**Life Cycle of Information: A Study**

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Every organism, whether living or non-living, accomplishes its life cycle in a way. A drama, should and does have a beginning, a middle and an end. Similarly, a piece of information does and should have a beginning and an insensuous middle but not an end. This article tries to recapitulate how a piece of information begins, how it advances, reconsolidates and gets matured.

1. Introduction

"Preserve the memory of the past by putting on record the astonishing achievements both of our own and other peoples." - Herodotus (ancient Greek historian)

Anything on the earth, whether it is a biological organism or information, does and must complete its "life cycle" cordially and conveniently. Generation of information leads to its optimum use which if transformed and incorporated in a mental creativity and exercise gives birth to a new product which is especially humanitarian:

There are a number of individuals participating in the process of information whose behavior and contribution take part in the efficient development of information transference.²

The responsibility for preserving the human heritage is a shared one. So we must preserve that which has been given us from the past and pass it on to our future - children and the humanity.

Knowledge is familiarity or cognition by research & experience. It can include:

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1 "The part speaks to All Peoples" in the Archaeology journal; special advertising section, Nov. – Dec. (2000). P. 64
2 Allmand, Monica. "Research in Curricula Modifications for the Technological Information Transference" in the International Information, Communication & Education journal; Vol. 8 No. 1 (1989) P. 46
i. know-what (knowledge about fact)

ii. know-why (scientific knowledge of the principles and laws of nature)

iii. know-how (skills of capability to do something)

iv. know-who (information about who knows what)

2. Generation of Information

Information is both a vital resource and fundamental ingredient of the human activity. Generally, information results from various activities like experience, observation, study, interaction, survey, research investigation. Communication is the originator of information at one end and vehicle or medium of information transfer on the other. Inspiration from one's kinsmen and observable phenomena in surrounding environment and nature is also deemed to be the facilitator source of information. In fact, writers, specialists, colleges, universities, libraries, information centers and the like offer ample role on the information transference providing tremendous opportunities to accelerate the pace of development, eradication of poverty, decision making and human interaction. The more one interacts with other fellow human beings, the more one learns to create and criticize.

Production of technological information includes the following ingredients:

i. Published information that can be freely obtained, e.g. patent documents, serial articles, technical pamphlets, manuals.

ii. Information that should be acquired together with technology, e.g. knowledge how to handle operative manuals & storage of data.

iii. Subject experts & technical specialists e.g. system analysts, industrial extentionists who generate & employ information.

The producers of technological information work collaboratively at institutions of research or enterprises. Both authors and users, must acquire specific training which covers all the necessary aspects for a complete application of new technologies while training the participants of the information cycle, it is essential to describe each operation and determine which are the requirements to its best fulfillment.4

Information moves in a spiral path which never gets terminated. Use of a piece of information gives rise to another piece (of information). Information, if communicated on time and used positively and properly generates other new pieces of information – massive in amount. Such process continues for ever. So, information and communication are intrinsic to the practice of science and technology; Research and Development (R/D).

The followings are some of the unique and typical attributes of information:

i. Size and amount of information is infinite, i.e. unlimited.

ii. Information can not be engulfed and emptied by making its over-use.

iii. IT is turbulently dynamic, never passive and static

3 Chanana, A.K. Country paper. India.
iv. It is manifold and multidimensional in growth.

v. It helps in establishing a continuity from the past to the present and then to the future.

vi. It moves on and on; it expands its own frontiers as it grows.

All the knowledge of the world depends on the senses and their stimulation, but the facts of raw sensory data are insufficient to produce or explain the coherent picture of the world. The planners' task is to design a course of action by choosing the alternative that reconciles both the manifested resistance to change from the criticism and the demands of the potential users. The situation can be illustrated by the following figures:

![Diagram](image)

Peoples' actions, emotions, thoughts and feelings all are triggered by perceptions of their surroundings. However, psychologically, the world is not the same for different people. It is the main reason that the same world is viewed differently by different people.

Pandit Jawaharlal Nehru affirms that the progress of science and its offspring Technology is chancing the way man thinks of himself and the world. Let us examine how the perceived world is not the real world but has a high feeling of reality:

"We all observe that the sun rises in the east and sets in the west," but in reality it never rises nor sets. A layman never accepts the reality but prefers to stay in his perceived world; whereas a space scientist or an information scientist not only accepts the reality but also tries to educate others. The feeling to the world is so strong that we seldom question what we see and perceive. Information technologists and managers are like a physicist who is able to distinguish between a perceived world and the real world. They need to recognize that the clientele and employees react to perceptions, not reality while making use of established world and produced information we see things differently and there are radical differences in which people 'think' and 'react' in the world. A staunch political propaganda, psychological impact, individual hobby and habit, and biological-structural adaptation are some of the manifest examples which prefer separately "another type" of information. A Librarian as a mediator or a catalyst in the cauldron of information, his or her success lies in his power to increase 'precision' and decrease 'prediction' and 'recall' which naturally leads to retrieval efficiency.

When knowledge becomes more valuable, there is a growing need to manage it effectively to capture its full benefit. Nationwide management of knowledge is a set of infrastructure, processes and practices to be established for creating the "knowledge environment" whereby knowledge creation is encouraged, nurtured, rewarded and finally exploited for achieving both intellectual and materialistic, both individual and social goals.

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5 Barelson and Steiner (1964) P. 87
All the living species survive by using their senses to collect information about their environment. This information is processed on the basis of intellectual level and stored for use in anticipation and probable posterity; and subsequently translated into actions which are advantageous to their well-being and survival.

3. Use of Information

Knowledge without innovation and use is of no value. It is through the process of innovation alone that knowledge is converted into wealth and social well-being, and this process takes place from an industrial firm to a peasants' farm.

Innovators are those who see what everyone else sees, but think of what no one else thinks. Creative people do things by one or all of the following seven ways:

i. They challenge assumptions by daring to question what most people take as truth.

ii. They see the commonplace in new ways.

iii. They make connections between seemingly unrelated ideas.

iv. They use chance by taking advantage of the unexpected.

v. They take risks by trying new ways or ideas with no control over the outcome.

vi. They construct networks, forming associations between people for an exchange of ideas, perceptions, questions and encouragement.

vii. They recognize patterns, perceiving significant similarities or differences in ideas, events or physical phenomena.

One of the critical questions in thinking about creativity is how bureaucratic, highly structured organizations, e.g. academic libraries can encourage creative thinking and innovative behaviour.

The biggest challenge of the 21st century society is that of changes in culture being brought about as "Knowledge is power" evolves into "Knowledge sharing is power".

Juran's Quality Trilogy shows that there should be balance of trinity quality if there is "quality planning" leading to "quality control", it is natural that there will be "quality improvement" in information transfer, and access the capacity to acquire, generate, process and store knowledge in all its forms, including the recovery and upgrading of traditional knowledge is perhaps the most important factor in the improvement of human condition.

3.1 Who uses information?

The information profession requires individuals who can think conceptually and reason logically and who can use both knowledge and advanced technologies to address the information needs of society. There must be an intellectual orientation to skills and methods, both technical and behavioral, before there can be an effective application of those skills. Their goal is to teach users how to find information (a vast amount of information) and what to do with it.

13 Bezanson and Sagarti in Chanana, A.K. Country paper: India, P.62
The exploding mass of knowledge has made it impossible to continue the idea of learning things or memorizing them in the hope and faith on possible future use. Rather, learning how to "find" information efficiently and effectively is now the goal. Both beginners and specialists, as users of information, must be independent learners:

i. thinking about issues;

ii. analyzing problems; and

iii. prepared to put forth convincing arguments to support conclusions.

Educators are responsible not only for the transmission of knowledge but also for the creation of new knowledge. The qualifications of each faculty member should include:

i. competence in designated teaching areas;

ii. technological awareness; and

iii. effectiveness in teaching.

The development of information societies represents an attempt:

i. to achieve an economic and social end;

ii. to raise levels of education because they are the agents to

i. strengthen community links; and

ii. stimulate public participation in decision making.

A. Firstly, information is used as an economic resource. Organisations make greater use of information to:

a. increase their efficiency

b. stimulate and facilitate innovations and researches and,

c. increase their effectiveness and competitive position often through improvements in the quality of goods and services that they produce. There is also a trend towards the development of more information – intensive organizations e.g. libraries, publishers and press that add greater amounts of value to any commodity and thus benefit a country's overall economy.16

B. Secondly, it is possible to identify greater use of information more intensively in their daily activities as consumers to:

i. inform their choices between different product;

ii. explore their entitlements to public services; and

iii. take greater control over their own lives. They also use information as citizens to exercise their civil rights and responsibilities.

In addition, information systems are being developed that will greatly extend the public access to the educational and cultural provision.

C. Thirdly, information is used to satisfy the general demand for information facilities and services.

4. Information Processing

The methods for information processing can broadly be categorized into two groups:

i. Manual Methods, e.g. cataloguing classification and linear arrangement on shelves.

ii. Mechanical methods, e.g. use of information technology in collecting, storing, processing, filtering and crystallizing and retrieving information whenever needed in whatever forms

16 Ibid, P. 9
5. Store and Access to Information

Information access, made more convenient and speedier through technology, is indispensable to:

i. the development of human potential;

ii. the advancement of civilization; and

iii. the continuance of enlightened self-government.

International information policies and global economic development on the one hand and political and societal demands on the other depend on, even demand, greater access to information in whatever form and wherever located. This presents challenges for:

i. a legal access,

ii. an intellectual access,

iii. an affordable access, and

iv. a physical access.

This requires a continuous broad-based planning and adequate evaluation of the educational preparation of those entering the information profession and the continuous educational development of those already working in information services, libraries and archives.\(^\text{17}\)