



JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

AN ANALYSIS OF ENTERPRISE RESOURCE PLANNING IN THE UNIVERSITY EDUCATION SYSTEM

Vineeta Sharma

Dr. Parveen Chauhan

ABSTRACT

A higher education ERP system helps manage business workflows at College and Universities. It streamlines the flow of information between all business functions and departments within the institution. ERP provides an integrated and continuously updated view of core business processes using common databases maintained by a database management system. ERP system track business resources—cash, raw materials, production capacity—and the status of business commitments: orders, purchase orders, and payroll.

ERP systems are used by large corporations around the world, recently replacing management, financial and administration computer systems in the higher education sectors (Pollock and Conford 2005). ERP has played a significant role in the IT management of higher education but it was—to some extent—far from the core discipline of the higher education. The higher education system supports the academic activities in colleges including some basic process such as scheduling, learning process – advising and follow up and performance indicators-, and examination process. ERP Systems can be local based or Cloud-based. Cloud based applications are growing in recent days due to information being readily available from any location with internet access. The Present paper points out the ERP project critical success factors (CSFs) with a focus on higher education institutes (HEIs).

Keywords: ERP in higher education, CSFs, ROI, BPR.

1. INTRODUCTION

Enterprise Resource Planning (ERP) systems also named integrated information solutions are one of the biggest and the most important areas of the development of information systems in the business field. ERP systems give us the ability to control all main functions of the business in the organization through using integrated information architecture. The main objective of implementing ERP systems is to



INTERNATIONAL JOURNAL OF RESEARCH AND

ANALYTICAL REVIEWS (IJRAR) | IJRAR.ORG

An International Open Access, Peer-reviewed, Refereed Journal

Ref No : IJRAR/Vol 8 / Issue 2/ 725

To,
Vineeta Sharma
Publication Date 2021-05-24 23:38:33

Subject: Publication of paper at International Journal of Research and Analytical Reviews (IJRAR).

Dear Author,

With Greetings we are informing you that your paper has been successfully published in the International Journal of Research and Analytical Reviews (IJRAR) - IJRAR (E-ISSN 2348-1269, P- ISSN 2349-5138). Thank you very much for your patience and cooperation during the submission of paper to final publication Process. It gives me immense pleasure to send the certificate of publication in our Journal. Following are the details regarding the published paper.

About IJRAR : UGC and ISSN Approved - International Peer Reviewed Journal, Refereed Journal, Indexed Journal, Impact Factor: 5.75, E-ISSN 2348-1269, P- ISSN 2349-5138

UGC Approval : Journal No: 43602

Registration ID : IJRAR_234319

Paper ID : IJRAR21B1725

Title of Paper : EMPIRICAL AND ANALYTICAL STUDY OF GREEN HUMAN RESOURCE MANAGEMENT AT DIFFERENT LEVELS OF EMPLOYEE,EMPLOYER AND OVERALL ORGANIZATIONAL LEVEL AT DELHI AND NCR

Impact Factor : 5.75 (Calculate by Google Scholar) | License by Creative Common 3.0

DOI :

Published in : Volume 8 | Issue 2 | May 2021

Publication Date: 2021-05-24 23:38:33

Page No : 978-982

Published URL : http://www.ijrar.org/viewfull.php?&p_id=IJRAR21B1725

Authors : Vineeta Sharma

Thank you very much for publishing your article in IJRAR. We would appreciate if you continue your support and keep sharing your knowledge by writing for our journal IJRAR.

R. B. Joshi

Editor In Chief

International Journal of Research and Analytical Reviews - IJRAR
(E-ISSN 2348-1269, P- ISSN 2349-5138)



International Scholarly, Open Access, Multi-disciplinary, Monthly, Indexing in all Major Database & Metadata, Citation Generator

PUBLICATION Website: www.ijrar.org | Email ID: editor@ijrar.org

A STUDY ON ENTERPRISE RESOURCE PLANNING WITH SPECIAL REFERENCE TO HIGHER EDUCATIONAL INSTITUTES

Vineeta Sharma

Dr. Parveen Chauhan

Jagannath University, Haryana

ABSTRACT

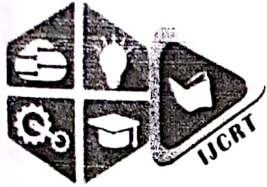
India has made terrible growth in different Industry field. Information is very important today in the competitive scenarios. It processing capability and decision making from information processed will decide the growth of any organization. ERP system have over the last two and a half decades become integral to the running of the business organizations all over the world including in Indian organizations. The challenging factor has been that various ERP Projects in Indian organizations, as in firms all over the world, have been loaded with problems such as cost/time overruns and non-achievement of project objectives, all leading to user dissatisfaction. ERP implementation issues arise from the latent complexity of ERP artifact in the context of its implementation. Actually, Information System (IS) project failure is "escalation" defined as a continued commitment to a failing course of action despite "uncertainty surrounding the likelihood of goal attainment" (Brockner 1992). So, ERP implementation is not always a success. Included functionality of the ERP is an indicator of the closeness to fit the company's business (Shyur, 2003). The academic institutions have been using ERP systems for more than a decade for managing the information and control, to achieve more efficiency and accessibility for all members.

Keywords: ERP, MRP, APS, SCM, CRM, BPR

Introduction

The success and wealth of a country are determined by technological advancements and infrastructure facilities. This is especially true when it comes to educational institutions. The educational sector is becoming more difficult as a result of rising globalization. Every institution urgently need automation to expand its market base and increase production. When compared to in-house development and the implementation of best practices in organizational processes, ERP systems feature data and application integration, the replacement of outdated, fragmented legacy systems, and the faster deployment of

packaged solutions (Beheshti, 2006). ERP frameworks are incorporated, undertaking wide, bundled programming applications that appropriate profound information on strategic approaches aggregated from seller executions to the consumer at core. The ERP frameworks are made out of different modules which incorporate business the board and managerial capacities including HR, creditor liabilities, buying, money, and understudy framework. It gives get hierarchical combination of information through inserted business processes which are exceptionally essential for Higher Education establishments. The ERP frameworks, subsequently, include both



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Cyber Security Attacks, Threats, and Vulnerabilities

Dr. Mahesh Sharma¹

Dr. Seema Nath Jain²

Vice – Principal¹

Principal²

Ideal Institute of Management and Technology, Karkardooma Institutional Area, Delhi – 110092

Abstract: The broad goal of this investigation is to learn more about cyber infrastructure attacks, threats, and vulnerabilities, which include hardware and software systems, networks, organization networks, intranets, and the usage of cyber intrusions. To accomplish this goal, the paper attempts to explain the significance of g in network invasions and cyber-theft. It also goes into great length on the reasons for cybercrime's rapid expansion. A thorough description and definition of cyber security, its role in community infiltration and cyber understand theft, and a study of the reasons for the rise in cybercrime and their impact are also included in the paper. Finally, the authors provide certain preventative measures and practical remedies to cyber security attacks, threats, and vulnerabilities. While technological know-how has a role to play in reducing the impact of cyber attacks, the vulnerability lies in human behaviour and psychological predispositions, according to the paper. While research points to the hazards of psychological vulnerabilities in cyber attacks, investments in organizational education programmes give hope that cyber attacks can be mitigated.

Keywords: Threat, Vulnerability, Cyber-attack, Cyber-Warfare

1. Introduction

The world is moving toward digitalization, which means less currency and fewer transactions. Even the government and security agencies have been subjected to significant cyber losses and disruptions. Because the crime environment in cyberspace is so different from that of real life, there are numerous obstacles to enacting cybercrime legislation as true space law in any civilization. For instance, in real life, age is a self-authenticating factor, however in cyberspace, age is no longer so. In the cyber world, a child under the age of 18 can easily hide his age and gain access to restricted resources, although in the real world, it would be difficult for him to do so. Cyber security is the process of defending information by avoiding, detecting, and responding to cyber-attacks.

CLOUD COMPUTING ISSUES, CHALLENGES, ARCHITECTURE, PLATFORMS, AND APPLICATIONS

Vivekananda Journal of Research
October, 2021, Vol. 10, Special Issue, Pg No.70-79
ISSN 2319-8702(Print)
ISSN 2456-7574(Online)
Peer Reviewed Refereed Journal
© Vivekananda Institute of Professional Studies
<http://www.vips.edu/vjr.php>



Dr. Mahesh Sharma,¹ Dr. Seema Nath Jain ¹
IQAC Coordinator, Associate Professor, Ideal Institute of
Management & Technology, ¹ Karkardooma, Delhi – 110092.
HoD & Associate Professor, Ideal Institute of Management &
Technology, ² Karkardooma, Delhi – 110092.

Abstract:

Cloud computing refers to the emergence of parallel computing, distributed computing, grid computing, and virtualization technologies that define the shape of a new era. Cloud computing is a new commercial computing model that is gaining traction. In this paper, the concept of cloud architecture is discussed, as well as a comparison between cloud and grid computing. We also go over some of the most popular cloud computing systems' capabilities and applications. The goal of this study is to identify the obstacles and issues associated with cloud computing. From the standpoint of cloud computing adoption, we discovered many problems, as well as the cloud interoperability issue, which warrants additional investigation. Due to confidentiality issues, users, on the other hand, have considerable obstacles in adopting to cloud computing platforms. We investigate the security and privacy concerns of key cloud computing system providers in this study.

Keywords: SaaS, PaaS, IaaS, DaaS

1. INTRODUCTION

Cloud computing is a relatively new idea. Virtualization, utility computing, software-as-a-service (SaaS), infrastructure-as-a-service (IaaS), and platform-as-a-service are all merging and progressing (PaaS). The phrase "cloud" refers to an online environment in which computing has been pre-installed and is provided as a service; data, operating systems, apps, storage, and processing power are all accessible via the internet and ready to be shared. Customers can quickly access pooled IT resources through the Internet with cloud computing, which is an on demand alternative. Where IT resources like as networks, servers, storage, applications, and services can be quickly and easily implemented with little administration and service provider interactions. In terms of improving the availability of IT resources, cloud computing has a number of advantages over traditional computer platforms. Users can pay according to the demand for IT infrastructure, saving money on the cost of purchasing idle physical resources.

2. ARCHITECTURAL COMPONENTS

The rest of the paper is organised as follows: The architectural components Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), and Data as a Service are all outlined in Section II (DaaS). Then, in Section III, we compare cloud and grid computing, followed by a discussion of various popular cloud computing systems in Section IV. In Section V, we shall discuss a

Cryptanalysis of a novel bitwise XOR rotational algorithm and security for IoT devices

Seema Nath^{a,*}, Subhranil Som^a and Mukesh Chandra Negi^b

^aAmity Institute of Information Technology, Amity University, Uttar Pradesh, India

^bTech Mahindra Ltd., India

Abstract. The internet of things (IoT) is a multiple devices, which connects with the internet for communication, in order to obtain the updated from the cloud. The fog can act as a controller and it is located between the IoT devices and cloud. The major attacks like de-synchronization, and disclosure has arises in the devices, this has been prevented. The major contribution in this work is key generation and authentication, for key generation the “advanced encryption standard algorithm” is developed, in which the new and old keys are generated. The encryption is done under the source side, and decryption is done under the device side. The fog security is maintained through “device tag, and bit wise XOR rotational algorithm”. The security, and the computational complexity is defined in this work and it is given in table format. The implementations are carried out in the MATLAB R2016 a. The proposed algorithm is compared with the existing protocols like LMAP, M2AP, EMAP, SASI, and RAPP, from the comparison the proposed methodology makes the better knowledge about the security and prevents from various attacks.

Keywords: Cloud, fog, internet of things, advanced encryption standard algorithm, bit wise XOR rotational algorithm

1. Introduction

The platform of internet of things (IoT) have several objects, which is surrounded us in one or another form. The new criteria of sensor network topologies, and tag device (radio frequency identification-RFID), contains some communication and the information, which is embedded in the environment as an invisible manner. Thus the results has been gives the massive data to stored, processed, efficacy, and highly interpretable [1]. The virtual infrastructures are provided by the fog computing to integrate the platform of visualization, client delivery, storage devices, analytical, and monitoring devices. The cost model of fog computing can enable the end-to-end service for users, and business to access the applications from anywhere [2,24].

The new challenges, and security threats are arrived towards the users in this way the fog computing make more adventurous one. In cloud computing have the service providers, similar way the fog also support to fog service providers [3–5]. The corrections of the fog data is very risky manner and it is occurred due to the following reasons

- More powerful infrastructure.
- Reliable than the personal computing devices.
- Solve the threats (Internal and external) for data integrity [1,6–9,25].

The security is held on through the encryption process with the huge growth of computer networks. The huge amount of the data is being transmitted over the several kind of networks. It can often prove that the several part of the information is being kept as private or confidential. The required data protection have been discussed with the help of security techniques [10]. One of the most critical aspects in the fog computing's are the security maintenance over the entire network.

*Corresponding author: Seema Nath, Amity Institute of Information Technology, Amity University, Uttar Pradesh, India. E-mail: Seemanath.iimt@gmail.com.

CLOUD COMPUTING ISSUES, CHALLENGES, ARCHITECTURE, PLATFORMS, AND APPLICATIONS

Vivekananda Journal of Research
October, 2021, Vol. 10, Special Issue, Pg No.70-79
ISSN 2319-8702(Print)
ISSN 2456-7574(Online)
Peer Reviewed Refereed Journal
© Vivekananda Institute of Professional Studies
<http://www.vips.edu/vjr.php>



Dr. Mahesh Sharma,¹ Dr. Seema Nath Jain ¹
IQAC Coordinator, Associate Professor, Ideal Institute of
Management & Technology, ¹ Karkardooma, Delhi – 110092.
HoD & Associate Professor, Ideal Institute of Management &
Technology, ² Karkardooma, Delhi – 110092.

Abstract:

Cloud computing refers to the emergence of parallel computing, distributed computing, grid computing, and virtualization technologies that define the shape of a new era. Cloud computing is a new commercial computing model that is gaining traction. In this paper, the concept of cloud architecture is discussed, as well as a comparison between cloud and grid computing. We also go over some of the most popular cloud computing systems' capabilities and applications. The goal of this study is to identify the obstacles and issues associated with cloud computing. From the standpoint of cloud computing adoption, we discovered many problems, as well as the cloud interoperability issue, which warrants additional investigation. Due to confidentiality issues, users, on the other hand, have considerable obstacles in adopting to cloud computing platforms. We investigate the security and privacy concerns of key cloud computing system providers in this study.

Keywords: SaaS, PaaS, IaaS, DaaS

1. INTRODUCTION

Cloud computing is a relatively new idea. Virtualization, utility computing, software- as-a-service (SaaS), infrastructure-as-a-service (IaaS), and platform-as-a-service are all merging and progressing (PaaS). The phrase “cloud” refers to an online environment in which computing has been pre-installed and is provided as a service; data, operating systems, apps, storage, and processing power are all accessible via the internet and ready to be shared. Customers can quickly access pooled IT resources through the Internet with cloud computing, which is an on demand alternative. Where IT resources like as networks, servers, storage, applications, and services can be quickly and easily implemented with little administration and service provider interactions. In terms of improving the availability of IT resources, cloud computing has a number of advantages over traditional computer platforms. Users can pay according to the demand for IT infrastructure, saving money on the cost of purchasing idle physical resources.

2. ARCHITECTURAL COMPONENTS

The rest of the paper is organised as follows: The architectural components Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), and Data as a Service are all outlined in Section II (DaaS). Then, in Section III, we compare cloud and grid computing, followed by a discussion of various popular cloud computing systems in Section IV. In Section V, we shall discuss a



JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

Ref No : JETIR / Vol 8 / Issue 11 / 111

Confirmation Letter

To,
Dr. Mahesh Sharma
Published in : Volume 8 | Issue 11 | 2021-11-16



Subject: Publication of paper at International Journal of Emerging Technologies and Innovative Research .

Dear Author,

With Greetings we are informing you that your paper has been successfully published in the International Journal of Emerging Technologies and Innovative Research (ISSN: 2349-5162). Following are the details regarding the published paper.

About JETIR : An International Scholarly Open Access Journal, Peer-Reviewed, Refereed Journal Impact Factor Calculate by Google Scholar and Semantic Scholar | AI-Powered Research Tool, Multidisciplinary, Monthly, Multilanguage Journal Indexing in All Major Database & Metadata, Citation Generator, Impact Factor: 7.95, ISSN: 2349-5162

UGC Approval : UGC and ISSN Approved - UGC Approved Journal No: 63975 | Link: <https://www.ugc.ac.in/journallist/subjectwisejurnallist.aspx?tid=MjM0OTUxNjI=&&did=U2VhcmNoIGJ5IEITU04=>

Registration ID : JETIR 316813

Paper ID : JETIR2111111

Title of Paper : A GUIDE TO CLOUD MIGRATION, A STUDY OF CLOUD COMPUTING ADOPTION IN UNIVERSITIES

Impact Factor : 7.95 (Calculate by Google Scholar)

DOI :

Published in : Volume 8 | Issue 11 | 2021-11-16

Publication Date: 2021-11-16

Page No : b67-b86

Published URL : <http://www.jetir.org/view?paper=JETIR2111111>

Authors : Dr. Mahesh Sharma

Thank you very much for publishing your article in JETIR. We would appreciate if you continue your support and keep sharing your knowledge by writing for our journal JETIR.


Editor In Chief

International Journal of Emerging Technologies and Innovative Research
(ISSN: 2349-5162)



www.jetir.org | editor@jetir.org | Impact Factor: 7.95 (Calculate by Google Scholar)



JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

A GUIDE TO CLOUD MIGRATION, A STUDY OF CLOUD COMPUTING ADOPTION IN UNIVERSITIES

Dr. Mahesh Sharma

Associate Professor

Ideal Institute of Management and Technology, GGSIP University, Delhi

Abstract: Universities encounter numerous obstacles in their information and communications technology activities, including financial expenses, licencing, and software and hardware administration (ICT). Universities can provide smart, safe, and fluent services to their teachers, students, researchers, information technology (IT) personnel, and administrators by addressing these hurdles. Cloud computing may be able to help with these issues. At terms of online education, economic crisis, globalization, and high and continuously changing requirements, the shift to cloud computing in universities is a critical step, particularly during the COVID-19 period. Cloud computing has the potential to help institutions quickly solve challenges related to the Corona Virus outbreak. The goal of this study was to determine the position of Turkish universities in the cloud computing space and to offer an abstract hybrid cloud framework for these institutions. The study included a descriptive method and a survey technique. The data was analyzed using the SPSS programme. In the analysis, percentage, frequency, and chi-square statistics were used. The present conditions and challenges in the usage of the cloud service model in universities were attempted to be recognized as a consequence of the research, and a road map for fixing these problems was put up. In this regard, a hybrid paradigm for implementing cloud computing in universities has been presented in order to help them overcome their highlighted obstacles. The findings are primarily meant to serve as a guide for colleges interested in adopting cloud computing.

Keywords: Universities, Cloud Computing, Higher Education, Education

Introduction

Universities in the information age use modern information technology (IT) to meet the needs and expectations of their consumers. Universities must make an effort to structure themselves according to the demands of new IT and to technologically refresh themselves. Cloud computing is one of the most well-known new technologies these days. This technology has numerous applications in the industries of finance, health, insurance, automobile, and military, as well as in colleges.

Many institutions are experiencing an IT revolution as a result of cloud computing. The recent significant growth in the number of universities in Turkey has created a number of concerns about the quality of university information



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Ref No : IJCRT/Vol 10 Issue 5/ 013

To,
Dr. Mahesh Sharma

Subject: Publication of paper at International Journal of Creative Research Thoughts.

Dear Author,

With Greetings we are informing you that your paper has been successfully published in the International Journal of Creative Research Thoughts - IJCRT (ISSN: 2320-2882). Thank you very much for your patience and cooperation during the submission of paper to final publication Process. It gives me immense pleasure to send the certificate of publication in our Journal. Following are the details regarding the published paper.

About IJCRT : Scholarly open access journals, Peer-reviewed, and Refereed Journals, Impact factor 7.97 (Calculate by google scholar and Semantic Scholar | AI-Powered Research Tool) , Multidisciplinary, Monthly, Indexing in all major database & Metadata, Citation Generator, Digital Object Identifier(DOI) | UGC Approved Journal No: 49023 (18)

Registration ID : IJCRT_219030

Paper ID : IJCRT2205013

Title of Paper : CYBER SECURITY ATTACKS, THREATS, AND VULNERABILITIES

Impact Factor : 7.97 (Calculate by Google Scholar) | License by Creative Common 3.0

Publication Date: 02-May-2022

DOI :

Published in : Volume 10 | Issue 5 | May 2022

Page No : a79-a86

Published URL : http://www.ijcrt.org/viewfull.php?&p_id=IJCRT2205013

Authors : Dr. Mahesh Sharma, Dr. Seema Nath Jain

Notification : UGC Approved Journal No: 49023 (18)

Thank you very much for publishing your article in IJCRT.


Editor In Chief
International Journal of Creative Research Thoughts - IJCRT
(ISSN: 2320-2882)



Indexing       
CiteSeer^x       

An International Scholarly, Open Access, Multi-disciplinary, Monthly, Indexing in all major database & Metadata, Citation Generator

Website: www.ijcrt.org | Email: editor@ijcrt.org



Cyber Security Attacks, Threats, and Vulnerabilities

Dr. Mahesh Sharma¹

Dr. Seema Nath Jain²

Vice – Principal¹

Principal²

Ideal Institute of Management and Technology, Karkardooma Institutional Area, Delhi – 110092

Abstract: The broad goal of this investigation is to learn more about cyber infrastructure attacks, threats, and vulnerabilities, which include hardware and software systems, networks, organization networks, intranets, and the usage of cyber intrusions. To accomplish this goal, the paper attempts to explain the significance of g in network invasions and cyber-theft. It also goes into great length on the reasons for cybercrime's rapid expansion. A thorough description and definition of cyber security, its role in community infiltration and cyber understand theft, and a study of the reasons for the rise in cybercrime and their impact are also included in the paper. Finally, the authors provide certain preventative measures and practical remedies to cyber security attacks, threats, and vulnerabilities. While technological know-how has a role to play in reducing the impact of cyber attacks, the vulnerability lies in human behaviour and psychological predispositions, according to the paper. While research points to the hazards of psychological vulnerabilities in cyber attacks, investments in organizational education programmes give hope that cyber attacks can be mitigated.

Keywords: Threat, Vulnerability, Cyber-attack, Cyber-Warfare

1. Introduction

The world is moving toward digitalization, which means less currency and fewer transactions. Even the government and security agencies have been subjected to significant cyber losses and disruptions. Because the crime environment in cyberspace is so different from that of real life, there are numerous obstacles to enacting cybercrime legislation as true space law in any civilization. For instance, in real life, age is a self-authenticating factor, however in cyberspace, age is no longer so. In the cyber world, a child under the age of 18 can easily hide his age and gain access to restricted resources, although in the real world, it would be difficult for him to do so. Cyber security is the process of defending information by avoiding, detecting, and responding to cyber-attacks.



To read the full version of this content please select one of the options below:

[Access through your institution](#)

[Access and purchase options](#)

Development of research agenda on demonetization based on bibliometric visualization

[Deepa Jain, Manoj Kumar Dash, Keshav Singh Thakur](#) ▼

[International Journal of Emerging Markets](#)

DOWNLOADS

ISSN: 1746-8809

International publication date: 12 March 2021



300

[International Standard](#)

[Reports & Permissions](#)

Serial

Number.)

Abstract

Purpose

The purpose of present study is to identify influential aspects of published literature, research streams and future research questions to set forth future research agenda based on comprehensive literature review using bibliometric and content analysis.

Design/methodology/approach

The study analyzed 285 documents from the international Scopus database using bibliometric analysis and content analysis. VOSviewer software is used for bibliometric analysis.

Findings

The study identified influential aspects of published literature; identified five significant research streams: (1) Demonetization and financial system, (2) Demonetization and financial technology, (3) Demonetization and financial market, (4) Demonetization and digital payment system and (5) Demonetization and governance and proposed 27 key future research questions to develop future research agenda.

Practical implications

The present study makes significant contribution to the literature by providing a framework for future research. The framework provides opportunities to future researchers to explore the web of relations among five identified research streams as future research agenda.

Originality/value

The present work is unique in its way of contribution, as to the best of researchers' knowledge no work was witnessed in published literature to cover demonetization in a detailed and comprehensive manner. The present study fills this gap by conducting bibliometric analysis and content analysis. The study proposed conceptual framework for demonetization characterization to understand the demonetization literature well; and also proposed framework for future researcher to be explored further.

Related articles

Demonetization move in India: a conceptual study
Deepa Jain et al., *Journal of Money Laundering Control*, 2020

Understanding the link between government cashless policy, digital financial services and socio-demographic characteristics in the MENA countries

Amari Mouna et al., *International Journal of Sociology and Social Policy*, 2021

Influential and intellectual structure of Islamic finance: a bibliometric review
Muneer M. Alshater et al., *International Journal of Islamic and Middle Eastern Finance and Management*, 2020

Urban smart mobility in the scientific literature — bibliometric analysis
Ewelina Julita Tomaszewska et al., *Engineering Management in Production and Services*, 2018

Trends and Visibility of "Digital Health" as a Keyword in Articles by JMIR Publications in the New Millennium: Bibliographic-Bibliometric Analysis
Alireza Ahmadvand et al., *J Med Internet Res*, 2019

The deubiquitinase USP11 promotes ovarian cancer chemoresistance by stabilizing BIP
Xiaolin Zhu et al., *Selections from Signal Transduction and Targeted Therapy*, 2021

Demonetization Digital Cashless Citation analysis


Bibliometric analysis

Acknowledgements

On behalf of all authors, the corresponding author states that there is no conflict of interest.

Citation

Jain, D., Dash, M.K. and Thakur, K.S. (2021), "Development of research agenda on demonetization based on bibliometric visualization", *International Journal of Emerging Markets*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/IJOEM-12-2019-1085>

 Download as .RIS

Publisher: Emerald Publishing Limited
Copyright © 2021, Emerald Publishing Limited

Feedback Manage cookies



© 2021 Emerald Publishing Limited

Services

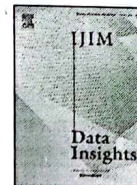
- Authors
- Editors
- Librarians
- Researchers
- Reviewers

About

- About Emerald
- Working for Emerald
- Contact us
- Publication sitemap

Policies and information

- Privacy notice
- Site policies
- Modern Slavery Act
- Chain of interest governance statement
- COVID-19 policy
- Accessibility



How is Blockchain used in marketing: A review and research agenda

Deepa Jain^a, Manoj Kumar Dash^b, Anil Kumar^{c,*}, Sunil Luthra^d

^a School of Commerce and Business Studies, Jiwaji University, Gwalior 474002, India

^b ABV-Indian Institute of Information Technology & Management, Gwalior, 474002, India

^c Guildhall School of Business and Law, London Metropolitan University, 84 Moorgate, London EC2M 6SQ UK

^d Department of Mechanical Engineering, Ch. Ranbir Singh State Institute of Engineering and Technology, Jhajjar, Haryana, India



ARTICLE INFO

Keywords:

Blockchain
Bibliometric analysis
Data analytics
Citation analysis
Marketing integration

ABSTRACT

Blockchain technology is the need of the hour today, due to its strong pillars of distribution, decentralisation, encryption, immutability and tokenization. It has a growing scope in various sectors of the economy. With vast data availability, there are challenges of big data, privacy, ransomware attacks, resulting into marketing fraud and spam. The present study reviews the use of blockchain in marketing area and seeks to identify influential aspects, research streams and research questions to propose the future research agenda of emerging market perspectives for blockchain marketing integration. The study analysed 75 articles from the international database of Scopus using bibliometric and network-based analysis. Present study firstly, identified influential aspects of literature in terms of highly cited articles, keywords, authors and publications; Secondly, identified five future research streams: (i) Blockchain and Electronic Commerce, (ii) Blockchain and Marketing; (iii) Blockchain and Data; (iv) Blockchain and Data Analytics and (v) Blockchain-Privacy and Security, Finally, suggested 18 future research questions. The study paved way for future researchers by providing future research agenda in terms of the proposed framework, which needs to be explored further to identify the relationships between five identified streams using proposed research questions. The study is unique in terms of its contribution to the literature publishing literature with an exhaustive focus on 'identifying the blockchain-marketing integration.' The present study fills this literature gap and proposed a framework and research questions for future researchers.

1. Introduction

In today's digital age, information and communication technologies (ICTs) has played a major role to bring a revolution in the virtual business models (Ismagilova et al., 2019). The most promising and disruptive technology discovered was blockchain, which has drastically impacted business models and created new avenues in different areas. Blockchain refers "to a fully distributed system for cryptographically capturing and storing a consistent, immutable, linear event, log of transactions between networked actors" (Risius & Spohrer, 2017). Blockchain was first recognized as a decentralized ledger for bitcoin. However, in recent years blockchain has been found popular in financial technology (Fintech) for being a core technology (Du et al., 2019). The dominant area of blockchain in Fintech has been payment system where there is need a need for a technically sound, safe and effective transaction (Ali et al., 2014). These digital currencies or cryptocurrencies uses encryption techniques, cryptography and pair of keys (private and public) for safe data transfer (Abramova & Böhme, 2016). As a result trust has now shifted to protocols- a decentralized architecture as against tradi-

tional architecture of client-server (Karafiloski & Mishev, 2017). With the expansion of digitalization in various fields, marketing shifted from brick and mortar to digital platforms, where an utmost need was felt to study the integration of latest disrupted technology of blockchain in marketing to make this function grow with secure transactions- a future challenge.

Blockchain has been applied in various areas ranging from banks to internet companies for creation of values (Chen et al., 2018; Mačiulienė & Skaržauskienė, 2021); artificial intelligence (Ekramifard et al., 2020; R. Gupta et al., 2020; Pillai, Sivathanu, & Dwivedi, 2020), healthcare (Dimitrov, 2019; Przhedetskiy et al., 2019; Tandon et al., 2020), bitcoin (Abramova & Böhme, 2016; Cocco & Marchesi, 2016; Nakamoto, 2008; Vyshnavi, 2016), Internet of Things (Krafft, Sajtos, & Haenlein, 2020; Liu et al., 2019), social media (Rathnakar, 2019; Van Osch et al., 2019); circular economy (Kouhizadeh, Zhu, & Sarkis, 2020); digital analytics (S. R. Gupta et al., 2020), financial technology (Ali et al., 2020), businesses (Grover, Kar, & Ilavarasan, 2018), insurance (Kar & Navin, 2021), cyber security (Mittal et al., 2021) but its application in marketing function has been studied only with very limited coverage to few articles on

* Corresponding author.

E-mail addresses: diya.deep83@gmail.com (D. Jain), manojdash@iiitm.ac.in (M.K. Dash), A.Kumar@londonmet.ac.uk (A. Kumar), sunilluthra1977@gmail.com (S. Luthra).

<https://doi.org/10.1016/j.ijime.2021.100044>

Received 9 August 2021; Received in revised form 15 October 2021; Accepted 16 October 2021

2667-0968/© 2021 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license

(<http://creativecommons.org/licenses/by-nc-nd/4.0/>)



FLUCTUATIONS IN STOCK PRICES OF INDIAN AUTOMOBILE INDUSTRY: DUE TO CORPORATE FINANCING VARIABLES

□ Ms. Nikita Jain*

Prof. (Dr.) Pradeep Kumar Varshney**

ABSTRACT

Share investing is taking a risk and investors seek those financial measures that have significant impact on stock price. This paper attempts to investigate the value of various Corporate Financing Variables on stock prices in the context of top Indian Automobile Industry. This paper determines whether Earnings per Share (EPS), Return on Assets (ROA) and Dividend per Share (DPS) have significant influence on stock prices of Indian Auto Industry. The study used 2019-20 financial reports of top 5 Indian Auto Industry. The result of this study shows Correlation between each Corporate Financing Variables with Stock Prices. Impact concluded from this study shows Positive as well as negative effect.

Keywords- Stock price, Corporate Financing Variables, EPS, Correlation

Introduction

The relevance of financial statement has always been central focus for investors and for market analysis to understand the key factors that explain stock prices. To understand the stock pricing strategy theoretical valuation technique is been used showing correlation and regression between different corporate variables and stock prices of various Indian Auto Industries.

Stock prices change as a result of market forces. By this we mean that share prices change because of supply and demand. If more people want to buy a stock (demand) than sell it (supply), then the price moves up and vice-versa. The most important factor that affects the value of a company is its earnings. Part of these earnings is distributed as dividends, while the remainder is retained by the company for reinvestment.

Different studies have been linked to

stock prices showing correlation and regression analysis using variables like: Earnings per Share (EPS), Return on Assets (ROA) and Dividend per Share (DPS).

List of top 5 Indian Automobile Industries taken for this research: Tata Motors Limited, Mahindra & Mahindra Limited, Maruti Suzuki India Limited, Ashok Leyland Limited, Hero Motocorp Limited.

Literature review

Dr. M. Rajesh and K. Bhasker (2015): analyses the impact of fundamental factors on share price movements. A study on selected companies of Indian manufacturing industries on Bombay stock exchange. The primary purpose of the study is to examine the share price variation to specific macroeconomic. MPS, PPP, GDP, Inflation, money supply (M2) and INP are the macro economic variables used for the study. The result indicates the industrial production of selected firms is significant and

*Research Scholar - Mewar University

**Mewar University, Chittorgarh, Rajasthan

FINANCIAL STRUCTURE ANALYSIS THROUGH M&A OF BHARTI AIRTEL AND TATA TELECOM GROUP

□ Ms. Nikita Jain*

Prof. (Dr.) Pradeep Kumar Varshney**

ABSTRACT

In this research, a Case Study Method examines the impact of M&A on shareholder capital. This study demonstrates the merger of largest telecom operator in India, Bharti Airtel, with the mobile company of Tata Group, which took place from 2019-20, began in July 2019 and finished by Jan' 2020. This research is a futuristic approach to the merger between the Airtel and Tata Telecom group, if it would produce any profits for the combined company's shareholders. For this research report, two approaches will be conducted, First is Equity Price Analysis and the second is the Accounting Data Analysis.

The study of stock prices shows the share prices Pre and Post the merger in order to assess any patterns and hence inferences on shareholder gains, according to data available for 2018-19. The effect of the M&A on the company's market value shall be analyzed with an order to attempt the access to the synergistic benefits and, eventually, the benefit to the shareholder. The Accounting Data Analysis on the other hand, uses different approaches to compare acquisition values using methods such as CAPM, NAV Method, Dividend Growth Model and P/E Ratio.

A review of the integration strategy and appraisal of Tata Telecom Group is a key objective, required for this company to regain the confidence of the markets.

Keywords: M&A, Wealth, Synergies, Stock Price, CAPM, Gains, Futuristic approach

Chapter 1 INTRODUCTION

M&A are motivated to create value for their firms. Their motive is to combine two businesses to expand its market and production work. The aim of this research paper to study whether Merger & Acquisition creates value as well as maximizes wealth of shareholders. This study is about recent M&A of Bharti Airtel & Tata Telecommunication Maharashtra Ltd. (TTML) and critical study of their M&A which has been proceeding since last year. The aim is to show critical aspects explaining whether acquiring TTML, Airtel gains wealth and synergy. And how does it impacts overall

development of TTML shareholder's

There are quiet motives to pursue for M&A, such as:

1. Apply Superior Management Skills
2. To enter new market
3. To obtain unique technical capabilities
4. To achieve operating economies

Similarly, M&A have to be evaluated using Net Asset Value (Cap Bud Process) to make sure that their ventures are achieving at least a minimum Rate of return.

*Research Scholar, Mewar University

**Mewar University, Chittorgarh, Rajasthan

Future Smart Home with Internet of Things

Nikita Goel, Seema Gupta

Computer Science Department, IIMT, 16X Karkardooma, Delhi
nikita.goel@ideal institute.edu.in, seemagupta@ideal institute.edu.in

Abstract— This paper gives an analysis of applications in the home based on the Internet of Things (IoT). The internet of things (IoT) has a variety of application areas, including smart homes. Due to advancements in smart, linked technologies such as the Internet of Things, smart home infrastructure is becoming more interwoven into our daily lives (IoT). Smart homes are characterized by the use of internet-connected technology such as smartphones, remote sensors, and other IoT devices to enable remote administration and monitoring of household appliances.

Keywords— Smart Home, IoT security, Electronic Product Code Technology, Cyber Attacks

Its mission is to promote knowledge and test practices for the security of the IoT. Researchers are doing various explorations in this field.

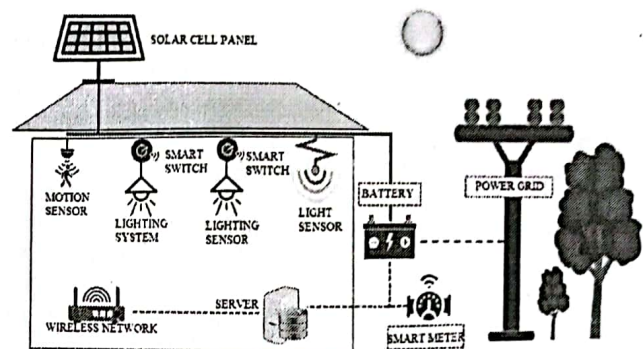


Fig. 1 Concept of IoT at Home

I. INTRODUCTION

After the Internet and mobile communication networks, the Internet of Things is the third wave of information technology, characterized by greater integration and intelligence. Electronic product code (EPC) Technology [1] and International Telecommunication Union research work was crucial in the development of the Internet of Things. (ITU). The internet of things talks about the scope of the internet which is going to be expanded, beyond computing and computer devices being connected. Some of the applications of IoT at home are door locks, smart gardening, smart heating, smart security, personal assistants, smart city[11] etc.

IoT is a network system in both wireless and wired link that consists of many software and hardware entities such as e-commerce, healthcare and medical system, agriculture management, energy management home automation, logistic department etc.[4] Fig.1 shows the concept of IoT at home, it shows how IoT controls and operates the physical appliances and various things via the internet.

It has been stated by various noble authors that IoT has become a reality, networking will become even more complex, with virtually every computing element or household object becoming part of a large interconnected system that would lead to more and more to vulnerable to cyber-attacks and physical threats, as a result, concern towards security is increasing, as a result, the Internet of Things Security Foundation (IoTSF) was launched on September 23, 2015.

II. OBJECTIVE

The main objective of this paper is to compare various controller boards that we can use for our hardware projects. The two most popular among them are Arduino and Raspberry Pi. In this paper, it is shown how Raspberry Pi is better than any other technology and how it is used in IoT in-home infrastructure, in this paper descriptive knowledge and comparison are given. Some features like family, usage and features processor used are explained in brief.

III. SMART HOME ARCHITECTURE

The fibre optic network's interconnection allows us to create a network for home air conditioning and other smart appliances by linking the family's communication network. Intelligent interactive terminals, smart plugs, and smart appliances, among other things, may be used to form a network of smart appliances in the house. We achieve household appliances that automatically gather, analyze, and manage electrical data, as well as effective operation and energy management.[3] The system may control house and other services remotely by phone, cell phone, Internet, and other ways, which is an IoT application.

We also perform automatic water collection and management, as well as smoke detection, gas leak detection, anti-theft, emergency help, and other home security services, using intelligent interactive interfaces. Some other applications to explore in IoT are gas meters, and support and property management centre cell master network of IoT architecture.

Cancellation On Fuzzy Projective Modules And Schanuel's Lemma Using Its Conditioned Class

AMARJIT KAUR SAHNI¹, JAYANTI TRIPATHI PANDEY²,
RATNESH KUMAR MISHRA³

^{1,2}Department of Mathematics, AIAS, Amity University, Uttar Pradesh, INDIA

³Department of Mathematics, NIT, Jamshedpur, INDIA

Abstract:—As an extension, the current study looks at fuzzy projective module cancellation and fuzzy module equivalence in specific situations. While addressing cancellation, we provide the necessary and sufficient criteria for fuzzy projective modules to fulfill cancellation over the polynomial ring and ring R . Furthermore, using fuzzy p -poor modules, we have established an intriguing result in Schanuel's lemma, claiming that for any two fuzzy exact sequences of fuzzy R -modules $0 \rightarrow \mu_1 \xrightarrow{\bar{f}_1} \eta_1 \xrightarrow{\bar{g}_1} \mu \rightarrow 0$ and $0 \rightarrow \mu_2 \xrightarrow{\bar{f}_2} \eta_2 \xrightarrow{\bar{g}_2} \mu \rightarrow 0$. If η_1 and η_2 are fuzzy p -poor modules then $\mu_1 \oplus \eta_2 \cong \mu_2 \oplus \eta_1$. The same is reinforced by an acceptable illustration of fuzzy p -poor module.

Key-words:— fuzzy modules, fuzzy projective module, fuzzy projective poor-module, fuzzy subprojective poor-module, schanuel's lemma.

Received: August 27, 2021. Revised: May 19, 2022. Accepted: June 9, 2022. Published: July 1, 2022.

1 Introduction

Throughout the study, rings are commutative with identity, and modules are unitary. Authors like Gilmer[6] studied the ring whose ideals meet cancellation characteristics independently. According to his research, every ring ideal is confined cancellation if and only if the ring is a nearly Dedekind domain or a primary ring. D.D. and D.F. Anderson[2] verified a similar finding and investigated it further. Mijbass[16] generalized this notion to modules. Many researchers worked on its various types, as mentioned in [5], [8], [25]. Also, weak cancellation modules by Naoum and Mijbas[18] proved some properties of them as well as their relations with other types of modules, such as projective and flat modules, and provided some conditions under which projective and flat modules act as weak cancellation modules. Zhang and Tong[24] also worked on the characterization of the cancellation property for projective modules and demonstrated that Dedekind domains contain it. Bothaynah, Khalaf and Mahmood investigated purely and weakly purely cancellation modules in [3] and developed equivalent criteria for each

kind. Mahmood, Bothaynah and Rasheed[15] investigated comparable cancellation modules and discovered some connections between them and cancellation modules. They also looked at the impact of module localisation and tracing on this sort of module. On the Laurent polynomial ring, authors like Mishra[17] studied cancellation modules. Later, as illustrated in [11], [12] and [4] cancellation modules such as purely, restricted, weakly restricted, fully and naturally were fuzzified.

Since then, the current work has focused on either the classical version of cancellation on projective modules or various sorts of cancellation fuzzy modules. Thus, the current work addresses the gap, and we extend the existing situation by examining cancellation on fuzzy projective modules and demonstrating the equivalence of fuzzy modules using Schanuel's lemma. To demonstrate Schanuel's lemma exemption for fuzzy projective modules, we constructed a new structure called the fuzzy p -poor module. The current research is organised as follows. In Section 2, the basic definitions are given for a better understanding of the reader. Section 3 is motivated by [17] and deals with the cancel-

New Mathematics and Natural Computation

On minimal fuzzy realization in category theoretic setting

--Manuscript Draft--

Manuscript Number: NMNC-D-21-00115

Full Title: On minimal fuzzy realization in category theoretic setting

Article Type: Research Paper

Section/Category: Mathematics of Uncertainty

Keywords: Category; Complete residuated lattice; Deterministic fuzzy automaton; Fuzzy language; Fuzzy realization

Corresponding Author: Jayanti Tripathi Pandey, Ph.D.
Amity University
Noida, Uttar Pradesh INDIA

Corresponding Author Secondary Information:

Corresponding Author's Institution: Amity University

Corresponding Author's Secondary Institution:

First Author: Shailendra Singh, M.Sc.

First Author Secondary Information:

Order of Authors: Shailendra Singh, M.Sc.
Amarjit Kaur Sahni, M.Phil
Jayanti Tripathi Pandey, Ph.D.

Order of Authors Secondary Information:

Abstract:

This paper aims to study the minimal fuzzy realization for a fuzzy language with membership values in a complete residuated lattice by using category theory. Specifically, we introduce the concept of a category $CT\ RL(\Sigma)$, whose object-class is complete transition residuated lattices corresponding to deterministic Σ -semi automata. We give the categorical characterization of reachability and observability maps for a given deterministic fuzzy automaton. In another direction, we demonstrate that the category $DSA(\Sigma)$ is a subcategory of the categories $FCA(\Sigma)$

and $FDA(\Sigma)$. Also, we discuss the concept of bisimulation between F1-coalgebras. Next, we introduce a general theory of minimal fuzzy realization for a given fuzzy language in a category theory setting. Strikingly, we demonstrate that all minimal fuzzy realization for a given fuzzy language is one of a kind up to isomorphism.

On Fuzzy Proper Exact Sequences and Fuzzy Projective Semimodules Over Semirings

AMARJIT KAUR SAHNI¹, JAYANTI TRIPATHI PANDEY²,
RATNESH KUMAR MISHRA³, VINAY KUMAR⁴

^{1,2}Department of Mathematics, AIAS, Amity University, Uttar Pradesh, INDIA

³Department of Mathematics, NIT, Jamshedpur, INDIA

⁴Ex Scientist GOI, Ex Dean, Professor VSIT, GGSIP University, Delhi, INDIA

Abstract:—As an analogue here we extend and give new horizon to semimodule theory by introducing fuzzy exact and proper exact sequences of fuzzy semi modules for generalizing well known theorems and results of semimodule theory to their fuzzy environment. We also elucidate completely the characterization of fuzzy projective semi modules via Hom functor and show that semimodule μ_P is fuzzy projective if and only if $\text{Hom}(\mu_P, -)$ preserves the exactness of the sequence $\mu_{M'} \xrightarrow{\bar{\alpha}} \nu_{M'} \xrightarrow{\bar{\beta}} \eta_{M'}$ with $\bar{\beta}$ being K-regular. Some results of commutative diagram of R-semimodules having exact rows specifically the “5-lemma” to name one, were easily transferable with the novel proofs in their fuzzy context. Also, towards the end apart from the other equivalent conditions on homomorphism of fuzzy semimodules it is necessary to see that in semimodule theory every fuzzy free is fuzzy projective however the converse is true only with a specific condition.

Key-words:- fuzzy semimodules, fuzzy projective module, fuzzy projective semimodule, 5-lemma, fuzzy exact sequence, fuzzy proper exact sequence.

Received: July 20, 2021. Revised: November 27, 2021. Accepted: December 18, 2021. Published: December 27, 2021.

1 Introduction

From 1965 onwards when the crucially relevant concept “fuzzy” came into existence, number of structures in algebra were extended to their fuzzy versions[21]. After which researchers did everything they could, to clarify concepts in the field of fuzzy module theory, leaving no stone unturned[3], [4], [7], [8], [12], [22]. And here in this paper we primarily deals with two aspects mainly: the study of fuzzy semimodules and fuzzy projective semimodules over semirings, where semiring is a structure near to ring but apart from the necessary condition of having an additive inverse. The term semiring was first coined by Vandiver[19], after which the concepts of automata and formal languages in[9] and [5] was extensively studied in its fuzzy context in which semirings act as a vital tool. Shu and Wang [16], [17] discussed the cardinality of bases and dimensional formula-

las of semimodules over commutative semirings. In the light of forgoing here we study the fuzzy context of semimodules, free and projective semimodules over semirings in order to set a new platform for future researches.

The present study is structured as follows. In Section 2 along with basic definitions appropriate examples have been constructed to support the study. In section 3 we have investigated and generalized the concept of semimodules and proved many interesting results. Section 4 analyses the concept of fuzzy projective semimodules. In it generalization from the corresponding results of the classical theory, along with the equivalent description of the same with a particular condition has being mentioned. At last, section 5 discusses the applications and future scope of the current study.

Future Smart Home with Internet of Things

Nikita Goel, Seema Gupta

Computer Science Department, IIMT, 16X Karkardooma, Delhi
nikita.goel@idealinstitute.edu.in, seemagupta@idealinstitute.edu.in

Abstract— This paper gives an analysis of applications in the home based on the Internet of Things (IoT), The internet of things (IoT) has a variety of application areas, including smart homes. Due to advancements in smart, linked technologies such as the Internet of Things, smart home infrastructure is becoming more interwoven into our daily lives (IoT). Smart homes are characterized by the use of internet-connected technology such as smartphones, remote sensors, and other IoT devices to enable remote administration and monitoring of household appliances.

Keywords— Smart Home, IoT security, Electronic Product Code Technology, Cyber Attacks

Its mission is to promote knowledge and test practices for the security of the IoT. Researchers are doing various explorations in this field.

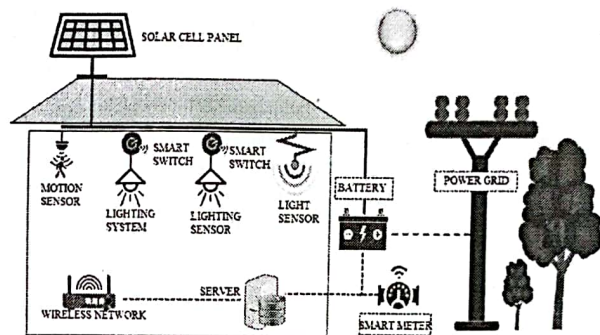


Fig. 1 Concept of IoT at Home

I. INTRODUCTION

After the Internet and mobile communication networks, the Internet of Things is the third wave of information technology, characterized by greater integration and intelligence. Electronic product code (EPC) Technology [1] and International Telecommunication Union research work was crucial in the development of the Internet of Things. (ITU). The internet of things talks about the scope of the internet which is going to be expanded, beyond computing and computer devices being connected. Some of the applications of IoT at home are door locks, smart gardening, smart heating, smart security, personal assistants, smart city[11] etc.

IoT is a network system in both wireless and wired link that consists of many software and hardware entities such as e-commerce, healthcare and medical system, agriculture management, energy management home automation, logistic department etc.[4] Fig.1 shows the concept of IoT at home, it shows how IoT controls and operates the physical appliances and various things via the internet.

It has been stated by various noble authors that IoT has become a reality, networking will become even more complex, with virtually every computing element or household object becoming part of a large interconnected system that would lead to more and more to vulnerable to cyber-attacks and physical threats, as a result, concern towards security is increasing, as a result, the Internet of Things Security Foundation (IoTSF) was launched on September 23, 2015.

II. OBJECTIVE

The main objective of this paper is to compare various controller boards that we can use for our hardware projects. The two most popular among them are Arduino and Raspberry Pi. In this paper, it is shown how Raspberry Pi is better than any other technology and how it is used in IoT in-home infrastructure, in this paper descriptive knowledge and comparison are given. Some features like family, usage and features processor used are explained in brief.

III. SMART HOME ARCHITECTURE

The fibre optic network's interconnection allows us to create a network for home air conditioning and other smart appliances by linking the family's communication network. Intelligent interactive terminals, smart plugs, and smart appliances, among other things, may be used to form a network of smart appliances in the house. We achieve household appliances that automatically gather, analyze, and manage electrical data, as well as effective operation and energy management.[3] The system may control house and other services remotely by phone, cell phone, Internet, and other ways, which is an IoT application.

We also perform automatic water collection and management, as well as smoke detection, gas leak detection, anti-theft, emergency help, and other home security services, using intelligent interactive interfaces. Some other applications to explore in IoT are gas meters, and support and property management centre cell master network of IoT architecture.