PROCEEDINGS

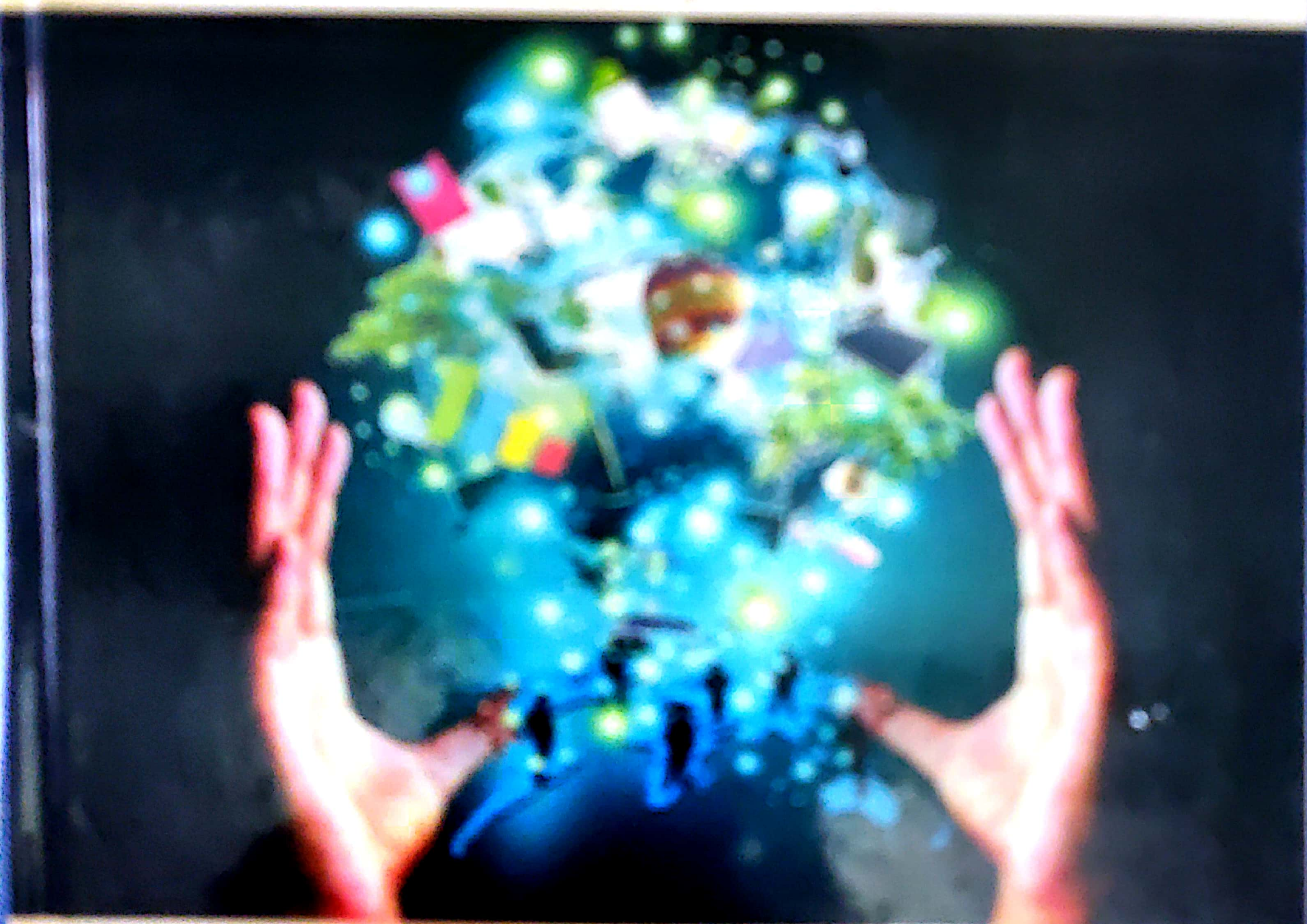
OF

UGC SPONSORED NATIONAL SEMINAR

ON

UPCOMING TRENDS IN I.T.

14 February, 2016



PROCEEDINGS
OF
UGC SPONSORED NATIONAL SEMINAR
ON
UPCOMING TRENDS IN I.T.

14 February, 2015

Organized By

Post Graduate Department Of Computer Science And I.T.

of

SHANTI DEVI ARYA MAHILA COLLEGE, DINANAGAR

Distt. Gurdaspur (Punjab)

Accredited by NAAC with 'A' Grade

"Star College"

Status conferred by M.H.R.D, Govt. of India, New Delhi

Patron-in- Chief
Swami Sadanand Ji,
President
College Managing Committee

Director
Mrs.Nirmal Pandhi,
Principal,
Shanti Devi Arya Mahila College,Dinanagar.

Chief-Editor
Mrs.Deepak Jyoti,
Head, PG Department of Computer Science & I.T

Co-editors
Mrs. Ratna Sharma
Dr. Parabjit Kaur
Mrs. Smriti Sharma
Ms. Ritika Mahajan
Ms. Supriya Mahajan
Ms. Ritanshi Gandotra

SHANTI DEVI ARYA MAHILA COLLEGE,
DINANAGAR Distt. Gurdaspur (Punjab)

Accredited by NAAC with 'A' Grade"Star College"
Status conferred by M.H.R.D, Govt. of India, New Delhi.

ISBN 978-81-84138-28-8

Published by
K.G. GRAPHICS
Booth #8, FF, GNDU Shopping Complex,
G.T. Road, Amritsar. (M) 9888324402

Printed at
M.S. Printers, Ram Tirath Road, Amritsar

Impact of Social Sites on India

Deepak Jain
HOD, Computer Sc & IT Dept.
SDAM College, Dinanagar
Distt. Gurdaspur(PB)

Abstract

Social networking has become one of the most important parts of our daily life as it enables us to communicate with a lot of people. Social networking sites are created to assist in online networking. Social-networking sites have taken the world by a storm leading to nothing less than a revolution. A lot of concerns have been voiced about social networking sites taking over in our lives. Many people seem to think that social media such as Facebook are principally a means to find and to develop relationships such as friendship. If you are active on social media sites like FACEBOOK, Twitter, Instagram, etc, it's probably a way of life for you. We usually go on these sites because our friends and family members are on them - and we think nothing more of it. Social media, although a relatively recent phenomenon, is becoming an increasingly important part of any business's marketing and client base development platform. The perception of social media marketing has shifted quickly—no longer viewed as a trendy or passing fad, having a flexible and well-managed presence in each of the "big three" (Facebook, Twitter, and Google+) has become a must for any business seeking to secure a place in both the traditional and digital marketplace. What could once be accomplished by a traditional website now needs to be supplemented by a robust and responsive utilization of the tools social media offers. However, one major issue that has been overlooked is the changing mind-set of the youth due to the social networking sites.

Keywords- Media, Social sites, IRIS, IAMAI, Security.

Social Media - Brief Introduction

Social media are computer mediated tools that allow people to create, share or exchange information, ideas, and pictures/videos in virtual communities and networks.

In 2004, a Harvard student Mark Zuckerberg created Facebook to connect with fellow students. But, at present, it is the most promising of all social media. At present there are 70 million Facebook users in India. Twitter, a micro blogging site where you can express yourself in 140 characters or less, is also a very prominent social media platform. YouTube was created in 2005 by Steve Chen and Chad Hurley that provides a provision of sharing videos. For all the professionals out there, LinkedIn is the best social media platform. Google has recently launched Google+ that is more or less like Facebook. Social media are different from traditional or industrial media in many ways, including quality, reach, frequency, usability, immediacy and permanence. There are many effects that stem from internet usage. According to Nielsen, internet users continue to spend more time with social media sites than any other type of site. In 2014, the largest social network is Facebook and other popular

ISSN 2394-5303

प्रिंटिंग एरिया

Mental Health & Todays Challenges

: Editor :
Dinesh Jaronde

Harshwardhan Publication Pvt. Ltd.

Special issue

Mental Health & Todays Challenges

Editor
Prof. Dinesh Jaronde

Reg No.U74120 MH2013 PTC 251293
Harshwardhan Publication Pvt.Ltd.
At Post Limbaganesh,Tq Dist Beed
Pin-431126 (Maharashtra) Cell 07588057695,09850203295
harshwardhanpubli@gmail com, vidyawarta@gmail.com
All Types Educational & Reference Book Publisher & Distributors www.vidyawarta.com
UGC Approved Jr.No.43053 Impact Factor 5.011 (IIJIF)

Mental Health & Todays Challenges

❖ **Publisher :**

Harshwardhan Publication Pvt.Ltd.
Limbaganesh, Dist. Beed (Maharashtra)
Pin-431126, vidyawarta@gmail.com

❖ **Printed by :**

Harshwardhan Publication Pvt.Ltd.
Limbaganesh, Dist. Beed, Pin-431126
www.vidyawarta.com

❖ **Page design & Cover :**

Shaikh Jahuroddin,Parli-V

❖ **Edition: 19 Feb. 2018 (Shiv Jayanti)**

ISSN 2394 5303

❖ **Price : 215/ -**

CONTENTS

UGC Approved Jr.No.43053 Impact Factor 5.011 (IIJIF)

21

Impact of Technology on Mental Health

Deepak Jyoti,
HOD, PGDeptt. Computer Sc. &IT
Shanti Devi Arya MahilaCollege, Dinanagar (Pb.)

Abstract

We all know technology is sweeping through society like never before. Technology is changing every facet of our lives, so rapidly that it can be difficult to adjust to it. Whether we like it or not, technology has become a part of our everyday lives. In fact, technology is a lot like money — it's a magnifier. It magnifies us as good and as bad both. Technology has opened a new frontier in mental health support and data collection. Mobile devices like cell phones, smartphones, and tablets are giving the public, doctors, and researchers new ways to access help, monitor progress, and increase understanding of mental wellbeing. Unfortunately if we're not aware of it'saffects on our mental health, it can lead us down a path of struggle and suffering. Technology can have a large impact on users' mental and physical health. Being overly connected can cause psychological issues such as distraction, narcissism, expectation of instant gratification, and even depression. Beside affecting users' mental health, use of technology can also have negative repercussions on physical health causing vision problems, hearing loss, and neck strain. Every major technological advancement in human history has brought with it societal change. A growing body of research, from a variety of disciplines indicates that the widespread use of digital technology – including computers, the internet, video games, and smart phones – has a measurable, negative impact on the

development and adaptation of the human brain, resulting in significant changes in our sleep, mood, concentration, memory and learning, as well as behaviors such as risk-taking and aggression. This effect appears to be more pronounced for the younger generation of so-called "digital natives." This paper will focus on digital technology like internetand smartphones. These are the technologies which have become the important part of our life. We cannot think of a life without these technologies.

Keyword: Internet , Smartphones, Mental Health

Introduction

Technology has greatly improved certain areas of our lives. Here are the most encouraging affects it has had on us. We rely on it for quick information, social networking, job searching, assignments, and entertainment for when we are bored. But being constantly connected to the technological world affecting mental health. It is rare to find a student that does not have a cell phone, laptop computer, email and facebook account. These tools are great for getting school work done, communicating with friends, staying connected with family while away at school, and for getting in touch with professors. It is important though to make sure that students don't become overly reliant on their technological devices and letting them take control of their lives. Maintaining face-to-face interaction is a key part of mental health. Life is naturally a very stressful for many and although technology is meant to ease the stress and simplify your work load, it may have the reverse affect. Do you ever find yourself stressing to get a reply from your latest text message? Or maybe you find yourself constantly checking your Facebook to make sure you're caught up on your social circle, or to see the number of likes you got on a photo. If the results were not what you wished or had hoped for, it could really take a toll on your mental health. Over thinking a situation, excessive worrying,



Rural Development for Inclusive Growth in Punjab

Dr. Rama Gandotra

Rural Development for Inclusive Growth in Punjab

Conference Proceedings
ICSSR Sponsored National Seminar
Organised by
Department of Sociology
Pt. Mohan Lal S.D. College for Women,
Guradspur-143521 (Punjab)
Accredited by NAAC with 'A' Grade

Edited by

Dr. Rama Gandotra
Head, Department of Sociology,
Pt. Mohan Lal S.D. College for Women,
Guradspur-143521

CRESCENT
PUBLISHING CORPORATION

23 Women Empowerment through ICT in Rural Areas

*Deepak Jyoti**

ABSTRACT

Education is the most powerful weapon which you can use to change the world. Information and communications are closely linked to power and the ability to affect change. ICT is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer etc. Socially the majorities of Indian women are still tradition bound and are in disadvantageous position. ICTs are emerging as a powerful tool for women empowerment in a developing country like India. Various Information communication Technology (ICT) platforms are used to address a particular need or enhance a specific activity in the women's lives. If access to ICTs can promote sustainable socio-economic development and women lag behind, a significant portion of the world's population must be aided by a targeted approach. Women in the global experience multiple challenges when it comes to access to and use of ICT. Most of these challenges are a result of social processes that marginalize women from technology, change and ultimately progress. The potential of ICT is twofold: it can contribute to socioeconomic development and promote gender equality.

The analysis of questionnaires and their replies from various surrounding areas women indicated that the Age group, Marital status, Educational level had significant effect on different variable of women empowerment like self-confidence, self-awareness, Independence and Feeling of freedom. The study can be used to create awareness among women for betterment of their live. This research concluded that the information and communication technology empower a women in various areas like social, educational, personal, psychological, political, technological and economical.

Introduction

India is a country of grand contradictions. While it is a global leader in the knowledge economy, it is also home to more than half the world's poor and illiterate people, most of whom are women (Reddi& Sinha, 2004).

* Asstt. Prof., Computer Sc.& IT, Shanti Devi Arya Mahila college, Dinanagar (Pb.).

The gender gap between male (82.14%) and female (65.4% literacy rates remain high at 17.10 as per 2011 Census. It is an important fact that no society will progress satisfactorily unless women, who constitute almost half of their population are given equal opportunities. The first Prime Minister of India Pandit Jawaharlal Nehru once said, **"To awaken the people, it is women who must be awaken; once she is on the move, the family moves, the village moves and the nation moves"**. So there is a greater need for bringing women in to mainstream of development of India. ICT opens up a direct window for women to the outside world. Information now flows to them without distortion or any form of censoring, and they have access to same information as their male counterpart. ICT are closely linked to power and the ability to affect change. It can create new opportunities by expanding information flows and by making communications more accessible, people living in poverty can make better choices, voice their opinions, demand their rights and have more power over their own lives.

Information technology has become a potent force in transforming social, economic, and political life globally. More and more, development strategists see the need for developing countries to embrace information technology both as a way to avoid further economic and social marginalization as well as to offer opportunities for both growth and diversification of their economies. The Beijing Declaration and Platform for Action adopted at the Fourth World Conference on Women in 1995 drew attention to the emerging global communications network and its impact on public policies, as well as the attitudes and behavior of individuals. It called for the empowerment of women through enhancing their skills, knowledge, access to and use of information technologies. It also included a strategic objective: "Increase the participation and access of women to expression and decision making in and through the media and new technologies of communication". Our Honorable President Dr. A P J Abdul Kalam calls this revolution of information as a nationwide movement to make India a superpower by using ICTs in both rural and urban areas. While the use of information

and communication technologies (ICTs) remains concentrated largely in the developed world, ICT diffusion is beginning to reach developing countries, including poor rural areas, bringing with it high hopes of positive development outcomes. Socially the majorities of Indian women are still tradition bound and are in a disadvantageous position. The Constitution not only grants equality to women, but also empowers the State to adopt measures of positive discrimination in favour of women. In the recent past, ICTs have been added to the women and gender equality debate. ICTs are being presented as a tool having potential to benefit women's 'empowerment' and a number of ICT projects that specifically target women have been established in several developed and underdeveloped countries. Before going to study the role of ICTs in women empowerment, is necessary to understand what is ICT.? Information and Communication Technologies (ICTs) are a diverse set of technological tools and resources to create, disseminate, store, bring value addition and manage information. The ICT sector consists of segments as diverse as telecommunications, television and radio broadcasting, computer hardware, software and services and electronic media, for example, the internet and electronic mail.

Role of ICTs in Women empowerment

Technologies are socially constructed and thus have different impacts on women and men. Women's capacity to exploit the potential of the new ICT as tools for empowerment is constrained in different ways. Some constraints are linked to factors that affect both women and men, including technical infrastructure, connection costs, computer literacy and language skills. Empowerment of women in the context of knowledge societies entails building up the abilities and skills of women to gain insight into the issues affecting them and also building up their capacity to voice their concerns. In this context ICTs are emerging as a powerful tool for gender empowerment in many developing countries. There has been a rapid growth in the ICT sector since the late 1980s and the use of ICT has dramatically expanded since the 1990s.

RESEARCH CHALLENGES IN COMPUTER SCIENCE AND TECHNOLOGY

Edited by
Dr. Pawan Kumar Chaurasia
Dr. Sunil Kumar Singh

ABOUT THE BOOK

Today, Computer Science and Information Technology plays a vital role in our daily lives. The objective of this book "**Research Challenges in Computer Science and Technology**" provides a platform for academicians, research scholars, and professionals working in the field of Information Technology to interact and exchange ideas, to discuss new issues and challenges with problems and solutions, to contribute and to disseminate innovatively and to shape future directions for research and development. It can be used as an online tool for research using references from magazines, journals, books and websites. This book contributed chapters by various academicians and research scholars.

EDITOR(S)

Dr. Pawan Kumar Chaurasia is currently working as Associate Professor and Head, in the Department of Computer Science and Information Technology, Mahatma Gandhi Central University, Motahari, Bihar from November 2019. Before joining here, Dr Chaurasia was working with Babasaheb Bhimrao Ambedkar Central University, Lucknow.Dr. Chaurasia awarded his Ph.D. degree in 2018, qualified NET in 2003 and GATE 2008. He has been in academics from the last 17 years. Dr Chaurasia was also awarded with **"BBAU, GAURAV SAMAN", "Best Research Paper"**and **"Rajiv Gandhi Excellence"** award. He is the member of various academic, administrative and research bodies. Currently, his research interest in Software Quality, Software Reliability, Machine Learning, and Internet of Things.

Dr. Sunil Kumar Singh is working as an Assistant Professor since November-2016, in the Department of Computer Science & Information Technology, Mahatma Gandhi Central University, Motahari, Bihar. Before joining here, Dr Singh has taught UG and PG students in Galgotias University, Greater Noida, Uttar Pradesh, India for almost 03 years. He received his M.Tech and PhD degree in Computer Science and Technology, in the year 2012 and 2017 respectively, from School of Computer and Systems Sciences, Jawaharlal Nehru University, New Delhi, India. Dr. Singh has published around 15 research paper in various International Journals (including Springer, Inderscience, IGI Global etc.) and Conferences. His research interest is in Mobile Computing, Parallel Computing, Machine Learning, Internet of Things, and Blockchain Technology.

SAPATRISHI PUBLICATIONS
24/9, Industrial Area, Phase-2
Near Tribune Chowk, Chandigarh
Tel: 0172-5002591, 94638-36591

ISBN
9 788191 [illegible]

RESEARCH CHALLENGES IN COMPUTER SCIENCE AND TECHNOLOGY

Edited by

Dr. Pawan Kumar Chaurasia

Associate Professor & Head

Department of Computer Science and Information Technology

Mahatma Gandhi Central University, Motihari Bihar-845401 (India)

Dr. Sunil Kumar Singh

Assistant Professor

Department of Computer Science and Information Technology

Mahatma Gandhi Central University, Motihari Bihar-845401 (India)

ISBN

978-81-949053-6-3

First Edition: 2020

International Publishers & Book Suppliers

Offices

#22466 133RD, Avenue South East, City: Kent,
State: Washington, Zip Code 98042 (USA) Ph. + 12532435688

#16, Fallowfield Road LEICESTER- U.K. LES-6LQ

Sapatrishi Publications approved by UGC

Price: Rs 800/- (Eight Hundred Rupees Only)

$ 15, £ 15

Published by

Sapatrishi Publications

Plot No. 24/9, Industrial Area, Phase-2,
Near Tribune Chowk, Chandigarh.

Website: www.sapatrishipublication.com

E-mail-: sapatrishi94@gmail.com

0172-5002591, 94638-36591

Chapter-21

INTERNET OF THINGS: VISION AND CHALLENGES

*Deepak Jyoti**

Abstract

The Internet of Things model makes promises to interconnect "things" on the Internet environment. This paradigm opens the doors to new technologies that will generate new type of networking among people and objects which will make more facilitating life for human beings. Any object connected with internet will be controlled by human even from remote sites. This new fabulous technology will create connectivity among specified objects/things and humans through internet. There will be direct communication among both without any intervention. This technology gave the idea to make the cities as smart cities and home as smart home. This technology enhancing the quality of life and efficient utilization of resources. It is the emerging technology which is providing us the incredible benefits on our life. It is very useful for the doctors to control their patients' health by getting vital information about patient's health even from the remote. Weather information, ***traffic monitoring, water supply, smart grid and energy saving and many more areas where IOT is providing facilities to manage their respective activities by receiving up-to-date information through sensors and internet.*** *This technology is working on sensor technology. More than 100 million devices will be interconnected in coming years. However, the interconnected devices on IOT can be hacked very easily. So there will be multiple security issues which will be a big challenge for the successful implementation of IOT. This Chapter will discuss the fundamentals and main concepts of IOT, architectures for managing IOT platforms, Challenges in IOT and future of IOT environments.*

Keywords:*Internet of Things (IOT), Sensors, Wireless Technology, Security.*

21.1 INTRODUCTION

Internet is the basic need of the lifestyle of many people. They use internet for multiple purposes as per their requirement like for watching any broadcasting and live shows, listening music and online shopping, online bookings, money transactions and many more. Now days, internet is helping in all fields of people's lifestyle during this pandemic condition in the whole world. Online education is the major advantage of the internet. IOT is the area which is growing rapidly due

Shanti Devi Arya Mahila College Dinanagar, Distt.

to the advantages of the Internet only. This the internet only which enables connected objects and machines to interact with each other to take some important action and provide some useful information. In the age of digital transformation, Internet of Things (IOT) is the hottest innovations which connect everything on the Internet. It is the key technology which is behind the making smart houses, self-driving vehicles, smart electricity metres, and smart cities and everything smart controlled and managed.

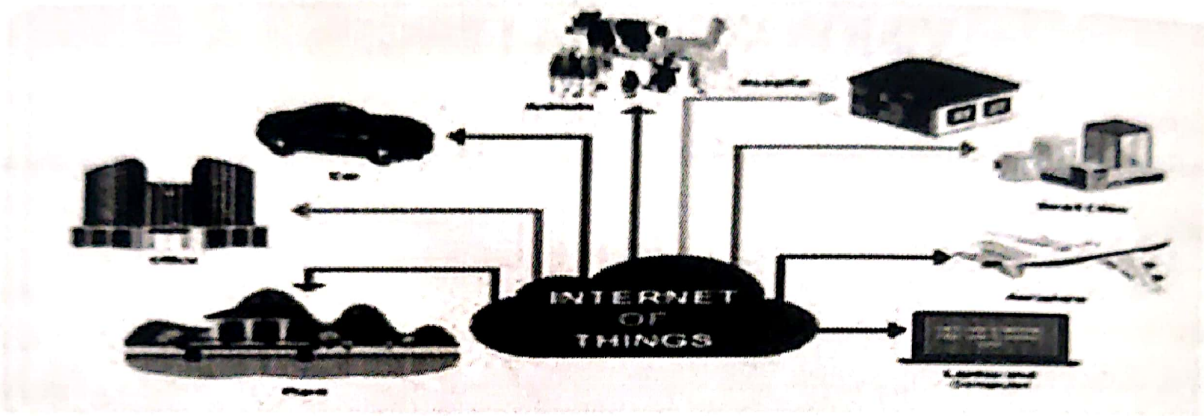


Figure 21.1: E-health

The Internet of Things (IOT) has rapidly become an enormous part of how people work, connect and do business. Web-enabled devices are transforming our whole world into a switched-on place to live. E-health is one of the most interesting application of IOT. It provides many elderly and disabled patients with medical supervision while maintaining their independence and security wherever they are. For example, physiological data is collecting and sending to respective doctor regularly through implanted sensors on or in a patient via wireless network and alarming doctor in the case of any emergency with patient. IOT has implemented in many applications as shown in figure 21.1

Internet of Things (IOT) is the most useful communication tool in our present life. It is growing quickly and facilitating our life more. These web-enabled devices are turning our whole world into a switched-on place to live. It connects our everyday objects having sensors connected to each other through internet so that they can exchange information to manage many important activities automatically. A smart system in which objects are connected to each other and send the information without human intervention on the cloud over wireless network. Many others consider it as a broad area where the interconnected devices communicate with each other through embedded smart sensors and wireless network. These devices are in streamline but not-so-common tasks in India. With the launching of 5G in coming years, it will be even common in India also. But there are many security challenges for the future of the Internet of Things (IOT) .

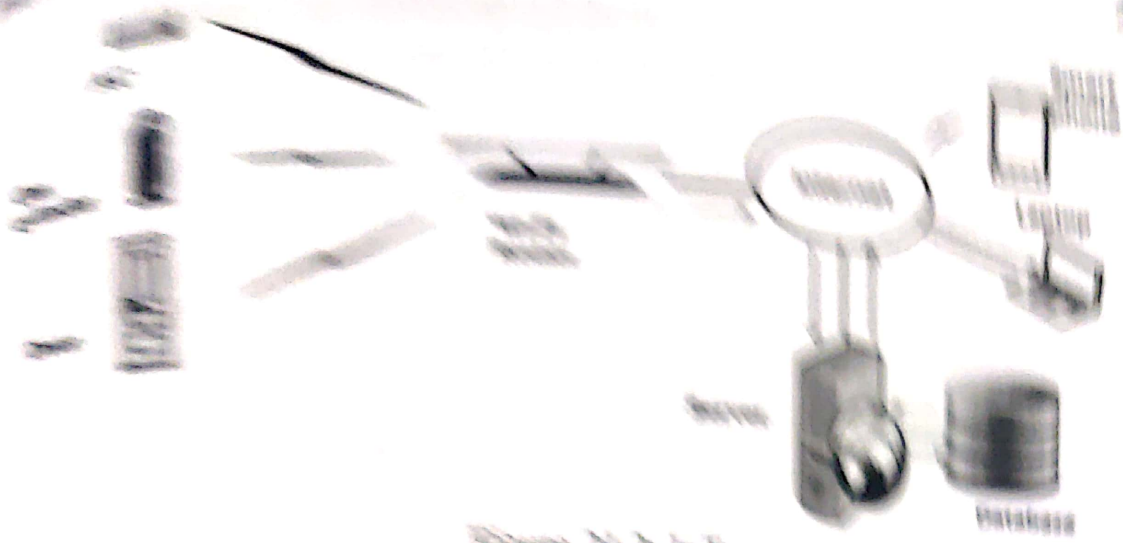


Figure 21.2: IoT

The main idea behind this innovative technology is to connect multiple gadgets that we use in our routine life through the internet and control their working automatically, without any human interaction. To collect the information from the various interconnected devices, special types of sensors are installed on all those connected objects or devices. When the collection of information is finished the local processing system of these devices analyze the information to deplete the unwanted data and restore the important one into local storage. Then analyzed useful data from local storage is sent to cloud storage. Finally, an appropriate action will be taken based upon the gathered and analyzed data. This information is also maintained in the cloud for the future use. It is not compulsory that the action is taken based upon current gathered information, but the control or management can also done based upon the previous behavioral actions of the connected devices or users.

21.2 APPLICATIONS

People living in smart cities have become more smart by performing their work automatically without any human being help but with the help of Internet. One of the most important as well as useful application of IOT is the real time monitoring of the patient in which embedded sensors in patients are used to get patient arterial pressure, respiratory rate, ECG changes,asthma attacks , heart rate etc. and other physiological data . Smart home is another application of IOT. It makes a home as automatic controlled home where all electronic appliances are connected to internet e.g.televisions, refrigerators, microwave ovens, heaters, air conditioners and security. These appliances can be controlled remotely from the users. In case of any fault in any appliance installed at home, the manufacturing company is automatically informed regarding the defect through sensor, which are already installed in the devices and internet. Animal tracking or tracing is another application of IOT. The global positioning sensors are installed in the animal's body to locate their movements easily. Owners of restaurants, hotels, malls, homes, farms etc. can control from anywhere of the world. This smart technology is very useful for children and elders. They can be monitored through wearable smart devices. In case of any emergency, relatives are informed automatically. The efficiency or smartness of these devices depends on the quality of installed sensors in it. They should be very effective because they compute the gained data in a real-time to make the best decision. Real World Applications of

Organic Farming

Sushma Gupta

Organic Farming

Edited by
Dr. Sushma Gupta

AKHAND PUBLISHING HOUSE
DELHI (INDIA)

Published by

AKHAND PUBLISHING HOUSE

Distributors, Library Supplier, Online Bookstore & Exporter

L-9A, First Floor, Street No. 42,
Sadatpur Extension, Delhi-110094 (INDIA)
Phone No.: 9968628081, 9555149955 & 9013387535
E-mail : akhandpublishinghouse@gmail.com,
akhandpublishing@yahoo.com
Website : www.akhandbooks.com

Organic Farming

Ist Edition 2019
ISBN 978-93-88998-07-9

Printed in India

Published by Jhapsu Yadav for Akhand Publishing House, Delhi.

15. **Dr. Vikrant Dhawan,** Department of Agronomy, Punja Agricultural University, Ludhiana.
16. **Dr. Kashish,** Department of Economics and Sociology, Punja Agricultural University, Ludhiana.
17. **Dr. S. S. Walia,** Department of Agronomy, Punjab Agricultur University, Ludhiana.
18. **Dr. Jagjeet Singh Gill,** Department of Agriculture, CT Grou of Institutes, Jalandhar.
19. **Dr. Ashish,** Agricultural Technology Management Agency Sri Muktsar Sahib.
20. **Ms. Priyanka,** Department of Environmental Sciences, Sm Rama Chopra S.D.K.M.V College, Pathankot.
21. **Dr. Reena Talwar,** HOD, Department of Sanskrit, SDA College, Dinanagar.
22. **Dr. Rummi Devi Saini,** Associate Professor in Chemistry SMDRSD College, Pathankot.
23. **Ms. Sarvpali,** Department of Biotechnology, SDAM Colleg Dinanagar.
24. **Ms. Meenakshi Bhanot,** Department of Chemistry Government college, Gurdaspur.
25. **Ms. Roshni Dhawan,** Department of Biotechnology, SDA College, Dinanagar.
26. **Ms. Vishav kirti,** Baba manjh convent school, Kangmai.
27. **Mr. Deepak Kapur,** Department of English, Governmen College, Urmur Tanda.
28. **Mrs. Deepak jyoti,** HOD, Department of Comp.sci., SDA College, Dinanagar.
29. **Mrs. Sangeeta Puri,** HOD Department of Home Science, SDAM College, Dinanagar.
30. **Mrs. Jyoti Saini,** HOD, Department of Fashion Designing, SDAM College, Dinanagar.
31. **Mrs. Parneet Dhillon,** Department of English, Khalsa College, Amritsar.

24

Role of ICT in Empowerment of Farmers

Mrs. Deepak Jyoti

Abstract

Information and Communication technologies (ICT) are transforming all human activities, including agriculture which is the mainstay of rural India. One of the main reasons for the inequitable distribution of economic gains between the haves and have-nots is the gap in access to information. ICT plays an important role in bridging this gap and eventually will help in poverty alleviation. Farmers can get access to knowledge to improve their production and even get better price for their produce through variety of ICT systems. The advancements in ICT can be utilized for providing accurate, timely, relevant information and services to the farmers, thereby facilitating an environment for more remunerative agriculture. ICT is a powerful and productive system which can accelerate economic and socialdevelopment in rural areas. We discuss in this issue, how this new age technology is helping rural India live a better life. One of the most effective tools of ICT is the internet, which has seen a remarkable growth in our country in the last one decade. In this issue specialists on the subject discuss the growth of internet in rural India and how it is actually working on the ground. However, despite the thunderous growth in ICT technology one of the main problems in adoption of ICT in rural segments are ICT illiteracy, availability of relevant and localized contents in their own languages, easy and affordable accessibility. Community radio is another technology which is being used by the rural people in their local language. In this issue we discuss about the Community

radio as well. The country is going through an ICT revolution and this has become an enabling force for the farmers and those living in rural India to become active participants in the growth of the country.

Keywords: ICT, Farmers, Development

Introduction

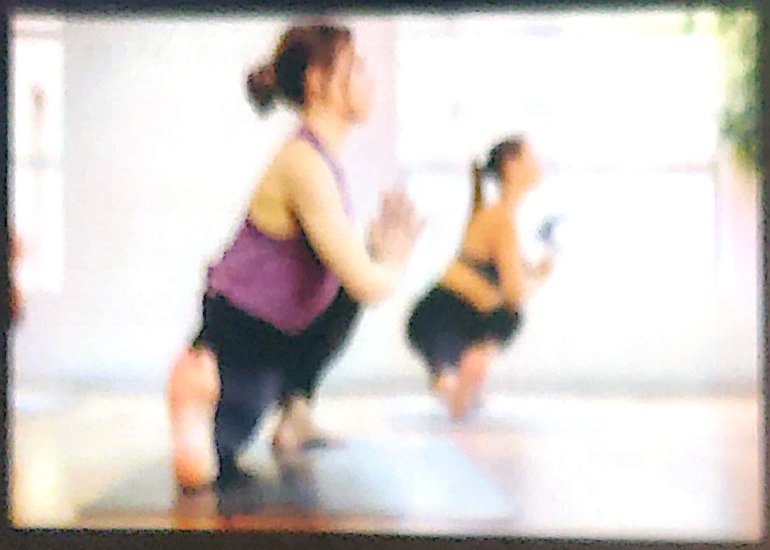
Many perspectives and many experiences could be provided on this subject. Some persons have specialized in the adaptation and integration of new electronic and digitized communications media for the benefit of farmers and other sectors of society whose economic and social advancement is the concern of ECOSOC and UN member governments as well as civil society. ICT by facilitating the promotion of changes in agricultural production methods is helping in many rural households to enhance their food security and raise their incomes, promote greater self confidence and innovation, contribute to environmental sustainability, and mitigate climate change effects.

Roles of Information and Communication in Development

Assessing the contributions that new technologies for information and communication (ICT) can make to poverty reduction, social integration and employment creation requires some understanding of and agreement on the roles that these technologies have in development. The three domains of resources, technology, and organization make different and respective contributions to the capacities of countries, communities, and individuals for meeting human needs and wants.

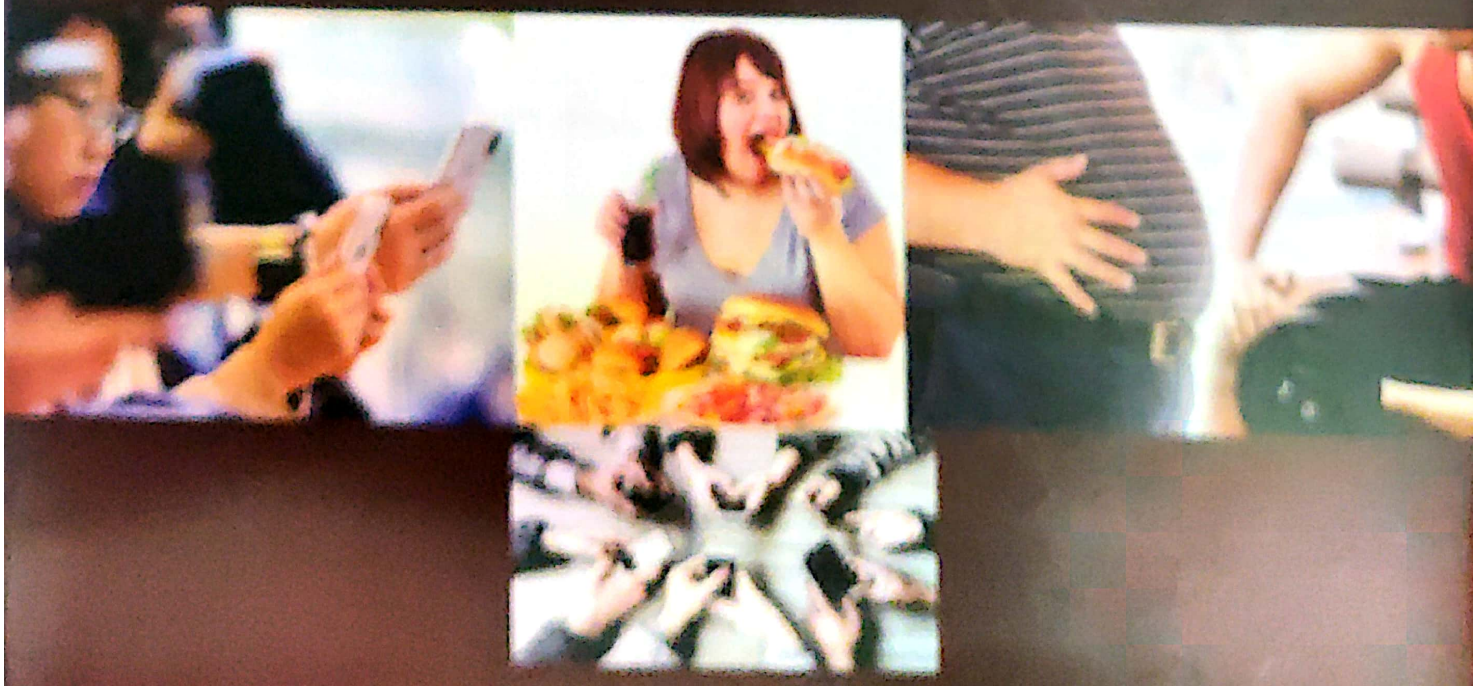
- *Resources* represent the broad category of inputs into processes of production, whether these are economic, social or political, that can meet needs and wants.
- *Technology* refers to everything from knowledge to machinery that is required to convert available inputs efficiently and effectively into more, or more valued,outputs, for meeting people's needs and wants more fully, reliably or innovatively.
- Organization then pertains to the social, economic, administrative and other structures that can manage the various processes of production that are necessary to meet human needs and wants. This includes functions like accessing resources and adapting technology.

These meta factors of development resemble land, labor and returns in any one of these



Life Style Disorders

Their Causes and Preventive Measures in The Indian Scenario



Sangeeta Puri

Life Style Disorders

Their Causes and Preventive Measures in The Indian Scenario

Sangeeta Puri

AKHAND PUBLISHING HOUSE
DELHI (INDIA)

Published by

AKHAND PUBLISHING HOUSE

[illegible]

[illegible]

[illegible]

Phone No.: [illegible]

E-mail: [illegible]

[illegible]

Website: [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

ISBN: [illegible]

[illegible]

Printed in India

Published by [illegible] for Akhand Publishing House, Delhi.

14. **Ms. Sunaina Gupta** , Assistant Professor, Faculty of Home Science, R.R. Bawa DAV College for Girls, Batala, Gurdaspur
15. **Rajib Biswas,** Associate Professor, Dept. of Physiology, Himachal Dental College, Sundernagar, Himachal Pradesh
16. **Alok Ghosh Chaudhuri,** Associate Professor, Dept. of Physiology, Vidyasagar College, Kolkata, West Bengal.
17. **Neetu S. Pathania,** PhD Scholar, Pacific University, Udaipur
18. **Vibha Mahajan,** Lecturer, G.A.E.T'S Pre-School Teacher Training Centre Goregaon (East), Mumbai
19. **Dr. Priyanka,** Assistant Professor, Department of Environmental Sciences, Smt. Rama Chopra S.D.K.M.V College, Pathankot
20. **Mrs. Neeti Kapoor,** Dept. of Home Science, KMV college Jalandhar
21. **Ashwani Kuma,** Prabhjyoti Department of Zoology, Department of Botany, Doaba College, Jalandhar
22. **Dr Maneeta Kahlon,** Assistant Professor English Shanti Devi Arya Mahila College Dinanagar, Distt -Gurdaspur, Punjab
23. **Randeep Dhoot,** Assistant prof.(Dept. of Political Science) S.D.A.M. College Dinanagar
24. **Mrs Mani Khera,** Assistant professor, Department of Home Science Kanya Maha vidyalaya, Jalandhar
25. **Deepak Jyoti,** HOD,PG Department of Computer Science and IT Shanti Devi Arya Mahila College, Dinanagar(Pb.)
26. **Mrs. Sunita Verma,** (Associate Prof) HOD, Zoology Department, SDAM College, Dinanagar (Distt. Gurdaspur)
27. **Mrs.Ratna Sharma**, Principal, SDAM College, Dinanagar
28. **Sangeeta Puri,** Asst Prof. In Home Science, SDAM College, Dinanagar
29. **ਡਾ. ਪਰਬਜੀਤ ਕੌਰ,** ਐਸੋਸੀਏਟ ਪ੍ਰੋਫ਼ੈਸਰ ਤੇ ਮੁਖੀ, ਪੋਸਟ ਗ੍ਰੈਜੂਏਟ ਪੰਜਾਬੀ ਵਿਭਾਗ, ਸ਼ਾਂਤੀ ਦੇਵੀ ਆਰੀਆ ਮਹਿਲਾ ਕਾਲਜ, ਦੀਨਾਨਗਰ।

22

ICT's Role in Healthcare Transformation in India

Deepak Jyoti

Abstract

Information & Communication Technology is a glory for health education. It serves as a platform for all the health professionals to communicate with their colleagues, patients and keep them abreast with the latest happenings in medical and clinical advancements across the world. Information technology (IT) has produced a deep impact on human lives, and the most important aspect of its effect is on education and learning. Institutionalization of ICT helps in better healthcare. It is felt by many healthcare professionals that if the same is done for the health sector, it might help in enhancing the adoption of ICT in health care which will be helpful to improve the health of all. ICT in healthcare can enable remote consultation,diagnosis and treatment through telemedicine. Any disease like dengue, Swine flu etc. if comes, most of us are aware about the symptoms of disease, precautions to stay away from those viruses and best doctors for that disease. Information and communication technology helps for educating the healthcare providers to understand the diseases and to educate the people about the precautions to stay away from the disease. Information and communication technology (ICT) tools such as e-learning, m-learning, science apps, evidence-based medicine, readymade power point presentation and Wikipedia are effective in improving knowledge and skills in health care professionals. This paper will focus on use of ICT in healthcare.

ISSN: 2320-7698

Phalanx

A Quarterly Review for Continuing Debate

Vol-17, No-4 October - December -2023

Phalanx: A Quarterly Review for Continuing Debate

(Peer reviewed Refereed UGC Care Listed Journal)

Phalanx: A Quarterly Review for Continuing Debate

Vol-17, No-4, October-December-2022

ISSN: 2320-7698

Phalanx: A Quarterly Review for Continuing Debate

(UGC Care Listed Journal)

CONTENTS

Phalanx: A Quarterly Review for Continuing Debate
Vol-17, No-4, October - December, 2022
(UGC Care Listed Journal) ISSN: 2320-7698

CHATGPT: A REVIEW ON BACKGROUND, APPLICATIONS, KEY CHALLENGES, LIMITATIONS AND FUTURE SCOPE

[1]Dr. Deepak Jyoti

Abstract

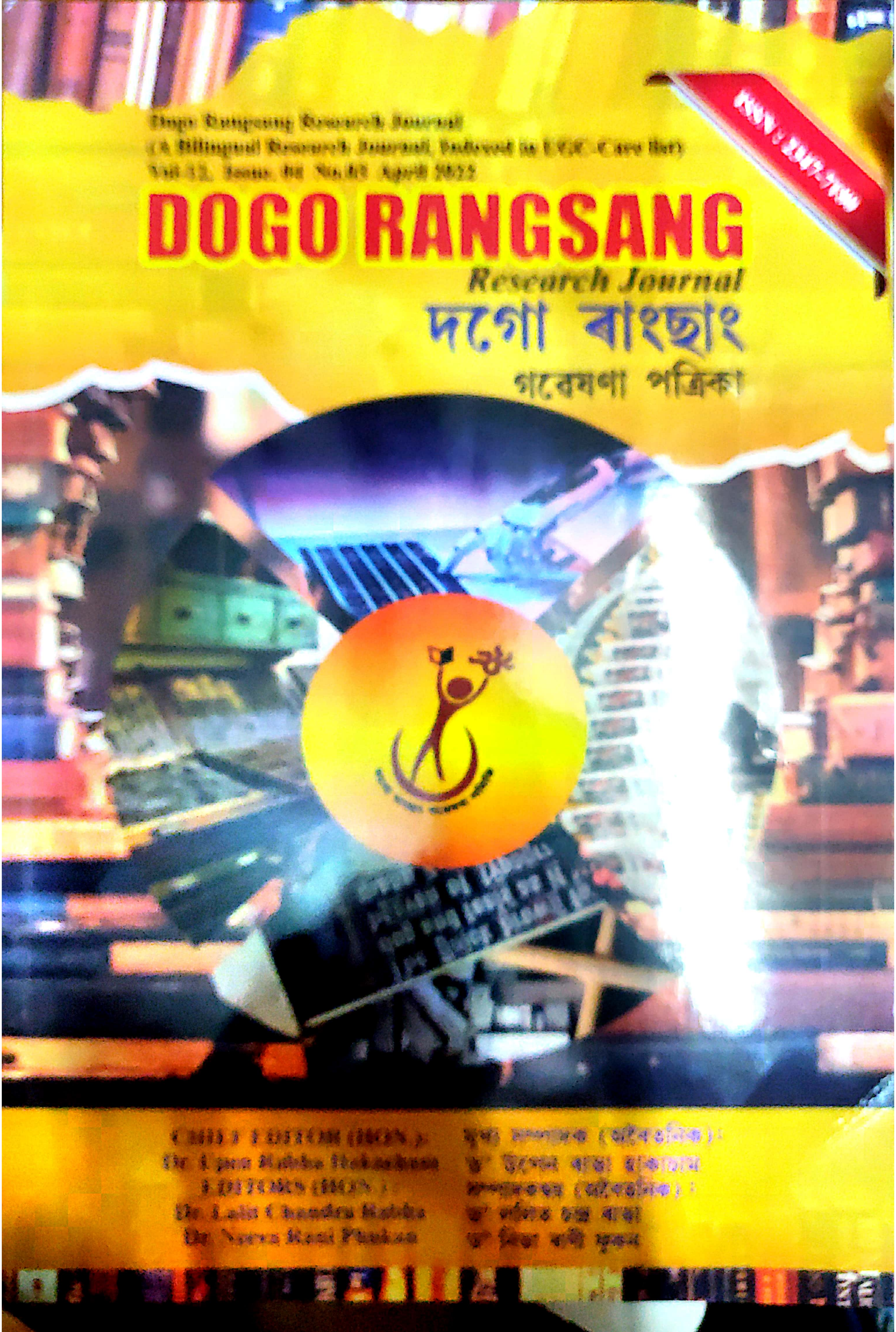
Every new innovation completely changes the world for raising the standard of living like the internet or airplanes. The new innovation Chat GPT developed based upon Open AI. ChatGPT is a natural language processing (NLP) model that combines GPT-2, a transformer-based language model developed by OpenAI, with supervised and reinforcement learning techniques to fine-tune it (an approach to transfer learning) on the GPT-3 group of large language patterns developed by OpenAI. The model enables users to interact naturally with an AI system throughtext-based conversations. It could be used for customer service applications and to create virtual assistants for voice and text conversations. ChatGPT also provides features such as topic detection, emotion detection, and sentiment analysis capabilities to help users understand their conversation partner better. Additionally, it has the capability to generate multiple conversation threads in order to create more realistic interactions between user and bot. This article is about the recent developments in the field of artificial intelligence (AI). AI has advanced significantly over recent years, with a wide range of applications and new technologies being developed. Which are use to improve human lives. In this article will discuss how ChatGPT - a Natural Language Generation (NLG) model powered by Open AI's GPT-3 technology - can enhance e-commerce via chat, as well as other sectors such as education, entertainment, finance, health, news and productivity. We will analyze the current use-cases of ChatGPT in these sectors and explore possible future applications. This article will providereaders with an understanding of how ChatGPT works and how it may be used to improve conversational AI applications. Finally, we will look at how ChatGPT can help tomake customer service more efficient and effective for businesses.

Keywords: ChatGPT, GPT-3.5, Generative AI, Conversational AI, Context understanding, Natural language processing

Introduction

ChatGPT is a natural language processing tool driven by AI technology that allows you to have human-like conversations and much more with the chatbot. The language model can answer questions and assist you with tasks, such as composing emails, essays, and code. ChatGPT is similar to the automated chat services found on customer service websites, as people can ask it questions or request clarification to ChatGPT's replies. The GPT stands for "Generative Pre-trained Transformer," which refers to how ChatGPT processes requests and formulates responses. ChatGPT is trained with reinforcement learning through human feedback and reward models that rank the best responses. This feedback helps augment ChatGPT with machine learning to improve future responses.This revolutionary platform utilizes natural language processing (NLP) and machine learning (ML) algorithms to enable users to communicate with machines in a conversational manner. It has recently been introduced to the public with great fanfare andpromises to revolutionize how people interact with technology. With their ability to comprehend context, intent, sentiment, and more, ChatGPT enables users of all ages and backgrounds to communicate naturally in a variety of languages without having any prior knowledge or experience in programming or

[1] Assistant Professor, PG Department of Computer Science & IT, Shanti Devi Arya Mahila College Dinanagar, Punjab


DOGO RANGSANG
Research Journal
দগো ৰাংছাং
গৱেষণা পত্ৰিকা

ISSN 2347-7180

DOGO RANGSANG RESEARCH JOURNAL

দগো ৰাংছাং গৱেষণা পত্রিকা

A Peer Reviewed Bilingual Research Journal
(Indexed in UGC-CARE List)

ISSN 2347-7180

DOGO RANGSANG RESEARCH JOURNAL
দগো ৰাংছাং গৱেষণা পত্রিকা

Vol. IX, Issue. XV

January, 2022
২০২২

Dogo Rangsang Research Society
Reg. No. KAM-M/263/L/ 595 of 2015-16
দগো ৰাংছাং গৱেষণা সমিতি

Dogo Rangsang Research Journal (DRRJ : 2347-5188)
(A Bilingual Research Journal of Social Science and Humanities indexed in UGC-CARE List), Vol. IX, Issue XV, January, 2022

Price: Rs. 350/- (Three hundred fifty) only
Design & Layout : Kamal Krishna Sarmah

Published by Dr. Angshuman Das, Secretary, Dogo Rangsang Research Society, and **Printed at** Dream Graphics, Naokata, Baksa (BTAD), Assam.

SMART HOME SYSTEM BASED ON IOT

Deepak Jyoti Research Scholar Computer Science Department Desh Bhagat University, Punjab
Dr. R.K. Bathla Senior Professor Computer Science Department Desh Bhagat University, Punjab
mdjyoti385@rediffmail.com ; dr.bathla@gmail.com

ABSTRACT

Recent advancements in the technology which introduced the connectivity of hardware devices with communication technologies known as Internet-of-things (IoT). IoT introduced latest form of communication in between human and things or between two things. IOT concepts has improved the modern life in current era. The Internet of Things (IoT) is the network of physical things are embedded with sensors, software, and other technologies to connect and exchanging data with each other on the internet in real time. The key concept used in smart IOT applications are intelligent processing and analysis. In order to create smarter environment , there is a need to implement machine learning on IoT. There are various applications of IOT like smart home, smart industry, smart supply chain management, smart barcode readers, smart grids, smart healthcare system, smart farming etc. Machine learning language analyze the collected data with camera and sensors and then take best decisions to improve the performance of the smart systems. In this paper, i will discuss only one application that is smart home or home automation. The purpose of this paper is to survey different IoT technologies to help the people to live in a smart home.

KEYWORDS: Internet of Things(IOT), Smart home, RFID, sensors, internet, protocol, cloud

INTRODUCTION

By the growing use of internet and communication, IoT gains the most significant research attention. IoT consists of two words that are internet and things. Hence Internet leads the future of internet means devices connected to wireless network and things connected to wireless smart sensors and human invention because of that IoT which represents an interconnected devices on internet to make the whole system more intelligent or smart. IoT will get empowered with the developments of RFID tags, smart sensors, internet protocol, and some other smart communication technologies.

Home automation means making a home with automatic services or making home smart home. Everything in the smart home will be controlled or monitored automatically with smart control system. All the electronic appliances will be controlled automatically with smart system. Security of the home, entertainment, electronic appliances operations etc. when they are connected with the Internet then these home devices are known as Internet of Things ("IoT"). IOT control and monitor all the activities of the connected home devices. Smart home system connects all controlled devices on the central hub which is known as "gateway". The user can control this system either from the mobile or laptops or desktop etc.. for controlling or accessing this smart home automation system, the user only need to have application software and internet connection on the terminal. But there are many security issues with smart home automation. Depreciation of older devices is also major issue in this field. There is a need of data sharing between family members or trusted individuals in smart home system and if the system is hacked then the shared data will not be secured and a major problem can occur. To work with IOT, all connected devices require regular power supply and internet connection to work which could lead to more energy consumption with environmental impact.

Smart home means a residential area in which all the electronic appliances like refrigerator, air conditioner, microwave oven, television, washing machines, dish washer, coffee maker, entertainment system, lighting system and security system etc., all appliances are communicating with each other and

or all are controlled remotely through mobile, laptop or desktop or any other terminal device on internet. All these appliances are connected to the central hub at home. They can communicate to each other through internet, switches and sensor system.

platform of smart home appliances provide convenience and savings of time, money and energy. But such systems are required to be adaptive and adjustable to meet with the current needs of the home system. The infrastructure is more flexible to integrate the wide range of appliances with different vendors and standards. The basic architecture of this smart system measures the resident conditions by then process that measured data, utilizing the smart sensors to measure the home conditions and remote tool to control all interconnected home devices.

smart home concept is growing faster in the modern lifestyle for making life more comfortable. All this is achieved through internet of things (IOT) and machine learning.

Literature Review

In this section, different types of smart home automation system technologies are discussed. Smart home system with Wi-Fi technology consists of few main parts Web server , hardware interface module , Wi-Fi shield PCB, input alarm PCB, output actuators PCB etc.. All these components provide interface to sensors and actuator. This is better technology for smart home system. this application was designed for the android systems. This flexible and scalable system can also be use to login to the server web based application. If the server is connected to the internet then user can access server web based application from remote. There is a need of network interface card to make the connectivity among remote user, server, raspberry pi card and home appliances. If the user want to control from mobile than user need to download related application software on mobile and raspberry pi card is required to control the shutter of windows. User will provide the command to raspberry pi card through Smartphone. The interface and update the signals between the actuator sensor and raspberry pi card. Cloud-based home appliance monitoring and controlling System. Design and implement a home gateway to collect metadata from home appliances and send to the cloud-based data server to store on HDFS (Hadoop Distributed File System), process them using MapReduce and use to provide a monitoring function to Remote user. Raspberry pi based smart home system is more powerful, efficient and economical system as compare to other smart home systems. Another smart home system is based on DTMF(dual tone multi frequency) in which call tariff is implemented which is the drawback of this technology that is why it is not recommended. LEDs were used to indicate the switching action. System is interactive, efficient and flexible. Smart House Monitor & Manager (SHMM) is the another system proposed by Shih-Pang Tseng in which Zigbee wireless network is used to connect all sensors and actuators. Wireless ZigBee and wired X10 both technologies are used in smart home system . A simple smart socket is designed which can control from remote. All sensed data transferred to the virtual machine(VM) in the cloud. Computer system and smartphone can be used to control the home activities on internet. Arduino microcontroller is used to receive commands from user and execute these commands on Ethernet shield. Resource-constrained scheduling problem (RCPSP) is followed from SHMM. Arduino microcontroller consists of web server application which communicate with the help of HTTP protocol with web based application on android system . The mobile can communicate through wireless or wired system to the central controller system. This whole smart home network monitors and sense through sensors and then transmits data to the cloud data server . Then it control all appliances , manages the information and provide the demanded services to the user. All this controlling done through commands received by the mobile devices. This proposed system has the good feature of expandability, modularity and very low power consumption. This proposed system can control the power consumption. Fire detection and intrusion detection and security like services information can send to the user through email notification and siren alarm.

Sr No.	System	Communication Interface	Controller	User Interface	Applications	Benefits
1	Wi-Fi based using Arduino Microcontroller	Wireless LAN and Wi-Fi shield	Hardware interface module	web based Application.	Temperature and humidity, Motion detection, Fire detection, Door status, Light level ,Video monitoring, Controlling appliances	Low cost, Secure, Ubiquitously accessible, Auto-configurable, Remotely controlled
2.	Web service and android app based using Raspberry pi	Web server and interface card	Raspberry pi	Android application	Controlling shutter of window	Autonomous and Quite scalable


Internet
of
Things
Enabling Things Smarter
DEEPAK JYOTI

Internet of Things

Enabling Things Smarter

Deepak Jyoti

AKHAND PUBLISHING HOUSE
DELHI (INDIA)

Published by

AKHAND PUBLISHING HOUSE

Publisher, Distributor, Exporter having an Online Bookstore

Head Office : L-9A, First Floor, Street No. 42,
Sadatpur Extension, Delhi-110094 (INDIA)
Phone No.: 9968628081, 9555149955 & 9013387535
E-mail : akhandpublishinghouse@gmail.com,
akhandpublishing@yahoo.com
Website : www.akhandbooks.com

Internet of Things
Enabling Things Smarter

Ist Edition 2021
ISBN 978-93-90870-47-9

Printed in India

Published by Jhapsu Yadav for Akhand Publishing House. Cover Designed and Laser Typesetting at VM Graphic and Printed at Aarna Enterprises, Delhi.

Acknowledgement

Any person alone can never do a work of this nature. I have been able to bring this book in present shape only because of hearty co-operation of number of heads and hands.

This work has been completed with the blessings of my elders, best wishes of my friends and motivation from my colleagues and family. Thanks being a small word cannot express the immense sense of gratitude one dwells in the heart towards anyone. This book is an acknowledgement in itself to the intensity, drive and competence of many individuals who have contributed to it. I would like to say a few heartfelt words to all those who helped me to complete this book.

Above all I am thankful to the "Almighty" for showering his blessings on me to complete this work.

I express my deep gratitude to my husband Mr. Rajeev Sharma, who helped me in completion of this book. Without his inspiration and support this book would not have been able to complete. I am thankful to my parents , dear son and daughter for providing me suitable environment for writing this book.

Finally , it is the publisher that pulls everything together and does whatever is required to deliver the final product. At the end, I would like to thank the publisher of this book for completing the book effectively and timely.

Deepak Jyoti

Contents