

# RESEARCH ON QUALITY STANDARD OF RURAL INFORMATION

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**Abstract:** Researches on information quality standard is few both domestic and abroad, furthermore, there is no research on quality standard of rural information. In order to meet the need of China's rural information construction, promote the development of information science, the research objects and difficulties in the study of quality standard of rural information have been analyzed by the authors. New conceptions such as relativity, essential requirement, external expression, requisite element, optional element have been put forward creatively. Besides, researches on commonality extracted from diversified rural information and standardized treatment on relativity of rural information have been taken. Moreover, a qualified expression method based on the organic integration of essential requirement and external expression has been explored. The dialectical relationship between essential requirement and external expression, internal elements within the essential requirement, requisite element and optional element has been highly concluded in this paper. Consequently, "essential requirement, four necessities; external expression, classified description; pursuing integrity, not inexhaustibility; simple and clear, stressing on utility" as the clew of compiling this standard has been extracted and the grades and standard of rural information quality have been preliminarily brought up.

**Keywords:** rural information; quality standard; research

## **1. INTRODUCTION**

“The quality is our life” has become the guideline of so many enterprises and organizations. It goes through the whole process of production, operation and development. Not only in the fields of production and sales of agricultural products or industrial goods, but also covers medical services, culture and education, catering and entertainment, and thus rural information service is without exception.

High quality rural information is the corner stone and premise of improving the effectiveness of rural information service. To enhance the research on rural information quality is one of the most basic and key point in the process of promoting rural information construction. We get troubled when facing an ocean of trash information even though great manpower, material resources and financial strength have been put in. And even the more you put in the more you waste and aftermath follows.

Many people have realized the importance of information quality but most of them are still at the stage of perceptual cognition or verbal expression. Take agricultural websites which produce, operate and spread rural information as an example, if we pay a little attention, a great number of trash information would be found. Website undertakers may definitely know the importance of information quality, but they haven’t put it into practice and haven’t deeply realized that those trash information comes from their website would be concerned by the government or officials, attacked by their competitors, becomes constraint when negotiate with partners such as communication operators, becomes the fear point when users clicks the web pages again, becomes the legal dispute and speculation of major medias. Finally, trash information develops as deadly poison of ourselves. On the contrary, high quality information would become the shining point and core competency of our websites.

## **2. RESEARCH PURPOSE ON QUALITY STANDARD OF RURAL INFORMATION**

### **2.1 Meet the social demand**

In a sense, “quality is our life” drives the construction and development of quality standard system worldwide. Standards is a ruler, a basic tool for improving the product quality, enhancing comparability, raising management effectiveness, decreasing management cost, unifying and regulating the market, promoting the production share and exchange capability.

What information to gather, when to publish, how to accurately describe the information need unified and normative quality standard. Furthermore, information transportation mode, information executions such as analyzing, utilizing, exchanging and sharing, and technical trainings on web editors also require the guide of unified and normative quality standard.

If there is no quality standard, we have no way to judge and compare the quality of goods accurately, objectively and effectively. If there is no quality standard of rural information, how can we doubt what kind of information is “trash”?

However, up to now, there is no unified and normative quality standard. Just for this reason, the editing, approving and monitoring of rural information are inefficient; we have to be so cautious on the service, usage and development of rural information, or great loss may happen because of fake information, false information and incomplete information; difficulties come out in integrating, exchanging and sharing resources among websites and relative departments. Rural information service requires us to research on quality standard of rural information.

## **2.2 Promoting the development of science**

Research on information quality should be an important constitution to the construction of information science, and also research and establishment of information quality standard should be an important constitution to the construction of information quality standard system. However, the result after our web search both in Chinese and English is that information quality studies are few and it is almost vacant in the field of quality standard of rural information. Therefore, no matter the development of information science or the construction of rural information needs the research and establishment of quality standard of rural information.

## **3. RESEARCH ON QUALITY STANDARD OF RURAL INFORMATION**

### **3.1 Making clear the research objective**

As the name suggests, rural information implies information which related to agriculture, rural areas and peasants. It is much extended than agricultural information. From the definition we may know that rural information is great in number, with various types, complicated relationships, dispersed sources and diversified styles. For example, rural information could be displayed by narration, exposition and argumentation, or in the way of diagram, sound or image.

## **3.2 Analysis on difficulties**

### **3.2.1 Research on information classification**

Different types of information decide different ways of expression such as news item must be different with price information. Therefore, we have to classify the huge and complicated rural information, and classification itself is a research hotspot and difficulty (authors of this paper have taken research on rural information classification and now is asking for advice. This will be introduced specially in other papers).

### **3.2.2 Quality commonality extraction from diversified rural information**

The types of rural information is numerous and if establish standards respectively to all types may seem ponderous and complicated, hard to remember and carry out. Through years of studying, authors have summarized the ways of expression on rural information quality and characteristics have been put forward: authenticity, accuracy, punctuality and utility. Namely, these characteristics are the fundamental criteria for the judging of rural information quality.

### **3.2.3 Standardized treatment of information quality relativity**

The fit and unfit of information quality is relative. Relativity means the uncertainty of information quality. We often call useless information as “trash information”. However, utility itself is a variable. Stock information is useful to those stockholders, but useless to those who are not care about stock market. A piece of information may be useful to me yesterday but useless today. Within the same piece of information, some people just glimpse at the title but others may read the full text without satisfaction. Therefore, information quality varies with people, time and circumstances. This is the relativity of quality information. Relativity may hold back the pace of researching on information quality. Two conceptions: requisite element and optional element are put forward in this paper. By effective collocation between them, the way of standardized treatment would be fulfilled and then the key arduous problem be solved in the course of compiling the standard.

### **3.3 Expression style of information quality standard**

By studying on different types of rural information quality, we take up the position that quality standard of rural information could be described with combination of essential requirement and external expression.

#### **3.3.1 Essential requirement for information quality**

Essential Requirement indicates that it can reflect the implicit attribution of description objectives by passing through the external expression. Generally, it contains authenticity, accuracy, punctuality and utility.

**Authenticity:** information expression is in accordance with objectivity. It requires gathering reliable and unbiased information not figment. Editors should check carefully and not trust too readily on any false news or the information provided would lack fidelity.

**Accuracy:** totally conforms to the reality or expectation. We should accurately gather or describe objects, truthfully reflect things as they are, fully states the information and use statistics when necessary. For example, a piece of information on fruit, a complete description should be provided such as production history and actuality, variety, amount, shape, flavor, grade, transportation and etc. Readers would gain a full understanding on the goods.

**Punctuality:** means catch the time, meet the needs; not delay, handle right away; pursue speed in collecting and transporting messages, pay great importance on concept of time. Message out of date is useless and even have side effect. As information which reflects market changes usually passes in a twinkling, we have to catch them promptly and win in the competition.

**Utility:** as the name suggests the information should be with practical use value. It requires us considering the uses of the information not only from our own perspective but also from the perspective of the public. For example, a supply message of well-known goods which with high authenticity may have small production scale, low amount of goods. This kind of information has low utility. So we have to consider its usefulness when providing information.

Among the four requirements, authenticity is the basis and premise. Both accuracy and punctuality are important guarantee of utility; utility is the starting point and essential destination of information service.

Essential requirement is the commonality of information quality. Namely, any types of information should be a combination of authenticity, accuracy, punctuality and utility. Or it would become “trash”.

### 3.3.2 The external expression of quality standard of rural information

The external expression: It is the outward appearance, the external relations of things and the surface depiction of information description object.

Different types of information have different quality external expression, and the difference may be huge. For instance, the expression style between price information and news information is apparently different. Therefore, the external expression of quality standard is certainly different. Due to different service objects, time and environment, same types of information may also have different outward appearance. That is the relativity of information quality.

In order to reach a simple, standardized and unified format, improve the universality of the standard and satisfy objective requirements of information quality relativity, we have explored a way to standardize the external expression of information quality standard: requisite element organically collocates with optional element.

Requisite element: Some types of information must have requisite element. The information would have apparent quality defects without any one of the elements. For example, the elements of news information are time, place, person, events and so on. The elements of supply and demand information are supplier and purchaser, the content, quantity, contact information and etc.

Optional element: These elements are not essential, but they are useful for some customers. Without these elements, the information itself has no apparent drawback or it may be also high-quality information. But, some customers may pay their attention to these elements and even these elements are very important. There is a piece of news: "It is published by provincial price bureau that the price index of Sichuan province rose 5% in the first quarter of 2007; because of macro regulation and control, it is predicted that the price index would fall down in the second quarter, but it would keep an increase of 3%." This news has no obvious problems, but some customers may pay more attention to other elements, such as the concrete increase in prices in the first quarter, the measures of macro regulation and control, commodities whose price would go up in the second quarter, regions where price would get higher. Some customers still attach importance to the elements which usually appear in the supply and demand information, such as color, shape of goods and etc.

Different types of information have different requisite and optional elements. For example, the requisite and optional elements of laws and regulations information are apparently different from the requisite and optional elements of supply and demand information. Requisite elements of the same kind of information are the commonality of the quality external

expression. As previous stated, news information must have the following elements such as time, place, person, events and etc. Optional elements are the embodiment of individuation and relativity of information quality.

### **3.3.3 The relationship between the essential requirement and the external expression**

There are mainly three aspects: firstly, essential requirement is the fundamental requirement of information quality and it reflects the internal relations of things. It is in the first place; the external expression is the surface depiction of information description object, it reflects the external relations of things. Secondly, essential requirement is the commonality and universal demand of all types of information; the external expression is the special expression of different types of information quality, it is the personality and relativity expression of information quality. Thirdly, the essential requirement and the external expression are unified in the information quality and they are inseparable. The essence is the essence of the external expression and it has the function of regulating the external expression. The external expression is the external expression of essence. It must be embodied and described around the essence. It is the concrete description of the information quality surface, the supplementary illustration and the embodiment of the essential requirement. The essence decides the external appearance and we can see through the appearance to perceive the essence.

## **4. THE CLEW OF COMPILING THE QUALITY STANDARD OF RURAL INFORMATION**

### **4.1 Essential requirement, four necessities**

Authenticity, accuracy, punctuality, utility are the essential requirements of all the information quality. The concrete expression of different types of information quality standard must have four basic attributes mentioned above at the same time.

### **4.2 The external expression, classified description**

Because different types of information quality have different external expressions, the requisite element differs from the optional element. Thus, classified description becomes an inevitable choice.

According to the external expression of information quality, the rural information can be divided into 13 types. They are news, laws and regulations, science and technology, product introduction, organization introduction, character introduction, investment, disaster prevention and reduction, price, supply and demand, training, job seekers, employment.

### **4.3 Pursuing integrity, not inexhaustibility**

Firstly, we should aim for the integrity of the classification object and try to avoid omitting important ones. But we do not require all the information have well-defined quality standard. Secondly, we should also aim for the integrity of the external expression of information quality. The utility of the information will not be influenced without some elements under some conditions. Therefore, it is not necessary to have all elements.

### **4.4 Simple and clear, stressing on utility**

The quality standard of rural information should be studied deeply and systematically. In order to improve the maneuverability and practical value of the standard, we should try to simplify, standardize and unify the standard through extracting the essence and removing the unnecessary details.

## **5. THE GRADES OF INFORMATION QUALITY**

### **5.1 High-quality information**

High-quality information authentically, accurately and punctually reflects events which are concerned by people. This kind of information has good utility, complete requisite elements, outstanding characteristics of optional elements, refined and accurate expression.

### **5.2 Incomplete information**

This kind of information is authentically, punctually reflects events which are concerned by people. It has some practical value, but, it has incomplete requisite elements or roughly described elements. These disadvantages influence the efficiency of information.



### **5.3 Fake information**

This type of information is fictitious and concocted out of thin air; it may be out of date or cribbed from someone else.

## **6. CONCLUSION**

The research of quality standard of rural information is an important component of construction in quality standardization of rural information and information science. As rural information is great in number, with various types, complicated relationships, dispersed sources and diversified styles, the research has many difficulties. Besides, there are few researches and references on quality standard of rural information both domestic and abroad. As a creative study, imperfectness is inevitable. This article intends to start further discussion on this issue.