
ETHICAL ISSUES OF GREEN INFORMATION TECHNOLOGY IN THE MODERN DIGITAL LIBRARY

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ABSTRACT

Nowadays legal issues such as related to software technology, data base protection the collection, digitisation, archiving and distribution of protected works are of most important for the viability of Digital Library. New Technology including mobile phone and use of ethics based social media available of news sources for news and Information. In this paper the ethical issues of green information technology in modern digital library discussions are reported. The content also discuss ethics and techniques to avoid question paper leakage. Libraries and press need to be ethics based innovative. This paper will present case studies that illustrate the challenges and opportunities to discuss about the Green Information Technology by using in Library digitisation and discuss the report on impact about the Ethical issues in Green Information Technology to develop Modern Library.

KEYWORDS: Role of Modern Digital Library, Ethics about the safety and security, capture, preservation, Green Information Technology, Copyright, digitisation.

INTRODUCTION

In the 21st century, as the system of thinking is moved more towards a world of digital collections, many challenged for cultural repositories. The recognising the importance of having code of Ethics, Library associations have a long history of developing and promoting ethics for the profession. Libraries, the repositories of human knowledge, are our past- present - future. Digital Library is the need to access fast and accurate knowledge. Library have adopted internal regulations abide by national laws and international practices and to satisfy People's search for data and creative works like word we use today like "have you googled".

The most profound ethical issues or dilemmas facing Librarian's selection of materials and intellectual freedom, copyright patron privacy, computer effective usage on net and plagiarism and mainly on numerous ethical issues, due to technological innovation. Copy right is a legal concept part of a broader notion of intellectual property with critical use of Digital Library. In the new environment, Green-Information-Technology systems, the protection of legal rights can hardly be achieved through the application of codes of conduct. Intellectual property issues for Digital Library in the internet work that deviates from traditional book keeping library of the past. The Digital-Library is not merely a host of e-books and collection with an integrator of information management systems also. Its infrastructure computer network, software can organise & manage and make available open-access to give information to Library Users. The author focuses upon some ethical issues and considers an alternative proposal in respect of Green- Information-Technology [GIT] for saving Green polices and adopting in the digitisation process to bring out Green Concepts in Library Services.

LITERATURE REVIEW

Nowadays, many renowned companies are try to reduce the amount of energy waste. For that going Green is not only a fashion statement. It has become a way of life in almost every sector. Companies want to follow a moral responsibility to their society to save energy and natural resources, with focus on ideas how to make device with energy efficient factor, and want to encourage green technology in the field of Digitisation also. While applying Green Information Technology in the Digital Library, some ethical issues are applicable.

There is an lack of comprehensive, systematically gathered data concerning psychologists' beliefs about and compliance with ethical principles, it is the fact that resources are valued as effective in guiding appropriate follow-up of ethics as per (Kenneth S. Pope, 2016) as per the author.

“Considering the materials and energy used to manufacture (Chirs Branddrick-2009),like the Eco-system that promised its consumers that they would save energy and money”. It is not moral or ethical for such manufacturers to lie on the efficiency of their product however it is not illegal to say that the product is misinterpreted by the consumer.

Related to this statement, Mobile app will be applicable in rural areas also. According to NICHOLAS NEGROPONTE a GURU of the digital Concept, has called for the United State Congress to a digital deposit act change the Library of Congress from a depository to re-trievatory. His vision is one where a **“Library of progress could be in the pockets of tomorrow’s Kids”**.

E-Books can be defined (Chris Armstrong, Louise Edwards, Ray Lonsdale, 2002) Virtually There? E-books in UK academic libraries resource excluding journal publication that is an electronic format and can be accessed in a networked environment with the help of Information Technology tools”. (Jennifer Poggiali-Online data), adopting Ethical Consumption into E-Device Acquisition: a Proposed on librarians practice ethical consumption & purchasing e- devices. Though librarians have long been engaged with environmentalism and social justice, few have suggested that such issues as e-waste and also get knowledge about e-readers, tablets, and other electronics.

(PTI | Apr 2018, Read more at: CBSE papers leak) School teacher leaked papers using e-tools using Whats App, which is a real time unethical behaviour.

Microsoft builds digital solution for CBSE to prevent paper leaks After drawing flak early this year for the leak of question papers, the Central Board of Secondary Education (C-B-S-E) revealed that the digitally encrypt the Question Papers[QPs] for the Class 10 and Class 10+2 exams.

It has tied up with Microsoft-India to help it encrypt the question papers, making it difficult for people to leak them. The technology solution would give the Controller of Examination [CoE]secret access to the process of operation(Business line, HYDERABAD, AUG 2013).

OBJECTIVES:

1. To assess the ethical issues of Green Information Technology in Modern-Digital-Library
2. To study whether Green-Information-Technology has influenced on Modern-Digital -Library to bring environmental sustainability.
3. To study the problems are faced by Digital Library in the effective use of Green Information Technology.
4. To recommend methods for solving ethical issues of Green Information Technology/improve the Knowledge/skills of Library Professionals in the field of Modern Digital Library.
5. Avoid the Question paper leak in the society using Green Information Technology

RESEARCH METHODOLOGY

Related to research question, how can a device like information technology provider smart-phone source become an integral-part of green Library and what are all the ethical issues of using GIT in Digital-Library.

In developed countries, environmentally sustainable issues surrounding technologies are the frequent conflict with the local day today needs and priorities. Recently many libraries acquire new technologies such as i- pads, kindles, chrome books or wearable technology such as Apple-watch and Google glass; these are considered for helping green practices in the Society.

The Ethical issues in the empirical research in to Green Libraries bear out this emphasis on e-waste recycling. The Literature reviews also reveal that electronic formats (Digital technology adopting Green

information Technology) are promoted as an environmentally-sustainable alternative to print. Several vocal critics have called in question the statement that electronic formats are greener than print and should therefore be privileged for the development.

Main aspect to discuss in the article is making more responsible purchase is only one aspect of ethical energy consumption and impact of ethics. The critical challenge is that academic Libraries to face today is the balance between the need of core sustainability in today’s digital-environment with the tradition of continued growth and the sustainable energy consumption that growth requires.

Green-peace has noted that electronics are often recycled in developing countries using methods endanger the health of workers. In the year 2015 study by the associated chamber of Commerce of Industry of India revealed e-waste are reduced by the method of Green computing about 76%.

Library is responsible for recycling our electro-photography that is certified by e-Stewards., (www.e-stewards.org) to set recycle responsible device. Rigorously speaking to evaluate the ethics of given action one needs to take into account only the effects of that action. The method on ethical-energy consumption behaviours is also changed for the better services. So focus an electronic devices, the same frame work could be applied to adopt the Green Information Technology in Library Digitisation process and strengthen the policy of Green Building Space and Design also.

TABLE: 1. First part of Questions to Respondents

ETHICAL ISSUES OF GREEN INFORMATION TECHNOLOGY IN MODERN DIGITAL LIBRARY		
Name of Ethical issues	No of Defendants	No of Questions
Privacy Issues	8	20
Negative impact of environmental policy	6	15
On line theft	6	10
Copy right	8	15
Security	6	12
Forging Digital Documents	8	10
Rapid Information & spread of Rumours		
And False news.	6	12
Ethical Abuse of Camera	6	10
*Question Paper Leakage	25	n

The probe* which started with questioned 25 people, mostly students. The police are working to “n= number of question” trace the source of the CBSE leaked paper, which appears to have been circulated over WhatsApp, the encrypted messenger service.

ETHICAL ISSUES:

The motive behind G-I- T- practices include -reducing the use of hazardous materials, maximum energy consumption. Green Information Technology systematic application of ecological sustainability criteria (Such as pollution prevention, product stewardship, use of Clean Technology) to the creation of Green environment in Digital Library.

RETALED WORKS OF METHODOLOGY:

The necessary of G-I-T?

Green Information Technology [GIT] refers to the study and practice of using computers and Information Technologies survey identifies the consumption in a responsible way.

Questionnaire on Green Information Technology using in Digital Library

- Do you print papers on your papers, assignments notes etc , using
 a) Double sided paper. b) Single Side., c) I don’t print my note. (a- Answer)
- Which operating system is Greener?
 a) Windows vista, b) windows XP c) Luniux d) Apples OSX (c-Answer)
- How do you dispose of your old computers or Electronic device?

- a) Throw them in the trash b) Always sold them away (never disposal) c) Look for a recycling centre and dispose it properly. (c-answer)
- 4) The average laptop uses only half as much emergency as a desk top Personal computer. (c-answer)
- a) True b) False (c-answer).
- 5) Recycling printer cartridge is greener than refilling them (c-answer).
- a) True b) False (a-answer)
- 6) Telecommuting is a way- companies can make office Greener (a-answer)
- a) True b) False

GREEN INFORMATION TECHNOLOGY ATTITUDES IN THE FIELD OF DIGITAL LIBRARY:

Table No 1

ITEM	EUROPE	NORTH AMERICA	ASIA	OTHERS
Environment concerns in planning Green Information Technology Operations are :				
Very Important	48%	33%	NA	NA
Some what important	45%	52%		
Not Important	6%	15%		
The issues of Green IT on Digital Library	16%	16%	15%	18%
reen Technology reduce – Environment and power consumption	45%	35%	39%	38%

SMART PHONE DEVICE APPLICATION & ISSUES ON ITS DEVELOPMENT:

Smart Phone Device has lots of potential in the field of Banking, Health Care, Agriculture, Food, and Technology. Smart Phone Device play an important role in day to day life of the people in the Society. Online facilities are over welcoming by the people at the same time they are many issues arise to pop up the digitisation process, because of the severe threat from the Hackers. To evaluate this problem, Researchers find out the solution to adopt Green Information Technology in the process of digitisation, the collection of cloud computing data analysis help this process to reduce the energy and power consumption rates in the digital process. However smartphone device, applying the recyclable process and reduce the power and energy from the e-waste help to solve the ethical issues in this case. Smartphone mobile applications are the root cause of Green washing in Library Services. Librarians and staff are really understood this facts and interest to enlighten this mobile application in Library Services. Further, avoid use of smart phone to stop leak of confidential academic data.

RULES AND REGULATION ON SMART PHONE TO STOP LEAK OF CONFIDENTIAL ACADEMIC DATA

- 1) Not to Carry in the question paper printing
- 2) Not to use during invigilation of exam
- 3) Not to use during class test

SMART PHONES ALLOW THE USER TO GATHER INFORMATION FROM THE INTERNET

Smart phones as positive device to gather information from the internet that is timely accurate, materials and useful. It allows the user to calculate the most fuel- efficient driving route taking into consideration and traffic conditions. While Information Technology creates an enormous electronic waste challenge, the use of GIT can be part of the solution challenge, understanding green branding and consumers’ attitudes toward green brands. Also offers a standards platform for development of all the above facilities and able to execute arbitrary 3rd party applications.

Uses in Education through gamification, Disease response in world wise awareness, monitoring government accountability, preserving the rain forest. With the example of an Android app that is helping

means of an Amazon jungle tribe measure their lands carbon stock and sell carbon offsets. Disaster response with the example of Red Cross app that help technology emerging preparation.

Usually phone consists of approximately 40% of metal plus 60% of plastic with the phone and the rest of gadget comprising glass, ceramic etc. A significant environment consideration is the energy requirements to extract the metals use in cell phones.

The investigation of The NewYorkTimesthat smartphone rely on accessing data in the cloud. Today the infrastructure in cell phone in reality is powered by massive data centres that by design,consume vast amounts of energy. In the most bodies of phone contain Toxic waste and the gadgets reach the landfill cause the highest level can causing dioxins in the world. Though the mobile technology provides definite benefits, but still plagued with the environmental and ethical issues.

ACCESS OUR NEEDS: PACKED DEVICE LIKE THE IPHONE CONSIDER GREENPHONE.

Environmentally friendly cell phone like I Phone are the best choice and Smart phone are free from material hazardous chemicals and contain half of the gadgets or more recyclable materials, more than 29 mobile phones are included in ULE's sustainable product. Data Samsung Galaxy exhilarate (AT&T) and Sam Replenish Sprint).UL Environment recently created a sustainable stand for cell phones. We can bring digital Library system app in Smartphone and application of Green information Technology works out with accomplishments which include reducing carbon emissions (eg) Eco credentials of AT &T and Verizon with working out with the environmental system by reducing 793 pounds in recycling energy consumption by 84 million in 2009 and the process is going on increasing now.

Dispose system Corporate Companies like Hewlett-Packard, Cisco IBM, Apple, and Best - buy offer buy pack policy and are keen on recycling programme which tend to offer credits or discounts to word future phone purchases. Their main Goal is to bring out Clean Energy in the Society.

The range of Health app is as varied as the users and their needs and Apps related to health should be consistently differ according to the purposes, application and user groups. Methods and tools are needed to distinguish between the useful to the People. The App in Agriculture field, Online Money transaction through the Bank are all useful to the Society and at the same times the ethical issues are to be find out and rectify by using the Green Technology in digital Library.

PROJECT GREEN LIBRARY IN CROATIA

Public library Fran Galović in Koprivnica implements this idea and integrates "green" topics into its regular programs. Most of the programmes were oriented on small practical steps and advices on what we can do in our everyday lives to contribute and participate in sustainable development and environmental protection. During National assembly of Croatian Library Association in October 2014. Project Green library has expanded on a national librarian level by establishing the Working group for Green libraries.

PROJECT GREEN INFORMATION LIBRARY WITH ETHICS IN INDIA

The group are need to follow:

1. Making a survey among librarians in order to define willing participants in the project with ethics
2. Holding ethics based GIT library project lectures
3. Creation of group interested ethics based GIT library through media networks
4. Avoid the not smart phone usage zones in the university, press or test or exam centre. Paper evaluation centres.

CONCLUSION

The goals of this paper, to educate people about the tremendous impact of the ethical issues of Green Information Technology in the field of Digital Library. Create the awareness of Clean Green in the digital Library concepts with discussion and survey. The paper also motivates people to recognise the importance of the issues question paper smart phone use in digital way. At the same time, to develop Digitisation of the Library is the best way to solve the ethical issues in a proper method of adopting Green Information Technology to be the best solution, when the usage leads to an efficient way.

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