SOS POLITICAL SCIENCE AND PUBLIC ADMINISTRATION
MBA HRD 205
SUBJECT NAME: MANAGEMENT INFORMATION SYSTEM

UNIT-IV

TOPIC NAME: INFORMATION QUALITY

INFORMATION QUALITY:

MEANING:

Information quality (IQ) is the quality of the content of information systems. It is often pragmatically defined as: "The fitness for use of the information provided." IQ frameworks also provide a tangible approach to assess and measure DQ/IQ in a robust and rigorous manner.

TYPES OF INFORMATION QUALITY:

Information quality is the value of information for a given use. The following are common types of information quality.

1. Accurate: Information that is correct.
2. Precision: The level of detail information provides. For example: there is a difference between knowing that a company's earnings will be good as opposed to knowing their numbers.
3. Credibility: Information that comes from a reputable source.
4. Timeliness: Information may only be actionable for a limited period of time and quickly losses its value.
5. Completeness: The scope, depth and coverage of information. For example: a customer satisfaction metric based on feedback from your entire customer is more complete than a rating based on feedback from three customers.
6. Relevance: The potential of information to improve the quality of decisions or solve problems.
7. Uniqueness: In some cases, a secret or unique analysis is worth more than something that everyone knows.

8. Comprehensible: Information is data that is meant to be used by people. As such, quality information is designed for human comprehension. If most observes misinterpret an information item. It can be considered low quality even if it technically correct.

DIMENSIONS AND METRICS OF INFORMATION QUALITY:

"Information quality" is a measure of the value which the information provides to the user of that information. "Quality" is often perceived as subjective and the quality of information can then vary among users and among uses of the information. Nevertheless, a high degree of quality increases its objectivity or at least the inter subjectivity. Accuracy can be seen as just one element of IQ but, depending upon how it is defined, can also be seen as encompassing many other dimensions of quality.

If not, it is perceived that often there is a trade-off between accuracy and other dimensions, aspects or elements of the information determining its suitability for any given tasks.

Wang and Strong propose a list of dimensions or elements used in assessing Information Quality is:

- Intrinsic IQ: accuracy, objectivity, Believability, reputation.
- Contextual IQ: relevance, value-added, Timeliness, Completeness, amount of information.
- Representational IQ: interpretability, format, coherence, compatibility.
- Accessibility IQ: accessibility, access security.

Other authors propose similar but different lists of dimensions for analysis, and emphasize measurement and reporting as information quality metrics. Larry English prefers the term "characteristics" to dimensions. In fact, a considerable amount of information quality research involves investigating and describing various categories of desirable attributes (or dimensions) of data. Research has recently shown the huge diversity of terms and classification structures used.

While information as a distinct term has various ambiguous definitions, there's one which is more general, such as "description of events". While the occurrences being described cannot be subjectively evaluated for quality, since they're very much autonomous events in space and time, their description can since it possesses a garnishment attribute, unavoidably attached by the medium which carried the information, from the initial moment of the occurrences being described.

In an attempt to deal with this natural phenomenon, qualified professionals primarily representing the researchers' guild, have at one point or another identified particular metrics for information quality. They could also be described as 'quality traits' of information, since they're not so easily quantified, but rather subjectively identified on an individual basis.

QUALITY METRICS:

- **Authority/verifiability:**

Authority refers to the expertise or recognized official status of a source. Consider the reputation of the author and publisher. When working with legal or government information, consider whether the source is the official provider of the information. Verifiability refers to the ability of a reader to verify the validity of the information irrespective of how authoritative the source is. To verify the facts is part of the duty of care of the journalistic deontology, as well as, where possible, to provide the sources of information so that they can be verified

- **Scope of coverage:**

Scope of coverage refers to the extent to which a source explores a topic. Consider time periods, geography or jurisdiction and coverage of related or narrower topics.

- **Composition and organization:**

Composition and organization has to do with the ability of the information source to present its particular message in a coherent, logically sequential manner.

- **Objectivity:**

Objectivity is the bias or opinion expressed when a writer interprets or analyzes facts. Consider the use of persuasive language, the source’s presentation of other viewpoints, its reason for providing the information and advertising.

- **Integrity:**

1. Adherence to moral and ethical principles; soundness of moral character
2. The state of being whole, entire, or undiminished

- **Comprehensiveness:**

1. Of large scope; covering or involving much; inclusive: a comprehensive study.
2. Comprehending mentally; having an extensive mental grasp.

3. Insurance; covering or providing broad protection against loss.

- **Validity:**

Validity of some information has to do with the degree of obvious truthfulness which the information carries

- **Uniqueness:**

As much as ‘uniqueness’ of a given piece of information is intuitive in meaning, it also significantly implies not only the originating point of the information but also the manner in which it is presented and thus the perception which it conjures. The essence of any piece of information we process consists to a large extent of those two elements.

- **Timeliness:**

Timeliness refers to information that is current at the time of publication. Consider publication, creation and revision dates. Beware of Web site scripting that automatically reflects the current day’s date on a page.

- **Reproducibility**: (utilized primarily when referring to instructive information)

Means that documented methods are capable of being used on the same data set to achieve a consistent result.