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on

THE ETERNAL QUEST
OF MANKIND

Chief Editor: Dr. Satish Ahuja



DAV CENTENARY COLLEGE

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NH-3, NIT, Faridabad ,Haryana, India

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ON

THE ETERNAL QUEST OF MANKIND

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PREFACE

**“The quest for knowledge never ends;
It just leads to more curiosities that lead to a greater mind.”**

It feels privileged and honoured to bring another succession of journal “The Eternal Quest of Mankind” especially when this journal aims to publish high quality research papers from various disciplines. The journal aims to provide readers to provide with high quality peer-reviewed scholarly articles on a large and extended variety of issues related to doctoral studies in various areas like information technology, literature and language, science, management and a vast scope for all the researchers to expose and evolve their curiosities on a common ground.

Considering these circumstances, the foremost objective of the journal is to emphasis on the new emerging scope for research and methodologies in various streams of knowledge. The journal provides a pivotal platform to the researchers to transcend their limits in their field and discover a new arena. The journal will be quite fruitful and thoughtful for the scholars and researchers with the relevant concepts, techniques and outcomes. Thus with this current edition the purpose of the journal is to features insightful, scholarly and unbiased write ups and looking forward to being enriched with your intellectual contribution.

Dr. Satish Ahuja

Principal
DAV Centenary College
Faridabad (Haryana), India



Message

It is a matter of great pleasure to announce another successful series of journal "The External Quest of Mankind." It is indeed a matter of profound pride that every time this journal comes up with more innovative and ingenious scholarly articles which are globally applicable and provides a profitable opportunity for the newly aspirants as well as scholars to share discuss and communicate their views and observations. The journal includes various disciplines and provides an opportunity to students, researchers and scholars to enhance their learning and volunteer with their innovative skills and perfection in their fields. It is a commendable efforts to bring together eminent academicians, scholars and researchers for widening the horizon of their knowledge. In this regard, I congratulate the entire member of the journal for their commendable efforts and the researchers for their insightful contribution. My best wishes and greeting to all.

Ahuja

Dr. Satish Ahuja
(Chief Editor)

Dr. Suniti Ahuja

Associate Professor
Coordinator, MA(English) & BCA Deptt.
DAV Centenary College, Faridabad



Message

I feel happy and thrilled to bring forth another edition of the journal "The Eternal Quest of Mankind." As the title of the journal itself signifies the quest of the researchers, scholars and intellectuals which is never ending.

This quest keeps on increasing deeper and deeper, the more we dive into the sea of knowledge. The journal aims to promote healthy, constructive and interpretative writing on various issues and trends, thus provides an adequate space for the quality research being pursued by the budding researchers and emerging scholars from different fields. In this journal we have evolved various disciplines of life, thus not restricting it to a particular domain. In fact it has become a huge platform for all to elaborate not only their specific fields but also go beyond that in order to explore their innovative spirit.

I would like to thank the principal of the college for always encouraging and motivating for doing our best. Apart from this I would like to pay my regards to all the members wholeheartedly supported for the coming forth of this journal. Last but not the least, I would like to congratulate all the scholars and researchers for their prolific contribution. I look forward to many more such editions for the welfare of all and sundry.

Suniti

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Message

"The Eternal Quest of Mankind" is a journal dedicated to authentic Manuscripts. It is an international journal with ISSN No. 2454-4620. As per the title, the journal is dedicated to endless expedition coupled with the latest advancements in research in all the fields. It is a peer-reviewed, annual journal of DAV Centenary College, Faridabad. The goal of this journal is to provide a platform for scientists, researchers, academicians, and students all over the world to promote, share, and discuss various new issues and developments for scientists, researchers, academicians, and students. Our objective is to contribute substantially to all the fields by providing a high-quality medium for the dissemination of new knowledge and methods. Scholars, practitioners, and other interested groups and individuals are the targeted audience for the journal resulting in fulfilling our endless mission. The Journal is exclusively scientific, literary, and educational in its character of "eternal quest" justifying the name of the journal.

Manuscripts are selected for publication on the basis of merit and appropriateness. Quality and timeliness of published material are our paramount goal. This is achieved through the excellent contributions of our reviewers. By assuring the selection of appropriate, well-qualified, and responsible reviewers who can identify quality manuscripts, and efficiently manage the peer-review process.

With dedication and strenuous effort, this journal stands for a source of inspiration for eagers.

Associate Editors

Ms. Ritu Sachdeva

Ms. Anita Rani

Dr. (Ms.) Priya Kapoor

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A Study of Human Resource Management for Improving the Teaching Skills of Faculty Members

Dr. Satish Ahuja

Principal

D.A.V. Centenary College, Faridabad

Abstract

Human Resource Management is a branch of an organization which appoints and develops personnel to promote the organization's goals. Human Resource Management consist the various things such as training staff, interviewing applicants and employee retention. We can say human resource Management division involves few aspects are compensation, benefits, employee, labor relations, health, safety and security.

The ultimate objective of department of the human resource management is to manage people, human capital, and culture for the organization's success. In the educational field, the selection of an effective school administrator is crucial in maintaining a nurturing and supportive environment for teachers.

Therefore, this research paper intends the first by emphasizing the role of human resource management practices of the teaching staff and focusing on the job training, discuss the role of pre-service training for teachers tuition at State University, then discuss identify and define indicators of effective teaching then determine laws and regulations, public skills, basic training in this workshop.

Keywords:- Human Resource Management, Teaching skills, Effective Teaching

Introduction

Today scenario, organizations have various communities that their Life and stability depend to Strong link between the component and its constituent elements, by this strategic approach to human resources that are valuable as a smart and useful investment. Human capital, is not only financial or physical capital But it is defined as the skills, knowledge creativity and health. Experience has shown that the human ability impact on the development of organizations and societies and it is more likely than other inputs such as physical inputs. Therefore, the importance of human resources performance in developing countries for researchers and planners caused to researchers and planners pay attention to the issue of human resource management. In the field of human resource management, the impact of human resource management practices and policies on the organizational Performance is important matter. And organizations can enhance and improve the quality of the staff by providing education and promoting inclusive.

Indeed, Studies show that investment in education will lead to greater efficiency. Therefore, learning organization chooses to invest on people, because people are actually valuable human capital that has different qualities and create added value for the organization.

Indicators of Effective Teaching

• Planning

Planning is a Process of identifying and defining objective and providing the means and measures that Makes it possible to realize the goals. It should be noted that the definition of the concept of the lesson plan is scheduled similar meaning which it is represent four specific role of planning in effective teaching PNU that they are:

- a) Proper utilization of class time to tea
- b) Conduct meetings have been set according to the outline of all the lessons focus on challenging topics
- c) Do not waste time teaching.

• Organization

The important and most complete of learning and study strategy is organization that it Plays the best role in learning of how to learn by the classification of Contentsand create a logical and meaningful connections between content and different seasons.

• Evaluation

In the basic sense evaluation in order to determine the value of a thing and specifically Evaluation determines the success of a program, a course, a test that considers the primary purpose. It is noted that the evaluation system design of the final exam questions and test time can be centralized with two forms: objective and subjective based.

• Teaching Method

Teaching Methods is a teacher practice in the classroom and creates opportunities for good learning. However, due to the variety of teaching methods, experienced teacher can create effectiveness of learning and transfer of learning using a combination of teaching methods and instead of a mere transmission of content Provide learning conditions and instead of focusing on the teacher-centered instruction emphasize to learner-centered education and cognitive processes . Thus the educational conditions are proportional with semi-person structure of number of students.

• Expression Technique

Use simple, direct and organized is behaviors that most clearly attributed to teachers. At first in an education research by "Hiller" (1986), "Gisher" and "Kaess" (1969) Was evaluated ambiguity of expression in teacher and then by the other researcher for example "Smith" and "Cotton" (1980), "Land" (1981), Seif (2006), Kadnoghi (2007) was developed. The results of this researches showed clear expression is directly proportional with high levels of teacher knowledge and word ambiguity is directly related to the low level of knowledge.

Some characteristics of teachers are the following:

➤ Good Teacher has strong Communication

When it comes to good or effective teaching, quality of strong communication skills are a must. "As a leader or mentor, good communication is a tool for overcoming fear."

➤ Good Teacher should be Listen Well

Great communication doesn't stop when teacher is taking. Listening well is one of the most important skills needed to be a teacher. "Teachers that are skilled in listening and observing often pick up on what isn't being said, such as any anxieties a student may have, and can then help the student build their skills and good confidence levels,"

➤ Good Teacher should be Focus on Collaboration

Working in education means you're never actually working alone. From paraprofessionals and teaching assistants to other classroom teachers and school leaders, working as a teacher often means working successfully in a group. The key to success in this kind of environment,

➤ Good Teachers should be Adaptable

Effective teachers need to be able to work in a regularly evolving environment and adjust their teaching methods and technique based on the age of their students, the resources available and changing curriculum, practices and requirements.

➤ Good Teachers Should be Engaging

Being able to engage students with humor, productive lessons and a strong classroom presence is a main part of what makes someone a good teacher.

"If you were to imagine that teacher that you would want in your life, even now, you're going to want someone who is very engaging in front of the classroom, this is very important thing.

8 Good Teacher show Empathy

Another key to engaging students and improving and enhancing their learning is to treat each student as an individual, by being empathetic and accepting to what may be going on in their lives.

"We need to take a time to think back and think about what could be going on in this student's life. It's so important to be attentive, observant and empathetic and always have a positive manner.

➤ Good Teacher have Patience

No matter what grade level you're teaching, your patience will be tested while working as a teacher. Whether you're One of the best preparations for effective teaching is to ensure that education students get plenty of classroom experience early on in their degree programs.

» Good Teachers should be Life Long Learners

One of the key skills needed to be a good teacher is a dedication to continued education and a love of learning. Whether you're learning more about your subject area, learning new methods of communication or even exploring how to bring more technology into your classroom, continuing to expand your own knowledge is an important key to expanding that of your students. Managing classroom behavior, working with colleagues with different observations or communicating student issues or progress with parents, patience is one of the most important skills to practice as an educator.

» Good Teachers Share Best Practices

A willingness to share experiences and knowledge with others is one of the most important qualities of a good teacher. Education is a very hands-on field and often requires experimentation within the classroom to discover which methods of communicating with students work best. Part of being an effective teacher is sharing your findings and best practices with others in the field.

» Good Teachers Value Real World Learning

Teachers who bring their students' learning into the real world are often some of the most engaging. But it's important for teachers to bring their own learning into the real world, too.

Conclusion

This research paper studies the teachers' knowledge with the help of effective teaching indicators. These provide significant differences. An educational workshop could increase teachers' basic skills in teaching indicators like teaching method, evaluating, planning etc. There isn't significant difference in organization's component. The mean scores of organization slightly modified before and after the workshop. According to the classified material and make a reasonable and meaningful connections between subjects and different seasons for learners and their familiarity with the conceptual model and the organizers as organizing principles is a highly specialized concept in the field of education and teaching and learning that teachers are less able to learn through personal experience or trial and error. So spatial workshop, books and educational materials will have a significant role in the empowerment of teachers. A so providing an in-service training course has a significant role in the empowerment and increasing of interest and motivation. These teaching can create significant effective on performance and eliminate teachers' weaknesses.

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Imminent Outlook of Digitalization and GST (With Special Reference of Indian Hospitality and Tourism Industry)

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Abstract

India has seen two big financial reforms post October, 2016. These two reforms namely demonetization and introduction of GST created lot of difficulties and confusions and market outrage in the short term. This impacted the overall economy including hospitality and tourism industry adversely at least up to the second quarter of 2017. The GDP forecasted for January, 2017 in the earlier scheme of things was 7.6% where in the current status it is hovering around 7.1%. Indian economy suffered a setback which is portrayed as a small time affair though demonetization caused certain devastation to the progression of tourism in many premier destinations. With settling of GST, including implementations of various modifications and alterations, the market seems to show positive response. The results are still awaited but the hospitality and tourism industry and the various stakeholders have started showing/indicating positive response with regard to GST and digital mode of monetary/financial transactions. Indian hospitality and tourism sector seems likely to grow to \$48 billion at the end of the year 2020. Through this paper, the researcher has tried to explore the future perspective of digitalization and GST on Indian hospitality and tourism industry. The objective of the paper is to compare the pre and post reform period in hospitality and tourism sector. The research is based on secondary data. For data analysis, the researcher has used descriptive statistics. The findings will gauge the long term benefits of these two major reforms in Indian hospitality and tourism industry.

Keywords: Imminent outlook, Digitalization, GST, Hospitality and Tourism Industry

Introduction

Prime Minister Narendra Modi stunned the nation on 8 November 2016 when he removed high denomination notes (INR 500 and INR 1000) as legal tenders. The move was made with the goal of uncovering the hidden money that tax evaders, drug dealers, smugglers and other criminal groups stashed with. New INR 500 and INR 2000 notes have been launched but the change has caused a lot of pain to the common man and the inability to replace the old currencies in sufficient measure has impacted a range of sectors in the nation. It seems clear the short-term impact would be on real estate and retail business. The fallout of the demonetization also has spilled over into the tourism business as well.

Other Change was the tax regime. The state government would first collect GST, luxury and entertainment tax under the old indirect taxation system, while the federal government would instead levy a completely new collection of taxes such as excise duty, sales tax, customs duty and federal state tax. Remember, for example, the VAT which is often paid on an amount already having an excise duty by state governments. Thus, with various states having their own tax thresholds, hotels and hospitality companies have no way to take advantage of an input tax credit, because the central tax burden cannot be balanced against state taxes such as VAT, or vice versa. Within the previous law, a hotel with tariffs in excess of Rs. 1,000 will be liable to pay 15 percent service tax. A deduction of 40% allowed on the tariff value would bring the effective rate of service tax down to 9%, but its effect was negligible since the VAT and luxury tax would still apply. Such a cascading effect of the tax regime rolls down right to the end customer, who bears the burden of paying taxes on taxes. GST, which is implemented from July, 2017, aims to replace multiple state and central levies with a single tax. All countries that have adapted GST have grown in their GDP. In case of travel and tourism, GST is likely to eliminate multiplicity of taxes. Implementation of GST would simplify and streamline the tax regime. It will contribute to regulatory easiness and accountability. Assigning GST rates for annual sales for hotels and restaurants is a positive decision by authorities.

Review of Literature

A number of researches and studies have been done in this field since India has significant potential to become one of the

preferred tourist destinations globally. Many surveys have been conducted regarding the impact of demonetization and impact of GST on Indian Hospitality and Tourism Industry along with other various sectors. Some of previous research studies in this field are as follows:-

Ashima Gambhir and Gagan Batra (2016) have conducted a survey on impact of demonetization on various sectors and Indian economy and found that demonetization would affect the different sectors with differing intensities and across varied time areas. The findings of this survey revealed that demonetization has affected different sectors mainly Real Estate, E-Commerce, Banking, Automobiles, Pharmacy and Health care etc.

Nitin kumar and Sharmila (Dec. 2016) have revealed in their paper that demonetization in Indian economy is having negative impact on the different sectors of the economy but majority the negative effects are short run effects. Even though, people are ready to bear the problems for its positive effect on the economy.

Lokesh Uke (Feb. 2017) has further tried to find out the positive and negative impact of demonetization on various sectors like parallel economy, GDP, bond markets, banks, On-line transactions, private educational institutes, medical institutions, political parties, agriculture sector, service sector, retail outlets, small businesses, professionals, etc.

Ashita Chadha and Ritu Sharma (June, 2017) has highlighted the short term and long term impact of demonetization on various sectors of India through their paper named "Demonetization: Economic impact on different sectors in India".

Niharika Gupta (July 2017) has explored various dimensions in her article such as the impact of GST on hotels and lodges as well as tourism industry, taxability under GST, composition scheme in tourism sector, registration fees, cancellation fees, tour packages, insurance fees, key issues facing the tourism sector etc.

K.S. Vinaya kumara and Dr. T. A. Binoy (Oct. 2017) has examined the impact of GST on travel and tourism industry in India. They revealed that GST is a mixed bag of better and easier rules and regulations and increased costs and compliances. Western India's hotel and association lobbied for a 5% GST rate, claiming that a lower rate will pull in more visitors and allow Indian businesses to complete the global chain

After reviewing many literatures, it is concluded that a number of qualitative researches are done in the area of impact of demonetization and GST on Indian hospitality and tourism industry. But very few researchers have made an attempt to study about the future perspective of demonetization and GST on Indian hospitality and tourism industry. That's why; the researcher has selected the above topic for her study.

Research Problem

India has seen two big financial reforms post October, 2016. These two reforms namely demonetization and introduction of GST created lot of difficulties and confusions and market outrage in the short term. This impacted the overall economy including hospitality and tourism industry adversely at least up to the second quarter of 2017. The GDP forecasted for January, 2017 in the earlier scheme of things was 7.6% where in the current status it is hovering around 7.1%. Indian economy suffered a setback which is portrayed as a small time affair, though demonetization caused certain devastation to the progression of tourism in many premier destinations. With settling of GST, including implementations of various modifications and alterations, the market seems to show positive response. The results are still awaited but the hospitality and tourism industry and the various stakeholders have started showing/indicating positive response with regard to GST and digital mode of monetary/financial transactions. Indian hospitality and tourism sector seems likely to grow to \$48 billion at the end of the year 2020. That's why the researcher has tried to explore the imminent outlook of digitalization and GST on Indian tourism and hospitality industry.

Research Objectives

The objectives of the study are as follows:

- 1 To compare the pre and post reform period of demonetization and GST in hospitality and tourism sector.
- 2 To explore the future perspective of digitalization and GST on Indian tourism and hospitality industry.

Significance of The Study

Demonetization in the current dimensions is mooted to be the biggest reform move in India since the nationalization of

fourteen private banks in 1969. There was a major overhaul in the systemic aspects of leading industries including tourism and hospitality. The GDP forecasted for January, 2017 in the earlier scheme of things was 7.6 % where in the current estimate project it is hovering around 7.1%. Indian economy suffered a setback which is portrayed as a small time affair though demonetization caused certain devastation to the progression of tourism in many premier destinations.

Demonetization has created newer problems, though it was a courageous move to immediately kill the flow of black money in the country. The foreign and domestic tourists who were carrying high-value currency with them for their expenses had no way to go to the banks to get them exchanged for the new currency and had a tough time trying to solve the issue.

India's largest tax overhaul has not been met with equal appreciation and criticism. While introducing the Goods and Service Tax aims to bring a significant advantage to the economy by lowering sales prices, combining revenues, and decreasing business transaction costs, it would also raise market costs as well as the regulatory pressure. One such area of the economy that deliberates on the current tax system is the hospitality and tourism industries. Hospitality is one of the country's most dynamic and ever-widening sectors. The tourism industry contributes almost \$136 billion to India's GDP and is projected to continue to expand by 2026 to US\$ 280.5 billion. Hospitality and tourism are also among the highest job-generating sectors, and among the country's top 10 sectors with the highest foreign direct investment volume. Besides being one of the top foreign-exchange sources, tourism is also among the country's top tax-generating sectors. Through this study, the researcher will be able to present pre and post reform status of demonetization and GST in hospitality and tourism sector as well as to enlighten the positive modes of these two biggest reforms for future perspectives of the Indian hospitality and tourism sector.

Research Methodology

The nature of research design is descriptive and explorative. To compare the pre and post reforms period of demonetization and GST in Indian hospitality and tourism industry, the researcher has reviewed so many journals, research papers and articles. The researcher has used secondary data which is collected from various published reports of Ministry of tourism, Govt. of India and Worlds Travel and Tourism council, various economic survey reports, published research papers, articles, magazines, journals, newspapers, websites etc. For data analysis, the researcher has used descriptive statistics. Contradictory findings and data from various publications restricted researcher's ability to make accurate analysis and suggestions.

Data Analysis

Comparison of pre and post reform period of demonetization and GST in Indian Tourism and Hospitality Industry.

(A) Impact of demonetization on Indian Tourism and Hospitality Industry

In India, the peak tourism season lasts from October to January. While most of the domestic travelers visit Rajasthan, Maharashtra, Gujarat and Karnataka in October and November, hundreds of thousands of pilgrims visit shrines such as Sabarimala in December. The year-end party seekers look forward to a break in Goa and Maharashtra in late December and early January. Even though demonetization was criticized by many but tourism sector showed positive results especially with regard to foreign tourist inflow. November through January months witness the maximum inflow of international tourists to India. The growth rate of earning of Indian tourism industry grew 1.5 times than that of world tourism industry. In November, the growth rate of Indian tourism industry was 7.5% compare to that world tourism industry which was 4.53%. This intern means India is getting favorable response with regard to demonetization from the world tourism.

The following table reflects some data showing the status of Indian tourism industry in pre-reform period of demonetization and post-reform period of demonetization-

Table 1- Status of Indian Tourism Industry in Pre-Reform and Post-Reform Period of Demonetization

| Items | Status of Pre-Reform Period of Demonetization | Status of Post-Reform Period of Demonetization | | |
|---|---|--|----------------------------|----------------------------------|
| | | End of 2016 | 2017 | 2018 |
| No. of countries offered E-tourist visa facility | 43 countries at the end of November, 2014 | 169 countries at the end of December, 2019 | | |
| No. of Foreign tourists arrivals on e-tourists visa | 103,617 (December, 2015) | 1,62,250 (December, 2016) | 23,69,941 (2018) | 25,51,211 (up to November, 2019) |
| NO. OF E -TICKET USERS | 30,00,000 | 1,81,00,000 | | |
| Other Items | Pre-Reform Period of Demonetization | End of 2016 | 2017 | 2018 |
| No. Of foreign tourist arrivals | 7,42,000 (October,2016) | 88,04,411 | 1,00,35,803 | 1,05,57,976 |
| No. Of foreign tourist visits | 2,33,26,163 (end of 2015) | 2,47,14,503 | 2,68,86,684 | 2,88,72,384 |
| No. Of domestic tourist visits | 1,43,19,73,794 (end of 2015) | 1,61,53,88,619 | 1,65,75,46,152 | 1,85,49,33,384 |
| Foreign exchange earnings (us\$ million) | 21,013 (end of 2015) | 22,923 (Revised estimates) | 27,310 (Revised Estimates) | 28,586 (Revised Estimates) |

Source: Indian tourism statistics 2017 and 2019 and IBEF report of tourism and hospitality industry

(B) Impact of GST on Indian Tourism and Hospitality Industry

India enthused a step taken for the accomplishment of the goods and service tax (GST) regime with the parliament and approved by the constitution (122nd Amendments) Bill, 2014. The GST is implemented on July, 2017 to replace multiple state and central levies with a single tax. After implementation, GST has replaced all indirect taxes that are presently levied on goods and services separately by the central and state government. India is poised to grow with total GDP of the nation to grow by 1.5% to 2% post implementation of GST.

The tourism and hospitality sector remains divided on the predicted impact of GST. Most players in the tourism industry have welcomed the move to the new tax regime with great enthusiasm and considering long-term impact as Tourism in India accounts for 7.5% of the GDP and are the third largest foreign exchange earner for the country.

Table 2-Economic Contribution of Indian Travel and Tourism Industry In 2016 and After Implementation of GST

| Economic Contribution | 2016 | 2016 (% of Total) | 2017-2027 Long Term Growth p.a. (%) |
|---|----------|-------------------|-------------------------------------|
| Direct contribution to GDP (US\$ bn) | 71.7 | 3.3 | 6.8 |
| Total contribution to GDP (US\$ bn) | 208.9 | 9.6 | 6.7 |
| Direct contribution to employment ('000 jobs) | 25,394.7 | 5.8 | 2.1 |
| Total contribution to employment ('000 jobs) | 40343.0 | 9.3 | 2.0 |
| Travel and Tourism Investment (US\$ bn) | 34.0 | 5.7 | 5.7 |
| Visitors exports (US\$ bn) | 22.8 | 5.3 | 6.1 |

Source: World travel and tourism council- Economic Impact (INDIA) 2017

World Bank perceives a lower growth rate for India but maintains that India will continue to remain the world's fastest growing economy ahead of China, in 2017. It has lowered GDP estimates for India from 7.6% to 7% for FY 17-18. But anticipate India's growth to pick up again in FY 18-19 with several reform measures including needed amendment in GST and insolvency and bankruptcy code.

Findings of the Study

Future Perspective of Digitalization And GST On Indian Hospitality And Tourism Industry

(A) Future Perspective of Digitalization on Indian Hospitality and Tourism Industry

After comparing the status of pre and post reform period of demonetization in tourism sector, the researcher has found that economic instability is always a deterrent for the future of tourism and expected the government to lift the restrictive measures completely at the earliest. If demonetization can bring forth positive changes in future as highlighted, there is lot better in store for tourism as well. The travel advisories issued by countries like Canada (which has advised caution to its citizens travelling to India) hopefully will not have a long lasting effect on their outbound tourists to India. Many countries asked their citizens to make sure whether their credit and debit cards will work in India. It is time for the Indian government to start the image building exercise.

Post demonetization, the tourism sector has started the foray into the digital travel booking mode. There has been a surge in mobile transactions in this sector too. Smartphone prices have come down crashing in India. This has led to a rapid mobile penetration in the Indian market. This has led the Indian consumers to a growing use of mobile devices to book travel. Leading online travel portals are indicating that the bulk of the hotel bookings are being done through websites and mobile apps.

The travel and hospitality industry accentuated the use of plastic money post demonetization. Survey done by a leading online travel web portal indicated the inclinations of Indian travelers to use credit or debit card over cash. More than 37% travelers chose plastic money over cash for making bookings and travelling. It is also an optimistic sign in case of online hotel bookings as there has been a double digit growth and the same is expected throughout most of 2017.

Post demonetization, Indian government has taken serious action plans to curb the negative impacts upon foreign tourists arrivals after November 8, 2016. Archaeological Survey of India (ASI) efficiently transitioned to the cashless mode of payment by simplifying the process of e-tickets. It little bit spruced-up the growth rate of Foreign Tourists Arrival (FTA) by 9.3% in comparison of 2015 to 2016. **The most notable part is an extensive growth of e-tickets sold during 09/11/2016 to 08/12/2016 which increased to 28,176 from 2,807 during 09/10/2016 to 08/11/2016 with a consequent amount of Rs 181.49 lakh and Rs 3.10 lakh correspondingly.** Therefore it can be seen that sales of e-tickets and profits from them have dramatically risen by 10 and 58 times respectively as people purchase tickets via cashless payments. As more people have come online, smart phone penetration due to launching of cheaper data of Reliance Jio, has increased along with the use of digital payments and digital booking system which has also gone up, so it is estimated that India's online hotel market will grow to \$4 billion with 31% penetration at a CAGR of 25%. **It indicates that the cashless economy as of now is somewhat at a distance.**

(B) Future perspective of GST on Indian hospitality and tourism industry

Indian hospitality and tourism industry is also looking at goods and services tax expectantly. But GST is the need of the hour. India is needed to be unified under taxation system. Some teething problems are there for the adoption of GST but those would be addressed in time so that we can ancash the benefits of GST. **One of GST's key advantages for the hospitality and tourism industry is that it would eradicate various taxing schemes by subsuming all historically collected taxes into a single body.** The promise of "one nation, one tax" will also increase the ease of doing business in the country with the provision of standardized tax rates and flexible criteria to avail input tax credit.

Through subordinating multiple taxes into one umbrella, GST would abolish the tax-on-tax system and streamline the sophistication of taxation procedures. The majority of ordinary customers cannot discriminate between various taxes and prices. Consumers would have a more comprehensible and straightforward tax system with just one fee on their bill under the GST rule. As well as **allocating a lower tax bracket to small restaurants and hotels would help them expand and allow them to continually improve their level of service and standards.** Low to medium budget hotels currently account for almost 80% of India's hospitality industry and **a reduced tax burden on these hotels would also help build thousands of new jobs.** Indian hospitality and Tourism sector has moved up 13

positions to 52nd rank from 65th in Tourism and Travel Competitive Index and is expected to create 13.45 million jobs and the Indian passenger travel market is expected to grow to \$48 billion at the end of the year 2020. It indicates that GST will make India a bigger player in the global hospitality and tourism industry.

Conclusion

In India, demonetization along with GST had its effect on various sectors with a sizeable magnitude of cash transactions and a biggest tax reform in the form of 'one nation, one tax'. Real estate, construction, jewelry, high-end retail, white goods along with travel and tourism were adversely affected. But in the long term, it is expected that the economy will benefit from the reduction of multiples taxes and reduction of black money which will lead to higher tax collection, better business environment, less corruption and high cash transparency. It is predicted by India's largest online travel company; Make My Trip that 39% more Indians are taking a holiday in 2017 than in 2016 and international travel has grown faster (60% from last year) than domestic trips (37%) as Make My Trip are helping a lot of travelers' plan for their trips online. According to data collected by the Directorate General of Civil Aviation, domestic airlines carried a record 10.6 crore passengers in January-November 2017, an increase of 17% from the same period last year; the International Air Transport Association expects India to become the third largest aviation market by 2025. There are other important trends playing out, too. Mobile is increasingly becoming the preferred booking platform, accounting for 59% of online transactions compared to 41% on desktop. Spending on global travel is four times higher than what domestic tourists shell out. It indicates that due to digitalization and GST, International trips are growing faster than domestic travel. Therefore, the Indian Government will have to work overtime to further uplift the image of transforming and more vibrant economy. Government should adequately modify and streamline the tax structure time to time. They should provide incentives and liberalize loans and grants to tourism and hospitality sectors. Govt. should make an attempt to provide proper network availability for online transaction. They should monitor properly, the passage of GST reductions benefits recently made on meals to the customers.

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Nayantara Sahgal: Setting a Traditional of Anticolonial Perspective

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Abstract

Colonialism is the most prominent benchmark of Nayantara Sahgal's narrative. It is actually a practice against domination, imperialism, subalternity and tormentation. India underwent this deterrent world of imperialism for a long time. Nayantara Sahgal being a member of a powerful political family was highly influenced by the practices and tradition of the prevalent society. It was a society which was terribly divided into two separate worlds: the world of the tormentors and the world of the tormented selves. Sahgal had a deep peep into the politics of India during the colonial as well as the postcolonial world. She witnessed various cultural, social, political and religious transmissions, which were going on very rapidly at that time, with her naked eyes. In the present paper, we have tried to depict various interpretations and its impact on her male as well female characters, though women were the worst sufferers during that time. For this study, we have taken the ninth novel of Nayantara Sahgal entitled Lesser Breeds.

Keywords: Domination, Imperialism, Subalternity, Tormentation, Colonial etc.

Introduction

Nayantara Sahgal: An Introduction to the Author

Nayantara Pandit Sahgal, daughter of Ranjit Sitaram Pandit and Vijay Laxmi Pandit was born in May 1927 in Allahabad. Her childhood was spent in Anand Bhawan at Allahabad, the central hub of political affair during the colonial period of India. The impact of politics was so deeply rooted in her heart that she could hardly separate herself from it and the result was that she became the first and foremost political novelist who realistically merged politics as the background of her novels. She did her schooling from Mussorie and graduation from Wellesley College in Massachusetts in 1947 when India got freedom. Thus, the impact of quit India movement was lying very in her subconscious mind. As she points out, "I am Indian – by blood, nationality, upbringing and conviction and Western by virtue of my English-medium education. Starting with the local convent in Allahabad, I went on to five years at an American school, Woodstock, at Mussorie, followed after a gap by four years at Wellesley College in the United States." (Point of View: 23). In 1967 she married Gautam Sahgal. This marriage was not a pleasant one for her and as a result she did remarriage with an I.A.S. officer Mangat Rai in 1979. The unhappy experience of her first marriage became one of her prominent themes along with the political theme in almost all of her novels. She says in her autobiography, "Marriage unsettled me disastrously. For the first time I came across the shocking assumption of inequality. A man's ego and ambition, I learned, must be served first. In case of conflict, the man's will and desires must prevail. Eager not to be found wanting, I became docile and obedient, a "good wife". (Point of View: 29).

Nayantara Sahgal, as a leading woman writer has won many awards. She won Sinclair Prize for fiction for her novel in 1985 and Sahitya Akademi Award for the same in 1987. Except it she won Commonwealth writers prize for Eurasia for her novel *Plans for Departure* and for *Mistaken Identity* in 1988. In her literary account, she has nine novels, two autobiographies, articles and non-fiction works. Except it she has written a collection of letters. Her journey from her first novel *A Time to Be Happy* to her latest one *Lesser Breeds* is completely infatuated by her personal experience of political scenario. All of her novels acclaimed international recognition and made her the only woman writer who embedded her novels with political history of India. Being a woman writer Nayantara Sahgal has focused on gender issues in relation to her novels with political background. Although she has presented her women characters as emotionally strong and socially relevant figures yet they are not free from the gender role played in society. The author has raised many such issues in her previous novels along with her latest one.

Post Colonial Point of View in her Narrative

In her novels Nayantara Sahgal uses visual representation and realistic narratives of cultural, social, historical and political background and theoretical language. Her theoretical language makes her to illustrate each scene in a straight forward manner. As Gita Ranjan says, "...the 'political' has always been her commonplace experimental reality, and she writes from that experience. She knows that her audience is among the cultured, educated masses who have either direct

or mythological access to these experiences, and she spins her tales to make reading a pleasurable act – albeit an intellectual pleasure with a deeply reflective common sense tenor through which the readers hear the echoes of Sahgal's philosophy of nationalism fictionalised as an immediate, experimental reality. To claim that she has no ideological agenda in her fiction is also true at first glare. But upon closer scrutiny, we discover that her work is often coloured by insights from familial history (which is always already comingled with the political history of the nation) and diffused into the national – popular culture via her storytelling technique." (NAYANTARA SAHGAL'S INDIA: Passion, Politics, and History, 29).

Nayantara Sahgal started writing when India was under imperial power. She witnessed India during pre and post colonial India. In her present novel *Lesser Breeds* she has dealt with her conventional postcolonial point of view in her narrative. As Bhaba defines in his introduction to *Nation and Narration*, "Nations, like narratives, lose their origins in the myths of time and only fully realize their horizons in the mind's eye. Such an image of the nation – or narration – might seem impossibly romantic and metaphorical, but it is from those traditions of political thought and literary language that the nation emerges as a powerful historical idea in the West, an idea whose cultural compulsion lies in the impossible unity of the nation as a symbolic force. This is not to deny the attempt by nationalist discourses persistently to produce the idea of the nation as a continuous narrative of national progress, the narcissism of self-generation..." (*Nation and Narration*: 1). In the present novel she has used the post-colonial point of view in her narrative along with narrative technique like third person point of view. It basically deals with a particular type of literature which was produced in colonies of those countries which were marginalized by other countries. It deals with some common themes like struggle for freedom, national- identity and emigration, lose of identity, self-identification, gender-issues where women were subjugated by their male counterparts, patriotism and many more such political, social and cultural upheavals. It is an intellectual discourse which analysis the political knowledge of the author in context to its social ideology. It focuses on social, cultural and economical difference in countries because of the control of colonizers over the colonized. The language used in the literature does not read like Standard English thus the language used is alien to the British culture. The concept of nationalism and identity crisis is visible in Nayantara Sahgal's present novel. This novel is based on her Indo-British experience. She says, "The imperial era I was born into was a stage setting of this kind. Empire itself was no illusion. It was a fact of life, a businesslike arrangement that have divided up the globe into rules and the ruled, masters and slaves." (*Point of View*: 53).

Lesser Breeds - The Novel

Lesser Breeds is the ninth and the last novel of Nayantara Sahgal. Like her other novels this novel too has various themes like struggle for freedom, gender bias, socio-historical references, but unlike her other novels this novel has a male protagonist, Nurullah and his search for his identity as an Indian. Nikhil though remains on the background of the novel throughout yet he cannot be called the protagonist of this novel. As far as the title of the novel is concerned, Nayantara Sahgal has borrowed the title of this novel from Rudyard Kipling's poem 'The Recessional' which he wrote on the occasion of 60th anniversary of Queen Victoria's reign. He wrote this poem in 1897 to celebrate Diamond Jubilee of the Queen. In this novel Nayantara Sahgal describes the pre and post colonial struggle for freedom as well as her concern for the underprivileged and female emancipation during that period of India. As about the title she herself claims, "... is a quotation, from a Kipling poem, in the days of empire which had a right to rule the lesser breeds, the empire which consisted of the ruler on the one side and the ruled on the other' so we were among the lesser breeds." (*Sahgal*: 3). The second last stanza presents the gist of the poem as well as narrative of Nayantara Sahgal which focuses on marginalised and their hope for liberty. The paragraph of the poem reads like this:

"If, drunk with sight of power, we loose
Wild tongues that have not Thee in awe-
Such boastings as the Gentiles use,
Or lesser breeds without the law -
Lord God of Hosts, be with us yet,
Lest we forget-lest we forget!"

In the paragraph Rudyard Kipling prays to God to forgive all the lower limits who have forgotten God's existence. *Lesser Breeds*, the latest novel of Nayantara Sahgal, is a pre-colonial novel in which the marginality as the 'lesser breeds' and the colonizers as the 'rulers' have been mentioned.

The setting of the first part of the novel is in Allahabad, the place where she spent her childhood days. This part of the novel focuses on the freedom struggle of Indians against the British Rule. The other part of the novel sets in America, its lost generation which believe in dating and mating and the impact of the Second World War in the whole world. Her narrative changes when she shifts from the first part of the novel to its second part. As Sahgal describes, "On a personal level the western world I grew up in is no longer there. Its map, its ideology, its priorities have changed. At the same time the Indian world I grew up in is also no longer there, for the stage is set for every kind of religious and other combat and confrontation with the ideas that produces modern India." (Sahgal: 47) In the novel *Nayantara* Sahgal has beautifully spun the yarn of the story through her experiences and memories. Obviously she has used her sense of imagination with her experience to weave a shadow on narrative. In *Lesser Breeds*, the last novel of Nayantara Sahgal, the narrative has been woven liberally from her personal experiences, point of view, thoughts, her reflection of the people and whatever she has seen during the last days of the British Raj in India. Being the member of the Nehru family she has closely experienced the freedom struggle and its impact not only on India and its people but also those sitting very far away from it. Nayantara Sahgal's novels are never free from the dominance of political environment. Basically she concentrates on Indian politics from 1929 to 1947 as the theme of her novels. In the novel she has presented the picture of non-violent movement in India during the post-colonial India. She uses Gandhi's ideology of non-violence and truth as the very base of her novels. In the present novel *Nikhil* is also the believer of Gandhi's ideology. As Ralph J. Points out, "Mahatma Gandhi's strategy for independence has regularly been read as a unique ideology of non-violence. But while it has suited many in the West (as well as in India) to think of non-violence as an essentially Indian trope, it is worth recalling that Gandhi's code of non-violent action was a calculated strategy..." (NAYANTARA SAHGAL'S INDIA: Passion, Politics, and History: 64)

Writing Style of Sahgal

Sahgal's unextraordinary attempt to make politics the background of all her novels is tremendous because except her no other woman writer can be marked who thought politics as a 'masculine field' by many writers. About her language she herself asserts, "I was a lover of language, not any particular one but all those I had been exposed to. I enjoyed the sound and meaning of words, what one could accomplish by using and arranging them. Words were the stuff of me, and there was the thrill of expression when facility came one's way." (Point of View: 24)

She makes use of nationalistic discourse in order to define nationalistic spirit. As Ralph J. Crane points out, "...Sahgal highlights her belief that writing comes more out of the world a writer inhabits than out of any literary tradition (a belief borne out in Sahgal's own fiction by her commitment to Indian history and politics). She also draws attention to the way the line between the public and private words seems to be disappearing and the way that people must increasingly face the traumatic consequences of public events in their private lines." (NAYANTARA SAHGAL'S INDIA: PASSION, POLITICS, AND HISTORY: viii). In order to make her language more attractive and effective the author makes use of adjectives. Nayantara Sahgal uses adjectives which give a musical vein to her text as: Wide shallow steps, A grizzled old mali, a rose-reddish white-flecked floor, A delayed boisterous shout, a younger dhoti-clad party member, A glass-shelved cabinet, an amiable dreadfully untidy couple, the reddish-pink verandah, the white-tiled bathroom, harrowing illustrated sagas, drunken monkey, her chiselled beauty, snow-shrouded skeletons, her sapphire-ringed hand etc.

Conclusion

Thus, we can conclude with the statement that Nayantara Sahgal has very efficiently projected the true picture of the colonial world around her. The impact of society and its culture has weighted upon her writings. In the novel she has merged two conflicted worlds together: the personal world of man-woman relationship and the impersonal world of politics. It is only subjugation that connects both these worlds with more accuracy and prominence.

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Impact of Innovative Teaching on Students

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Abstract

The study of being a teacher or the process of education is called pedagogy. The task of teachers has shifted from being a subject expert who shares information with students. In this era when students have technique to explore their own its become challenging for teachers to develop students capabilities, teamwork, and moreover their sitting in classroom for productive reasons. The design thinking process is a set of prepared strategies that recognize challenges, collect information, create possible solution, refine ideas, and test solutions. Teachers can start with one new project to see how things go with their students while revising, learning and constructing regularly. Innovation is a necessary change we need in schools today, and it can begin with you on design education have gained great attention. In rapidly-changing society, adaptation of design thinking process in education to build up the professionalism and integration capability is really fruitful. In traditional teaching methods interaction with students works and thinking is a solution oriented method to solve the problems.. It offers creative solutions to various topics. To motivate people for working in team and to coup with them in positive way and also exchanges ideas, metods with each other create good results and relations also.. This study will express the views of students regarding design thinking process in class room.

Keywords: Pedagogy, Design Thinking, Traditional Teaching, Innovative.

Introduction

In classroom it is necessary that teachers should be listened by students. Every teacher want the same but unfortunately it doesn't happen. But question arise that why students are not listening and why they are not attentive in classroom or in concise words we can say that why their participation is less. It is true that being human we get monotony by doing same activity so same psychology also work on students. Many reasons can be there behind it like maybe subject is not of students' choice, maybe he or she knows little about subject, maybe content wise teacher is not and reached, and possibility is also that teacher is not getting students participation by setting students responsibility and also by giving authority for using his or her own opinion which may be out of box so that they feel zeal to solve problem in their own way. In nutshell that teachers should create creativity in them so that students could get their own space and try to learn to do the things in their own way. And very important part is that teacher should accept it. It will not happen always that students would read it right solution of problem but always there will be failure it is also not going to happen. By providing these sort of classroom it is possible that students main developed in many aspect 3 maturity, teamwork, participation, responsibility, creativity and moreover self-discipline may arise and that is very important because self discipline or self control is best in this world and being a teacher our duty is not to make students only professional Businessman or Employees but our duty is to make them complete human being who is creative, confident and rational social creature and self controlled ,so innovative thinking process should be part and parcel of every classroom and students also want it. The study would give vision to see that exactly what students feel about design thinking process in classroom.

Objective of the Study

- To know the impact of innovative teaching on students.
- To suggest for improving innovative teaching in institutions..

Literature Review

The use of innovative teaching strategies has been a hot topic from the last decade. Creative and expert teachers are being found using diverse innovative teaching methods at higher education levels. Many studies consider creativeness as a personal characteristic and academic ability of different individuals, associating creativity with genius and intelligence (Albert & Runco, 1999), or with knowledge (Weisberg, 1999). Therefore, the work of Picasso, as well as Einstein, Marie Curie, and Newton, can be seen as creative because at the same time point during their lives, these geniuses came up with something original, new, and at the same time valuable and appropriate (Ala-Mutka, Punie, & Redecker, 2008).

(Dunne & Martin, 2006) design thinking process is rapidly accepting by institutions for becoming leader in market.. And although

design thinking has become an important part of the design and engineering as well as in business, it can also have a encouraging effect on 21st century because it involves creative idea in generating solutions for problems. In academic atmosphere students should think rationally and by using creativity should achieve the way to solve the problem. Rotherham & Willingham, 2009). To help students succeed in this, digital era educators should support students in developing skill so that creative response should started to come by students side (Nagai & Nagouchi, 2003). The topic of expertise in design has also been receiving increasing attention in design research. Pedro Marques Design Thinking: creating value through problem-solving. Apr 10, 2018 This paper was written for the Design Thinking module as part of my Master's in Digital

Methodology

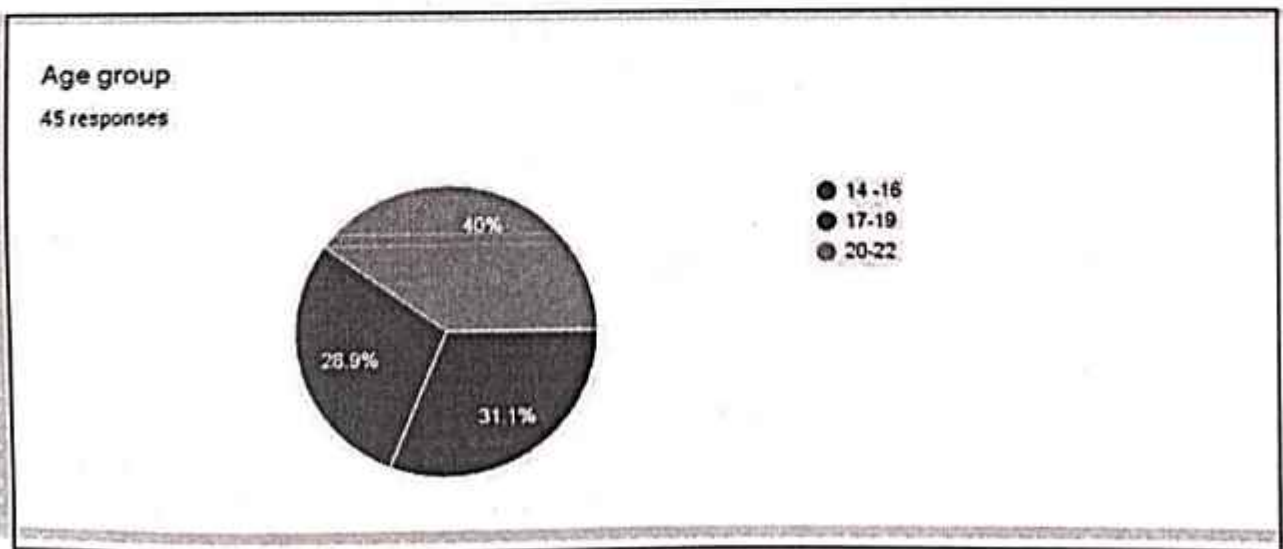
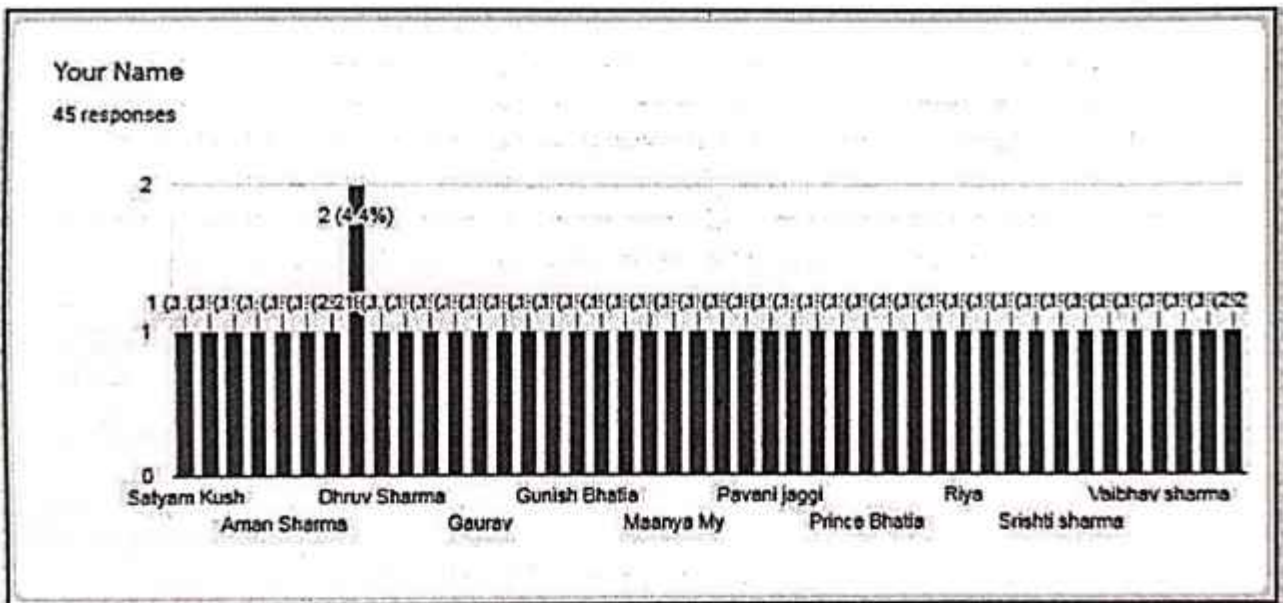
Data

In this study primary data will be used by filling questionnaire online.

Sample Size

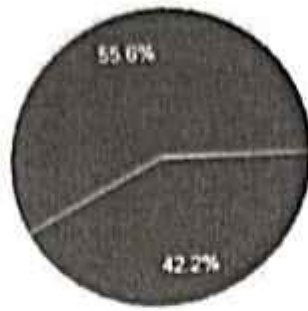
Sample size will be of 45 students both school and colleges Frequency measure will be taken for concluding results.

Results



You are student of

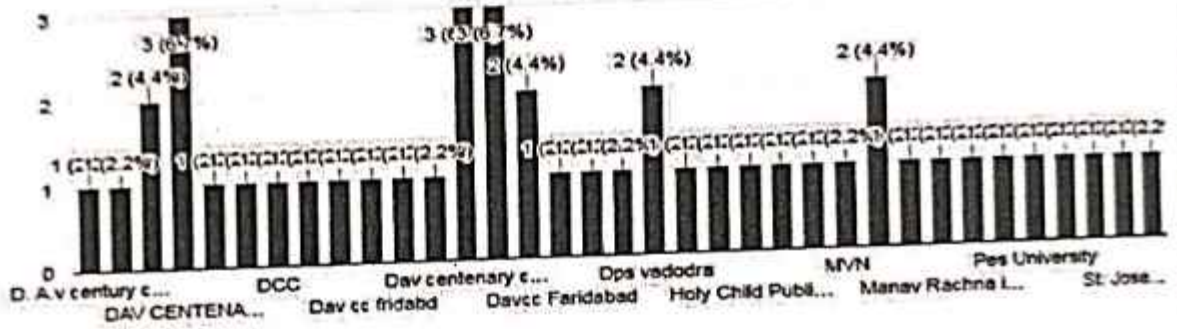
45 responses



- School
- College

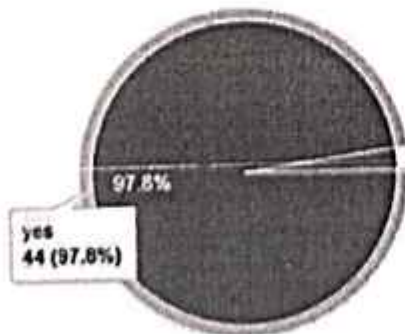
Institution Name

45 responses



Do you participate in class with teacher

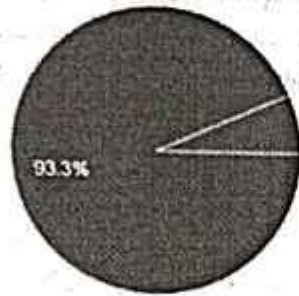
45 responses



- yes
- No

Do you get chance to show your creativity In solving problem

45 responses



- Yes
- No

By using your creativity have you ever solved any problem given by teacher

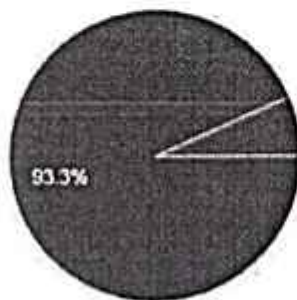
45 responses



- Yes
- No

Do you feel pride after solving it

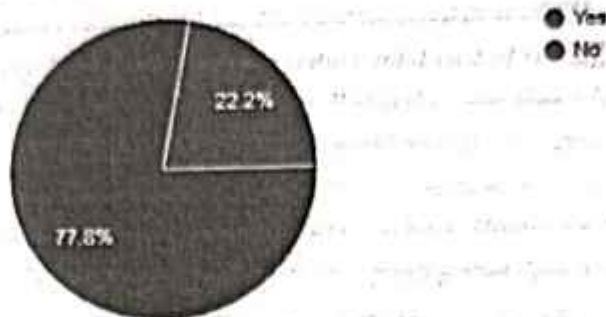
45 responses



- Yes
- No

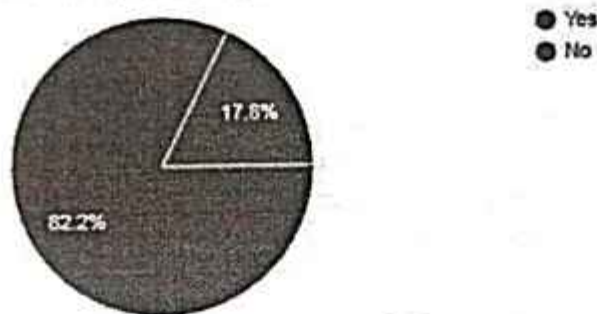
Creative achievements are recognized and celebrated in your school / college

45 responses



school or college support students by adopting their creative mind in running institution

45 responses



Implications

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Experimental Review of Different Homomorphic Encryption Schemes For Integrity Verification of Data

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Abstract

With growing digital communications over networks, organizations are producing more and more data and thus require immense space for storing and processing that data. The cost incurred in storing and processing data in local space of organization emerges to be very high, so in order to reduce total cost of storing and processing the data, organizations opt for migrating the data to some external location. But at the same time while migrating data to some external location, there are many security issues with data like confidentiality, Integrity, availability of data. But maintaining Integrity of data is of paramount importance. Integrity of data is about for sending data from unauthorized modifications. For maintaining Integrity of data various Homomorphic Schemes have been implemented, by which user can verify the Integrity of data without opening that data and sharing decryption keys with untrusted systems. In this paper Fully Homomorphic Encryption Scheme has been compared with Partial Homomorphic Encryption Scheme. This paper analyses that Fully Homomorphic Scheme is proved to be 33% more efficient in terms of Computation time over Partial Homomorphic Encryption Scheme.

General Terms: Partial Homomorphic Encryption, Fully homomorphic Encryption, Pailler's Scheme, Elgamal Scheme.

Keywords: Integrity, Homomorphic Encryption, Data Security

Introduction

Now days, organizations are producing data at a rapid rate and thus requires huge space for storing and processing that data, so they store the data at some external location. While storing data outside the organization at some external location, maintaining data security [2] becomes challenging task because some control over data is lost once data is migrated from organization. Data security means shielding information from unauthorized clients and undesirable activities. Keeping up information security is most imperative while outsourcing it to some external locations There are some major security issues in storing data at external location like confidentiality, availability, Integrity of data.

- Confidentiality of data stands for protection of data from unauthorized accesses.
- Availability of data means data should be available for authorized users all the time when they require it
- Integrity of data stands for protection of data from unauthorized modifications for maintaining data quality at the sametime.

In order to maintain these crucial parameters of security, several data security techniques need to be applied like encryption for confidentiality, replication for availability etc. To ensure data confidentiality users can apply different encryption techniques on data before storing it externally.

Further data replication [1] is being done in order to enhance data availability for authorized users. As user is being charged for availing storage services so user need to be assured about that data stored is intact and no transmutations have been made to it. For this purpose user needs to verify the Integrity [5] of data. By verifying Integrity of data user can be assured that no unauthorized modifications has been done with the data.

Basic approach to verify the Integrity [2] of data is to create hash of entire file before storing it to external location. The hash is computed by the user before outsourcing data and stored locally. When user needs to verify the Integrity, hash is computed and compared with already stored hash value. Integrity of data is said to be maintained if the computed hash value matches with already stored hash. But inhibition of this approach is to compute hash of the entire file frequently which is a time consuming process. So this Scheme is proved be more efficacious for files with small sizes because huge amount of overhead can occur for files of bigsizes.

Another approach for maintaining Integrity of data is Homomorphic Encryption Scheme. Homomorphic Encryption

Scheme [1, 5] is a Scheme which enables computations to be performed on encrypted data without decrypting it. Results of operations are in encrypted form which if decrypted gives the same value as if operations were performed directly on plaintext. Homomorphic Encryption Schemes can be classified in two types: Partial Homomorphic Schemes and Fully Homomorphic Schemes. Partial Homomorphic Encryption Scheme is a sort of Homomorphic Scheme used for checking Integrity of data where user can compute either addition or multiplication on encrypted data. Fully Homomorphic Encryption Scheme is one which allows both addition as well as multiplication operation to be performed on encrypted data.

Pailler's Scheme is based on Partial Homomorphic Scheme [1] which is capable to perform only additive Homomorphism. However Pailler's algorithm is not capable to perform multiplicative Homomorphism As Pailler's Scheme is not capable of implementing all the operations hence it has proved to be less efficient..

This paper compares Partial Homomorphic Encryption Scheme with Fully Homomorphic Encryption Scheme [11] for maintaining the Integrity of data. This paper analyses that Fully Homomorphic Encryption Scheme is more efficient than Partial Homomorphic Scheme.

Literature Survey

R. Mukundan, S. Madria, M. Linderman [1] have elaborated a Scheme which allows users to ensure about presence of multiple replicas in cloud storage. They have proposed Probabilistic encryption which creates different cipher text every time when same message is encrypted using same key. BLS signatures Scheme is being used to generate signatures of encrypted replicas, Pailler Scheme has been used to encrypt the data which fortifies addition operation on encrypted data.

R. Mukundan, S. Madria, M. Linderman [2] have proposed work related to preservation of Integrity of replicated data in cloud. Dynamic data update operations are also supported in their Scheme. There is single decryption key for all the data copies. This Scheme can be extended for multiple versions where only deltas can be stored. Deltas are changes made to file. Addition in encrypted form can be done after that to update the file.

Ateniese et al. [7] were first to define the provable data possession (PDP) model. This mode ensures about that multiple file actually resides at untrusted storages. They used RSA Homomorphic tags for auditing outsourced data. Creation of Multiple replicas and dynamically storing data was not supported in their Scheme.

I. Ahmad et al. [5] have worked on Homomorphic Encryption technique for security in cloud. Homomorphic Encryption is a technique for security which allows to compute on encrypted data and provide results without knowing the actual data, for sake of data confidentiality. In this paper Pailler algorithm has been discussed with RSA for Homomorphic Encryption using proxy Re-encryption algorithm that prevents cipher data from chosen cipher text attack hence make it more secure.

Hao et al. [6] proposed a Scheme that support both dynamic operations on data and public verifiability of data. Public verifiability allows third parties to verify the Integrity of data stored in cloud by running challenge response protocol. Their Scheme does not consider data encryption before storing and does not suit for storing multiple data copies in cloud.

Curtmola et al. [3] proposed multiple replica provable data possession (MR-PDP) Scheme where data owner can verify that several copies of file are stored by a storage service provider. In their Scheme distinct replicas are created by first encrypting the data and then hiding it with some random number generated from a pseudo-random function (PRF). This Scheme made use of RSA signatures for creation of hash. Their Scheme didn't support dynamic data operations and did not specify how the authorized users of data can access the file from cloud servers without noting the internal operations of the CSP.

Liam Morris et al [7] have proposed that Homomorphic Encryption is another form of encryption which permits to compute on encrypted data without decrypting it. The result of computations is returned as encrypted result which on decrypting gives the indistinguishable value as if computation was done on plain text. They have also explained about Partial Homomorphic cryptosystem which allows some specific operations to be performed on cipher text (either addition or multiplication). According to them a Fully Homomorphic Scheme is one which allows both addition and multiplication to be performed on data. For example RSA, Paillier's Scheme are Partially Homomorphic Scheme.

Overview of Homomorphic Encryption Scheme

Homomorphic Encryption Scheme [7] allows to compute some operations (Addition, Multiplication etc) on encrypted data without decrypting it.

For example:

There are two data values 5 and 10.

Their encryption key is multiplication by 2. So encrypted form of 5 and 10 value will be 10 and 20.

Now if a user ask a system to add these values in their encrypted form, system will compute as $10+20=30$ and return it to user.

Now user can decrypt it to $30/2 = 15$, which is same as $5 + 10 = 15$ of plaintext.

Which implies Operations (plaintext) = Decrypt (operation(encrypt(plaintext)))

Some Homomorphic cryptosystems are Partially Homomorphic and allows only either addition or multiplication to be done on data.

(A) Partial Homomorphic Encryption Scheme[7]

In Partial Homomorphic system [7,9] Encrypted data is stored along with its metadata for decryption to some external system. In Partial Homomorphic Encryption Scheme some addition operations can be performed on cipher text using Homomorphic keys and other operations are performed by decrypting the data.

Pailler Scheme [1,7] which is a Partial Homomorphic Scheme is able to perform only addition, insertion operation on encrypted data and other operations are performed on plaintext. Partial Homomorphic Encryption Scheme supports only additive Homomorphism property. For performing operations on plaintext first data has to be decrypted using decryption key. Ultimately decryption keys has to be shared with untrusted system which causes low security and Integrity. Also there is a key management issue in Partial Homomorphic Scheme.

(B) Fully Homomorphic Encryption Scheme

Homomorphic Encryption Scheme[11] are cryptographic constructions which enables to compute operations on encrypted data without ever decrypting them.

Additive Homomorphic encryption: Homomorphic Encryption is said to be additive if

$$\text{Encrypted}(x+y) = \text{Encrypted}(x) + \text{Encrypted}(y)$$

Multiplicative Homomorphic Encryption: Homomorphic Encryption is said to be multiplicative if

$$\text{Encrypted}(x*y) = \text{Encrypted}(x) * \text{Encrypted}(y)$$

A Fully Homomorphic Encryption system [11] supports both additive and multiplicative Homomorphism. A Homomorphic Encryption Scheme over a group $(G, *)$ satisfies that given two encryptions $c1 = Ek(m1)$ and $c2 = Ek(m2)$, where $m1, m2$ belongs to G and k is the encryption key, one can efficiently compute $Ek(m1 * m2)$ and $Ek(m1 + m2)$ without decrypting $c1$ and $c2$ in Fully Homomorphic Scheme.

(C) Pailler's Scheme (Partial Homomorphic Scheme)[1,7,11]

The Pailler's Scheme consists of following values:

- Two large primes p and q , $n=pq$.
- Define $a(n)=lcm(p-1, q-1)$
- Choose some value g where $g^a \pmod n$ (known as u) exists.
- The public key is (n, g) and the private key is (a, u) .
- Function $l. ()$

Encryption:

Plaintext $m < n$

Select a random $r < n$

Cipher text $c =$

Decryption:

Cipher text c

Plaintext $m = 0$

()

Homomorphic Property:

Paillier's Scheme is additively Homomorphic. Given two cipher texts.

$E(m_1, pk) = ()$

$E(m_2, pk) = ()$

where r_1 and r_2 should be randomly chosen from Z_n we have

Homomorphic addition of plain texts

The product of two cipher texts will decrypt to the sum of their corresponding plain texts,

$D(E(m_1, pk).E(m_2, pk)(\text{mod})) = m_1 + m_2(\text{mod } n)$

Because

$E(m_1, pk).E(m_2, pk) = () ()$

$= ()$

$= E(m_1 + m_2, pk)$

The product of a cipher text with a plaintext raising g will decrypt to the sum of the corresponding plaintexts, i.e.

$D(E(m_1, pk). ()) = m_1 + m_2(\text{mod } n)$ Because

$E(m_1, pk) = ()$

$= ()$

$= E(m_1 + m_2, pk)$

Illustrative Example of Paillier's Scheme

Paillier's Encryption Scheme with illustrative example has been explained below

1. Choose small prime numbers to create small n , Let $P=7, q=11$ then $n=p.q=7*11=77$
2. An integer g must be selected from such that the order of g is a multiple of n in if randomly choose the integer $g=5652$ Then all necessary properties are met as the order of g is $2310=30*77$ in Z .
3. The public key for the example will be $(n, g) = (77, 5652)$
4. To encrypt a message $m=42$ where $m \in Z_n$
5. Choose a random $r=23$, where r is a non zero integer and $r \in Z_n$.
6. Compute

$()$

$=$

$= 4624 \text{ mod } 5929$

7. To decrypt the cipher text c , calculate the value of $\lambda = \text{Lcm}(6, 10) = 30$

8. Define $L(u) =$

Compute

$()$

$= L()$

$= L(3928)$

$= 3928 - 1/77 = 3927/77 = 51$

9. Compute the inverse of k ,

$$= ()$$

$$=51$$

$$=74 \pmod{77}$$

10. Compute

$$= () ()$$

$$=L()$$

$$=L(4852).74 \pmod{77}$$

$$= 42$$

In Partial Homomorphic Pailler's Scheme [7] key size used is 128 bits. But as operations are performed size of cipher text may increase and there can be issues in decrypting it. So small key size is a limitation in Pailler's Scheme. Small key size will not allow to decrypt the data if size of cipher text become greater than the key size used. But as operations are performed on cipher text, size of cipher text may increase and thus there can be issues in decrypting it which becomes a limitation with Pailler's Scheme. Another gap with Pailler's Scheme is that it is a Partial Homomorphic Encryption Scheme where only addition operation can be performed on encrypted data however multiplicative Homomorphism is not supported. To make Pailler's Scheme as a Fully Homomorphic Scheme multiplication operation should be supported on encrypted data.

(D) Elgamal Scheme (Fully Homomorphic Scheme)[13]

The Elgamal encryption Scheme [11,13] is a public key encryption algorithm based on the Diffie Hellman key exchange. It was invented by Taher Elgamal in 1985. Elgamal Scheme exhibits multiplicative Homomorphism. By multiplying each component of multiple cipher texts with their corresponding respective components, the decrypted result is equivalent to the multiplication of plaintext values.

Algorithm:

Encryption Steps: Sender should do following steps for encryption

1. Obtain the public key (p,a,d) from the receiver A.

P = prime number, a = random generator number between 1 & $p-1$

Select X = integer number (private key)

2. Choose an integer d such that:

$$1 < d < p-2$$

$$d =$$

3. Represent the plaintext as an integer m where $0 < m < p-1$

4. Compute (y) as follows:

$$y =$$

5. Compute (z) as follows:

Select a random k

$$z = (dk * m) \pmod{p}$$

6. Find the ciphertext C as follows: $C=(y,z)$

7. The sender B send Cipher C to receiver A

Decryption steps:

1. Obtain the ciphertext C from B.

2. Compute (r) as follows

$$r = y^{p-1-x} \pmod{p}$$

3. Recover the plaintext as follows:

$$m = (r * z) \pmod{p} \text{ Multiplicative Homomorphic property:}$$

Consider an Elgamal public key (g, p) with private key a . Recall encryption of a plaintext message x with nonce k to be

$E(x, k) = (y_1, y_2)$ where

$y_1 =$

$y_2 = x \cdot$

Given two plaintext messages x_1 and x_2 with nonces k_1, k_2 . The corresponding cipher texts are:

$E(x_1, k_1) = (y_1, y_2)$

$= ()$

$E(x_2, k_2) = (y_3, y_4) ()$

Multiplying two ciphertexts together yields: $(y_1, y_2) \cdot (y_3, y_4) = (y_1 \cdot y_3, y_2 \cdot y_4)$

$=$

$= ()$

Decrypting the resulting ciphertext yields: $() = x_1 x_2$

Illustrative Example of Elgamal Scheme

Example: Let $p=11$ and a generator number $=2$ Select integer number $x = 5$

Calculate $d =$

Then public key $= (11, 2, 10)$ Private key $= (5)$

Plaintext = Age

Represent the plaintext as integer value as follows: The new plaintext = (1 7 5)

Encryption: $y =$,

$()$

Choose a random integer value $k=6$ $y_A =$

$z_A = ()$

Choose a random integer value $k=4$ $y_g =$

$z_g = ()$

Choose a random integer value $k=7$ $y_e =$

$z_e = ()$

Ciphertext = (9,1) (5,7) (7,6)

The sender send the cipher text value to receiver A. The receiver should decrypt the cipher text as follows:

Compute (r) and (m) where

$r = ()$

$()$

$()$

$()$

The receiver find the plaintext (1 7 5) Convert the plaintext to letters =Age

(E) Flow Diagram

Flow of Elgamal Scheme has been shown in Figure 1. First step is to select a by user and then apply encryption on it before outsourcing it. After storing encrypted file externally user asks server to create its replicas and perform operations on encrypted file. operations are performed and then signature is calculated using MD5. Signatures are calculated for results of plaintext data as well as encrypted result. Both the signatures are compared to verify the integrity.

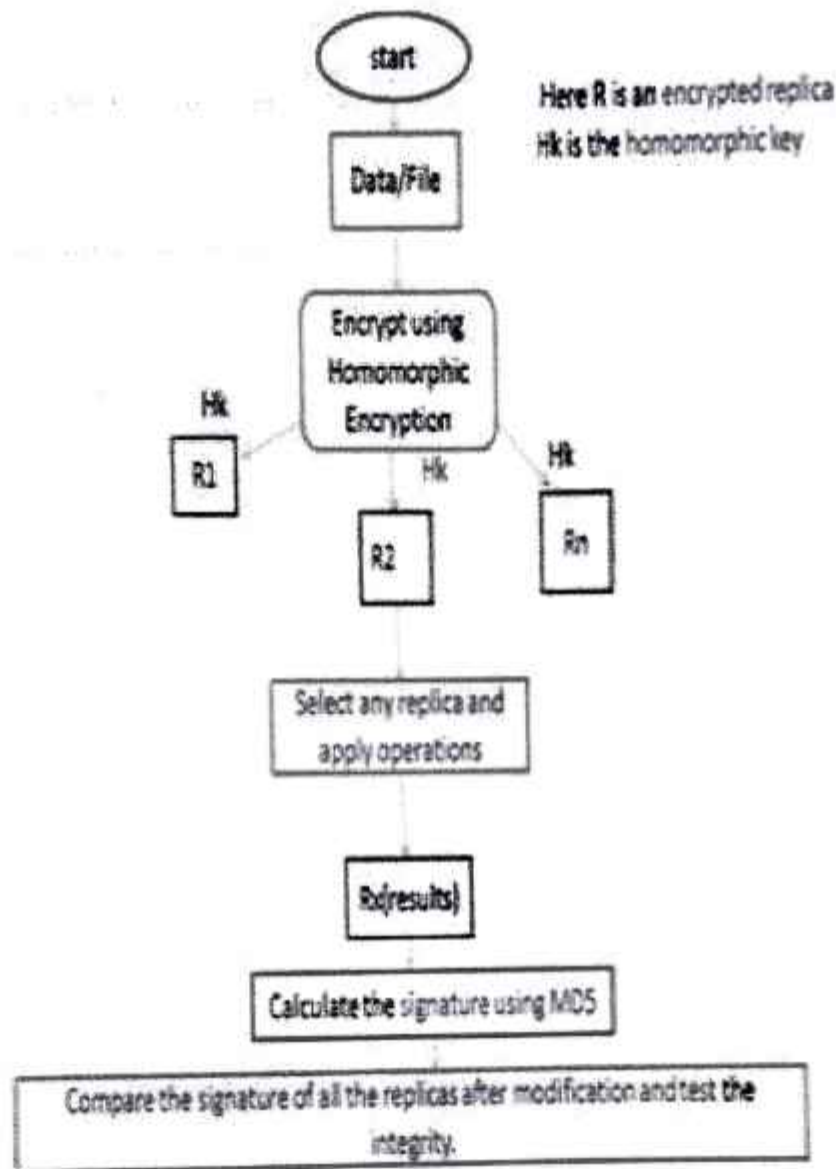


Figure 1: Elgamal scheme Flow Diagram for applying Fully Homomorphic Encryption

Experimental Analysis

Elgamal Homomorphic Scheme scenario has been implemented on visual basic in C#. In Elgamal Scheme file has been encrypted using Fully Homomorphic algorithm and then Multiplicative Homomorphism has been applied on file to check the Integrity of file. Integrity of data is said to be verified if the computed hash value of encrypted result after applying operations matches with the already stored hash value of file then.

Applying Fully Homomorphic Encryption Scheme for file size of 5 Mb has been shown in In **Figure 2**. First step is to encrypt the file using Homomorphic keys. In second step Multiplication of file content value with a random number has been performed before encryption as well as after encryption. In third step signature of encrypted result of multiplication of file with random number has been compared with signature of multiplication value in plaintext form. The two signatures do match hence integrity of file is verified.


```

Testing static decryption -----
Original message: "hello & welcome."
Testing multiplication in batch -----
Testing for key No. 0
File content value: 5409950F
Batch value: 5409950F
Verification: 5409950F584002036C9950A03D41E2 equal to 5409950F584002036C9950A03D41E2. Test

```

Figure 2: Snapshot for performing Integrity test on a file

Table 1 : Computation time for Pailler and Elgamal Schemes

| File Size in MB's | Time Taken (in ms) Pailler's Scheme | Time Taken (in ms) Elgamal Scheme | %age efficiency (p-E)* 100/P |
|-------------------|-------------------------------------|-----------------------------------|------------------------------|
| 1 MB | 1.1 | 0.737 | 33 |
| 5 MB | 3 | 2.01 | 33 |
| 10 MB | 5.2 | 3.484 | 33 |
| 20 MB | 13 | 11.39 | 12 |

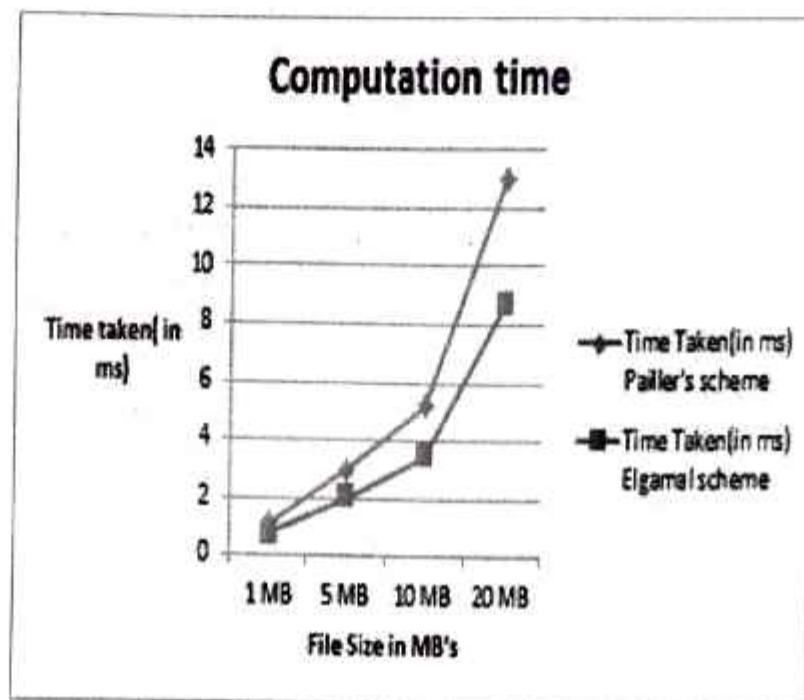


Figure 3: Computation time of Pailler and Elgamal Scheme

The computation time is done on system's side in response phase. Computation time for Pailler's and Elgamal Scheme is shown in Figure 3 for different file sizes. As file size increases computation time taken by Elgamal Scheme is comparatively less than the computation time taken in Pailler's Scheme. This Scheme only includes additive Homomorphism however the Elgamal Scheme supports multiplicative Homomorphism as well.

Conclusion and Future Scope

5. Fully Homomorphic Scheme has become an important Scheme in real time entities like financial privacy, banking applications, e-voting Scheme for maintaining Integrity of data. Fully Homomorphic Scheme allows to compute addition as well as multiplication on encrypted data without decrypting that data, consequently called as Fully Homomorphic Scheme. Fully Homomorphism has been implemented in this work for maintaining Integrity of data. Elgamal algorithm has been used to perform encryption on data. Key size is taken in big integer and Md5 has been used to calculate the signature of data. Considering these factors computation time taken by Elgamal Scheme is less than Pailler's Scheme for different file sizes.

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Impact of Covid 19 on Education Sector

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Abstract

The objective of this paper is to analyze the impact of Covid 19 on education industry in India. We are using applied research methodology; we are basically finding the solution of immediate problem. The conclusion of this study is that the education system is adversely affected but our govt making best effort to recover this loss with the help of education system in India. this paper consists of original study because much work is not done yet on this subject.

Keyword: Covid 19, Applied Research, Education System

Introduction

The entire world is facing the biggest public health risk which has changed the world order and has affected by and large nearly every industry and segment of all the countries. Covid 19 has created a huge impact on entire world to an extent that in more than 185 countries, governments have announced closure of schools impacting nearly 1.5 billion students.

It had hit Indian education system equally hard because, the government of India has announced lockdown from 23 march to 17 may. This restricted any kind of movement for every individual and no one can step out of their homes due to the corona virus. The situation is worsening with each day. The worst effected segment of society is the student who are adversely affected. The government has decided to postpone the board examination of Class 12 and 10 which were always considered to be sacrosanct.

Not just the board exam, all the competitive exams including administrative services, competitive examination such as IIT JEE, AIEEE and regular college exam have also been postponed. This reflect the impact Covid 19 has on our education system.

Now the biggest question arise what strategies need to adopt to recover the loss of education system. The governments, schools, colleges and universities are scrambling different methods to cover up the loss of education to be imparted. These methods are not just limited to following measures but beyond:

1. All the educational institute are running their online classes
2. Exams of all the colleges are also conducted online
3. Government is in continuous effort to find a way how to conduct competitive exam.

There are several online tools which these organizations are using to deliver the education content such as :

- Microsoft teams
- Zoom meeting software
- Google Classes
- Facebook rooms
- Custom built software etc.

Though different methods have been adopted to deliver the lectures and classes online, this also brings a huge challenge in terms of adoption and comprehension. The Indian education system is not for such as early adoption at such as rapid pace due to knowledge issues, infrastructure issues, network issues, technology issues etc.

The sudden shift to online learning without any planning – especially in countries like India where the backbone for online learning was not ready and the curriculum was not designed for such a format – has created the risk of most of our students becoming passive learners and they seem to be losing interest due to low levels of attention span.

Other Issues

The challenge posed by Covid 19 is not just limited to education and lecture delivery, it has also impacted the admission and new enrollment process in education institutions and pose a severe risk of students losing a complete academic year from their academic life.

In the orders released by various state governments and central governments, the education institutions have been barred from charging the fees components, thereby leading to salary issues with teachers and educationists. The movement restrictions imposed due to lock down and fear of virus spreading has also stopped all kind of ongoing research work happening in education system, hereby stopping technology development and reducing job prospects. The recruitment for jobs and placement in campuses has taken a severe hit because industries are facing severe losses due to economic slowdown.

Positive Impact: Every difficult situation also presents an opportunity, there are following positive impacts which may be considered:

- Connect with technology: New ways of delivery and assessments of learning outcomes will have to be adopted which opens immense opportunities for a major transformation in the area of curriculum development and pedagogy.
- Learning management systems to be the new norm in the education where connect with teacher and student a single click will be new normal
- Rise in collaborative work: The teaching community to a large extent has been very insulated and more so in a country like India. There is a new opportunity where collaborative teaching and learning can take on new forms and can even be monetized.
- Many academic meetings, seminars and conferences will move online and there is a possibility that some new form of an online conferencing platform will emerge as a business model.

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Conclusion

This research paper conclude that this pandemic has adverse effect on Indian education system. But our government is in constant effort to minimize the loss of education by adopting various measures. there are lots of studies related to Covid in, but this research paper is mainly focus on how governments, education institutions and technology players are put their best effort to overcome this pandemic situation in education sector

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Internet Marketing Through Consumers: A Study of Effectiveness of Various Tools

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Abstract

This examination is directed to perceive how the buyers' image discernment and buying choices are affected by various internet promoting apparatuses utilized over the businesses, for example, Word of Mouth (WOM), online Chat help and Email publicizing. Its motivation was to study the connection between the diverse web based showcasing apparatuses and procedures, WOM, Online visit and Email and their consequences for the brand recognition and buyer buying choice. There are a great deal of other affecting components remembered for a dynamic of a purchaser for buying and building up an observation about a specific brand yet the most significant elements that assume a characterizing job in changing the customer brand recognition and buying choice is WOM and the reliance exists on these three factors. Our outcomes show that the inhabitants of Karachi who are dynamic on web lean toward WOM over the other two factors which are online talk and email publicizing. Various organizations profit the web based advertising technique of WOM administration so as to draw in the potential clients and impact their buying choice and brand recognition. There are no summed up factors that influence the purchaser choice of buying and building up a brand recognition in Karachi. WOM is being finished by the shoppers and it's one of the least expensive mode of web based advertising which is being profited by numerous organizations and end up being successful.

Introduction

Right now, customary showcasing is blurring endlessly with the infiltration of web based promoting which has spread a wide range of branches including web based life, websites, visit gatherings and general investigating discussions. The pace of data sharing has never been as quick for what it's worth right now to encourage this blast of new evolving data, web based promoting has a task to carry out. Web based advertising engages the customers to showcase the items which they feel are deserving of procurement alongside point by point conversations on the highlights, quality, strength, plan and usefulness of different items across enterprises.

Advertising supervisors are progressively utilizing web based promoting because of different reasons including: dispensing with topographical limitation, simplicity of openness, solidification of enormous volume of data into a minimized online site, high edge for customization and force of reach to potential and real purchasers around the globe.

Internet advertising can impact the purchaser buying choice and change brand impression of various results of various enterprises. It is the motivation behind this exploration to contemplate the different instruments and procedures showcasing directors can use to impact purchaser buying choice and brand recognition by using shoppers as their promoting resource.

Issue Statement

To consider the impacts of web based showcasing through customers, utilizing different apparatuses and systems across ventures.

Theory

H1: The impact of online informal advertising through shoppers on buyer buying choice and brand observation across enterprises.

H2: The impact of email promoting through customers on shopper buying choice and brand discernment across ventures.

H3: The impact of online visit segment on shopper buying choice and brand discernment across ventures.

Definitions

- **Consumer Purchasing Decision:** Consumer buying choice alludes to official choice a customer takes subsequent to considering all the elements, for example, pay of the individual, nature of the item, brand value of the organization and so forth, to make instalment for the bought item to make the buy last.

- **Brand Perception:** This alludes to the arrangement of qualities a potential customer relates a specific item/organization/brand with so as to make relationship with. The impression of a specific brand perhaps impacted by components, for example, showcasing of that specific brand, social crusades did by that brand, and customer fulfilment/disappointment of that specific brand subsequent to devouring that brand and verbal picture that brand has set up.
- **Email Advertising:** This alludes to the trading of item conversations/sees/tributes through messages shared between shoppers with buyers, activated by the organizations.
- **Online Verbal Showcasing:** Marketing the item online through different procedures including web based life, for example, Face book, Twitter; including buyer web journals to energize viral promoting.
- **Chat Area:** One to One or One an excessive number of conversations on the web on built up visit discussions intended to encourage sentiments, investigating, proposals and recommendations with respect to at least one items.

Writing Review

In these advanced occasions, customers purchase items as well as market them. They share subtleties, for example, item quality, dependability, estimating, and usability and guarantee techniques by overhearing people's conversations and through online gatherings and social networks. This examination intends to concentrate inside and out the variables that influence customers' capacity to advertise items on the web and to then create and concentrate on the most gainful proportions of promoting with the goal that they help showcasing chiefs across enterprises to grow new devices and methods to saddle shoppers advertising potential.

The more prominent the communication between individuals on broad communications, the higher the odds of them sharing this data to cause assessment change coming about social change. This implies circuitous operators aren't as compelling as immediate specialists, right now, themselves. Urging shoppers themselves to engage in the advertising procedure expands the believability of the message conveyed.

Moreover, Direct-to-shopper showcasing can be significantly influenced by buyers approach towards it, which is impacted by media honesty. It's likewise critical to remember the moral worries of pharmaceutical enterprises while including shoppers as publicizing operators as inappropriate endeavours can prompt harming results. For instance the works on concerning harmed a considerable amount of patients and caused huge monetary. A suspended item more than 9 years back has the open door for coming up again as purchasers of this specific item intend to utilize vigilante advertising as an apparatus to change, fix and develop this item. Web based talking has end up being a solid advancement and advertising centre point right now. As per Teenage Research Unlimited, 81% of youths utilize the Internet and talking is the main movement wherein they lock in. The exploration right now still being worked on however the possibilities look productive as such huge number of youthful personalities in a solitary spot has huge amounts of data to share, including their encounters of various items.

Making moral client esteem not just methods fulfilling the client by satisfying their needs through an item which is fabricated by an undertaking supported up by numerous moral standards and qualities. Or maybe it likewise implies, including clients to share their experience of item use against the experience of utilizing contenders items and afterward to distribute these squares of data online of social web journals or important discussions so it permits ventures with more prominent edge to approach. The endurance of an unreservedly controllable pool of obvious communications is supreme. This assessment builds up the presence of proof into these collaborations alongside its recovery by least sticker price. The inconsistency relations in the midst of amount in addition to dissemination and deals should be examined. Besides, assuming the relationship is there, the issue of handling scattering is rousing.

What's more he further expressed that more research is required for the age of an increasingly worthy root planned for the calculation of dissemination. One increasingly huge issue right now the relationship between the on the web and disconnected domains of informal. This investigation examined the viability of online social orders in retouching basic deal improvement happening disconnected. which implies people come to disconnected decisions succeeding handling on the online information online connections may trigger disconnected collaborations take an interest in online data sharing without recognizing the fact the associations is also preparing this data all the while and shutting different translations from them. Be that because it may, this is not things in standard statistical surveying estimation where

individuals give their assent for such utilization of their data. it's typical for a robust medium, for instance, web to form without anyone else new methods for correspondence interfaces and new applications to assist the making of an internet language referenced that viral promoting is that the new dialect in web based advertising. Be that because it may, some new names are being authored cherish viral showcasing which can make others decipher it in an inappropriate manner. Aggregate sifting orders people with equal solaces utilizing clustering techniques. Such strategies help in carving Web destinations. The notice an aggregate separating technique utilized by CD Now, so on recommend new and up and coming craftsmen to their current customers through their email addresses referenced making of online bazaars for the purchasing and selling of products should be possible by PC operators. The notes that these operators significantly influence the viability of e-advertising.

"We investigate re-examining rehearses at Amazon.com and bn.com and located that client evaluations will generally be productive at the 2 locales which they're progressively far reaching at Amazon.com. This affirmation proposes that client support contacts purchaser buying execution at two Internet retail destinations. The thought that client content influences deals is obligatory for changes in client content greatness to own any effect on contrasts in incomes or productivity across retailers. a desirable stipend to the current examination is investigated within the case of refining a client's happiness with their buys influences subsequent client devotion."

This paper relates and clarifies the connection between web criticism components and their capacity to show intent on be enormous scope data trade centres where shoppers share their perspectives on various items. the doorway of web based advertising within the thought set of shoppers is incredibly impacting the selection examples and selection practices of buyers across businesses in an unpretentious yet noteworthy manner. there's proof to recommend that shoppers presently depend much on online perspectives and sentiments running from venture choices to picking what diversion to use for entertainment. the online based promoting faces another test within the contemporary time, that is, the novelty of the people posting or offering data on the online to the individuals who see or potentially get to that. As every individual can uninhibitedly post, offer and remark his/her conclusions and perspectives with regard to varied items on the online with no careful contribution of individual data; it makes a fragile online personality, like that of an outsider. this could prompt trust issues among the intended interest, during this way influencing the effect of the mutual data. Talks about anyway that new personality can prompt ideal yields if the concept of information sharing isn't abstract yet objective. Target data sharing and trade can prompt preferred comprehension of the setting over abstract data as there's less mutilation and changeability in target information contrasted with emotional information. Be that because it may, note that the concept of the item or administration will likewise impact the viability of the mutual data.

The development pace of the market may be a basic pointer of the market's latent capacity. Markets that are getting firmly will generally have more potential for benefits than business sectors that are stagnating or on the decrease. Be that because it may, a high development rate might not really demonstrate a high benefit potential too. this can be due to the way that organizations is also assuming to enter the market by keeping net revenues low. Thusly, organizations may keep their net revenues high yet still have a solid development rate just in light of the very fact that the market's latent capacity is such. Rivalry much of the time consumes the online revenues of this firms live because the bigger the number of all out players, the lesser the cash to play with. this can be likewise implies that profoundly focused firms tend create solid hindrances to section to secure their overall revenues. Despite the very fact that, this enemy of significant nature of firms is unsafe over the end of the day for purchasers, it demonstrates very gainful within the short-run for the organizations. Another angle identifying with business sectors is item institutionalization. In business sectors, where item institutionalization is high, purchasers will generally make basic correlations between items. Therefore the marketplace for such items is exceptionally serious and value wars are a typical element of such market, except if implied agreement is now chosen. This makes a solid requirement for organizations to separate their items through successful promoting because the items themselves are just about the equivalent.

Research Methods

Strategy for information assortment Information utilized straight away simply essential information gathered from the respondents. Individual reviews were led and polls were made to fill.

Examining Technique

The examining strategy and technique is unhindered, non-likelihood inspecting.

Test Size

75 respondents from various zones of India, including workplaces and shopping centres. Instrument of information Collection Polls addicted to close finished inquiries, numerous decision and liker scale.

Conclusion

As per the examination of test size 75 respondents, we came to realize that there is no immediate association of the contemplated factors (Consumer Purchasing Decision, Brand Perception and Online promoting through Consumers). Purchasers either emphatically concur or concur that brand's presence via web-based networking media is fundamental for development. Pretty much every administrator concurs that promoting through verbal exchange has significant effect than doing it through talk area or email publicizing. Purchasers do choose verbal exchange as a significant device for web based promoting. Also this examination adds to the investigations of various scholars who have taken a shot at a similar subject. The end to the paper is additionally supporting what is finished up. As indicated by him Word of Mouth is imperative apparatus than advisements in supporting insight of a development and in tying down the choice to attempt the item. The examination adds to the investigations of various scholars who have taken a shot at a similar subject. WOM is preferred device of showcasing over some other this is potentially in light of the fact that individual sources are respected progressively trustworthy.

Conversations

Verbal exchange can be exceptionally a supportive apparatus that gives a firsthand input to comprehend the different sorts and level of chances and dangers that are looked by the clients. Through verbal clients straightforwardly communicates his interests and perspectives about a specific item. Informal exchange has likewise end up being very helpful procedures which adequately impact the buyer conduct towards their buy choices. Additionally Word of mouth has developed to be a device handle conventional commercial methods in term of cost, time and spread. Purchasers depend on the criticism of existing clients and assessments of specialists. This dependence will in general be static in the short run. When a discernment has been made about an item it can't be change medium-term and furthermore makes different methods, for example, email notice and visit area. So as to keep up a positive informal exchange about a specific item ought to be made and kept up from right off the bat in item's life-cycle.

Suggestions

We can say that the exploration infers that internet showcasing through buyers by means of verbal stages end up being the best apparatus across businesses to impact shopper buying choice and brand discernment.

Future Research

Future research is conceivable in the zone of web based advertising through internet based life, explicitly Face book as its objective reach is the most noteworthy. To supplement this territory of research, further research on web access and remote systems administration access in urban and rustic territories can likewise be done.

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Distributed Mobile Cloud Computing: A New Technique

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Abstract

Distributed computing is by all accounts the most encouraging innovation of the century we are living. It gives another way of sharing dispersed assets and administrations that might be a piece of various associations, topographically situated in better places and diverse time zones. Versatile Cloud Computing offers mostly a similar usefulness, with the main extra necessity that, at any rate, a portion of the gadgets is portable. Right now, will attempt to give a natty gritty clarification of Mobile Cloud Computing idea by giving various models, figures, openness, upsides and downsides and correlation.

Keywords: *Distributed Computing, Mobile Cloud Computing, Smart Phones.*

Introduction

A couple of a long time ago, cellular telephones were simply some devices that actually allowed customers to perform phone calls whilst no longer at a post workplace or home. But all this changed thanks to the huge investments in net connectivity, which made possible the easy get entry to, and thus, permitting a large demand on cell telephones, that these days are used twice or even more than a desktop pc was about one decade ago. Cloud computing seems as the trendy evolution in handing over computing power, permitting even small or micro companies to have get entry to to a better level of processing power, or totally "virtual" infrastructure out of the workplace, which previously has been a luxurious that only massive organizations should afford. It also allows dynamically scalable resources as virtual offerings. Considering the case of Mobile Cloud Computing, there are many advantages offered. Mobile devices are very used due to their length and portability. But, smaller size way decrease weight, decrease hardware performances and smaller battery. These hardware constraints imply at the development and the functionality of the software committed for mobile. Finally, this paper is built and divided in 3 fundamental sections, where the first segment will try to provide a wellknown deal with of the Cloud Computing notion, persevering with with Mobile Cloud Computing, the meaning, sorts and challenges, and ending the paper with a table of various cloud vendors, their benefits and dangers.

Cloud Computing

Simply said, Cloud Computing is the delivery of the computing services, including servers, databases, garage and networking over the Internet. These services, normally are offered by way of so called Cloud Providers, that commonly charge primarily based on utilization. Nowadays, everyone this is using a device related to Internet might be consumer of cloud services, despite the fact that we might not be aware of it. Almost each online provider, together with email, document editors or interesting apps, might be running using cloud offerings. Cloud Computing scheme example If ever questioned what Cloud Computing is successful of, following is a commonly narrow listing of the talents that Cloud Computing can provide:

- Create new pps and services
- Store, back up and recover records
- Deliver software
- Analyse information for pattern recognition
- Streaming.

Besides the talents that Cloud Computing offers, there are also quite a few benefits that it can offer.

Cost the use of cloud services lowers the costs that businesses need to spend for getting hardware and software gear for putting in place the infrastructure for its desires.

Speed while the business enterprise needs more sources, provisioning additional resources in cloud offerings can be carried out in minutes.

Scaling the capability to scale elastically on call for the usage of cloud services appears as their important and most commonplace use case – processing power, garage, bandwidth and whatever the demand is, in much less than a minute. Depending at the type of service companies offer, there are several categories of Cloud Computing models, a s

indexed:

- **Software as a Service**

The carriers that provide this version of Cloud Computing solutions, typically offer a web-primarily based application where the customers of the carrier can operate. In this version, the consumer does not have any control over the infrastructure that the provider is jogging in, along with the community, servers, storage or running gadget. It removes the want that several companies or organizations to install and run their applications or offerings on their facts facilities or organization computers. By this, the companies save a number of economic resources by saving cash on the hardware they would need to run the application, the lease of area wherein the statistics center would be positioned on, or maybe software program licence for working structures and relying software.

- **Platform as a Service**

Platform as a Service is any other Cloud Computing version wherein the third-party provider affords the necessary hardware and software program equipment normally required for development or studies over the Internet. In other words, all of the programming languages, libraries, offerings and different programming tools supplied by using the company are deployed within the cloud infrastructure that the issuer affords. Similar as in the previous version, SaaS, the stop user does not have any manage or manipulate any a part of the infrastructure, along with community, operating structures, storage, etc.

- **Infrastructure as a Service**

According to maximum of statistics provided with the aid of unique surveys, IaaS is the most common cloud-based totally model furnished with the aid of the provider carriers. IaaS refers to the carrier carriers who provide processing capability, storage, community and different fundamental computing resources, to the consumer who desires to run any type of software in it. Usually these services are made possible with the aid of using virtual machines as instances. Xen, Oracle VirtualBox, KVM or Hyper-V are standard examples of companies that offer first rate possibilities to run these VMs.

- **Mobile Cloud Computing**

In the purchaser area, mobility players which include Apple, Google, and Microsoft all provide variations of cloud-based totally apps and private storage. However, the line among the man or woman and the professional is more and more being blurred. Allowing employees get entry to to company assets using private devices makes them anticipate access on your CRM device on their iPad, with (near) real-time enterprise intelligence reports added with the aid of the contact of a finger at the same time as sharing analysis with their teams at the collaboration platform. Most of the agencies tent to move their apps and services inside the cloud. Every corporation mission is to grow and evolve. Considering this example, corporations face hassle with new coming personnel, which carry their own gadgets, offerings and apps. This method that, it calls for extra efforts and time to combine the records to the corporate cloud, in order to ensure assist and control over usage of the same. When we add the complex format of making positive that corporate services are as much as date, all this process turns into a mess and quite regularly it turns into a challenging venture for the responsible employees.

Advantages

MCC gives a group of advantages at the same time as the usage of cloud services. Following are listed some of the most important ones:-

Flexibility – considered one of key benefits while the usage of MCC is that the cloud records may be used anywhere, everywhere; all you want is a cellular device of any kind, which is paired or configured with the organisation cloud platform Real time available facts – accessing the information in actual time is no longer a mission at the same time as you're out of the workplace No upfront payments – last, but no longer least – payments. Commonly, cloud packages does not require fee without using it. It is in the main the case pay-for-use, which enables in growing the adoption of the version.

Disadvantages

When there are benefits, it's miles sure that there are negative aspects as well. Following are listed a number of the most crucial risks of MCC, that every MCC user maximum keep in thoughts before using it: -

- Security – a first-rate problem with Cloud Computing is the security and facts integration. When cell is the subject, the eye ought to be times higher: unprotected records can be without difficulty sniffed.-

- Internet connection – considering the power of MCC, allowing the customers to get admission to the facts from anywhere, calls for Internet connection. Making sure that, when gaining access to statistics, the user wishes a strong and strong Internet connection, frequently can motive headache, in particular in non-metropolitan areas.-
- Performance – considering smaller length and lower hardware overall performance, it is comprehensible that the performance with MCC could be in a much lower degree.

Mobile Cloud Computing Security Concerns

One of the maximum enormous concerns of Cloud Computing in popular, and Mobile Cloud Computing particularly without any doubt, is statistics security. According to the most recent studies, cell gadgets are at the top of the listing of the maximum enormous security risks. Confidentiality, integrity and authenticity of records are the maximum unique threat. Confidentiality is considered in hazard while unauthorized events, somehow, control to intercept statistics transmission. Allowing the sort of thing, risks the integrity of the records. The authenticity is risked while these unauthorized parties can use the devices to cause transactions. The today's tendencies of the usage of mobile gadgets is by means of the usage of free programs, which may be infected by means of malicious software. Using open channels over community threatens confidential facts. Thus, those packages are regularly up to date or upgraded, trying to provide as much security as possible.

Data Loss

Using Cloud Computing is greater like outsourcing the data to the provider company. This means increasing the chance of exposing important information, due to the new problems cloud is facing, and which were not problems in traditional computing. Since greater of the service carriers provide shared sources, it's miles much more likely for the example to crash and the records to be lost. Recently, there has been a number of unintentional deletion of statistics by way of the companies. Also, a terrible line code can mess up access keys, and the data is lost.

To prevent facts loss, following solutions can decrease the chance:- Encrypt statistics at the same time as transmission;- Using get right of entry to manage gear- Time-to-time returned up

Untrusted carrier carriers

Also known as malicious insiders, they may be the people who have get admission to and are authorized to manipulate with the statistics inside the carrier providers supplying cloud services. These human beings can either be running for different businesses or they do it for their personal intentions. Not always the agency is guilty, in this kind of case.

Insecure API

Usually, the verbal exchange between a client, which in this situation may be a mobile tool treated by way of the company employee, and the server, which in this situation is an instance somewhere in the cloud, is finished via an Application Programming Interface. In order to hold facts integration and protection in a higher degree, the company presenting the API should secure the verbal exchange channels and the data transmitted. Avoiding insecure APIs can be achieved via using the following techniques:

- Applying authentication gear and get entry to manipulate tools on facts transmission;
- Implementing the proper safety version in line with service company's safety protocols.

Conclusion

Nowadays, Cloud Computing is transferring is massive steps in the direction of becoming the maximum popular and the maximum used era, both inside the organizational context, or smaller units. Considering this, and also thinking about that cell era is another useful technology that gives flexibility, compactness and portability, the large players inside the IT enterprise are honestly centered in producing as premier as viable answers that will fit for cell gadgets also. The research done in this paper is attempting to illustrate the contemporary traits within the IT industry, by means of presenting data from unique sources. Considering the tables, assumptions and everything referred to on this paper, appears that Mobile Cloud Computing will soon take the lead as the most modern-day technology to pay attention to.

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Causes and Effects of Stress on Working Women in India

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Abstract

In this modern era, women is playing very important role in the success of a country's economy. Now the women is walking with men in the development of economy. In India the status of women has been changed in last few years. In India many decades ago there were very less number of women who were working. In that time period large number of women were housemakers only. They were not allowed to go out to earn living for their family. But now time has changed and women are going out to earn money. But time has not changed their condition in our society. Though number of working women in India has increased but still large number of women are working without the support of their families. Now working women are playing double role i.e. fulfilling all responsibilities of house work and fulfilling all responsibilities related to job at their work place. And the effect of so many responsibilities on working women is STRESS. And this stress is gradually affecting the life of working women. And ultimately this will decline the growth rate of active participation of working women in economic development of India. In India due to stress health related issues in working women has been increasing at a higher rate in last few years. Now a major proportion of working women is facing health problems related to nervous system and other physical problems. A working woman is suffering from both physical issues and psychological issues. In this paper the causes of stress and effect of stress on Indian working women will be discussed in detail. The main focus of this paper is on the stress issues related with the working women of India. For this paper secondary data has been collected and analysed to present the stressful life of working women in India.

Keywords: Working Women, India, Stress, Effects

Introduction

Stress: Stress can be defined in psychological terms as well as in medical terms.

In psychological terms stress can be defined as- "a feeling of emotional strain and pressure". It is of two kinds- (a) Positive stress (b) Negative stress.

(a) **Positive stress:** It is desired and beneficial. It is necessary to maintain good performance in any work.

(b) **Negative stress:** It is a kind of mental strain or pressure which affects the performance negatively.

In medical terms stress can be defined as- "a physical, mental or emotional factor that causes physical or mental disorder". It can be of two types- (a) External stress (b) Internal stress

(a) **External stress:** It is created by external environment. External factors like social surroundings can be a cause of this kind of stress.

(b) **Internal stress:** It is created by internal factors. A weak body due to long illness can be a factor of creating stress.

Working women : Woman is the most incredible creation of God on earth. A woman plays different roles effectively and efficiently at the same time. At home she is a cook, a nurse, a maid, a teacher, a doctor, a manager at the same time. She takes care of each and every family member. She does duty of a homemaker happily and with complete responsibility.

In last few years the proportion of working women in India has been increasing. Now thinking of most of Indians has changed. Now they are understanding the importance of education and job for women. A daughter can help her father in feeding her family. And a wife can be a great support for her husband in improving the standard of living of their family. For a woman to go out to earn income was very difficult many years ago. But with the passage of time women has become a part of working population of India. Hence she is contributing in the economic development of India.

Stressful life of working women: Most of the percentage of working women is living a stressful life. The life of a working woman is full of responsibilities. The increasing number of responsibilities take the form of stress in a woman's life. A working woman has to play double role in her life. And this double role has made her life difficult. She has to fulfil

all her responsibilities with Grade A at home. Mostly in-laws do not want to adjust with their working daughter-in-laws. They want her to be the best homemaker. They never want to understand the importance of job of their daughter-in-laws. They always make negative statements about the job of their daughter-in-laws. These kind of family problems always create hurdles in the path of success of a working woman. For a working married woman the family support is very important so that she can fulfil both the responsibilities perfectly.

Women at Workplace: Along with the home responsibilities a working woman has to handle various responsibilities at their workplace. A large number of Indian women is a part labour class. These women participates in jobs like- road construction, manufacturing buildings, maids, employees in many small and cottage industries etc. And highly educated women are employed in various companies with good position, educational institutes and in various government jobs etc. Whether they are belonging to labour class or employed in reputed jobs, they have to do their jobs with dedication. There is no excuse for them that they are homemakers and can not contribute 100% for their job. For earning living for their families they have to work hard at their working place too. But they have to face many problems at workplace like gender discrimination, sexual harassment etc.

Objectives of Study

1. To present the stressful life of working women in India.
2. To present various reasons responsible for stress.
3. To discuss various effects of stress on life of working women.

Research Methodology

The present study is based on secondary data. Secondary sources have been used for collection and analyses of information. For this paper necessary information has been collected from research papers, on line material, journals and books.

Limitation of Study

- Due to time limitation only secondary data has been considered for this study.
- This paper does not cover any primary data collection.
- There is no use of any quantitative technique in this paper.

Causes of Stress in Working Women

There are various reasons for stress of women at workplace. It is very difficult for a women to do a job with freedom. She has to handle various responsibilities of family as well as job. Here we will discuss the various causes of stress in life of a working woman.

Some reasons are:

1. Mental harassment- There is an old age convention that women are less capable in working than men when there is matter of doing job. At the same working place there are various men and women doing the job. But in mostly organizations men are considered better than women even if both have pursued the same professional degree. There is discrimination in salary package for the same job. This discrimination is a part of every workplace, whether it is a corporate sector, educational sector, banking sector, hospitals and even in Bollywood. And this kind of discrimination creates stress in the mind of working women.

2. Sexual harassment- Even if our country is a developing country and women is a part of economic development of our country, though women, whether married or unmarried are prone to sexual harassment. Women face sexual harassment while travelling from home to their workplace and from workplace to home. They also face sexual harassment at workplace while doing their jobs. Management of some organisations sexually harass women for promotions. If they protest against this harassment, they are forced to resign.

3. Insufficient maternity leaves- In various organisations, specially private sector organisations do not provide sufficient leaves for working mothers. And because of this many working mothers have to leave their infants at home for long hours without proper breast feed. This is a major cause of stress in working mother's mind and she cannot give her best because of stress. And most of working mothers have to resign for proper feeding of their infants.

4. Absence of facility of creches in various organisations- A large number of organisations do not provide facility of

creches to working mothers so that these mothers can handle their small kids and job together in an efficient manner. This can be a reason of resignation by various working mothers for feeding their infants.

5. Lack of family support- Working women whether a married or unmarried or a mother are not allowed to work for long hours. Only a small proportion of Indian families 100% support their working female members. Family support is very essential for the efficient performance and success of working women.

6. Adjustment at workplace- At workplace every one has to work with other employees. Some are superiors, some are subordinates and some are officers in top management. All have to work in coordination. Sometimes it becomes difficult for a woman to adjust with her colleagues. It becomes difficult for her to convince the superiors about her problems. Some times she is not able to concentrate on job due to reasons like- sickness of her children, some serious family problem, tension of handing home work after reaching home etc.

7. Discrimination in performance appraisal- Both men and women are a part of human assets in an organisation. Both work together for the success of organisation and give their best. But in most of the organisations at the time of promotion mostly male candidates are selected even if qualification and performance level of both males and females is same. It is the thinking of mostly people that a female is weaker in taking job responsibilities than a male. So this is a tragedy with a working specially married working women at workplace. Mostly top positions like principal of an educational institute or a manager in an organisation or directors in a company or a chief minister of a state or a prime minister or president of country, has been men.

8. Strict policies at workplaces- At mostly workplaces job related policies are almost same for male as well as female employees. Sometimes these compulsory and strict guidelines regarding working hours, overtime, meetings in other states, sometimes visit in other countries etc can not be handled by women specially married women. And it is most difficult for a working mother. Some women do not join an organisation due to its strict policies. Ultimately it becomes a stress causing factor for working women.

9. Underestimate oneself - Mostly women live their lives with a feeling of inferiority complex. They underestimate themselves. They consider themselves low-worth as compared to male in our society. These women are always in a dilemma that whether to go for job or not. And in case they join job then they always consider themselves weaker than their male colleagues at workplace. This is also a factor causing stress in women at workplace.

Effects of Stress on Working Women

Stress is a universal phenomenon. In this advance and modern world stress has become a part of everyone's life. In today's running life every male or female wants to be the first in the race of life. And this race takes the form of stress in their lives. In this paper i have discussed about causes of stress in lives of working women. Now I will focus on effects of stress on lives of working women in India.

Effect of Stress on Personal Life of Working Woman

1. Family disputes- Frequency of dispute with family members increases due to stress in mind of working women as woman is an important part of family. She has to take care of her family too. If she is not able to fulfil her family responsibilities due to her job then it will create disturbance in family relations and dispute takes place.

2. Loss of Sex in marital life- Working women specially working mothers can not spare time for their husbands at night. After fulfilling all responsibilities of job and home, she feels tired and cannot fulfil the desire of their husband. They always feel bad and guilty of themselves for the lost sex in their marital life.

3. Divorce- In neutral families where both husbands and wives are working, sometimes sparing time for each other becomes difficult and at one time the distance between both increases. Specially for a working mother it becomes almost impossible to spare sometime for her husband. So ultimately stress of life ruins the happy married life of a family.

4. Relation with children- The relationship between a mother and a child is very delicate. Sometimes it becomes difficult for a working mother to spare sufficient time for the good upbringing of her children. And sometimes it affects the emotions of a child. And the child feels that her mother has no time for him. And sometimes this mother child relationship becomes worse.

5. Disturbance in social relationships- As compared to housewives it is quite difficult for a working women to spare time for her friends and relatives. Sometimes she is not able to attend important functions at some relative's or friend's

home due to some important official work. And it becomes difficult for her to maintain relationships with friends and relatives properly.

6. Psychological effects- Stress creates psychological problems in the life of working women. And it will lead to problems like-

- **Negative thinking-**

- (a) Pessimistic thinking
 - (b) Self-criticism
 - (c) Over analysing
- **Mind Traps-**
 - (a) Taking things personally
 - (b) Rigid thinking
 - (c) Exaggeration

- **Lifestyle Choices-**

- (a) Caffeine
- (b) Lack of sleep
- (c) Overloaded schedule

7. Physical effects- Stress creates various physical disorders in the body of a working woman. Various health problems are associated with stress in mind. Some health problems are-

- Heart problems
- Weak immunity
- Breathing problem
- Pulse rate problem
- Diabetes
- Skin disease
- Ulcer
- Improper digestive system
- Headache
- Ovarian problems
- Menstrual problem
- Infertility
- Sex related problem
- High or low blood pressure

Effects of Stress on Professional Life of Working women

- 1. Poor Performance-** A stressed employee cannot give her best to the job. Hence it becomes difficult for a woman to perform well at workplace with a stress in her mind.
- 2. Failure to achieve desired goals-** Due to poor performance it is not possible for a woman to achieve her job targets on time. And it ultimately leads to her failure.
- 3. Higher absenteeism-** With a constant stress in mind, she loses interest in doing job. And she always tries to take leave from job.
- 4. Idleness-** She loses energy in doing work and loves to be idle rather than doing work. Stress makes her idle.
- 5. Poor relationship with colleagues-** Stress ruins her relationship with her colleagues. She has a feeling of inferiority complex in her mind and it spoils her relationships with her colleagues at job. Her behaviour becomes aggressive and she loses temper easily and ultimately no one wants to talk with her at workplace.
- 6. Frequent Change of job-** A stressed woman feels boredom in doing her job and keeps on changing jobs frequently in order to avoid her boredom.

Hence, we can say that Stress is the biggest enemy for a person. Stress can spoil a person's personal as well as professional life completely. Stress is a silent poison in the body of a person. It kills a person slowly and finishes life completely, if it is not managed on correct time and in a correct manner.

Suggestions for Management of Stress

Before becoming the victim of stress it is very important to manage it. Stress management is very necessary at personal level as well as at workplace.

For managing stress at personal level a working woman should aware of following-

1. Don't underestimate oneself- Working women should try to change their thinking about themselves. They should not underestimate themselves. They should uplift themselves for handling what they already are, and should move confidently to next step.

2. Take decisions patiently- In order to avoid the negative effect of stress and to avoid more stress, it is very important for a working women to take decision patiently after proper analysis of the situation. She should give priority to the important work and avoid the unnecessary matters. So that she can feel relaxed and do her job and house work properly.

3. Change of Perspective- Women should try to conceptualize events in a positive manner. Like they should take any new work as a challenge instead of taking it as a threat and take it as opportunity instead of crisis. This kind of change in perspective will make their lives stress less instead of stressful.

4. Reading of Books- They should spare time for reading books like joke books, books giving positive messages and religious books. *There is a quote by Ernest Hemingway: "There is no friend as loyal as a book".*

5. Listening music- They should listen the music of their interest so that for sometime they can avoid unnecessary thoughts in mind. A good music makes a brain more intelligent and healthy.

6. Yoga and Meditation- Yoga and meditation are best to manage stress. Regular yoga and meditation makes a person healthy internally as well as externally.

7. Sleep on time- Working for long hours makes a person tired and frustrated. So it is necessary to have proper sleep at night. A person should sleep 7 to 8 hours in night for a healthy life. But now very few persons sleep on time. A proper sleep minimizes the stress in mind and person feels relaxed.

8. Exercise- Doing exercise early in the morning is very necessary for good health. But due to shifts sometimes it becomes impossible to spare time in morning. In that case go for a walk in evening but it should be on regular basis.

9. Have healthy food- If input is healthy then output is also healthy. Always try to avoid junk and packed food. Healthy food makes our thinking and body healthy.

Here we have discussed various methods to minimize stress. These methods can be applied personally by working women themselves. Now we will discuss some methods which should be executed at all organizations to manage the stress of their female employees at workplace.

The methods which should be used at workplace to manage stress of working women are-

1. Stress Management Training- Stress Management Training (SMT) is employed by many organizations to control the stress levels of their employees. The idea is to maintain stress levels below instances of burnout.

2. Stress Interventions- It refers to class of activities that are used by organizations to improve employee well-being and reduce stress. In programme the focus is on finding out the causes of stress.

3. Different time-table for working mothers- Organizations must consider the circumstances which are faced by a working mother. Employers should make different work schedule for working mothers so that they can give their best to their jobs as well as to their small kids.

4. No Extra workload- Organizations should not put extra workload on female employees. As home environment of all female employees is not compatible for them. So female employees should not be forced for extra work.

5. Counselling- There should be proper counselling of female employees at workplace, at least twice in a month. While counselling their views and queries must be invited and proper solutions must be given to them. Counsellor must be a qualified person who must know how to manage stress of people.

6. Spiritual environment- Spiritual environment is very important to deal with the stress of employees. A spiritual

activity once in a month would be helpful in maintaining spiritual environment in the organization. It makes the employees positive from inside and they can give their best to the organization even in negative situations too. Spiritual environment also helps in minimizing the cases of sexual harassment at work places.

7. Good Management- Only a good management can make an organization survive for many years. Good management always keep on improving the working conditions of organization and maintaining a feeling of job security in the mind of employees.

8. Proper maternity leaves- Proper maternity leaves should be provided to the working mothers.

9. Performance appraisal without discrimination- Employees should be promoted on the basis of their performance, not on the basis of their genders.

Conclusion

From this study about the causes and effects of stress on working women in India, it is concluded that stress is a big obstacle in the path of success of a working woman. Because of stress a major proportion of working population is not giving 100% to the economic development of a country. Stress should be considered a critical element at both personal and professional level. In today's life like other factors, stress is also an important factor which is affecting the economic development of country. Positive stress is like motivator for good performance but negative stress is affecting the performance level of working women negatively. Family and social support is very important for working women in India. Some organisations have adopted stress management techniques in India. But it is necessary to execute it at a grand level. In category of working women the level of stress is comparatively higher in case of working mothers. Stress is affecting both personal and professional life of working women. Now Government should make proper guidelines for stress management of employees at workplace. It should be made mandatory for all private and government organizations. And at regular intervals government should take feedback from all the organisations about the adherence of guidelines made by government regarding stress management.

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Analyzing the Students' Academic Performance by using Clustering Methods with Decision Tree

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Abstract

Analyzing the student academic performance is not an easy work for the institution of the higher education. The performance of student during their first year in college is a very important point in their educational path and usually encroaches on their final percentage of the result in a decisive manner. The student performance evaluation factors like class tests, internal marks, class quiz, and performance in the lab will be evaluated. This performance will help the teachers to reduce drop out ratio to a significant level and enhance their performance in the final exam. Statistical play an important role in analyzing and evaluating the performance in institution in order to make appropriate decision making of the performance. Academic decision should be used periodically on the performance of the students. This performance parameters chosen can be used at individual students, class, department and college levels In this Paper the major clustering method is used to extract the meaningful information to develop this significant relationship among the variables stored in the large data sets. In this research paper we present a procedure based on decision tree of data mining techniques, and K-means partitioning of clustering methods which support to improve the quality of educational system by analyzing and improving the student academic's performance.

Keywords:- Database, Data Clustering; Data Mining; Classification; Prediction; Assessments; Decision Tree, Academic Performance.

Introduction

Clustering methods in Data mining have been applied in many applications areas such as fraud detection, banking, academic performance and instruction detection. This method may have futures from several categories. Many factors could act as a barrier to student attaining and maintaining high percentage marks that reflects the overall academic performance during their tenure in college. These factors could be targeted by the faculty members in developing strategies to improve and enhance student learning and academic performance by the way of monitoring and analyzing the progression of their performance. With the help of classical partitioning methods and decision tree of data mining techniques it is possible to discover the key characteristics for future predictions.

The objective of portioning methods in clustering is to partition students into homogenous groups according to their education. Analyze different factors effect a students learning behavior and performance during characteristics, class work activities and abilities. These applications can help both the instructors and student to improve the quality in academic career using K-means clustering algorithm and decision tree method in a higher educational institute. Decision tree method is a popular data mining technique that can be used to explain different variables like attendance and grade ratio. Clustering is one of the basic techniques often used in analyzing data sets. This study makes use of cluster.

Methodology

Data Base:- A Data Base is a collection of Data usually associated with some organization or enterprises. Data in a Data base are usually viewed to have a Particular structure or schema with which it is associated.

Data Warehouse: Data warehouse is a storage system (data base) where large volume of data is stored in such a way that retrieving desirable information from the system is very easy and reliable form. Data warehouse is stored in different locations or areas so that it does not collide with transactional data base systems, which store day-to-day information and provides solutions to sophisticated queries and problems, which involve many computations to be performed at higher level of granularity.

Data Mining: Data mining is a process of extracting knowledge from massive volume of data. It refers to a way of

finding significant and useful information from a data base of Organization. The knowledge which is extracted can include pattern types, association rules and different trends. Data mining is method of confined to a particular organization instead it has a technique to explore the knowledge hidden in any data. Data mining software allow the users to analyze data from different dimensions categorizes it and summarized the relationships, identified during the mining process. The different techniques and method used from retrieving out data are artificial intelligence, statistical and mathematical techniques and pattern recognition techniques.

The Technique of Data mining can be differentiated by their different model functions and representation, preference criterion and algorithms. Additionally, data mining systems provide the means to easily perform data summarization and visualization, aiding the security analysis in identifying areas of concern. The models must be represented in some form. Common representations for data mining techniques consist rules, decision trees, linear and non-linear functions, methods, and instance based examples and probability models.

Definition of K-Means Clustering

This K-means algorithm randomly selects K number of objects (data points), each of which initially represents a cluster mean or center. For each of the remaining data points or objects, an object is assigned to the cluster to which it is most similar, based on the distance between the object and cluster mean. Then it computes new mean for each cluster. This process iterates until the criterion function converges.

Algorithm 1- K-Means Clustering

This Algorithm consists of following steps:-

1. Place K points into the space represented by the objects (data points) that are being clustered. In this algorithm these points represent initial group centroids.
2. Assign each objects (Data Points) to the group that has the closest centroid.
3. When all objects (Data Points) have been assigned, recalculate the positions of the K centroids.
4. Repeat Steps 2 and 3 until the centroids no longer move. This produces a separation of the objects (data points) into groups from which the metric to be minimized could be calculated.
5. This algorithm aims at minimizing an objective function, in this case a squared error function.

The Objective Function is
$$J = \sum_{j=1}^k \sum_{i=1}^n \|x_i^{(j)} - c_j\|^2$$

Where $\|x_i^{(j)} - c_j\|^2$ is a chosen distance measure between a data point $x_i^{(j)}$ and the cluster Centre c_j is an indicator of the distance of the n data points from their respective Cluster C.

Characteristics of K-Means Algorithm

K-means clustering algorithm attempts to determine the K partitions that minimize the squared error functions.

- This algorithm relatively very scalable and efficient in processing the large data value sets because the computational complexity of the algorithm is $O(nkt)$ where

N=Total number of objects (data values)

K=Number of clusters

T=Number of iterations.

- This technique is well-known centroid based method that takes the parameter, k, and partitions a set of n objects (data items) into k clusters so that the resulting value of intracustersimilarity is high but intercluster similarity is low.
- This algorithm mostly terminates at the local optimum value.
- In this clustering technique similarity is measured in regard to the mean data value of the data objects in cluster which can be viewed cluster's centroid or center of gravity.

Decision Tree

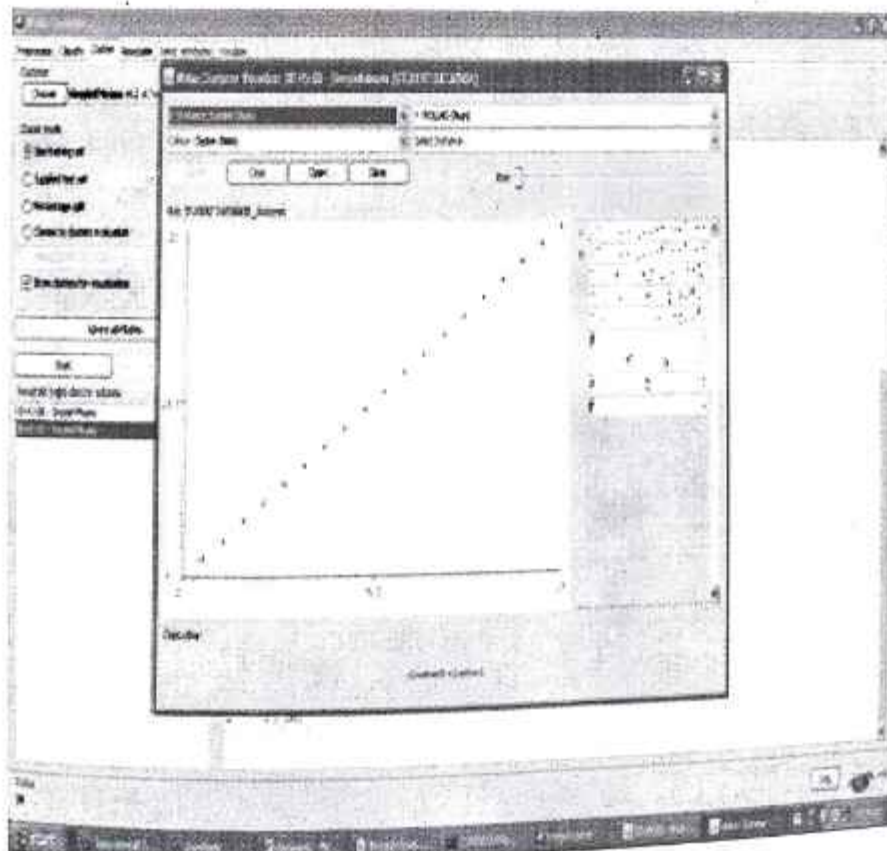
Decision tree technique can be integrated with data warehousing techniques for data mining. A decision tree is a predictive modeling technique used in classification, clustering and prediction tasks. A decision tree is a tree where the root and each internal node are labeled with a question. The arcs emanating from each node represents each possible answer to the associated question. Each leaf node represents a prediction of a solution to the problem under consideration. The basic algorithm for decision tree induction is a greedy algorithm that constructs decision trees in a top-down recursive divide-and-conquer manner. Decision tree algorithm generates a decision tree from the given training data.

Algorithm 2- Decision Tree Algorithm

1. Create Node N
2. If Data value (samples) are all of the same class, C then
3. Return N as a leaf node labeled with the class C;
4. If attribute-list is empty then
5. Return N as a leaf node labeled with the most common class in samples (data value).
6. Select test-attribute, the attribute among attribute-list with the highest information gain;
7. Label node N with test-attribute;
8. For each known value v_i of test-attribute.
9. Grow a branch from node N for the condition test attribute = v_i ;
10. Let M_i be the set of samples for which test-attribute = v_i ;
11. If M_i is empty then
12. Attach a leaf labeled with the most common class in samples;
13. Else attach the node returned by generate-decision tree (M_i , attribute-list-attribute);

Students DataBase

20 sample unit. It can be extended.



| ROLLNO | GPA | CLASS INTERNAL | ATTENDANCE | ASSIGNMENT | LAB PERFORMANCE | OTHER ACTIVITIES |
|--------|------|-------------------|------------|------------|--------------------|---------------------|
| 1 | 3.88 | 19 | 20 | Y | GOOD | GOOD |
| 2 | 3.93 | 18 | 19 | Y | GOOD | AVG |
| 3 | 2.5 | 16 | 15 | Y | AVG | AVG |
| 4 | 3 | 20 | 19 | Y | GOOD | GOOD |
| 5 | 2.98 | 13 | 10 | Y | GOOD | AVG |
| 6 | 1.98 | 5 | 2 | N | BAD | BAD |
| 7 | 2.6 | 10 | 12 | Y | AVG | GOOD |
| 8 | 3.87 | 19 | 20 | Y | GOOD | GOOD |
| 9 | 2.67 | 14 | 16 | Y | AVG | AVG |
| 10 | 2.99 | 16 | 17 | Y | AVG | AVG |
| 11 | 3.8 | 17 | 18 | Y | GOOD | GOOD |
| 12 | 3.21 | 18 | 16 | Y | GOOD | GOOD |
| 13 | 1.45 | 0 | 0 | N | BAD | BAD |
| 14 | 3.27 | 13 | 17 | Y | GOOD | GOOD |
| 15 | 2 | 10 | 13 | Y | AVG | AVG |
| 16 | 2.58 | 16 | 16 | Y | AVG | AVG |
| 17 | 3.78 | 18 | 19 | Y | GOOD | GOOD |
| 18 | 1.56 | 3 | 3 | N | BAD | BAD |
| 19 | 2.76 | 14 | 16 | Y | GOOD | AVG |
| 20 | 3.65 | 18 | 19 | Y | GOOD | GOOD |

Conclusion

In this research paper we use K-Means clustering algorithm using Decision tree technique. This study evaluates and predicts the student learning activities. We hope that the information generated after the implementation of k-means clustering technique with decision table technique may be helpful for teachers as well as students. This research Paper may improve the student academic performance and reduce the failing ratio by taking appropriate steps at the right time to improve and enhance the quality of education.

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Machine Learning In Data Analytics for Infectious Disease In Human Body: A Review

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Abstract

Today extracting and analyzing meaningful information from the data has been the major consideration for organizations. In fact, every sector relies upon data analysis for future directions for efficient working and time saving. Machine learning in data analytics helps to do such analysis efficiently. Machine learning is being used in various fields like stock exchange, weather forecasting, ecommerce, prediction of disease etc. So, a number of paper regarding the techniques of Machine Learning used in analysis of infectious disease on human body are reviewed. It has been found that techniques like KNN, SVM, NAÏVE BAYES, RANDOM FOREST, K-MEANS, HIERARCHICAL CLUSTERING are being majorly used. But RANDOM FOREST, GLM, GBM, K-MEANS are mostly suited in the field of infectious disease.

Keywords- Data Analytics, Machine learning, Random Forest, KNN, GLM

Introduction

Data is being generated heavily in every organizations whether small or big, but this data nothing more than crude oil until it is processed and is ready for use. Same with data, until this raw data is processed and generates some meaningful information there is no benefit in storing it and organizations will not be able to give a competitive edge to each other. Data analytics is the field which does this data refinement process effectively. In a country like India which is the second most populated country of the world, large and heavy volume of data is being generated from the health care industries. If proper analytics techniques are used then vital information can be provided to the doctor about the patients current health disease and predict the patients future health.

The information like patient's risk for stroke, coronary artery disease, and kidney failure based on the previous blood pressure readings, lab test results, race, gender, family history, socioeconomic status, and latest clinical trial data if provided to doctors, then the doctors are able to make a proper diagnostic plan, also taking into account the cost involved and possible outcomes. Mostly the massive data being generated is either unstructured or semi structured in nature. A number of traditional tools and techniques of data analytics are there but somewhere they lack in extracting meaningful information as the data today is quite heterogeneous and complex. Moreover with the changing technologies the data is also dynamic in nature.

Machine Learning in Healthcare

A number of algorithms in Machine learning have been written recently which has led to new developments in the field of healthcare. A machine learning algorithm has been developed by Google which helps to identify cancerous tumors. A deep learning algorithm is being used by Stanford to identify skin cancer. Also as presented in a recent article, deep machine-learning algorithm results were being used to diagnose the diabetic retinopathy in retinal images. Hence these recent developments have shown that machine learning can be put as another arrow in the quiver of healthcare decision making. [1]

Image datasets such that of radiology, cardiology, and pathology which are always quite large. Machine learning can be trained with this data set to find the abnormalities and the areas needing rectification. Hence the machine Learning algorithms are capable of working on large data set, identify data patterns and make analysis without the intervention of human beings. This predictive analysis, if provided on time and with accuracy, helps to treat the various infectious disease and also streamlines medical processes.

Machine Learning Techniques Used in Healthcare

SVM (Support Vector Machine)

Mostly used for classification problems SVM is a supervised ML algorithm. In this algo, every data item is plotted as a point in space. The space used is n-dimensional and the coordinate values indicated as value of each feature. Then classification is performed by finding the hyperplane which divides the two classes.[2]

Naive Bayes

Although Machine learning has made tremendous advancement in the last decade or so but Naïve Bayesian still remain a simple and accurate technique for the construction of the classifiers. It belongs to probabilistic algorithm family and works on the principle of Bayes theorem. It works very well with large data sets. Naïve Bayesian classifiers works on the assumption that values of features are not related to each other or they are independent of each other for a given text. The probability of each feature is calculated based on the previous conditions.[3]

KNN (k-Nearest Neighbors)

It is most simple supervised ML algorithm which is majorly used for classification problems. KNN training phase is very negligible so it is often called as lazy algorithm. Also no assumption is made on the distribution of the data so it is also known as non-parametric algorithm. It adopts the similarity approach for predicting the data points of new values. A value is assigned to the data points if it is similar to the points in training set.[4]

Random forest

It is one of the most powerful classification algorithm of machine learning. It works by creating a forest of large number of decision trees. Each individual tree gives a prediction and the decision of one tree is not affected by others. The final result comes on the basis of committee (group of trees) and not on the basis of individual trees. The trees are uncorrelated and as the number of uncorrelated trees increases in the forest the accuracy of prediction also increases.

Various ML Techniques for the Prediction of Infectious Disease in Human Body

Prediction of liver disease

Liver is the largest internal organ of the body, so timely prediction analysis can give an insight of future risk. Classification algorithms are being used for the prediction of liver disease.

Thirunavukkarasu K. and co-authors used Logistic Regression, K-nearest neighbor and Support Vector Machine for predicting the liver disease. The dataset is taken from the Indian liver patient dataset (ILPD). These three algorithms were compared on the basis of classification accuracy using confusion matrix. It was found that Logistic regression is most appropriate for predicting the liver disease. [5]

Prediction of chronic kidney Disease

Kidney disease can lead to several other implications in the body if not treated on time.

Anusorn Charleonnann and Thipwan Fufaung compared four machine learning, methods KNN, Support Vector Machine, logistic regression and decision tree classifiers in order to find the best predictive method for Kidney disease. The Indians chronic kidney dataset was taken from UCI Machine Learning Repository. It was found that SVM classifiers gives the highest accuracy with 98.3% while Logistic, Decision Tree and KNN gives the accuracy of 96.55%, 94.8% and 98.1% respectively.[6]

Prediction of Diabetes Disease

Diabetes is one critical disease which has serious implications in a developing country like India.

Gauri D.Kalyankar and co-authors, implemented a Hadoop MapReduce based machine learning algorithms for Pima Indian diabetes data set which is used to find the missing values and discover the patterns. With the help of this work the types of diabetes which are widespread can be predicted. Also the type of treatment in accordance with the risk level of patient can be provided.[7]

Pujan Sheth and co-authors, proposes an intelligent mHealth application which finds out the chances of a person of being pre-diabetic, diabetic or non-diabetic. The application consist of four modules and based on the dataset, five machine learning algorithms are compared. After comparing it was found that SVM gives the highest accuracy and therefore SVM is used in this model. [8]

Prediction of Breast cancer

Breast cancer is a life threatening disease for the women today. Prediction of breast cancer at an early stage can help the doctors to take a proactive approach.

Tawseef Ayoub Shaikh and Rashid Ali, experimented with two dataset, one Wisconsin dataset and other BCDD (Breast Cancer Digital Repository) dataset. Four machine Learning classifiers are used on these data set and parameters are noted down on the basis of technique used. It was found that changing the technique increases the accuracy of the classifiers.[9]

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