QR 코드 태그를 이용한 전자 피드백 시스템

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E-feedback System Using QR Cod Tag

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ABSTRACT

A government or non-governmental organization give service to their customer. Each organization have different hierarch levels. Service satisfaction surveys have become an important tool for government planners, as important in the perceived quality of service lead to great delivery of public service. When a customer gives feedback at a bottom level of organization, it is so difficult reach to higher official in time. This paper argue that, Quick Response (QR) code open up the possibility of conducting public service satisfaction at lower cost and the way feedback is directly routed to the relevant party according to their hierarchical level and gate real time feedback using specific smart phone application.

Keyword

Big data analysis, e-feedback, e-government, QR Code

Ⅰ. Introduction

Improvements in the delivery of public services contribute greatly to good governance for the achievement of country development goals. Country program inspires public servants all over the world to work towards perfecting their approaches, methodologies, practices, systems and processes, in the delivery of public services.

For many years, e-Government has had an uneven and heterogeneous development. On one side, some agencies were heavily technological, offering online services, while others-the majority-had weak technology and thus, poor online services were provided to citizens. The poor online services provided to citizen, they had to visit offices to access services, incurring sometimes high costs and a lot of time in the process on acquiring services. While countries' e-government projects had individually achieved significant improvements; in the quality of public services information systems became more complex as each government agency widened the scope of delivery of public services thus creating many problems for the government both internally and externally. Citizens experienced inconvenience as the public services delivered to them is poor and they do not have a way to report to the whole-of-government. For instance, with over 18 ministry , 226 local governments in Korea[1] and many more low level officials, this presented a complex to the whole of government when citizens would like their feedback of public services may produce a great citizens satisfaction, then reduce complexity in terms of transparency, accountability, adaptability, and compatibility in internal management, as well as citizen services.

Public service satisfaction Surveys have become an important tool for government planners, as improvements in the perceived quality of service lead to greater delivery of public service. As most customers carry their smartphones when visiting office, Quick Response (QR) codes open up the possibility of conducting public service satisfaction at a lower cost.

QR code is a matrix symbology. The symbols consist of an array of nominally square modules arranged in an overall square pattern, including unique pattern located at three corner of the symbol (in Micro QR Code symbols, at a single corner) and intended to assist in easy location of

its position, size, and inclination [2]. Typical features provided by QR code are: High capacity encoding of data, Small printout size, Kanji and Kana capability, Dirt and damage resistant, QR code has error correction capability, Structured appending feature, and Readable from any direction in 360⁰ [3].

The paper contribute to the limited existing literature by developing the analysis of QR codes applied to public satisfaction in government and highlighting their importance for enhancing transparency, accountability, adaptability, and compatibility in whole-of government level, as well as citizen services. It also reduce the cost of data collection and processing to the existing by optimizing the data analyzing on central processing center.

II. System Approach

In order to improve citizen satisfaction and allowing whole-of-government at all level to measure citizen satisfaction, a new approach is needed where the unique identification of the office is taken as the key information. By using the office information that include the unique identification, the system will allow government officers to monitor in real time feedback generated by citizen using their smartphone through a survey mobile application window at all level of the government. The back end data center will perform analytics algorithms over data set constitute by the feedback data from citizens.

The QR code generated will have a unique identification according the location along with immediate hierarchy administration up to the central government ministries. The QR code information is assumed to be locater indoor of the service where the citizen can scan it and starting apply his satisfaction of the public service.

The design will allow the user starting measure the public service satisfaction service immediately before leaving the office. As most citizen uses smartphone, the location based service integrated with the proposed mobile application would allowing location context awareness of the citizen satisfaction, then consider his feedback as an important information to improve public quality service and therefore let the hierarchically administrations to reduce complexity in terms of transparency, accountability, adaptability, and compatibility in internal management, as well as citizen services. As the real monitoring of the whole-of-government id the main contribution, computation platform and framework for analyzing in real time feedback data set will be provided.

III. Conclusion

The main contribution of this paper is to present the ongoing project of a new real-time e-feedback system by using QR code technology to send public e-feedback to the immediate hierarchy of the public agency as well to the whole-of-government level.

The proposed system save time and cost on analysis of data and routing of feedback to all corresponding levels of officials.

The proposed system allows to get feedback what they really feel at a particular time.

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