Understanding the past and present of Knowledge organization to create the futuristic KO tools

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“If I have seen further it is by standing on the shoulders of Giants.”

Isaac Newton

Dedicated to all those Giants
Outline of the Presentation

- Introduction
- Reasons for adopting subject-based approach
- Purpose of Knowledge Organization
- Origins of modern science and birth of traditional Knowledge Organization
- Knowledge and Human mind
- Human Needs – the Link between knowledge and Human Mind
- Knowledge organization based on Human Needs
- Features of Human Needs based KO
- Advantages
- Conclusion
Reasons for Adopting Subject-based Approach

- Emphasis on organizing propositional knowledge
- Restructuring knowledge from a “jigsaw puzzle”
Purpose of Knowledge Organization

**Humans** - consciously or subconsciously engage themselves continuously in organizing entities be it materialistic objects or abstract entities such as thoughts, ideas or concepts etc, as it facilitates getting maximum benefits, with optimum utilization of resources by expending minimum effort.

Knowledge is one of the vital and fundamental resources required by human beings for each and every activity of their life.

Purpose of Knowledge Organisation is to
- improve and increase productivity and efficiency and
- develop comprehensive and holistic understanding about the world around us and our place and role in this world.
Origins of Modern Science and Birth of Traditional Knowledge Organization

- Renaissance Science
- Industrial Revolution
- Modern Education and Modern Libraries
Knowledge Creation

Knowledge and Human Mind

Knowledge is creation of the Human mind

Reasons for seeking knowledge
Scope of Knowledge

Diagram illustrating the relationships between different categories such as environment, matter, animate, universe, plants, animal, kingdom, society, and man.
Human Needs
The Link between Knowledge and Human mind

EXISTENCE GOAL

NEEDS
PREREQUISITES
ASPECTS
ENTITIES
Process adopted by Human Mind

- Understanding, Analysis, Comparison, Evaluation and Application
- Division
- Integration
Associations (Semantic Relationships)

- **Hierarchical** based on "Is a" relationships – While Understanding

- **Networks** based "Required for" – While Applying

---- Knowledge Organization both Hierarchical as well as Network (simultaneous organization)
Knowledge Organization based on “Human Needs”

Human Being is Universal, So are his Needs

- universally applicable,
- adaptable,
- scalable,
- interoperable and
- suitable to both electronic as well as conventional environments.
Schema of **Knowledge Organization** based on “Human Needs”

**Fundamental Needs Level 0**

**Pre-requisites Level 1**

**Aspects Level 2**

**Entities Level 3**
Fundamental Categories

- Health
- Food
- Clothing
- Shelter
- Knowledge (Acquisition, documentation, storage, organization, communication, dissemination)
- Recreation, Entertainment, Creativity
- Environment, Natural Resources
- Philosophy/Religion
- Society (social Security)
- Emotional Security
- Economy, Industry
- Infrastructure
- Trade, Commerce, Business
Example:

Level 0 (fundamental need) – Health

Level 1 (pre-requisites) –
Diet/Nutrition, exercises, hygiene, diseases, prevention/curing systems, pharmaceuticals, pharmaceutical industry, knowledge about human body, infrastructure, psychology, management and administration of medical facilities, Education, Research and Development (illustrative list)
Level 2 (aspects) – Diet/ Nutrition

Dietary Categories,
Specific Dietary Regimens (specific to Age, Sex, physical condition, occupation)
Nutritional policy/planning/programs
Socio-economic, cultural aspects of Nutrition
Nutritional Education
Environmental aspects of Nutrition
Nutritional research and Development
Nutritional indicators/surveys/statistics
Level 3 (entities) – Dietary Categories

**Carbohydrates**

**Proteins**

**Fats**

**Vitamins**

**Minerals**
Advantages

Ease of use

Permanency and Sustainability

Proactive

Holistic and Comprehensive

Displays the relationships that exist between subjects and the fundamental needs they fulfill very clearly and explicitly
THANK YOU