Outcome and Implications of ‘Statistical Self-portrait’

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I. Introduction

1. The close relationship between statistics, knowledge and policy has been addressed and discussed since the OECD World Forum on "Statistics, Knowledge and Policy" in 2004. Through the debate, a shared view of the importance of not only the production of statistics but also the use of statistics was formed. Experts and policy makers as well as the general public should be considered when data is disseminated.

2. Considering these trends, it seems essential for the statisticians to try to present information meaningfully instead of just presenting survey results. To help users easily understand statistical information, advanced visualized services like pictures and graphs should be utilized when displaying data. These visualized services will bring about users' emotional response and finally affect decision making.

II. Statistical Self-portrait

A. Background

3. The survey on user demand for the statistical information service carried out in 2008 revealed that the general public was interested in statistics but they thought statistics were too difficult to understand. Also they wanted visualized tools such as graphs, and asked for statistical data that even children could understand and utilize.

4. In this regard, the KOSTAT analyzed domestic and foreign interactive programs to develop statistics-related programs in which everyone might be interested. ‘Brain Structure Test’ of Japan, ‘CPI Experience’ and ‘Interesting Stories in Statistics’ of Statistics Korea were under intensive review.

5. ‘CPI Experience’ is a customized statistical program which the KOSTAT launched in 2007. Despite the positive response of the media, the general users paid little attention to the program. The reasons were
mainly due to lack of user friendliness. Meanwhile many Koreans have been using 'Brain Structure Test', which was developed in Japan. In a test, if a user inputs his or her name, a brain structure image is to be displayed on the Internet. This Web-based program successfully attracted people's interest.

6. As a result of careful review, “Statistical Self-Portrait” was finally devised. ‘Statistical Self-portrait’ is a program that helps users to explore 'their statistical self' through statistical data. Users are expressed through statistical figures.

B. Major contents and scenario

7. The characteristics of Statistical Self-portrait are as follows;
   • First, statistical users play a main character when they explore 'their statistical self' through statistical information.
   • Second, users may check their identity visually alongside with 'their avatar, their appearance on the Internet' by choosing a character according to hair style and dress.
   • Third, visualized graphs are used to help users understand statistics easily.
   • Fourth, statistics become familiar to the public by presenting interesting statistics.
   • Fifth, regardless of age, after inputting some personal information, all age groups find customized statistics including average height, average weight, population and life expectancy of their respective age groups.
   • Sixth, 350 statistical tables in 6 fields are provided from "Special Statistics" of KOSIS. (Family, education, leisure, health, economy and environment)

8. The scenario of Statistical Self-portrait will be explained with pages of the program.

1. Start: "User guide" is provided to first-time users.

2. Personal information input: 6 pieces of information such as age, height, weight, marital status and educational attainment should be inputted to obtain customized statistics.
③ Character choice: The character that a user selects is used all through the program.

④ Comparison of height and weight with the average/Calculation of obesity: A formula to calculate obesity depends on gender, age, height and weight.

⑤ Customized information: Customized statistics are provided according to user age and gender. (Population, life expectancy, number of households, number of children, unemployment rate, average monthly wages, prevalence rate of major diseases, etc.)

⑥ Latest news: A list of newly added or updated statistics is provided and may be specified as a shortcut.
C. Major outcomes

9. The most significant achievement obtained from Statistical Self-portrait was the increased interest in the KOSTAT and statistics. The provision of statistics through visualized graphs made users familiar with statistical information. This user-oriented service contributed to a substantial improvement in the KOSTAT image. Koreans paid great attention to this program. 500,000 people used the program for the first 6 months after the beginning of the program. And it improved the awareness and satisfaction of what the KOSTAT serves for the general public. The KOSTAT took the first place in terms of query ranking on a private portal site for the first time as a governmental agency.

10. In addition, Statistical Self-portrait provided the opportunity to make children and teenagers, who are future statistical users, interested in statistics. And a lot of related organizations and enterprises asked the KOSTAT to support the utilization of contents, which means that Statistical Self-portrait greatly contributed to the improvement in people's awareness.

11. Key factors for this outcome are as follows:
   - First, it is a customized service targeted for the Internet generation. Users play 'a main character' while they are querying statistics. Statistical Self-portrait successfully meets user demand by providing statistics meaningful to respective users.
   - Second, it is a visualized provision of statistical data. Graphs change difficult statistics into easy and interesting ones.
   - Third, it is an entertaining data provision. Statistical Self-portrait serves as an opportunity that the public, who have been indifferent to statistics, come to realize that statistics are closely related to their daily lives.
III. Implications and Future Plans

12. The above-mentioned stories suggest that the future statistical information services should be customized and visualized, and should transform statistics into knowledge. In the past, statistics were used mainly by experts and decision makers. Currently, statistical users are expanded to the general public due to statistical dissemination strategies and the change in user awareness. Therefore, to satisfy user expectation, the statistical services should be user-oriented, not supplier-oriented. Expert groups should be considered and at the same time various contents should be developed for customized data provision. For general users, statistics should be easy and interesting. For expert groups, statistics should be meaningfully organized.

13. In a deluge of information, it takes time and energy to transform information into knowledge. Accordingly, it’s necessary to visualize statistical data and transform information into knowledge so that intuitively users can find what they need from large amount of statistical data. And statistical data should obtain vitality by using the story-telling technique. Individually dispersed statistical data should be provided in a meaningful context so that users can find what they need.

14. As mentioned before, statistically advanced European countries are using ICT to gradually transform information into knowledge. On the basis of success in Statistical Self-portrait, the KOSTAT worked out KOSIS development plans in which statistical information will be customized, visualized and transformed into knowledge annually by using advanced ICT. In 2009, the KOSTAT started the BCC (Business Cycle Clock) to visualize business cycles. And the KOSTAT plans to develop more contents in the future.

15. In 2010, G20 Summit will be held in Korea. So the KOSTAT will expand visualized contents related to G20 member countries. The KOSTAT will launch "G20 Statistics Board" and "G20 Statistical Journey". As for "G20 Statistics Board", the KOSTAT plans to use open sources developed by the European Central Bank. The Board will display visualized statistical data for the easy and convenient comparison of financial and economic indicators of G20 member countries. As for "G20 Statistical Journey", statistical data of G20 countries will be shown on the map.

16. In the long term, SDMX will be adopted for international compatibility. Non-official statistics that the public want will be provided, too. And interactive communication with statistical users will be implemented by using ICT.