The role of using the new technologies and programs in improving the quality of official statistical data

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Introduction

Data visualization is to find and study of the visual representation of data, meaning "information that has been abstracted in some schematic form, including attributes or variables for the units of information". People comprehend data better through pictures than by reading numbers in columns and rows.

The difference between data, Information and knowledge

Data — is the essential raw material needed for the creation of information; however, it cannot be used to make decisions because it has no meaning. It lacks meaning because it has no inherent structure; no relationships between entities. Data transformed into information when we add meaning. We add meaning by providing a context to the data.

Benefits of Data Visualization

The importance of data visualization

The modes of information communication evolve constantly in order to improve its efficiency, clarity and aesthetic appeal. Generally, there are no wrong ways to communicate information, but the traditional textual forms are slowly giving their way to data visualization.

The importance of data visualization

Data visualization is in the first place used to improve efficiency of the communicated information. A beautiful presentation which, however, fails to emphasize relevant data or is not clear enough is of little value. For that reason, it is highly important to make sure that the presented data are clear and understandable, and only then focus on aesthetically appealing and attention drawing design. Just as important is to support the communicated information with additional materials such as official statistic data, facts, examples, etc. if you want the audience to accept your view/interpretation.

The difference between data, Information and knowledge

How can data visualization increase the Statistical awareness

Sharing data creates new opportunities for impact. Of course, raw data is not that interesting for everyone, nor does everyone love it. But in order to democratize data and to raise awareness someone has to do that labor of love (like Neurath and Rosling) and to do it in that effective way that will also engage a large number of people to look and to see i.e. understand data

An Example of diagrams used for data visualization

Future statistical challenges

Data visualization is a response to the ever-increasing amount of information in the world. With big data, informatics and predictive analytics, we have an unprecedented opportunity to revolutionize policy-making. Yet data by itself can be overwhelming. New tools and techniques for visualizing information can help policymakers clearly articulate insights drawn from data. Moreover, the rise of open data is enabling those outsides of government to create informative and visually arresting representations of public information that can be used to support decision-making by those inside or outside governing institutions.

How can data visualization increase the Statistical awareness

Loved data lives longer

Conclusion

Visualization is a powerful tool for breaking down complex information and understanding data. Used in the field of politics it can provide unprecedented means for leveraging transparency in the governmental affairs but also can be used as a tool for telling stories efficiently and communicating meaningfully information about historical or current political events, debates and so on.

Using data visualization in our century are compatible with future challenges in our statistical World With the availability of many of the official statistics data not only which is issued every second of specialized agencies but also which should decision makers are used in a variety of quickly situations.