



Library And  
**Information**  
Science Theory And Practice in  
**The Digital Age**  
An African Perspective

*Edited by*  
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## Chapter 4

### Management of Change in Complex Organisations: Policies and Environment

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#### Introduction

Change is usually said to be the only constant thing that exists in one's life. This notion is also applicable to business organizations as well. External and internal factors almost always lead to changes in the way things happen. It is expected of the managers to smoothly and rightly implement these changes. This process is generally referred to as change management.

Since the success of an organization largely depends on how well it adapts to change, therefore, management of these situations is highly important. This is where change management comes into play. Every good manager must be able to anticipate predictable changes. Apart from that, he/she should also be able to smoothly incorporate these changes into the organization. This is basically the entire aim of change management.

Changes in its external and internal environment constantly affect every business's activities. These changes can happen either at individual levels or at the organizational level. Furthermore, it affects employees as well as managers. It is also basic in human nature to resist changes, especially drastic ones. Because change is constant, therefore preventing changes is not always possible as they are inevitable sometimes. However, it is possible to plan for changes and overcome them. The management must always strive to ensure changes happen smoothly. The organization and its members must not find changes too drastic.

### **Meaning of Change**

Change is basically a variation in the common way of doing things. Whenever people perform a task in a particular way, they get used to them. They however develop methods which they can implement routinely to achieve these tasks. Any variation in these methods is nothing but change.

Changes may be either natural or reactive. Natural changes generally occur routinely in the ordinary course of business. For example, the effects of the growth of an organization lead to changes in management styles.

On the contrary, reactive changes happen as a reaction to the organization's policies or its environment. For example, whenever a firm adopts new technologies in production, its workers will have to adapt to them. This is not different in the case of library and information centres.

### **Management of Change**

Change is always inevitable; one can never completely prevent it. Managers can either wait for changes to occur or they can anticipate them and act in advance. A good manager will always do the latter.

The process of managing change generally requires an in-depth knowledge regarding the factors that affect these changes. This is because external and internal factors are solely responsible for effecting changes.

### **Causes of Change**

Changes affecting an organization are basically the result of its environment. Both, external as well as internal factors play a huge role here. Hence, managers need to understand all types of changes possible under these two factors:

### **External Factors**

As the name implies, these factors always affect an organization from the outside, Papadakis in (Aronsson *et al.* 2021). Neither the organization itself nor its members are responsible for them.

However, they always feel the effect of these factors. Some of these factors include:

- Economic factors: Access to resources, market demand, competition, inflation, interest rates, etc.
- Technology: The growth of technology always forces an organization to adapt. For example, the discovery of new production methods or its application in the storage and retrieval and dissemination of information resources as in the case of libraries.
- Policies: Government policies change routinely. Even the government itself changes every term. These factors play a large role in the external environment.
- Other factors: Factors like urbanization, education, cultural changes, change in social mindset, etc. also affect every business organization.

#### **Internal Factors**

Sometimes changes can also occur internally. An organization and its own members are responsible for these changes (Domingues *et al.* 2015). For example, the top management of a company might decide to diversify its business. This decision will lead to several changes in which the company functions.

- Changes in personnel due to hiring, termination of employment, retirement, promotion, etc.
- Change of functional policy decisions like holidays, work hours, paid leaves, etc.
- Changes affecting physical facilities like usage of alternative raw materials or adaptation to new machinery.

#### **Resistance to Change**

Based on the 5<sup>th</sup> law of librarianship by S. R. Ranganathan, “the library is a growing organism.” Growth in this context means “change” and academic libraries are faced not only with an unprecedented rate of change, but also very real challenges to their existence in contemporary society. Libraries have been static organizations until recent changes in technology occurred. In almost the entire history of libraries, they have been unchallenged as the providers of convenient, comprehensive

information which meets a whole range of needs for the public. Librarians have been the sole gatekeepers of this information. Now, librarians must not only facilitate access, organization, storage, and retrieval of information, but they must also become change agents and assume a proactive role in the diffusion of technological innovations. However, libraries are usually not positioned to respond to rapid changes. Visionary leadership, an elastic organization, and receptivity among the staff to a very different vision are required to respond to large-scale changes. Resistance to change is inevitable in organizations that are missing any of these elements.

### **Reasons why people resist Change**

In practice, there are 8 common reasons why people resist change as pointed out by Tanner (2023) which include:

#### ***Loss of status or job security in the organization***

It is not our nature to make changes that we view as harmful to our current situation. In an organizational setting, this means employees, peers, and managers will resist administrative and technological changes that result in their role being eliminated or reduced. From their perspective, your change is harmful to their place in the organization!

Forcing a change on others has its place. Over time, however, when this is the only approach that you use to make change, you'll find that your change results suffer. If you overuse this approach, you will harm your effectiveness over the long term as others will find direct and indirect ways to resist you. Without a thoughtful change strategy to address resistance to change, you will trigger strong resistance and organizational turnover.

#### ***Poorly aligned (non-reinforcing) reward systems***

There is a common business saying that managers get what they reward. Organizational stakeholders will resist change when they do not see any rewards.

Managers should not take for granted, the reward to employees for implementing change.

Without a reward, there is no motivation for your team to support your change over the long term. This often means that organizational reward systems must be altered in some way to support the change that you want to implement. The change does not have to always be major or costly. Intrinsic rewards are very powerful motivators in the workplace that are non-monetary.

***Surprise and fear of the unknown***

The less your team members know about the change and its impact on them, the more fearful they will become. Another good example is that people who refuse to change from analogue to digital may fear that they may lose their jobs.

***Peer pressure***

Whether we are introverted or extroverted, we are still social creatures. Organizational stakeholders will resist change to protect the interests of a group.

According to the psychologist, Abraham Maslow, the need to belong to a group is a powerful need in the workplace. If your change effort threatens these workplace social bonds, some of your team members may resist your change effort.

***Climate of mistrust***

Meaningful organizational change does not occur in a climate of mistrust. Trust, involves faith in the intentions and behavior of others. If you are trying to implement your change effort in an environment where most of the people working with you mistrust each other, you'll have limited success. You'll need to spend some time rebuilding trust if you want better results from your change effort.

Trust is a fragile asset that is easily harmed. It is almost impossible to get employees to support the changes that leadership wants to make when all the employees are always against each other.

***Organizational politics***

Some resist change as a political strategy to “prove” that the decision is wrong. They may also resist to show that the person leading the change is not up to the task. Others may resist because they will lose some power in the organization. In these instances, these individuals are committed to seeing the change effort fail.

Political obstacles are frustrating when you are trying to implement needed change.

***Fear of failure***

Your team members may be resisting these changes because they are worried that they cannot adapt to new work requirements.

Fear is a powerful motivator that can harden people’s intent to resist your efforts to implement change. If you want your change effort to be successful, you’ll need to help your team members move beyond these fears.

***Faulty Implementation Approach***

Sometimes it is not what a leader does, but it is how s/he does it that creates resistance to change! Undue resistance can occur because changes are introduced in an insensitive manner or at an awkward time.

In other words, people may agree with the change that you want to implement but they may not agree with how you are going about making the change.

For any significant organizational change effort to be effective, you’ll need a thoughtful strategy and a thoughtful implementation approach to address these barriers.

So, the next time you hear someone say that people naturally resist change explain to them that this is a myth. We change all of the time.

### **Techniques/strategies for overcoming resistance to change**

The most effective technique is by encouraging participation in decision making. In the planning stage, involve your workers in decision, let them be part of the decision because they can contribute positively to the change of your organization.

- (1) Education, training and communication bring about reduction in resistance to change.
- (2) Changes should be a positive one that will be of advantage or benefit to workers

### **How to initiate Change**

Change can be planned or unplanned, it can also come as a result of the following:

- (1) Situation evaluation – Change can even come as a result of hatred between workers in an organisation
- (2) A new goal/objective can bring about change e.g. a new idea or plan which they want to achieve can bring about a change.
- (3) Planning must come before one can achieve a change, e.g. a teacher needs to plan his or her timetable, even the government needs planning especially in budgeting.
- (4) Effective utilisation of available information resources.
- (5) Evaluation of feedback i.e. what can you achieve? What have you achieved? Is there any improvement? Is the feedback positive? If otherwise, then you need to re-evaluate or re-adjust your position.

### **Strategies for implementing change in an Organisation**

To carry out a major change within your organization, you can take a few different approaches to help things go more smoothly:

#### ***Plan out the change***

The best strategy for implementing change in your organization is to create a plan. You should detail everything about the change before you get started on the process. Some of the questions you will want to answer during your planning include:

Who does the change impact?

- What size does the change need to be?
- What is the timeline of the change?
- What steps are involved in the change?
- What will the change cost?
- Who is responsible for implementing the change?

Answering these types of questions before you start offers several benefits. For example, it allows you to identify potential issues before they arise so that you can better prepare for them. It can also help your organization implement the change more easily and quickly.

#### ***Strive for regular changes***

It is often easier to implement change within an organization when employees experience changes regularly. Changes that do not come regularly are more damaging and, therefore, more challenging to adapt to. As a leader in your organization, you should always be on the lookout for ways to improve your business through change so that your team members do not become too accustomed to their old ways.

Your goal is to have employees who are comfortable with change, and you can reach this goal by implementing change more frequently. However, all changes should be done for a reason. So, even if they are minor, only make changes that can help improve your business processes.

#### ***Create stability***

While change is good, it needs a solid foundation to rest on. There should be certain foundational things about your business that remain consistent. For example, you can keep your organization's values and mission statements the same while changing how employees operate. Before making a change, you should write down your organization's core principles. Keep these in mind as you implement any change, as they will help determine how you carry out the process.

After making a change, your staff should feel like they are working for the same company, just in a different way.

***Let others have a say***

People have an easier time adapting to change when they play a role in creating that change. Whenever your organization needs to make a change, it's a good idea to include more people in the decision-making process. Ask for advice on what changes to make or the best ways to implement those changes. This will not only help others feel more involved with the change, but it may open you up to ideas you had not previously considered.

***Give reasons for the change***

When making a change within your organization, it's important to notify your staff with reasons for that change. This will help them understand the reasoning behind it and make your decision seem less arbitrary. You can start by providing the logical reasons for the changes, such as increasing revenue, decreasing costs or improving productivity.

Besides the logical reasons, also provide some emotional reasons. Talk about the benefits employees can expect to see from these changes, such as exciting new projects, a more creative atmosphere or closer team relationships. The logical reasons help employees understand why a change is needed, while the emotional reasons can help them embrace this change as something positive to look forward to.

***Offer incentives***

A good way to get more employees excited about an organizational change is by offering incentives. Incentives encourage employees to try out the change sooner and start adapting to it. For example, you could offer a party at the end of the week if each employee uses your new project management tracking system each day. Other incentives could include paid time off, gift cards, awards or small prizes.

### ***Package the change***

How you present the change to employees in your organization will impact how quickly they embrace it. Aim to present the change in a fun or interesting way to help people remember it. For example, you could order lunch for the group and provide a personal demonstration of new software rather than sending out a mass email with instructions. If you discuss the change in person, you can also explain the benefits and answer any questions people may have about it. Some people can be resistant to change, so it is crucial to present changes effectively.

### ***Lead by example***

To get others to embrace a change, you need to embrace it yourself. Talk about the change with a positive attitude, and demonstrate the change yourself whenever you can. For example, if you are training new employees in your department, you should take the initiative to get to know them and make them feel comfortable with the current processes and procedures.

Participating in the change can help encourage others to join in. Additionally, employees are less likely to feel like you are forcing a change upon them and may instead believe that you are making a positive change that impacts everyone, including yourself.

### **Theories of change**

A theory of change is a detailed description of the mechanisms through which a change is expected to occur in a particular situation. A theory of change identifies the goals, preconditions, requirements, assumptions, interventions, and indicators of a program, providing important insight into and guidance on intervention and **impact evaluation** design.

### **Change Agent**

A change agent is one who is a specialist or an expert in administration who also acts as a catalyst to effect change. Horsfall, (2023) also posited that a change agent is a facilitator of change in the perception of the situation, whose main task is

to help the representatives of the target group to identify and solve their problems by attracting the necessary resources for solutions. That is why Lankes in Mullen and Otto (2014) said, "librarians must adopt a mission of transformative social action to improve society, not simply document it" and also that "librarians need to offer something besides the materials and tools. A change agent is a motivator, who encourages other employees to make necessary adjustments about their thoughts, attitudes and actions in the organization.

#### **Categories of change agents**

Abbas, (2022) basically outlined five types of change agents to include:

- (a) *Internal change agents*: An internal change agent is generally a team member who understands organizational culture, history and politics. Within their organizations, managers and senior executives are frequently expected to be in this category, even though change agents are limited to high-ranking employees, a lower-level employee with the ideal combination of skills, personality traits, and authority to guide others through the change.
- (b) *External change agents*: As the name implies, these are agents outside the organization or third-party change expert with relevant experience to drive change efforts. They are not under the laws and policies of the organizations, they rather focus on providing appropriate change management models and techniques that can help in avoiding change failures.
- (c) *People-focused change agents*: Here are people who focus on other people's emotions and attitudes towards organization. They focus on boosting the morale of the employees and motivate or encourage them to accept organizational changes.
- (d) *Organizational structure change agents*: Their target is to increase the overall efficiency of the organization's structure by introducing new technologies and new policies.

- (e) *Internal process change agents*: These category of change agents use cultural change method which has to do with sensitivity training, team building and employee surveys to initiate change.

**Functions of a change agent**

- *Collects data (information)*: knowledge creation is usually the first role of a change agent which encourages other team members to take action. Here, a change agent, collects relevant data as well as gathering useful business insights and translate them into action for the team members who are involved with change process.
- *Sets agenda or programme to be followed*: A change agent is to mobilize and encourage individuals to participate in the change process. He takes the lead while others follow. He is vocal and champion the rationale for change.
- *Serves as a counsellor*: Due to the complexity of change process. Employees always have different opinions and believes about change, this is why we have differences among employees in any organization undergoing change, it is the role of the change agent to mediate or counsel the team members so as to facilitate a cohesive team.
- *Carryout an assessment of feedback*: A change agent is also a trainer who assists team members in acting on the new skills and knowledge. He transfers those new skills that will prepare the employees to face the new change (new digital or technological transformation).

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## Chapter 10

### Information Services to Disadvantaged Groups in an Information Society

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#### Introduction

The Information Society holds immense potential for societal progress, contingent upon the commitment to inclusivity and ethical standards. By leveraging technology, embracing inclusivity, and upholding ethical considerations, information professionals can play a pivotal role in creating an equitable and accessible information landscape for all members of society, ensuring that no one is left behind in the digital era.

This chapter explores the dynamics of information services, the Information Society, and the unique challenges faced by disadvantaged groups. It also delves into the distinctive features of disadvantaged groups, ranging from the visually impaired and hearing impaired to the mentally retarded, economically and socially disadvantaged, educationally disadvantaged, hospital patients, prisoners, children, and the aged. Highlighting the significance of information services, the chapter explores various types, such as circulation, reference, mobile libraries, outreach programs, and assistive technologies tailored to meet the diverse needs of disadvantaged populations. It underscores the importance of understanding the information needs of these groups, encompassing health, finance, education, and government. Despite the numerous benefits of information services, challenges persist, including inadequate funding, staff shortages, material scarcity, and ICT limitations. The chapter also addresses ethical considerations, emphasizing universal access, copyright, intellectual property rights, intellectual freedom, privacy, and the prevention of censorship.

### **Information Society**

Information can solely be seen as a communicated knowledge, imparting knowledge, a processed data, exchange of knowledge either oral or written, data processed and given within a context and operate in a setting that gives relevance and meaning to the seeker which enables its user to have maximum comprehension and decreases uncertainty and clear doubt.

**Society** on the other hand can be described as a group of people that share common interest and goal in their bid to achieve socio-cultural development and other endeavours.

From the above, we can surmise that an **information society** can be seen or viewed as a group of people who share the common interest of communication or imparting knowledge in a context that gives relevance to its seeker to enable them have maximum comprehension and decreased uncertainty. It is distinguishing feature of the modern world where we can be said to be part of a global information economy.

An **Information Society** can also be defined as a society where the creation, use, dissemination integration and manipulation of information to its members for economic, cultural, social, physical, political and socio-cultural activities in their bid to meet its demands

### **Characteristics of an Information Society**

There are several characteristics of an information society but we will examine three of them:

- Penetration of Information and Communication Technologies (ICTs): This is a common characteristic of an information society. This can be ascertained by observing the following: the number of main telephone lines per 100 inhabitants, the number of mobile telephone subscriptions per 100 inhabitants, the number of personal computers per 100 inhabitants and internet users per 100 inhabitants or households with access to the internet.

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- The digital divide: Another way to discern if a society is information driven is by looking at the digital divide, which is the gap between those who have access to ICTs and those who do not. This can be done by measuring the following: A percentage of households with computers; a percentage of households with internet access; and a percentage of individuals who have used internet in the last 12 months.
- Global Knowledge Index: By looking at the Global Knowledge Index (GKI), we can measure an information society. The GKI measures the extent to which a country's economy relies on knowledge-intensive activities. The GKI tracks the knowledge performance of countries in the following seven areas: Pre-university education; technical and vocational education and training; higher education research; development and innovation; information and communications technology; and economy and the general enabling environment.

#### **Benefits of an Information Society**

There are many benefits of an information society, which include:

- Greater efficiency and productivity in businesses and organizations
- Increased opportunities for education and lifelong learning
- Improved healthcare through telemedicine and other applications
- Greater social inclusion for marginalized groups
- Enhanced cultural exchange and understanding; and
- A more sustainable planet through increased use of ICTs in environmental monitoring and management.

#### **Concept of Disadvantaged Groups**

The disadvantaged groups in this context are those people who are not physically fit to get access to library resources or who may not because of their nature/situation read the conventional information resources like every other library user. This includes

the physically challenged with one disability or the other like the lame, the dumb, the blind, the deaf, the hospital patients, the prisoners, the aged, etc. This group of people needs specialized information in order to effectively manage their lives and survive in the society.

According to UNESCO (2023), a disadvantaged group or population is one that is at the risk of education exclusion because of gender, location, poverty, disability, ethnicity, language, migration, displacement or other characteristics.

Persons with special needs, otherwise referred to as people living with disabilities (PLWDs) can be found in virtually every corner of the world. They are individuals who experience sensory, cognitive, physical, mental and other forms of impairment. The impairment could range from mild to profound such as hearing defects, visual limitations, mobility challenges and emotional disturbances amongst others. Studies have shown that persons living with disabilities constantly suffer from discrimination, marginalization and oppression and as a result are prone to poverty, low level of education.

- **Physically Disability:** A Physical Disability is a limitation on a person's physical functioning, mobility, dexterity, or stamina that significantly and negatively impact one's ability to carry out normal life activities. It could be mild or severe; could affect one's development and it could be hidden. Physically challenges in individuals vary from one person to the one and could range from the degenerative conditions, trauma (Physical and birth); chromosome disorder, musculoskeletal conditions, limb differences or complex medical needs. The common types of physical challenges include Visual impairment, hearing impairment, mobility impairment etc.
- **Mental Retardation** also known as Mental Disability, Intellectual Disability (ID), Intellectual Development

in order to survive. Examples include women and the scheduled caste of India.

- **Educationally disadvantaged:** This group of persons usually refer to students who as a result of being economically disadvantaged, having disabilities, possessing limited English proficiency, being neglected, delinquent, homeless or migrant, are unable to access the same level of education as the rest of their peers.
- **Hospital Patients:** These are people with one form of ailment or the other who are at the hospital bed or at the confinement of hospital environment. This group of people constitutes a special class of people with apparent barriers in accessing information. Some hospital patients suffer psychological problems which can better be taken care of by using interesting information materials that meet their needs to cheer them up
- **Prisoners:** Macmillan Dictionary for Advance Learners (2007) defines a prisoner as “someone who is held in prison as punishment for a crime”. It is equally referred to person who has no freedom because his life is controlled. A prisoner is therefore someone who has been found guilty to have committed a crime by a court of law of competent jurisprudent. Prisoners should therefore be classified as special readers as they are disabled because of their confinement they cannot use the library service like others (Aina, 2004)
- **Children:** The Merriam Webster dictionary (2023) has defined a child as a young person between infancy/early childhood and puberty, the age which is legally construed as 14 in boys and 12 in girls.
- **The Aged:** The aged according to WHO (2015) are people who are 65 years old. These are older groups, aged senior citizens, and elderly statesmen, frail and weak biologically at the time of retirement.

### **Characteristics of Disadvantaged Groups**

The visually impaired possesses some characteristics with which they can be identified. Rayini (2017); Kinnell, Yu and Creaser (2000) identified the characteristics of the visually impaired as being frustrated due to the inability to actualize their aspirations, helpless, mindless, maltreated, and deserving of sympathy. The visually impaired, like other handicapped people, suffer social discrimination, Cultural bias that negatively impact on their information seeking behaviour and being embittered.

Igwela and Opara (2020) identified the characteristics of the hearing impaired (depending on how much hearing loss the individual is facing) to be easily offended, occasionally violent, always looking at facial expressions, speech delay, sensitivity to sound, poor performance at school, poor coordination, and even a family history of hearing impairment.

The characteristics of the mentally retarded as pointed out by Patil and Kumbar (2020) include a delay in the development of adaptive behaviors such as self – help or self – care skills; Lack of social inhibitors; Difficulty learning social rules; Deficits in memory skills; Delays in oral language development; being destructive; having emotional problems and always seek for friendship.

### **Information Services**

Information Services can be defined as the act or process of making information available to meet the diverse needs of different user groups. These services can be accessed through various outlets such as all forms of information media, social network services (Facebook, WhatsApp, Twitter, Instagram), a library or even the human brain.

### **Types of Information Services**

- Circulation Services
- Reference Services

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- Mobile Library Services
- Information and Referral Services
- Information Services for Children
- Services for Special Groups
- Current Awareness Services
- Outreach/Extension Services
- Selective Dissemination of Information (SDI)
- Literature Search Services
- Document Delivery Services
- Reprographic Services

**Information Needs of Disadvantaged Groups**

Individuals with special needs have a variety of needs as a result of their peculiar limitations. They not only need access to adequate collection of materials but they require information literacy skills. This will enable them utilize a wide variety of sources including the internet. People living with special needs generally have the same information needs as the rest of the populace which includes information on health, finance, recreation, government, housing, education, government, travel, employment information among others.

The visually impaired need information on where certain materials such as braille, talking books, large prints and assistive technologies are available. They also need information on how to get around in normal life situations and how to interact with people living with or without special needs. They need access to computers with adaptive technologies in order to participate in the same learning process as their peers.

The hearing impaired need similar information as the visually impaired as regards how to get around in normal life situations and needing access to computers with adaptive technologies. They also need information on how to access certain materials that make information accessibility easy for them.

The Information needs of individuals with motor challenges are basically the same as any able bodied person as long as they do have any other physical or mental impairment. That would mean tailoring their information needs based on the sort of physical or mental impairment they have.

The information Needs of the Mentally Retarded depends on their mental capability. A majority of persons with mental disability often depend on a caretaker to sort out their information needs. Their information needs revolve around things that will improve their mental capability.

The information needs of children are school-related, entertainment, leisure related, and peculiar personal information needs. If the child happens to be disabled or disadvantaged in one of more forms, then the information needs of that child would be tailored accordingly.

The information needs of the aged are usually about health conditions, pension/finance, government policies, current affairs and transport. If the elderly person happens to be disabled or disadvantaged in one of more forms, then the information needs of that individual would be tailored accordingly

### **Information Resources of Disadvantaged Groups**

Information Resources for the visually impaired include

- Braille: Braille is a system of reading and writing whereby raised dots are used to represent letters which are read by touch
- Talking books They are audio versions of books that could be recorded on cassettes, CD-ROM, DVD and on the internet as e-books. Most visually impaired people now prefer Talking books as it is faster and can be replayed.
- Large print materials: These are documents that are printed using large fonts (16-20)

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- Electronic texts: These are computer text-files. Electronic text are loaded in the computer using screen magnifying software which can be printed as text in large print and read using braille bar that is attached to the computer
- Moon type books: This produced for the blind using stylised raised characters based on the Roman alphabet.
- DAISY books: The DAISY (Digital Audio Based Information System) books is an audio book that is digitally based. This is an important information resource for the visually impaired

Information Resources for the hearing impaired include

- Pictures,
- Electronic bulletin boards,
- Films strips,
- Slides,
- Realia,
- Graphics: They are illustrations that are used to pass information and ideas through the combination of drawings, words, symbols and pictures
- Finger Alphabets: Using the fingers to depict alphabets
- Mock ups: A mock up is a special kind of model which is designed to show how something works or how it is constructed. They are great for demonstration.

Information Resources for the Mentally Retarded include

- Picture Books,
- Easy to Read books,
- Motion pictures,
- Posters,
- Audio books,
- games and toys

**Assistive Technology for Disadvantaged Groups**

Assistive Technology for the Visually impaired include screen reader, Braille translation software, Braille writing equipment,

Closed circuit television, Screen magnifier, Braille embosser, Kurzweil reading machine, scanners, Portable note taker, and Voice recognition software (JAWS) Assistive Technology for the Hearing Impaired- Telecommunication Device for the Deaf (TDD), Hearing Aids, Headphones/microphones and audio books.

Assistive Technology for the physically challenged- handrails, elevators, ramps/ moving ramps, extra-large doorways, automatic doors, low shelves, power wheelchairs Assistive Technology for the Mentally Retarded- Handheld magnifiers, talking calculator, Touch screen for the computer, pencil grips, Digital hearing aids, Electronic organizers,

### **Importance of Information Services to Disadvantaged Groups**

Through the effective provision of information services, people with disabilities can participate in social activities and do other things, which the typical persons regularly do. Information services help in meeting the distinct information needs of disadvantaged groups be it on education, political, business, occupational, health, housing, legal assistance, financial assistance etc. by serving them with the exact information they need to improve their quality of life. Providing information services serves as a source of occupational based and general information to disadvantaged groups. It improves their intellectual and social wellbeing and can contribute to the economic and sustainable development of the nation.

### **Challenges of providing Information services to Disadvantaged Persons**

In discharging their duties to people with special needs, information professionals are faced with certain challenges that if not addressed, will affect the services they render to this special group of users. These challenges include, but are not limited to:

- Inadequate funding of libraries

### Information Services to Disadvantaged Groups in an Information Society

- Lack of professional/insufficient staff
- Inadequate information materials
- Inappropriate/inadequate buildings:
- ICT Challenges
- Lack of appropriate training opportunities
- Lack of needs analysis

#### **Ethical issues in information services for disadvantaged groups**

Ethical standards and values serve as guides which all information professionals should be aware of. It is important to recognize that people with special needs have lesser access to information when compared to the others. Afolayan (2017) defines ethics as a branch of philosophy that involves systematizing, defending and recommending ways of right and wrong conduct. It is concerned with how individuals behave in the society being guided by moral principles. The branch of ethics that applies to professionals is called professional ethics. It is expected that information professionals abide by certain codes in order not to be involved in wrongdoings that could be detrimental to their careers and the profession they include:

- Universal Access to Information
- Copyright/Fair Use
- Intellectual Property Rights
- Intellectual Freedom
- Privacy/Confidentiality
- Censorship

#### **Conclusion**

In conclusion, the advent of the Information Society marks a pivotal shift in the way societies operate, emphasizing the centrality of information and communication technologies. It is a collective of individuals sharing a common interest in communicating and imparting knowledge within a contextual framework, characterizing the modern global information

economy. Recognizing and addressing the needs of disadvantaged groups within this information-centric paradigm is crucial for achieving inclusivity and ensuring that no segment of society is left behind.

The characteristics of an Information Society, such as the penetration of Information and Communication Technologies (ICTs), the digital divide, and the Global Knowledge Index, serve as indicators of a society's commitment to harnessing the power of information for economic, cultural, and social development. The benefits of an Information Society are far-reaching, encompassing increased efficiency, expanded educational opportunities, improved healthcare, enhanced social inclusion, cultural exchange, and environmental sustainability.

Within the framework of the Information Society, disadvantaged groups, including those with physical, mental, economic, social, and educational challenges, require special attention. The concept of disadvantaged groups extends to individuals facing barriers to accessing conventional information resources, such as the visually impaired, hearing impaired, mentally retarded, economically and socially disadvantaged, educationally disadvantaged, hospital patients, prisoners, children, and the aged.

Understanding the characteristics of disadvantaged groups is crucial in tailoring information services to meet their unique needs. Information services, ranging from circulation and reference services to mobile libraries and outreach programs, play a vital role in bridging the information gap for these marginalized populations. The development of information resources, assistive technologies, and ethical standards further contributes to ensuring equal access and participation.

The information needs of disadvantaged groups are diverse, spanning health, finance, education, government, and more.

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Tailoring information services to meet these needs requires a comprehensive understanding of the challenges faced by each group. Leveraging various information resources, including Braille, talking books, large print materials, electronic texts, pictures, and assistive technologies, is essential in creating an inclusive information environment

In conclusion; the Information Society holds immense potential for societal progress, but its realization requires a concerted effort to address the needs of the most vulnerable. By embracing inclusivity, leveraging technology, and upholding ethical standards, information professionals can play a pivotal role in creating a truly equitable and accessible information landscape for all members of society.

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