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NEW HORIZONS IN AGRICULTURAL INFORMATION MANAGEMENT

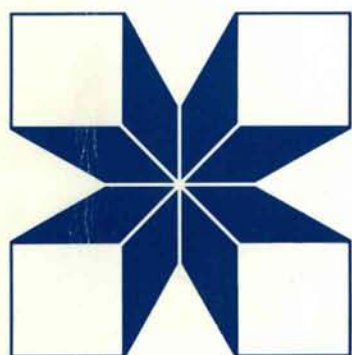
PROCEEDINGS

OF AN INTERNATIONAL SYMPOSIUM

MARCH 13-16, 1991

BEIJING, CHINA

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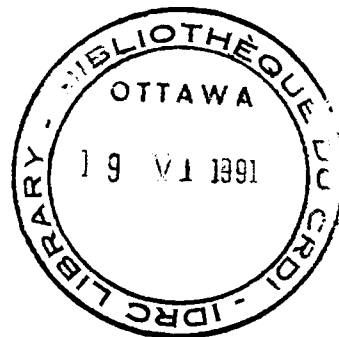
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The Infusion of Quality in Agricultural Information Services

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INTRODUCTION

Analysis of user need surveys in a wide variety of fields bear out quite clearly that libraries and information services rank low in the order of information sources sought when a user is in need of information. This state of affairs is probably due to the failure of libraries/information services to provide services or products that satisfy the needs and expectations of their clientele. Quality can be defined as "a judgement by customers or users of a product or service." Thus one can interpret quality to mean that it is "the extent to which the customers or users believe the product or service surpasses their needs and expectations." Libraries and information services therefore should continuously review their products and services to keep them in line with the needs of their users if they are to justify their existence in the light of other competing services or priorities. In this regard the need to infuse quality in the processes that lead to the development of relevant information products and services cannot be too strongly emphasized.

QUALITY

The notion of quality is difficult to define. It is seen as an ideal to which one should aspire but which exists in the realm of the impossible. However, contrary to normal assumptions, the infusion of quality in any endeavor is possible, provided there is willingness to make the necessary effort. In that sense quality is free. The erroneous assumption that quality means "goodness" or "luxury" or signifies a relative value must be obliterated. Quality is conformance to a set of requirements which must be specified. Arguments that quality is immeasurable and therefore cannot be specified, confuse our understanding of the word quality. Quality is measurable. In commercial circles quality is measured by the profits you make. When a general observation or evaluation is made that a process or thing possesses quality, the judgement that has been made is weighed against certain expectations or requirements. This implies therefore that, given further analysis and thought, specifications on the quality expected of a thing or process can be made.

Another way of measuring quality or at least making a judgement on it is to study the cost of doing things wrong. There must be a realization that doing things the wrong way implies the redoing of it which is wasteful and unnecessarily costly. In other words it was done at the expense of nonconformance. This underscores the concept of doing things right the first time. There must be sufficient thought given to a process before it is undertaken. Aspects of planning are inherent. Questions like: "What is to be done?";

"Why should it be done?"; "How should you do it?"; and "What are the requirements to be satisfied?" will help as guides to conformance and therefore to doing things right the first time.

There is also another erroneous assumption about the economics of quality. The attitude that the least effort and cost to produce a product or execute a process is cost effective is wrong. What is essential in quality is that the product or process possess appropriate measures of quality through a system that certifies this measure. Problems of quality are not just those originated by the workers or operators of a process or product. They may be due also to defects at all levels of top and middle management. Quality therefore is the joint responsibility of all staff.

THE NEED FOR QUALITY

The assurance of quality in an organization is dependent on quality management which may be defined as a systematic way of guaranteeing that organized activities happen the way they are planned. It is a management discipline concerned with preventing problems from occurring by creating attitudes and controls that make prevention possible. Management must therefore recognize that quality is a positive management tool.

In addition to paying attention to matters considered internal to the organization, quality management also encompasses due attention being paid to the relationship of the organization to its environment--the parent body it serves and other persons or organizations with which it has to work. Clientele needs have to be monitored. It must be realized that user satisfaction is the ultimate goal of any information agency. The user therefore is the most important element in the environment in which an information service operates. There is a need for a continuing process to determine how its products and services are performing and what new characteristics would increase user satisfaction.

Maintaining an information service with all its trappings is an expensive affair. In the harsh economic climate that many organizations face, the information service has to compete with other services and priorities of the organization for resources. The infusion of quality therefore in information services will be invaluable in convincing management that a well supported information service is an asset to the organization. Taking heed of this, managers of information services must realize that the cost of quality is at the expense of doing things wrong. Things done wrong in an organization may be avoided or minimized if management plays its appropriate role. Management is the function responsible for establishing the purpose of an organization, determining measurable objectives and taking the actions necessary to accomplish those objectives. It should be realized that the further an administrator gets from the administered the less efficient the administration becomes. The infusion of quality in an organization therefore, requires a commitment and involvement from management, which must be convinced that a quality infusion program implemented over a period of time will ensure eventual success.

QUALITY IN INFORMATION SERVICES

Users of library and information services have suffered from decades of negligence. We have yet to establish a continuing process that monitors users' needs and determines how our products and services are used and received. It is timely therefore to focus our energies and quality infusion programs on the following:

- a. The conduct of regular research on users and their needs and expectations with a view to the determination of appropriate, product or service concepts that would satisfy users.
- b. A user response analysis of information collected as a result of constant interactions with the user so as to understand better the performance of products and services and to effect any necessary changes on them.
- c. The planning and design of information products and services to ensure that design specifications comply with user needs.
- d. Ensuring that the process of producing the product or offering a service is in accordance with the design specifications. This is sometimes referred to as conformance.
- e. Ensuring the maintenance of uniformity of the quality characteristic of goods and services.

QUALITY INFUSION PROGRAM

It is proposed that information systems launch quality infusion programs on a planned basis to be monitored regularly. Since it takes time to change the attitude and habits of an entire organization, such a program may have to be consistently implemented for a number of years before the fruits of such an exercise become apparent. Major elements of a quality infusion program include the following:

- Management commitment
- Quality improvement team
- Adoption of new philosophy
- Quality measures
- Quality awareness
- Education and training
- Supervision
- Instilling pride in work
- Removal of negative barriers

- Restructuring
- Recognition

Management Commitment

If it is to be expected that staff at all levels are to follow the program, the role of management in its implementation is paramount. Leadership must be by example. Management commitment by personal participation "raises the level of visibility for quality and ensures everyone's cooperation..."

Quality Improvement Team

The establishment of a quality improvement team by management comprising representatives of departments will ensure the involvement of a cross-section of the organization. After having been briefed on the content and purpose of the program the team should be given a reasonably free hand to carry out their tasks. In this way operations and processes on a departmental and organization wide basis may be coordinated and improved upon.

Adoption of New Philosophy

The preparation of a quality policy by management will help set the broad direction for all. There must be promotion of quality consciousness among staff at all levels. All staff must actively "reject commonly accepted levels of defects, rework, shoddy workmanship and poor service." There must be a deliberate attempt towards defect detection followed by a defect prevention mechanism. Wide publicity of such a philosophy will ensure quality consciousness among all staff.

Quality Measures

Staff will conform to the requirements of a job if the job specifications are well spelled out. Therefore it is necessary to determine the quality measurements for each area of activity. The status of quality throughout the organization thus gets determined. Subsequently corrective action can be taken as and when necessary. It must be emphasized that quality measures should not be confused with numerical goals and work standards, which should be avoided.

Education and Training

The staff of an organization constitutes one of its most important assets. They have a need to understand the relationship of the work they do to that carried out in the rest of the organization. Their success in conformance to specifications means that they must be trained adequately to satisfactorily perform their function. Training must be regarded as an ongoing integrated process necessary in a successful organization. Staff motivation and morale take a higher plane when training programs are put in place.

Supervision

Supervision is a critical link between top management and its employees. "Supervision must be a supportive, positive endeavour that encourages learning, development, problem solving, trust and change by advancing training, removing barriers, fostering

pride in work, showing workers how they fit in---and stressing quality." The need for good supervisors is crucial in the promotion of team work and in improving the ability of staff to carry out their functions.

Instilling Pride In Work

Pride provides the impetus to perform better and to improve quality. It is poor management that is to blame if a worker lacks pride in his job. Factors that contribute to loss of pride in workmanship are many. Some of them are stated below:

- a. Managers pay too little attention to the problems of workers.
- b. Workers are confused, uninvolved and under-utilized if they do not understand the organization's objectives or goals and therefore do not identify with the organization.
- c. Workers are always blamed for system failures and the organization's problems.
- d. Inadequate training and low levels of supervision.
- e. Poor systems planning, faulty equipment and unwieldy methods add to the development of uninvolved and lack of concern.

If workers are robbed of their pride in workmanship and are treated as commodities then their full potential cannot be realized---an expensive loss to the organization.

Removal of Negative Barriers

Every organization during its period of growth and development is likely to face obstacles which could hinder its progress. Recognition of these barriers with the purpose of eliminating them or reducing their effect is a good first step. Good communication which is multidirectional, vertical and horizontal is essential in any organization if matters such as competition, differences of opinion, personal grudges, differing priorities and departmental barriers are to be minimized. The oneness of an organization encouraged by teamwork will go a long way toward effective cooperation and positive attitudes in the work place.

Restructuring

Any deliberate attempt to infuse quality in an organization will eventually necessitate the reorganization and transformation of the organization as a response to changes that will take place. The new organizational environment that will eventually evolve is the responsibility of management. The change in the philosophy of the organization and its culture will have at its apex the need to constantly improve every aspect of the organization.

CONCLUSION

There is an urgent need for all of us in the information world to rethink and rationalize our objectives in the context of this fast changing world. We cannot afford to continue

doing what was done decades ago. If there has been a change in the way we do things today it is to do them better but we are still essentially performing the same functions. The environment to which we have to respond has changed and is in a continuous state of flux. Our challenge is to be aware of our environment, determine the options of how to respond, take stock of the resources at our disposal, plan and implement our products and services with one major objective in mind--to more than satisfy user needs and expectations. The infusion of quality in such a program coupled with process improvement will doubtless witness a revolution in the information industry.