Translating Quality Management Principles (ISO 9000:2005 and 9004:2009) for Open and Distance Education Institutions

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ABSTRACT

The ISO 9000 series defines quality management system standards applicable in the product market to address the customer satisfaction, increasing market share, revenue generation, sustenance of product and research & development for further improvement in marketing and brand recognition. The eight basic principles derived, based on the experiences and knowledge of experts and practitioners, for quality management and quality assurance, are responsible for development and maintenance of ISO 9000 standards (ISO 9000:2005 & 9004:2009, 2005, 2009). In this paper, we have discussed how this experience and knowledge on quality management and assurance be translatedwith appropriate contextualization foropen and distance education institutions, which impart education 'with a difference'.Can the principles be used by education providers to devise a framework to transform university system towards learner-oriented effective and assured quality learning? We have made an effort to suggest quality parameters fordelivery of education through ODL mode.

Keywords: Research, assurance, management

The International Organization for Standardization (ISO) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in the subject, for whom a technical committee has been established, has the right to be represented on that committee. International organizations - governmental and non-governmental, in liaison with ISO, also take part in this initiative. Thus, the groups of experts as part of technical committees are responsible for development of the ISO standards. During the course of development of standards, the ISO collaborates closely with the professional bodies at national and international levels, e.g., on all matters of electro-technical standardization, it collaborates closely with International Electro-technical Commission (IEC) (ISO, 1996).

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While detailing the standards, ISO created standards under 9000 series on quality management system and created eight principles to ensure establishment and sustenance of Quality Management in an organization. These are the minimum standards which should at least be met by the organizations to attain ISO Certification. However, they are always expected to strive to achieve higher levels of standards beyond these marks. When an organization conforms to these ISO standards, it simply means that the services and products of that organization are at least of acceptable standards if not of high quality. These principles are (ISO 9001:2008):

Principle 1 – Customer focus: Organizations depend on their customers and, therefore, should understand their current and future needs and strive to exceed their expectations.

Principle 2 – Leadership: Leaders establish unity of purpose and direction of the organization. They should create and maintain the internal environment in which people can be fully involved in achieving organizational objectives.

Principle 3 – Involvement of people: People at all levels are the essence of an organization and their full involvement enables their capabilities to be used for the organization's benefit.

Principle 4 – Process approach: A desired result is achieved more efficiently when activities and related resources are managed as a part of the process.

Principle 5 – System approach to management: System approach to management necessitates identifying, understanding and managing interrelated processes as a system which contributes to the organization's effectiveness and efficiency in achieving its objectives.

Principle 6 – Continual improvement: Improvement as a continuous process leading to enhancement of overall performance of the organization should be a permanent objective of the organization.

Principle 7 – Factual approach to decision making: Effective decisions are based on the analysis of data and information. The organisational data available at a given point of time needs to be used by the organisations judiciously so as to improve the quality of decision making as an ongoing process.

Principle 8 – Mutually beneficial supplier relationships: An organization and its suppliers are interdependent and a mutually beneficial relationship enhances the ability of both to create value.

The Standard ISO 9004:2009 (https://www.iso.org/obp/ui/#iso:std:iso:9004:ed-3:v1:en) focuses on how to make a quality management system more efficient and effective. It is interesting to translate these principles for higher education institutions, particularly in an Open and Distance Learning (ODL) institution, which are now facing Herculean challenges that have emanated from non-recognition of their degrees for higher education and non-acceptability of graduates in job market, low success rates/retentivity and high dropout rate, the demands of life-long learning (L-3), ignorance of the purists among the intelligentsia about tools, techniques and processes of and methodologies used by open educators, rapid changes taking place within the system and criticism by different regulators (Ahmed and Garg, 2015).

Other related Standards

ISO has deliberated at length on the standards for online, mobile learning and eLearning to address the needs of learners. ISO has developed a standard on coding of audio, picture, multimedia and hypermedia information (ISO/IEC JTC 1/SC 29) that provides details on multimedia standards for education. Forty two standards have been developed on various aspects of information technologies and learning, education and training. Some of these standards are listed below:

ISO/IEC 19796-1:2005 on Information technology -- Learning, education and training (LET) -- Quality management, assurance and metrics, having three parts, Part 1 on General approach and Part 2 on Access for all personal needs and preferences for digital delivery; and, Part 3 on digital resource description.

ISO/IECTS 29140-1:2011 Part 1 and 2 are on Mobile Learning with title "Information technology for learning, education and training -- Nomadicity and mobile technologies" with Part 1 on Nomadicity reference model and Part 2 on Learner information model for mobile learning.

As per the catalogue of ISO Standards, not much is deliberated on the other delivery mechanisms in the

print based distance learning, on online or eLearning delivery mechanisms or on recent technology driven/ enabled learning such as Open Education Resources (OERs), open and distance education system, or Massive Open Online Courses (MOOCs).

There are various ways in which quality management principles can be applied to different processes within the ODL Higher Education Institutions. The nature of the institution and the specific challenges faced by it determine the implementation strategy for the ISO standards. Many institutions find it beneficial to set up quality management systems based on these principles.

This paper provides a general perspective on the quality management principles underlying the ISO 9000 Series. These principles have been reviewed and their implications have been analyzed to suggest how collectively, these can form a basis for performance improvement and organizational excellence with particular reference to ODL institutions.

Higher Education System in India

According to a World Bank Report (n.d.), the Higher Education System in India is the third largest system in the world preceded only by USA and China. It has witnessed quantum increase in the number of Universities/University level Institutions and Colleges as well as students since India attained Independence. The number of Universities has increased 34 times from 20 in 1950 to 677 in 2014. The number of Central Universities is 45. Of these, 40 are under the direct purview of the Ministry of Human Resource Development, 318 State Universities, 185 State Private universities, 129 Deemed to be Universities, 51 Institutions of National Importance (established under Acts of Parliament) under MHRD (IITs - 16, NITs – 30 and IISERs – 5) and four other Institutions (established under various State legislations) (MHRD, 2013). The number of colleges increased about 74 times; from 500 in 1950 to 37,204, as on 31st March, 2013 (http://mhrd.gov.in/university-and-higher-education, retrieved on 22 November, 2015). These institutions together cater to the higher education requirements of 28.56 million students. Due to these developments, the gross enrolment ratio (GER) in higher education in the country is stated to have reached 20.4, which essentially means that we are able to cater to only one-out-of-five youth aspiring for higher education and willing to contribute to national economic growth and development with sense of service.

It may be mentioned here that more than 80 per cent enrolment in Indian higher education comes from undergraduate programmes such as BA, BSc and BCom. The infrastructural facilities available in our higher education institutions are not uniform. Experience shows that these are influenced by governmental policies as well as the ownership, affiliation, financial position, geographical location and mindset of the governing body of the institution. As far as quality and management of higher education are concerned, there is a *"quiet crisis in higher education that runs deep. Pockets of excellence remain but the general impression is one of mediocrity"* (NKC, 2006). A few centers of excellence and that too in certain government sponsored fields in a vast expanse of barren landscape of a country of the size of India, do not do justice to our collective genius. Our universities no longer incubate innovations or generate new knowledge commensurate with academic developments globally. This is in spite of the fact that we have 18 regulating councils for each stream of education: liberal, professional, medical, legal, teacher education and so on.

With the objective to develop a system for conscious, consistent and catalytic action and improve the academic and administrative performance, in January 2013, the University Grants Commission (India), through National Assessment and Accreditation Council, made it compulsory for every conventional higher education institution in India to establish Internal Quality Assurance Cell (IQAC) (NAAC, 2013). Similar provisions for ODL Higher Education Institutions were put in force in 2009-10 by the Distance Education Council (DEC), created under the statutes of the National University, and linked it to funding and recognition of institutions offering education at a distance (DEC, 2009). It proposed that all so as to internalize self-accountability in all processes and institutionalize best practices. But before these provisions could be implemented effectively, DEC was shifted from IGNOU and the authority to monitor the ODL system was accorded to the UGC. In our view,

this change has done huge damage to the growth of the ODL system. Now that New Education Policy is being formulated, it is hoped that a serious effort will be made to undo the harm by creating an independent Statutory Authority through an Act of Parliament like UGC, AICTE, NCTE, and other regulators.

The ODL System in India

The open and distance learning (ODL) system has emerged from the conventional mainstream higher education system in the country. It practices multiple media instructional package for imparting education. Though knowledgeable experts consider it as the third stage in the development of education, purists among the intelligentsia as well as employer groups are skeptical about its processes and products. For such reasons, distance education practitioners have been faced with the herculean challenge of meeting the aspirations of learners, bridge the gap between their existing and desired levels of knowledge, skills and attitudes, so as to fulfill the expectations of employers and society at large. In the initial years, idea was to provide second opportunity to learn at the university level offered through face-to-face mode to all those who missed it in their formative years for familial, financial, geographical or social reasons. Quite interestingly, most of the learners were mature working professionals. But they formed a heterogeneous group in terms of their prior learning, social status, experience, economic conditions, geographical barriers and expectations from the system, among others. Moreover, their educational needs and requirements were also different in the context that some joined the ODL system to acquire new knowledge while others would strive to secure a formal degree for seeking a desired job in the open market since, due to their compelling circumstances related to their family, job or even themselves at times, they could not join the conventional system of education.

In order to offer high quality education at affordable cost to its learners, different support sub-systems are created by every ODL institution. The four of major sub-systems are: student registration, instruction delivery, student support and performance evaluation. Each of these sub-systems entails a number of standard processes and basic activities to accomplish the overall educational goals of the institution. A bigger challenge before the practitioners in the system is in dealing with the numbers. In 2014, the ODL system catered to almost 22% of total students in higher education with different specialisations and streams of knowledge (Ahmed and Garg, 2015). In view of this, the ODL institutions invariably face serious challenges. In particular, they grapple with numbers beyond their infrastructural capacity. Moreover, in their quest for higher numbers, these institutions offer programmes whose number is disproportionate with their faculty strength. As a result, the quality of their services and hence learner retentivity/success rate are an issue.

In such a situation, the objectives can well be achieved only if the processes are standardized in a framework characterized by quality benchmarks for pre- and post-process levels and rigorous monitoring mechanisms. The application and implementation of ISO Standards of quality management in ODL institutions may go a long way not only in resolving concerns of increasing numbers but also in providing quality education to the aspirants.

IGNOU: An Overview

The Indira Gandhi National Open University was created in the country in search of a resilient and responsive system, which could not only provide education to the deprived and isolated sections of the society at affordable costs but also reach the last mile. The Indira Gandhi National Open University Act 1985 mandated it with dual responsibilities to:

(i) act as a university and offer innovative and need-based relevant programmes at different levels: awareness, certificate, diploma and degree levels—undergraduate, post graduate and research in different fields—liberal education, physical and natural sciences, agriculture, development studies and professional education (engineering, computers and information technology, health care, law, teacher education, media studies) using contemporary tools and techniques for indigenous capacity building as well as world markets, and

(ii) act as a national apex agency to promote and coordinate the open learning and distance education system in the country while monitoring and determining the standards of the programmes developed and offered by the ODL institutions.

As a university, IGNOU began by offering two programmes—Diploma in Management and Diploma in Distance Education—to 4,528 students in 1987. In its initial offerings, the University catered mainly to adults and the employed but the demography began to change significantly as its acceptability grew; now almost half of IGNOU learners are fresh school pass outs. In fact, during its 25 year long journey, IGNOU has emerged as a national resource centre for open education and significantly contributed in increasing access to quality higher education to those for whom such opportunities to learn either did not exist or were rather limited. By offering programmes relevant to economic and employment needs, IGNOU brought tremendous prestige and esteem to the ODL system in the country and gained global recognition and acceptability as a premier university in the world of open and distance learning. It follows learner-centric approach to promote active learning and multiple media instructional packages comprising printed learning materials, multimedia (audio/video), electronic media (interactive radio counseling, TV based telecasts, one-way video, two-way audio teleconferencing, satellite supported terminals and computer assisted chat sessions), and assignments are provided. The F2F contact is arranged at designated study centres, which are invariably created in reputed colleges and university departments.

The nature of programme offerings in IGNOU has changed continuously since 1987 with emerging societal needs. The University strived hard to conform to national priorities and train human capital for national, regional, and global markets (Garg et al., 2006; Srivastava, 2012; Ahmed and Garg, 2015; Garg, 2015) through technological revolution. In 2013-14, IGNOU offered 228 Programmes through 2667 Study Centres/Programme Centres in the country and 80 Partner Institutions in 43 Countries (IGNOU Profile, 2014). (However, all but six partner institutions were derecognized in 2014 and international operations were kept on hold.) The annual student intake of IGNOU was about 3.8 lakh for 2013 and the cumulative enrollment was 2,810,958 as on 31st March, 2015 (IGNOU, 2015). So far 24,83,641 students have been conferred certificates, diplomas, including advance diploma and post-graduate diploma and degrees, bachelors, masters and PhD (Khare, 2014). This became possible because the University strived for creating synergies and practiced the ethos of collaboration and partnership. Now IGNOU has emerged as the single largest Open University in the democratic world.

It is said that one designs and many build. With a view to pool teaching-learning experiences, Prof. G. Ram Reddy, the founder Vice Chancellor of IGNOU took a conscious decision to involve acknowledged professors from across the universities and experts from professional institutions in the design and development of study materials. The faculty members, who were relatively new but highly motivated and believed in 'being the change', worked to prove that the new system was viable as they got access to 'masters'. (Their efforts were supported by the leadership through creation of very stimulating work culture.) Once collaborations and partnerships, which paved a way for using conventional infrastructure for delivery of education, were forged, the faculty mounted quality programmes in quick time. Moreover, the system found ardent supporters, even advocates, of new philosophy of education. Open learning began to be accepted as an innovative philosophy of education. (In fact, it marked third stage in the development of education.) The University won national recognition and international acclaim by way of COL's Centre of Excellence award in 1992-93 for high quality stand-alone learning materials. The University was assigned leadership of the ODL system in National Policy on Education (NPE) 1986 and the open system became synonymous with IGNOU.

Electronic Media Production Center (EMPC)

The University began to create media networks in 1990-91 to increase interaction in teaching-learning and the leadership planned for teachers and media professionals to be trained by Official Development Assistance (ODA)

experts in IGNOU and a few of them were sent to UKOU. In 1993, even though ODA scheme was under way, the then leaders developed collaboration with Japan International Cooperation Agency (JICA) and the state of the art Electronic Media Production Centre (EMPC) came into existence in 1994-95. The media professionals were sent to Japan in 1996 to acquire necessary skills and training in managing new hardware and equipment. The indigenous capacity so created proved helpful in implementation of Gyan Vahini and EduSat projects. Under these initiatives, 35 Gyan Vani radio stations, five TV Channels, a few Satellite Interactive Terminals (SITs)and about 850 Receive Only Terminals (ROTs) for networking elementary (one-teacher) schools in four educationally most backward districts of India, were created in the period 1999-2006. This experience proved extremely useful in the implementation of Pan-African Project under which India began by offering tele-education in Ethiopia.

With the emergence of EMPC as a transmission hub for educational programmes, the priorities of the Centre shifted from A/V programme production to acquisition of programmes developed by private entrepreneurs from Indian as well as foreign media production agencies. Though no critical research on the impact of such programmes is available, one thing emerged clearly: indigenous capacity and creativity exhibited for programme production in initial years of the University were lost. This also affected the efficiency of well meaning producers. Worse still, learners could not use the facilities optimally due to inappropriate schedules, information gap and distances involved. Moreover, some of these networks were rendered dysfunctional with time due to misplaced priorities of individuals in the seat of authority and the facilities could not be put to optimal use. As a result, print re-emerged as the master medium of instruction.

The next quantum jump was realized when the University went global in 1995-96. Partner institutions were created in developing countries with sizable population of persons of Indian origin as well as Indian Diaspora. This was truly remarkable and propelled Indian open and distance education system in the league of international education providers. A spin off effect of this development was the recognition accorded by international funding agencies like UNICEF, UNESCO, UNDP, DFID and COL, among others. In its march towards the zenith, the University began to tread on the information highway through large scale computerization. Student registration and evaluation related activities were digitized and helped improve efficiency as well as productivity. These developments highlighted the fact that vision and value systems are very vital for growth of an institution.

IGNOU witnessed tremendous activity in programme design, development and offer in the period 2001-2006 when it was decided to upgrade the offerings in social sciences to post graduate level. However, the wheel of events turned in the anti-clockwise direction subsequently and the University began to lose forest for trees. Programme development was outsourced and poor implementation of various well meaning schemes put the faculty out of work. With time, complacency took over and leaders became laggards. The system is in such a state that only a truly dynamic leader can put it back on track.

A system approach is adopted in design, development and launching of a programme and the process of which starts with the needs assessment of the target group. The different phases of programme development are monitored by statutory authorities for holistic quality maintenance. With adequate debate, discussion and experimentation, an instructional design is devised suitable to the requirements of the programme, needs of the target group and expected learning outcomes. An academic programme suited to the educational needs, knowledge and skill requirements of a large target group from the society only is launched after passing through different quality check points.

Research is one of the finest outcomes of human intellect and is fundamental for the progress, intellectual morale and well-being of every individual, institution, community and the nation state. The outcomes of research provide newer and deeper insights into various phenomena, processes and techniques, and help push the frontiers of knowledge beyond the known and familiar. In common parlance, one engages in scholarship when addressing questions that actively

and continually challenge the discipline's frontiers. And to do so, she/he has to be current with the discipline's cutting edge, the "scholarship of the discipline". In the context of open learning, scholarship also includes discovery and communication of knowledge and skills through newer technologies/methods and improving ways of interaction between individuals bound by a common goal/interest for social good. Research supports *discipline of dissent*—rational debate, unbiased examination of facts and ability to question existing practices and theories in the light of new evidences—and informs teaching. In fact, these reinforce mutually and wither in isolation.

Universities are learning organizations and to keep in tune with this philosophy, research degree programmes were started in open universities. There was great expectation that their "fund of knowledge" will expand through active engagement of faculty and research scholars who will discover newer ways to meet the challenges of growing population of "digital natives". At the National Open University, a conscious decision was taken in 1999 to associate experienced scholars and researchers from outside the University with its faculty in the offer of PhD programme so that research scholars could pursue the programme without being displaced from their respective place of work/stay. (In 2009, the scope of this concept was widened to 'Recognized Research Centers' all over the country.) This scheme was adopted by SOUs as well. Experience shows that a righteous scheme has degenerated rapidly and floodgates opened for misuse. It is a pity that degrees have been conferred in areas in which no full time faculty was ever appointed and in numbers disproportionate to the strength of permanent faculty. There was hardly any intellectual contribution by and growth of OU faculty.

IGNOU began to offer Internet based bachelors and Masters Programmes in Computer Applications (CIC/BCA/MCA) online in January 1999. Every learner was provided a password/code to access the materials on the Internet. (A backup of materials in CD-Rom was also provided to all enrolled students.) This experience led the University to the Virtual Campus Initiative and develop human capital for 'informatics future' and the growing IT industry. IGNOU launched front-ended, technology-driven Bachelor of Information Technology (BIT) and Advanced Diploma in Information Technology (ADIT) programmes in collaboration with Edexcel Foundation, UK. The delivery of BIT and ADIT programmes was made through tele-learning centres at 14 Regional Centres and 14 centres created under Public Private Partnership (PPP) model. However, the University had to discontinue the offerings beyond 2004 once initial MOU expired. The significant experiences gained from the online offer of these programmes enabled the University to launch online programmes in other fields. In 2005, IGNOU began to create a digital repository *eGyankosh* as an open source with facility of video-streaming. It was hyperlinked to the *Sakshat* Portal developed by MHRD, Government of India (GoI). However, it was soon realized that although open source applications could revolutionize educational scenario and pave a way for innovative models of teaching-learning; building interactivity, sustainability in the long run and IPR were some of the basic issues to be addressed.

One of the latest applications of the Internet is in support for individualized learning by uploading the courseware as open education resources (OER). However, the socio-economic imperatives made the educational institutions around the world to emerge as a collective body of OER developers. Realizing the promise and potential of this concept, the Commonwealth of Learning (COL) and UNESCO began to support it from its primitive stage and it is now being harnessed more gainfully by distance teaching institutions to universalize knowledge. The OER movement can now be seen as a social practice, which benefits the learners with relevant and appropriate learning materials. However, contextualizing and customizing such materials by accommodating cross-cultural as well as local issues is a big challenge faced by the academics who wish to create learning communities around the OER. Nevertheless, Internet has emerged as world's most valuable knowledge repository; the latest information is available at the click of a mouse. Moreover, the Internet provides every life-long learner an excellent opportunity to become a discoverer, a researcher, a navigator and a collaborator by surfing through the information highway, interpreting it and sharing knowledge with many and varied netizens.

The OER movement has led different institutions and scholars to individually or collectively launch Massive Open Online Courses (MOOCs) in specialized areas. Initially, groups of experts/educators/instructors contributed a variety of content to a central repository where the course materials are available for free. However, those knowledge seekers who wished to get university credit or certification for their effort have to pay a fee. The term MOOC was coined by Dave Cormier and Bryan Alexander in 2008 (Sharma, 2013). Gauzing the popularity of such offerings through high enrollments, the New York Times declared 2012 as the Year of the MOOC. MIT, Harvard and Stanford set the example for others to offer such courses as an alternative and/or supplement to conventional university courses. The GoI has also decided to harness the potential of web-based courses and create MOOC platform, under the SWAYAM (Study Webs of Active-learning for Young Aspiring Minds) initiative to educate all free of cost. Since IGNOU has mastered the art of using technology in delivery of education, it is being involved in this initiative. This effort is bound to get impetus in the New Education Policy that is being drafted now.

In this paper, we have introduced the quality management principles on which the quality standards of the ISO 9000 Series are based, for the open and distance education institutions.

Principle 1 – Customer focus

An organization providing goods and services can achieve its commercial objectives optimally only if it meets the needs of its customers to their satisfaction. It would be ideal if it goes an extra mile to fulfill their expectations. According to ISO quality management principles, an organisation needs to fully know the background of its customers, their current and future requirements and levels of expectations. This analogy can be applied to open-distance education institutions, which are service organizations working for the social cause of its students and provide them value for money, time and effort. Their primary focus is on offering learner-centric educational programmes so as to enhance their skills, increase knowledge and inculcate values to serve people, society and the nation. The IGNOU follows the ADDIE (Analysis, Design, Development, Implementation and Evaluation) model of instructional design which is considered to be ideally suited to pedagogical processes.

The needs assessment of the target group paves the way for a decision as to whether or not a programme in certain area should be launched to meet expected requirements of the target group. Efforts are made to know educational background of the prospective learners, their social status, and current financial and economic positions. The understanding of the geographical location of the target groups enables the university in understanding the requirement and availability of necessary educational infrastructure at the local level. Therefore, learner is at the core of all the services provided by IGNOU. At the end of the minimum duration of an academic programme, there is a provision of programme evaluation wherein feedback on different aspects of the said programme is obtained from stakeholders such as employers, learners, other educational functionaries, and governmental and non-governmental organizations. This evaluation feedback plays an important role in revising the programme according to the changing needs of the learners and the social context. The whole exercise of keeping the learners at the core of all the processes helps IGNOU in designing developing and implementing learner-centric system of distance education. The learner-centric approach followed by the University keeps the learners at an advantage in the following manner:

- IGNOU is able to extend educational opportunities to different sections of the society, especially the marginalized.
- The institutional resources are directed towards creating learner-oriented processes which help in enhancing sensitivity towards the learners and create a pro-learner environment.
- The effectiveness of the academic programmes and their overall impact in social context increases considerably.
- The learners are provided customized support services.
- The instructional methodology suits to the self-learning requirements of the learners.

- The learners are able to meet their educational aspirations through tailor-made programmes.
- The learner-centric programmes enhance learners' motivation to acquire new knowledge and enhance skills. In this way, they are better prepared for employment.

Principle 2 – Leadership

The principle of leadership deals with the direction and unity of purpose. A leader enables individuals in an organization to share a vision to fulfill the current and future requirements and move in its direction. Moreover, he/she contributes to the management and operationalisation of *Innovative* ideas through team spirit. Though there are no facile formulae for successful and innovative leadership, yet vision, clarity, resoluteness, flexibility, accommodation, adaptability, foresightedness, conviction, pragmatism and ability to direct or operationalise concepts are some of the desirable attributes. Providing intellectual environment for unbiased discussion and setting high performance benchmarks help to manage transformation and facilitate innovations in distance education. For instance, digitization of best practices with revolutionary telecommunication and wireless technologies and management of virtual connectivity can pave way for innovative knowledge management.

A cooperative, understanding and employee-friendly culture of an organisation goes a long way in seeking maximum dedication and loyalty of the staff. Applying this principle to the organisational setup of IGNOU, an autonomous institution of distance higher education under the Ministry of Human Resource Development, one would note that leadership has been extremely liberal in extending promotion and other welfare schemes of the Federal Government to the staff working in IGNOU. Though University has framed its own rules and guidelines under the University Act, Statutes and Ordinances, rules and regulations framed by the Government of India from time to time are adopted wherever necessary and implemented in the University. In some situations, the University devised welfare schemes for its employees which were even not implemented for government employees. Thus, employees in IGNOU find themselves at an advantage over their counterparts in not only sister organisations but also in the Federal Government.

Being a public institution, IGNOU follows a participatory approach to manage different operations in the university. The teachers, academics and non-academic staff of the university actively participate in corporate life of the University. To further its objectives of providing a resilient system of education to all till the last mile, provisions are created through committee approach, where outside and in-house experts make recommendations after detailed deliberations. Sometimes, this approach has been misused to delay even crucial decisions. The welfare schemes for the employees are implemented in a time-bound manner so that they contribute maximally for the growth of the university. To keep the employees abreast with the updated knowledge and information, training and development policy is vigorously implemented in the University. A systematic training needs assessment is done to arrive at a decision on organisation of specialised training programmes for various categories, and different groups within a category of staff. As a result, the training and staff development activities are continuous ongoing process in the University. So it can be said that the leadership has been proactive towards the welfare of all employees. The work environment so created has led the University to register exponential growth. The University has been singularly fortunate to also receive complete support from MHRD, Govt. of India and became the first financially self-sustaining university in the country. As explained under principle 1, while pursuing its mission, vision and objectives, IGNOU caters to current and future societal requirements while offering learner-centered education. The leadership brought the following further benefits:

- instances of conflict between the management and employees have been minimal;
- employees have been motivated to meet the challenging goals and achieve the targets; and
- acknowledgement of the contributions of employees keeps them motivated to contribute to their fullest capacity and capability for the betterment of the organization.

Principle 3 – Involvement of people

The trained and well developed human capital is an asset to an organisation. It is in this context that every organization is expected to spend financial resources, time and effort on continuous professional development of their workforce. To take full advantage of available expertise, it is necessary that people working in an organisation are fully involved in different activities and decision making processes are collective. Such participation involves decentralization of power. The involvement of staff encourages them to take extra responsibility and come up with quality products and services which not only meet the expected requirements of the customers but also add to their satisfaction. This mechanism can also be seen as part of human resource development process where one of the core values of the institution is to groom its staff on-the-job in work ethos of sharing, taking higher responsibilities and fulfilling future requirements of the organisation.

The concept of quality assurance and quality circles is in vogue in various organizations. These groups involve fellow-workers in quality assurance processes in the organisation. In an educational institution, decentralization of administrative and financial authority, i.e., decision making at different levels is inevitable. Every position carries certain specific roles the individual concerned has to be accountable. In case of IGNOU, officials in Schools of Studies as well as Support and Service Divisions have gradually become victims of bureaucratic procedures and shy away from taking decisions even to carry out their day-to-day functions, particularly if it pertains to activities open for scrutiny or audit. (Gone are the days when every official felt empowered and did not hesitate to take bold decisions in the interest of institution). Now-a-days, even the CEO uses circuital routes before according his approval even on routine activities like holding Expert Committees for Programme Design and Development for fear of a few disgruntled elements. It is pertinent to mention here that different styles of functioning have been practiced in the University by different Vice-Chancellors. It would be no exaggeration to say that the IGNOU has been VC-centric. In fact, it is no exaggeration to say that systems, conventions and good practices have not taken deep roots with time. For instance, the concept of Task Force and Task groups so effectively used at one time to coordinate and successfully manage inter-school or inter-division tasks/activities in a given timeframe were bid good-bye by the successor. Even statutory bodies such as Board of Management, Planning Board, Academic Council, Finance Committee and School Boards were either managed or sidelined, discarding the participatory approach to decision making. In spite of such aberrations, which nevertheless have caused irreparable damage and disadvantage, the basic structure envisaged and approach adopted in the formative years of the University encouraged collective decision making from within and outside the University. This brought following advantages to the institution:

- ❒ enhanced commitment, dedication, motivation, mutual trust and creativity of all concerned;
- ❒ inculcation of core values such as cooperation, integrity, accountability and transparency;
- ❒ free and frank expression of concerns for the good of learners which facilitates growth of the institution;
- ❒ unbiased rather than preconceived opinions which helps to create conducive work culture;
- ❒ access to national expertise for design, development and delivery of academic programmes; and
- ❒ increased acceptance of the institution, its employees and graduates by their peers.

Principle 4 – Process approach

Every organization strives for excellence in its field of work. Since this is a continuous march, all activities and processes have to be carried out at all times in a systematic manner to achieve best results with minimal resources. The ISO (2008) defines process as 'a set of interrelated or interacting activities, which transform inputs into outputs'. The process approach demands that the methods of performing a particular task should be standardized so as to complete the task with minimum effort, time, money and resources. (Standardization of process involves activities such as gathering the data about performance of the process, its analysis keeping

its efficiency in mind, modifications/corrections based on feedback analysis and finally arriving at an optimal process.) Like organizations involved in manufacturing or providing services in any area, the ODL institutions need to standardize various processes, including design, development and delivery of instruction, learner support from the time he/she registers for a programme till graduation after completing all requirements successfully. The process set for accomplishment of a particular task helps in ensuring quality of the task or service. IGNOU has standardized various processes through designated centres/divisions:

- **Regional Centres:** conduct different activities like pre-admission counseling, sale of admission forms and receipt of filled in admission forms, finalization of admissions, communicating data to the headquarters, management of study centres, distribution of study materials, management and conduct of examinations, arrange for evaluation by liaising with evaluation centres, processing of assignment and project marks received from the study centres, planning, orientation of counselors, providing feedback to course teams on the acceptability of a programme launched by the University, implementation and management of various other academic and administrative activities.
- **Study centres:** help the regional centres in admission process, organisation of academic counseling and evaluation of assignments.
- **Regional Services Division:** undertakes the task of promotion, maintenance and monitoring of the regional centres and study centres functioning and services being offered by them to the students, and to look after the human resource and financial requirement of its ancillary units.
- **Student Registration Division (SRD):** performs activities pertaining to preparation of prospectus for different programmes, preservation and maintenance of admission data received from the regional centres, maintaining a detailed learner profile, servicing changing requirements of learners such as change of address, courses opted and allowing extended time for completion of programme in the form of re-admission.
- **Material Production and Distribution Division (MPDD):** undertakes printing and distribution of self-learning material (SLM) to the regional centres, and maintenance of sufficient stock of SLM for logistics.
- **Student Evaluation Division (SED):** manages for evaluation of student performance and updating the student profile with the performance data, issue of degree and certificates to the successful students.
- **Schools of Studies:** perform the activities pertaining to design, development and launch of academic programmes, revision of syllabus and self learning material of the programmes after a certain shelf-life, helping the SED in evaluation process.

By adopting the process approach for accomplishment of its different activities, the university is able to achieve the desired results more efficiently deriving the following key benefits:

- Process approach to accomplishment of different activities leads to standardization, formation of standard guidelines and procedures, and building of systems and sub-systems.
- This approach adds objectivity to the system and optimizes the utilization of resources.
- The activities are defined in a systematic manner to fetch desired outcomes.
- Analysis becomes easy and paves way for further improvement through evaluation and feedback.

Principle 5 – System approach

System approach is considered important by the organisations in management of inter-dependent processes influence by internal and external factors. It purports to analyse the problem in hand and arrive at logical solution by understanding the situation and examining the forces working on the problem. The

system not only consists of inter-connected components but also has a relationship with other similar systems. The system approach in an organisation helps in identifying the inter-relationship within and outside the system, understanding the relationships of the processes and managing them in an effective manner. These relationships are easily identifiable between the systems. The system approach is inbuilt in all the activities in an open and distance learning institution. The ODL activities can broadly be divided into four major support sub-systems i.e. counselling and admissions, instructional delivery, academic and administrative student support and performance evaluation and certification. Each of these sub-systems has further divisions into procedures and processes. As explained under Principle 4, the above mentioned sub-systems are being taken care of by SRD, MPDD, RSD and SED. The IGNOU follows a guided didactic approach to learning. The sub-systems help the students at different stages through their academic career with the university. The system approach brings objectivity to the processes independent of people deployed and working for them. The output of one system feeds the other system as input and thus, ODL system becomes a dynamic entity in its own stead. The University derives the following benefits following the system approach to management of its academic affairs:

- ❒ brings openness, procedural stability and objectivity to performance of activity;
- ❒ helps in understanding the dependent and independent factors influencing different processes;
- ❒ enables identification and analysis of inter-relationships among different systems and subsystems within and outside the system;
- ❒ it becomes easy to integrate and align different activities to the system, once structure of the system is known;
- ❒ provides stability and consistency to the procedural dynamics of different processes;
- ❒ locating the problem and its redressal becomes easy;
- ❒ helps in defining roles and responsibilities of different components in a tangible manner; and
- ❒ continual improvement of different processes through measurement, evaluation and feedback mechanism, gets embed as a regular feature of the system.

Principle 6 – Continual improvement

An organization is an independent nominal entity with perpetual succession. Its functioning should in principle not depend on any individual. In order for its survival and growth, it should have an in-built mechanism of continual improvement of different processes, systems and sub-systems. This phenomenon in the form of monitoring and quality assurance mechanism adds to the life of the organisation. Induction of new blood in the organisation in the form of fresh recruits infuses new impetus to the functioning of the organisation. The human resource development activities convert these new recruits into assets for the organisation. Later on, they share important responsibilities and become decision makers. The feedback mechanism and 360 degree assessment of the performances of employees, products and services play an important role in establishing a credible continual improvement mechanism in the organisation.

IGNOU, being a premier institution in the area of open and distance learning, had put in place very effective and efficient monitoring and feedback mechanisms which contributed significantly actively in improvement of its administrative and academic systems. The learner, societal, peer, employer and industry feedback to its ODL programmes guides the faculty in revising the content suiting to the market demand and choosing best suited instructional methodology. This feedback is taken at different stages beginning with needs assessment of the prospective students and the potential employers before conceptualizing any academic programme. The improvement process as a part of quality maintenance activity goes well along the shelf-life of academic programmes. The in-built continual improvement system brings the following benefits:

- ❒ product and process quality enhancement as an on-going phenomenon;
- ❒ preparedness for facing the impending challenges and transforming these into opportunities;

- ❒ easy alignment of different systems due to prompt calibration of activities;
- ❒ positive impact on the motivation and morale of the workforce;
- ❒ continuous professional development enables everyone to shoulder higher responsibilities; and
- ❒ documentation of good practices encourages the staff to improvise on their own performance.

Principle 7 – Factual approach to decision making

Factual approach to decision making is genesis of quality assurance mechanism in an organisation. It enables the management to take effective and appropriate decisions in the interest of all having stakes in organisation. To arrive at a decision, all the available data and information on dependent and independent, and controllable and non-controllable variables ought to be deeply analysed and pros and cons of the alternative solutions available studied in-depth. For the decisions to be effective and derive desired results on their implementation, these should be based on facts and figures. While the organisations need to take factual decisions keeping in view their competitive world in which they operate, the educational institutions act at times on assumptions.

In IGNOU, all the programmes are designed, developed and implemented following a rigorous procedure of needs assessment of the prospective clientele, industry and other employers. However, experience shows that several programmes have failed to attract adequate enrollment in spite of adequate promotion. The Schools of Studies are advised to revisit the eligibility conditions for the programme, content delivered and methodology for imparting instruction and evaluation of student performance. If registration does not improve, such programmes are withdrawn.

IGNOU is mandated to democratise higher education and extend its outreach to every niche and corner of the country. In about 30 years of its existence, IGNOU has developed dynamic procedures for programme development and delivery. (However, these were seriously dented when the University accorded higher priority to collaborations with private providers through community colleges and convergence schemes. The University began to offer even face-to-face post graduate programmes on its campus. Fortunately, these were withdrawn within three years due to opposition by faculty and change of guard.) Observance of Statutory provisions has benefitted the University to:

- ❒ take timely, well informed and effective decisions;
- ❒ encourage an open environment in the institution;
- ❒ documentation of good practices became inbuilt in the system;
- ❒ enhanced institutional experience in handling different situations; and
- ❒ development of a dynamic data analysis system in the institution.

Principle 8 – Mutually beneficial supplier relationships

The public funded educational institutions in India owe a social responsibility of educating people hailing from different strata of society by offering quality academic programmes with affordable cost without any discrimination. (The objectives of operation of these institutions do not match with those of commercial organizations which work for maximization of profit. While the private commercial organisations can mould their decisions quickly keeping in view the risk and profit factors at a given point of time, the public institutions have to strictly follow the rules, procedures and regulations laid down for the purpose by the government.) The ODL institutions share the state responsibility of providing alternative educational opportunities to the masses. The programmes in ODL system are launched with the following objectives in view:

IGNOU practices ethos of sharing, collaboration and partnership in the offerings of its programmes with conventional universities as well as industry. The academia-industry collaboration provides manifold benefits. While the learners undergo skill-oriented programmes and get due certification of their qualifications and skills, industry gets employable workforce with customised skills and knowledge. Both,

the students and the industry save on cost, time and effort. In this way, IGNOU has succeeded in exerting noticeable impact on the standard of living of different sections of the society. In sectors such as construction and automobile repairing, the University launched skill-based programmes where prior learning and experience of the learners was well recognised and became the basis of their getting better employment opportunities.

The learners are extended help in getting employment suitable to their qualifications through Campus Placement Cell. The participatory approach followed by the University and active involvement of the stakeholders begets the following benefits:

- promoting the interest of students by offering tailor-made, customised and need-based skill-oriented programmes, some of which were launched in collaboration with the industry;
- enhancing the acceptability of IGNOU students in the job market;
- offer of sponsored training and vocational programmes saved developmental costs;
- contributing to creation of human capital for knowledge era; and
- constant feedback from the field on the quality of the academic programmes helps in planning for suitable modifications and revision, if necessary.

Conclusion

The Standard ISO 9004:2009 (https://www.iso.org/obp/ui/#iso:std:iso:9004:ed-3:v1:en) focuses on how to make a quality management system more efficient and effective. There are many different ways of applying these quality management principles to different processes of ODL institutions. The nature of the institution and the specific challenges it faces determine how to implement the ISO standards. It is expected to be beneficial for the ODL institutions to set up quality management systems based on these principles. In this paper, the authors have discussed a general perspective on the quality management principles underlying the ISO 9000 series and framed the ODL activities into these standards and how these can collectively form a basis for performance improvement and organizational excellence in open and distance learning institutions.

The arguments presented in this article establish that the IGNOU developed an in-built system which more or less fits into the frame of ISO standards for maintenance of quality of its academic programmes and services. Being a public funded institution, IGNOU has to follow all the set rules and regulations of the government. Therefore, the decision making process at times takes more time than desired because of adherence to statutory provisions. For instance, a proposal for development of a programme supported by the student needs assessment report is processed through the School Board, Academic Programmes Committee/Planning Board before being placed for the consideration and approval of the Academic Council (a statutory authority responsible for all academic matters of the university). This obviously is a time consuming process. Similarly, taking a policy decision or revising an existing one by processing through Establishment Committee and Board of Management (apex executive authority of the university) takes time.

To sum up application of ISO quality maintenance standards to the processes and systems of ODL institutions will help them not only in optimizing the utilization of their scarce resources but also in enhancing the level of satisfaction of the learners, their employers and the society large.

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