

ROLE OF DATA FOR PROMOTING PUBLIC UNDERSTANDING OF SCIENCE

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ABSTRACT

In this fast moving world, data is the heart and soul of any enterprise. It has become an essential task for organizations around the world to protect their data. To deliver content data in plain language, without losing scientific precision, is indeed a difficult task. The society is a flexible set of tools for understanding and putting to use statistical concepts and data. Science is a critical public investment in our future, a resource with extraordinary dividends. Understanding and using statistical information is not an easy task. Facts and figures reported by statistics do not sound familiar and numeracy itself is not widespread. School systems can be data rich and information poor if they do not understand and manage their data effectively.

- The task for statisticians is to put existing data into a format that lends itself to answering questions and improving outcomes for the society. Common barriers to transforming data into knowledge in education or society settings often include poorly designed or nonexistent data systems; disorganized record management; moody gatekeepers--data mavericks--who hold back data to preserve power; or personnel who simply fail to ask the right questions of the available data. Fortunately, learning to deal with data does not require an advanced degree in statistics. To turn a body of data into useful information for knowledge-based decision-making at any level, data must be collected, organised, analysed and reflected upon.

OBJECTIVES

- ❖ The main objectives are to contribute to improving and promoting statistical literacy; to increase the trust of citizens, respondents and users in official public statistics; and to promote the critical use of statistical information in everyday life.

INTRODUCTION

- Public understanding of science means the understanding of scientific matters by non-experts. This cannot of course mean a comprehensive knowledge of all branches of science. It may however include understanding of the nature of scientific methods, including the testing of hypotheses by experiment. It may also include awareness of current scientific advances and their implications.

INTRODUCTION CONTD

- The history of science is rich with examples of data collections that played a crucial part in a scientific revolution, which in turn had a major impact on society. It may truly be said that data are the lifeblood of science.
- Managing data and passing useful information can be quite daunting when faced with the potential for inaccurate models and erroneous results. It is important to work with standardized rules that help develop the best possible models to better manage data in a meaningful way.
- Data forms are as numerous as the transactions they represent.
- Data can be a list of numbers, text characters, locations, product categories, a specific time, financial histories, travel patterns, or any other figure used to represent an event.

WAY FORWARD

The following are the suggested way forward of promoting the understanding of science through data:

- Data Accuracy
- Statistical Literacy
- Increasing the trust in statistics
- Critical use of statistical information in everyday life

CONCLUSION AND RECOMMENDATIONS

To turn a body of data into useful information for knowledge-based decision-making at any level, data must be collected, organised, analysed and reflected upon bearing in mind:

- ✓ the importance of science for the future development of the society, and
- ✓ the needs of the scientific community as necessary for the advancement of science and for the benefit of society as a whole.
- Thus, engaging in activities which promote public understanding of science, will play a more meaningful role in society's decision-making and governance.

- Given the substantial investment in data collection and its importance to society, it is equally important that data are used to the maximum extent possible.
- Data that were collected for a variety of purposes may be useful to science.
- Legal foundations and societal attitudes should also foster a balance between individual rights to data and the public good of shared data.

THANK YOU