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Problem Presentation of Echo Phenomenon on Social Listening and Proposal of Avoidance Method for It

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Abstract

In recent years, automatic or semiautomatic processing and analysis systems for a large amount of social listening data have been introduced and used in many industries. Honda Motor Co., Ltd. is also collecting and analyzing voice of customers from much type of media such as SNS using automatic Social Listening System. And verifying whether corporate images and brands are appropriately communicated or not every day. This verification is also used to find symptoms of risk that may be recalled.

On the other hand, we found that there were many copied sentences which were delivered from us to society in collected information as voice and opinion of customers. In this case, if these collected sentences are automatically processed as voice of customers using a normal language processing algorithm, we should have a risk to get excessively more positive result than actual. This is because the information delivered from the company like announcement of a new product etc., always includes many positive expressions.

And it has been confirmed that the distributor's advertisement and a large amount of retweets follows it, also causes the same risk for the same reasons.

It's hard to say that we are correctly measuring the voice of customers.

Based on the above situations, in this paper, firstly, we named the phenomenon as "Echo Phenomenon", which incorrectly recognizes delivered information from us as voice of customers. And present it as a problem.

Secondly, we propose a simple method to avoid this Echo Phenomenon problem without damaging useful information as much as possible, and show examples of application and its effect.

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1. Introduction

1.1. Introduction of Social Listening System to collect and analyze voice of customers

Honda Motor Co., Ltd. has introduced the Social Listening System to collect and analyze voice of customers, and has been operating it since 2016/10. Its verification targets are as follows:

- Is Honda Motor's target brand image being fostered as planned?
- Is the announcement about events and campaigns sufficiently transmitted to customers?
- Are there any symptoms of risk that may lead to recall?
- Are various topics related to Honda Motor Co., Ltd. sufficiently excited in the first place?

We regularly and quantitatively have been observing these items and use them as information for the next action and planning.

1.2. Characteristics of information to be collected

Since the data to be collected is basically a nonstructural natural language. So it's necessary to digitize it to make it easy to handle like comparing with past cases or situation of our competitors. And in digitizing, we focus on the extraction of information about "sentiment" such as praise, disappointment, surprise as well as quantity of mentions. This enables us to qualitative assessment of how is Honda thought from customers.

1.3. Automatic information gathering and analysis

As a matter of course, there is no processing system that is superior to humans in terms of understanding natural languages. However, the data to be collected has been increasing. Even if we collect only the Japanese and English SNS data about us and automobile / motorcycle companies we are interested in, the amount of mentions will easily exceed 100 million a year. Therefore, in order to speed up the task, automated social listening system is essential to compile data and analyze "sentiment".

However, we found that there was a problem in an automated system which process data from collecting to displaying result without human intervention.

2. Presentation of problem

2.1. "Echo Phenomenon" on social listening

Normally, it is a great opportunity to collect large amounts of voice of customers that period of events such as new product announcement and motor show. At the same time, it's also a time when the results of Social Listening are expected.

Before and during the events, companies will deliver information about their products for promotion, using mass media as a matter of course. Then, this information is copied and duplicated on Twitter, blog and web news. As a result, the previously mentioned automatic social listening system suffers from a chronic risk that information delivered from these companies is collected and analyzed as "voice of customers".

Normally, the delivered information related to the promotion event never contains negative contents. It's composed only positive contents. Therefore, analysis of automatic systems will result in excessively positive beyond the actual customers' evaluation.