional portal site was come out. Mikawa portal site provides various types of information based on a fixed term, and the news or information come from special correspondents, and blog of citizen. But as everyone knows, blog could not be utilized by personal. Thus, the appealing of regional characteristics was still a little bit weak.

## 2.2 Twitter based regional portal site in Japan

Therefore, the social media populating across Japan was a good chance for information providing by citizen. In 2007, twitter started to rapidly popular in Japan, and many business ventures found out the possibility of online business by twitter. (Hayashi, 2007) Twitter is a social networking and micro blogging service, owned and operated by Twitter Inc. that enables its users to send and read other user's messages called

tweets. Tweets are text-based posts of up to 140 characters displayed on the author's profile page. Twitter has gained notability and popularity worldwide and currently has more than 100 million users worldwide, and becomes the most useful tools for providing information. (Wikipedia, 2010)

Because of the low cost of twitter, ventures succeed in using twitter to process their own business, the regional shopping district also started to pay attention to twitter business. It's the start of regional information providing by twitter. After that, from 2009, a regional twitter portal site called YORITTER came out to be the first regional twitter portal site. This site collected tweets from shops, ventures and citizens, sorted them out by different lists, and also collected tweets using hush tag (a tag which use #). YORITTER has been noticed by Japan's various media and regional NPO, spotted in many newspapers and websites. Continued to YORITTER, other places started to make their regional twitter portal site one after another. The most famous twitter portal site is Kunitter. Kunitter is the Kunitachi, Tokyo twitter portal site. The purpose of this site is activation of region and business at Kunitachi, Tokyo. Citizen and supporters in Kunitachi area administrate Kunitter. (<http://kunitter.com>) This site becomes the standard of twitter portal site for others. Figure 3 is the capture of this site. The first list is tweets from citizen, the second list is tweets from ventures and shops, the third list is tweets from NPO or other groups, and the last list is tweets from government staffs who were added to the regional twitter account.



Figure3. Capture of “Kunitter” homepage.

As we can see in this figure, real time information become the main content on the

twitter based regional information site. The information separated by hash tags and account lists. These twitter-based sites don't need to sign up when they want to provide information, no matter guest or member. Just use hush tags on their tweet, information will automatically displayed on sites. It solved the problems that exist on other regional portal site, which we mentioned above. Twitter based regional portal sites become a combination of traditional regional portal site. But there are still some problems. Firstly, these tweets displayed on the site don't have achieve and good information classification. Though they classified tweets by keywords or accounts lists, the information is still difficult to sort out clearly. And the tweets are just flow at real time, no method to see information occurred before. Secondly, these sites are almost for urban areas. This style of rural areas site maybe could not bring out interest of urban people because of too much unrelated tweets to read. Thirdly, did not make full use of the Twitter functions. They just use twitter as real time tool, but twitter also can be used as report tool.

### III. Twitter integrated regional portal site in Asuke

#### 3.1 About Asuke

Asuke is located in the AICHIKEN, famous for colors leaves in autumn. Since ancient time, Asuke prospered as three-province highway (salt road), and a central of Mikawa. Figure 4 is the pictures we toke in Asuke.



Figure 4. The scene of Asuke in summer (left) and autumn (right)

For a deep understanding, as a preparation, we had an interview with person who lives

in Asume. Through the interview we learned crucially helpful information for our community information providing by social media. Firstly, there are some local citizen positively participate in online information providing of their region. One citizen of Asume area made mail magazine to share regional information, and the mail magazine is still popular, purchaser already up to 130 people. They also have blogs for regional information providing, having high access rates. Asume have web radio called community FM, especially podcasting about regional information. Secondly, when we talked about our website project, he said that residents in Asume hope to see both of real time job and archive. It was completely the same as our purpose.

Before start to design our information-providing model, we participated in Asume's traditional event to observe about social media usage and main tools of using social medium. As a result, we found out that twitter is the most popular social media tool in Asume, and iPhone or iPad are the most convenient tools for using social media as movable devices.

### 3.2 Twitter integrated experimental model

Referring to above, we designed an experimental model in Asume area. The feature of model is using easy way to provide rich information about Asume. First, we asked six Asume area's persons for correspondent staffs of our experimental model. Their mission was tweeting about Asume every day on their twitter account. Correspondents were chosen by the frequency in using twitter. And then, one curator will do the tweets check once a week. Tweets having high relationship with Asume would be chosen and retweeted by curator. Retweeted tweets would be displayed on twitter based Asume portal site. Below is the general information of this demonstrating site.

Site Address: <http://asume.boj.jp/>

Maintenance period: From 2010.12.10~2011.3.1

Twitter user of participants: 12 accounts

Curator: 1 account (students in Nagoya university)

Regional information tweeting: 5 accounts (residents of Asume)

Regional group or ventures: 6 accounts (Asume area)

#### 3.2.1 the design of experimental site

We designed this site beyond the concept of below.

[1] Have the link with traditional portal site, so that many could get different information from different two sites.

[2] At this twitter based portal site, would display original and real time information.

[3] Regional tweets would get from ordinary accounts of twitter.

[4] Curator would receive tweets from inside and outside of Asuke, pick up and retweets useful tweets and display it on demonstrating site.

[5] Tweets would be archived automatically once a week as blog post.

Figure 5 shows the concept outline of our twitter based Asuke portal site.

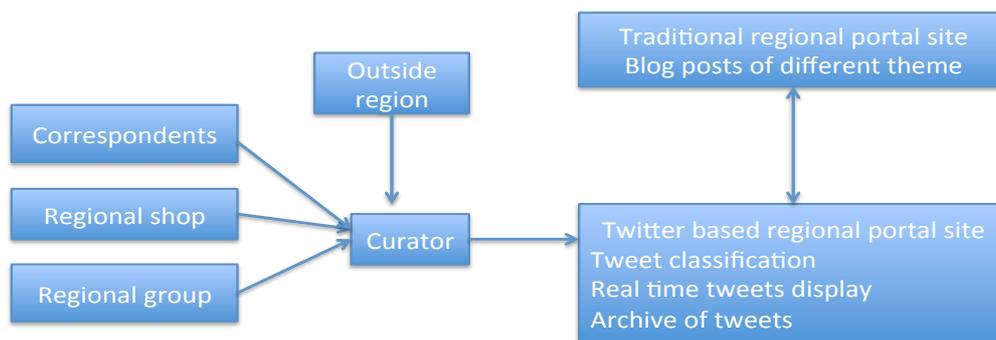


Figure 5. The concept of experiment mode

Follow the concept above; we constructed the site by open source CMS Wordpress. The main page of site is below.

[Top page]

[1] Information classified by curator: Through this step we could high improve the tweets relativity with Asuke area. The tweets sources were from different lists and key words including regional name “Asuke” both in English and Japanese.

[2] Pictures from tweets including keyword-Asuke: Because the volume of photos including in tweets was not so large, we didn’t process classification for photo included in tweets.

[3] Posts of one week's tweets archive: We plugged in automatically tweets archiving tools on wordpress, the tweets posted in last one week would be closed up and archived as one posts of last week tweets from curator.

Figure 6 shows the top page capture, and the number is the same with above.



Figure 6. Top page of experimental site

[About us]

① Twitter integration with Google map.

Mapping the twitter account inside the Asuke area and display tweet at the location of which move the mouse on. Be mapped account is automatically searched from location information on twitter.

② The profile of curator and correspondents

Automatically extract curator and correspondents' profile and thumbnail from twitter. Could easily appeal for the site so that don't need too much manual update.



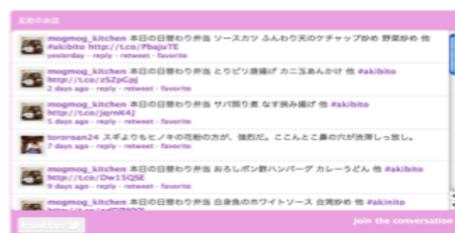
Figure 7. About us page of experimental site

[Real time tweet]

Display different list and real time tweets classified automatically by twitter list of curator. Classification is tweets including word Asuke, residents, shops, and tour ventures.



上: 「足助」 キーワード  
下: 住民によるつぶやき



上: 店 (自営業) によるつぶやき  
下: 観光協会によるつぶやき



Figure 8. Real time tweet display on experimental site

### 3.2.2 Structure of experimental site

After the construction of site, we start to manage our site follow the process as below.

(1) Interview with Correspondents.

Under the consideration of correspondents work, the offer of necessary equipment was executed, and then decided the frequency and the period of the dissemination by twitter. The result is shown below.

Dissemination period: From 2010.12.10~2011.2.28

Dissemination frequency: One time or more during a day.

Dissemination medium: iPhone and iPad

The background of participants is shown below.

Table 3-1. Asuke regional correspondents and individual background

No.	Initial	Occupation	Age	Sex	Twitter using period
1-1	N.T	Manufacturing	45	M	560days
1-2	H.M	Food service	39	M	1410days
1-3	H.S	Food service	34	M	410days
1-4	Y.K	Food service	31	F	438days
1-5	Y.H	Service	28	F	438days

Table 3-2. The group participants of Asuke

No.	Name	Occupation	Twitter using period
2-1	Asuke Commerce	Arbitrary	603days
2-2	Mogumogukicchin	Restaurant	636days
2-3	Sunrise taxi	Taxi	187days
2-4	Yam	Sales	253days
2-5	Tourist Association	Arbitrary	411days
2-6	100 years grass	Restaurant	436days

(2) Tweets classification by curator and construction of demonstrating site

Information was separated by daily live and event now. We collected tweets about shop, tour and daily life by accounts list and keywords. The editing and retweeting tool was tweetdeck, which can make the display by different lists; edit and retweet could be easily processed on tweetdeck application or site. Figure 10 is the edit page capture on

tweetdeck. We can learn from ① that long tweets also can easily retweeted by tweetdeck so reduced the editing time for curator.



Figure 9. The edit working of tweets retweeting

It is different from other twitter based regional portal sites. We didn't just automatically display tweets automatically classified by lists, manually classified it once a week. However, it cannot share the real time information if we check information once a week. Thus, we also made a page to display real time tweets automatically classified by lists. When we built our site, we used the open source contents management system- Wordpress. Wordpress could get form of geographic map, photo and movie directly from plug-in resources, which made by many of talented person over the world. So that, we could have high tech and easy using of website though we are in rural areas having few sources. Therefore, we used plug-in for integration with other sites or medium; its advantage will be fully brought into play. The main plug-in we used in our site was as following.

[1] Google maps plug in: Google maps plug in helps display tweets on Google maps. Through Google maps, the users can get geographic information and tweets they need.

[2] Twitter plug in: Its function is to enable novices share resources between the regional portal site and twitter accounts on our portal site.

[3] RSS/Atom Feeds plug in: Enable display tweets include photo information as photo style; all of these photos come from <http://twitpics.com>.

[4] Social media plug in: Enable convenient connection with other social media like YouTube, Facebook etc.

Under the construction mentioned above, we processed the experiment model for 80 days and got some useful data.

### 3.2.3 Results of Experiment

#### (1) About correspondent tweets

Tweets account of correspondents was as Table3-3. Because of individual twitter account, tweets also included many no relatively tweets with Asuke. Full count of tweets was 4722. The average of tweets a day was 59. Tweets of every person had difference. The most tweeted person tweeted 27.2 tweets a day when the fewest tweeted person tweeted 1.1 tweets a day.

As Table3-4, the tweets including RT(Retweet) were 40.0%, and mention(@) were 47.2%.

As Table3-5, Tweets including words “Asuke” were 2379tweets(50.4%), “Toyota” which is the city name of Asuke were 299 tweets (6.3%). In a word, the tweets above half were related to Asuke, and 56.7% of regional tweets were posted if include the city name “Toyota”.

Table3-3. Tweeted situation of correspondents

No.	Name	Tweets					RT	@	Regional
		Dec	Jan	Feb	Total	Average/day			
1-1	N.T	578	647	568	1793	22.4	40.5%	48.4%	66.1%
1-2	H.M	139	150	139	428	5.3	49.3%	56.1%	15.9%
1-3	H.S	60	112	60	232	2.9	12.5%	16.4%	20.3%
1-4	Y.K	34	33	24	91	1.1	40.7%	39.6%	31.9%
1-5	Y.H	667	823	688	2178	27.2	40.7%	48.1%	61.9%
Total		1478	1765	1479	4722	59.0			

Table3-4. RT and Mention account (Correspondents)

Type	Tweets	Percentage
RT	1,889	40.0%
Mention (@)	2,229	47.2%

Table3-5. Tweets including regional name (correspondents)

Condition	Tweets	Percentage	Tweets	Percentage
Asuke (Chinese)	1,545	32.7%	2,379	50.4%
Asuke (hiragana)	37	0.8%		
Asuke (English)	797	16.9%		
Toyota (Chinese)	255	5.4%	299	6.3%
Toyota (hiragana)	33	0.7%		
Toyota (English)	11	0.2%		

(2) About group tweets

Tweets information providing by group was as following. Because of group tweets, tweets contents had high relativity with region, but total tweets compare with (1), is obviously less number of 412 tweets, which averagely 5.2 tweets fewer a day than (1)(Table3-6). Group tweets didn't have big gap among each accounts. Tweets of most were 3.1 tweets a day, when the fewest tweets group tweeted 0.1tweets a day. We can learn by Table3-7, that percentage of tweets including RT was 35.9%, and percentage of mention was 47.8%.

Table3-8 shows the tweets including regional name. Tweets including "Asuke" were 123tweets(29.9%), and tweets including "Toyota" were 11tweets(2.7%). Tweets related to Asuke were totally 32.6% of the whole tweets.

Table3-6. Situation of group tweeting

No.	Name	Tweets					RT	@	Regional
		Dec	Jan	Feb	Total	Average /day			
2-1	Asuke Commerce	5	2	2	9	0.1	0.0%	11.1%	11.1%
2-2	Mogumogukic chin	37	26	21	84	1.1	0.0%	0.0%	1.2%
2-3	Sunrise taxi	85	102	60	247	3.1	59.1%	67.2%	47.3%
2-4	Yam	26	14	4	44	0.6	2.3%	54.5%	9.1%
2-5	Tourist	6	5	8	19	0.2	5.3%	10.5%	47.3%

	Association								
2-6	100 years grass	1	8	0	9	0.1	0.0%	44.4%	22.2%
Total		160	157	95	412	5.2			

Table3-7.RT and Mention account (Group)

Type	Tweets	Percentage
RT	148	35.9%
Mention (@)	197	47.8%

Table3-8.Tweets including regional name (Group)

Condition	Tweets	Percentage	Tweets	Percentage
Asuke (Chinese)	44	10.7%	123	29.9%
Asuke (hiragana)	0	0.0%		
Asuke (English)	79	19.2%		
Toyota (Chinese)	10	2.4%	11	2.7%
Toyota (hiragana)	0	0.0%		
Toyota (English)	1	0.2%		

### (3) About curator tweets

Curator picked up the tweets mentioned above and retweeted some tweets considered as having high relativity with Asuke, and displayed it on demonstrate site. As a fundamental classification work, used three hash tags of “#asuke\_shop”, “#asuke\_life”, “#asuke\_tour”. The result of curator’s tweeting is Table 3-9.

The frequency of classification processed once a week. As table 3-10, RT number of tweets was 148.This number was 3% of the whole tweets number including individual and group.

We can see in the Table 3-11, Tweets including regional name-“Asuke” were 104 tweets (70.0%), tweets including regional name-“Toyota” were 15 tweets (10.1%). Because the hash tag using to do tweets classification includes English letter “Asuke”, we didn’t collected the data about it.

The results of each classification are Table 3-12. The most tweets information of three contents was about Asuke's daily life.

Table3-9.Situation of curator's tweeting

No.	Name	Tweets				
		Dec	Jan	Feb	Total	Average/day
3-1	Asuke Curator	37	43	68	148	1.85

Table3-10.RT and Mention account (Curator)

Type	Tweets	Percentage
RT	147	99.3%
Mention (@)	147	99.3%

Table3-11.Tweets including regional name (Curator)

Condition	Tweets	Percentage	Tweets	Percentage
Asuke (Chinese)	102	68.9%	104	70.0%
Asuke (hiragana)	2	1.4%		
Toyota (Chinese)	13	8.8%	15	10.1%
Toyota (hiragana)	2	1.4%		
Toyota (English)	0	0.0%		

Table3-12. Classification situation by curator

Classification	Tweets	Percentage
Asuke shop #asuke_shop	17	11.5%
Asuke life #asuke_life	63	42.6%
Asuke tour #asuke_tour	14	9.5%

### 3.2.4 Result of investigation about site usability

We processed investigation of site usability in the Asuke area. As method of investigation, we collected the suggestion and comment of Asuke residents from N.T, directly did interview with N.T. The result of interview is as follows.

First, the RT mention of tweets would directly display on their twitter so that the mention list almost was from Asume curator sometimes. This situation is a little trouble to correspondents. Second, The archive of tweets post is very convenient to who want to search tweets about something or in someday. Because on the twitter site we could hardly search the tweets posted ago. Third, The page “About us” integrated with twitter, is very convenient and simple to learn about Asume.

The experiment processed successfully as we designed, and got many precious finding from the results.

#### IV. Finding: Evaluation of experiment model in Asume area

##### 4.1 Regional information providing of high quality seen from tweets data collection

###### 4.1.1 Data from residents and group in Asume

As we can see from the tweets of Asume areas, the tweets from personal tweets were apparently more than group and venture tweets. This one could express the importance of correspondents in rural areas. Because rural area doesn't have too much ventures or groups, tweets from individual is the most precious source to appeal regional characteristic. From the 83.7% of RT and mention tweets, we could understand that twitter is important tool to spread information broadly even because twitter could advertise about the blog posts on other sites. Tweets including keywords “Asume” and “Toyota” were 56.7% of individual and 32.6% of group. It means tweets including regional name were posted from individual more than group.

To sum up, we found out that as information providing in rural area, individual media is more important than group media. We should promote the social media usage by more residents to rich the information providing in rural area.

###### 4.1.2 Data from retweets by curator

Curator picked up 3% of tweets from 5000 tweets in experimental periods, highly improved the quality of information from tweets. Through the posts of weekly tweets could easily read out the news occurred in last one week. And the real time tweet page could satisfy the need of real time and original news. But all of RT would go directly to original authors as mention style so that were troubled the residents. But we thought that the benefit from RT is bigger than the trouble from mention (@).

## 4.2 Low cost and low technology level needed for our experimental model

4.2.1 Open source CMS-wordpress obviously lower the technology level of website constructing.

Wordpress is the popular CMS all over the world, because it can freely use most of plug-in tools on the wordpress site, more and more armature web designers like to use wordpress. And we also benefited from it. If someone have idea of site design, it could be easily done by wordpress no matter the designer has how much technology of web design. Wordpress also have a strong database function so that regional information occurred ago could be easily searched out.

In view of this, we thought twitter based regional portal site could be easily constructed by anyone in rural areas, so that reduce the talented level and cost in rural areas.

## 4.2.2 Using free and opened social medium to get highest advertisement effect.

Because of TV and newspaper or radio FM just could share information inside the region, Internet is the only tool to share information outside the region. And through this experiment, we got understand people live in rural area want to share the real time information in the casual time of their daily life. And this experimental system satisfied their demand on free and easy way to share information.

## 4.3 Fieldwork is the main observe tools for model improving

Through the fieldwork, we discovered some problems and confirmed our conviction as follows. At first, in future's research, fieldwork is still a main tool. Entire objective of this experimental model is the visitors come from urban areas. We only can understand some problems through fieldworks. And we certainly learned something cannot learn in virtual environment; Then, the rural area has worse electrical environment, but there's also some free spot in particular location. So we should collect this information through technical ways that for wider using. Lastly, rural areas' people also have positive online awareness; at the festival, they did information providing and communication by hush tags on twitter, and up to 40 people participated. There's a lot of possibility to widely use our information providing system. As talked above, there were more positive factors to use our system though it is rural area. Most important factor is more and more people

live in rural areas like to use online media to providing information, and the visitors also.

In a word, through this experiment, we got closed to our original goal sat. And just some little troubles need to improve like RT mention.

## V. Conclusions

There is serious regional disparity existing in Japan. For the reactivity in rural areas, in this research, twitter based regional information interface was processed in Asume areas. We sat our goals that use low cost and technology to rich the information providing between rural and urban areas by twitter. We designed an original twitter based regional site for Asume. The feature of this site was correspondents and curator to do tweets posting and picking up from 2010.12.10 to 2011.2.28. The utility of social media got strong impact in Asume area.

Rural area has reducing population and high regional communication mind inside the region. But now we need more effective information providing tools to promote information providing outside the area for the reactivity. Through the experiment we got that information providing by individual using social media could promote the information providing outside the region. And through our experimental model we convinced that information providing with outside could processed easily in rural area if use our original designed information providing model.

## VI. Further research

### 5.1 Policy implications

(1) Rural areas live many people of advanced age, and twitter can easily used by older people. This model can actively use by all generations so that could promote utility of social media by older people in rural areas. It will make sense for reactivity of rural area by individual.

(2) Because of the low cost need for this experiment model, more business ventures and enterprises in rural area will participate in our information-providing model and our portal site information will become rich. The rich information providing would push the business growth again. There would be a virtuous cycle to promote reactivity in rural areas.

## 5.2 Directions

### (1) Integration with other social media like Facebook

Through the fieldwork, we found out that rural areas have many events in different period. Therefore, event information is a part of tourist in rural areas. Because Facebook has event function on its own page, we want to integrate our model with Facebook to promote regional event advertisement and management. Thus, could make full use of advantage in each social media.

### (2) Various language measures for regional internationality

When the experiment model gets success to some extent, we want to consider about the various language measures for regional internationality. Excluding various languages based regional portal sites, some other popular social media using in foreign country also would be considered as one way to promote regional internationality.

## **ACKNOWLEDGEMENTS**

We would like to thank correspondents, who tweeted about Asume everyday for our experiment. We would also like to sincerely thank the Tankororin community leaders in the town of Asume and all of participants in this experiment.

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