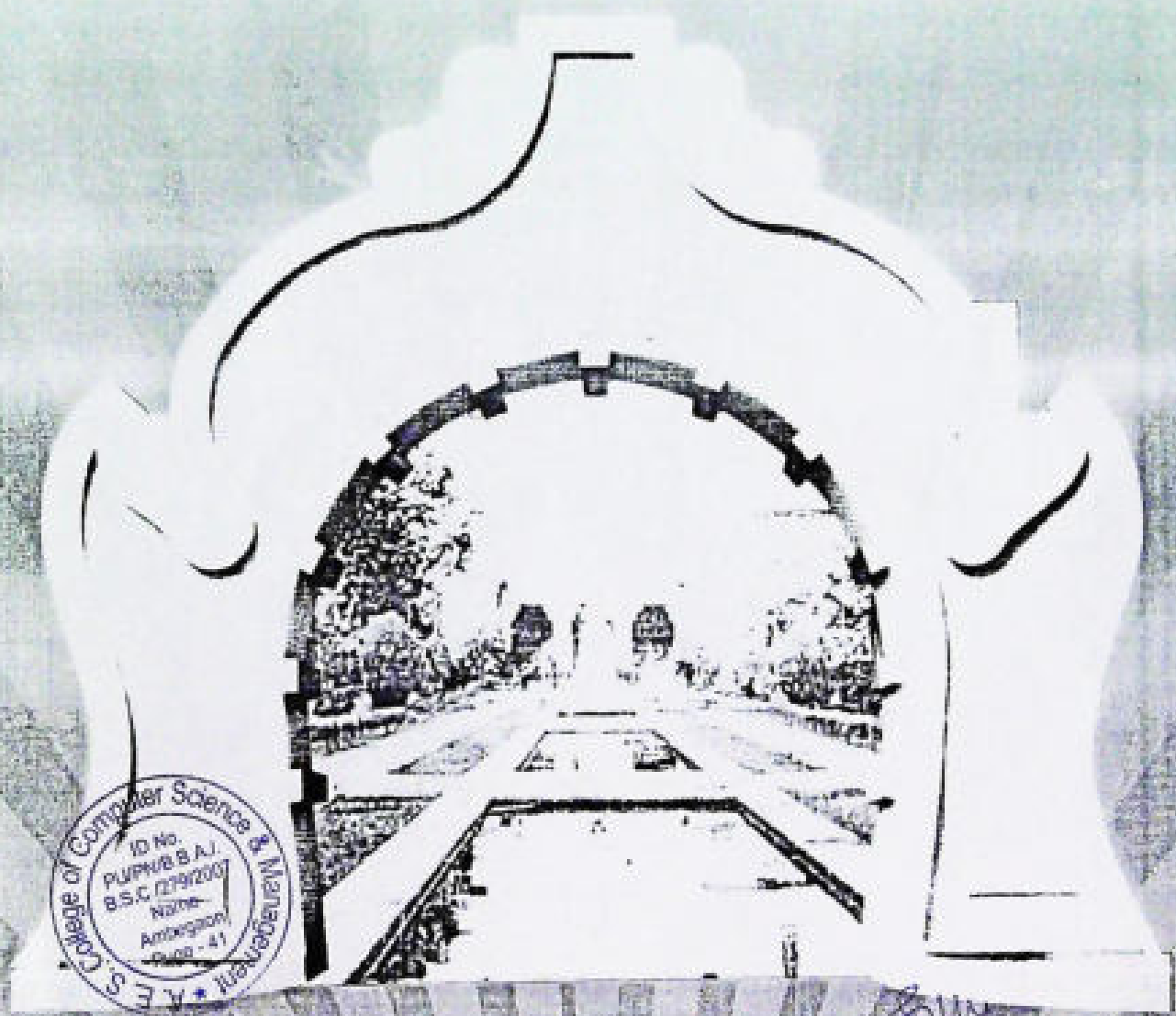


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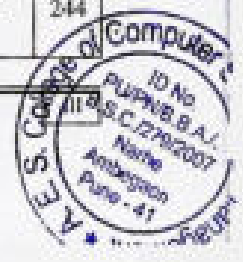
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EDUCATION SYSTEM: FOR EVERYONE , WHENEVER AND WHEREEVER STUDENT WILLINGS TO LEARN AND AT ANY EDGE

Mr. Kulkarni A. N.
Assistant professor,
A. E. S.'s College of Computer Science
and Management, Ambegaon, Pune 46.

Mr. Adewar
Assistant prof
A. E. S.'s College of Computer Sci
and Management, Ambegaon, Pune

ABSTRACT:

It is the education system that decides the nature of the country. In India, we have variety of education systems with their own strategies. When we are going global, our education system should also suitable globalization. It should have quality and quantity which will be globally accepted. Also, it should have attachment to fulfill needs of the area where the system is situated. It should allow every person who wish to learn. This paper discusses problems, solutions and its benefits to students in making the education (graduate & post graduation) local and global for the India.

INTRODUCTION:

According to the saying, education is a process of continuous learning. When education system is designed, it was designed to literate people in the subject of their interest. Experts or researchers should advise about their subject to them who are interested. Colleges, University departments are the places where research and learning should be carried out. Today the system has variety of options and the candidates seek admission are confused. Further, candidate goes for higher education in the search of better job opportunity irrespective of interests. This causes demand-supply model and education becomes business. The candidate who qualifies prescribed degree, gets better opportunity. Further, courses having more demand are cost more and after some time, due to market change, course gets out dated. While getting global, the courses by college or university are putting candidates in global market only and due to this instead civilization we have only urbanization. The main topic of this paper is to discuss major problems viz. Availability of education for interested person, focus on education for industry: both local and global and motivation research with or without help of industry. These problems are found to us as a teacher, while admit students. Because we can not change existing system, implementation could not be done. But, the paper discusses possible solutions for these problems.

PROBLEM-I: Education for Interested: Our education system has two options, first is industry and second research. Unfortunately, the research has very less connection with industry and vice versa. Person having some skills and interest in the subject could not join the course until he/she qualifies the minimum qualification.

It is also seen that, a person capable of paying fees can only join the course, but a person who has some knowledge of the subject, but do not have proper minimum qualification could not join the course. The teacher, who is expert in the subject, has no role in selection of candidate and candidate also has no choice to select the teacher. The candidate has no more options in selection of courses and their durations. He cannot complete the only course of his interest by his perspective. He has to select one option from the many of those which are offered. These 3-4 points are more important because on the basis of these points the main path of student's life and his candidature is decided.

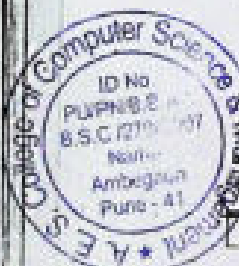
PROBLEM -II: Education for local and global industry: When a course is designed, it is designed with reference of some expert or by the demand of industry. The expert or industry is either local or global. While designing the course, interest of candidate or availability of subject expert is always out of focus. Also the candidate gets expertise in the topics according to the demand of that industry. Due to this candidate seeking admission has very few opportunities and the information may be useless if industry rejects the candidate.

Such courses cause students with lack of understanding and with poor skills. Thus candidate becomes a worker.

When industry is global, it causes urbanization only.

These courses are application oriented and have less life span. It has no research approach.

PROBLEM -III: Motivation for research: When courses are designed according to the need of industry, these courses are application oriented. Due to advancement in the subject, fundamentals are neglected. When fundamentals are neglected, it stops research opportunities. This is a big problem and it causes dependency on others. When fundamentals are taught in the course, advancements are neglected. Even though the course becomes research oriented, repeated research is carried out.



SOLUTION: The better solution leads here. It is as follows.

1. Merge the degrees having same course content, e.g. B.E. and B.Sc.
2. Design the course by the expert or group of experts. The experts may belong to industry & research.
3. Train the teachers under these experts so to convey the goal of course up to the student.
4. Set the course in different levels. At end of the level, there will be an exam. A candidate passing the level should be given a certificate and treated eligible for higher level in the same course.
5. Do not force the candidate to complete all the levels. As per his interest, he will complete the levels.
6. Allow candidate to change University or courses for admission at any level.
7. For experienced candidate or candidate switching course or University a level may be skipped. For this eligibility exams may be taken.
8. Free ships/ Scholarships / Stipends may be possible for all candidates.

This will help the student and teacher to switch from one course to other course, from one college to another and even from one University to other. The problems of finding equivalence, migration etc. will be solved. Further the person wish to get knowledge will be allowed.

(CONCLUSION:

The conclusion leads the system that declares every candidate educated and it removes burden on student to complete the course. Further it is an efficient education system which is time saving, money saving and most suitable for candidates interested in getting knowledge.

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Impact of ICT on Teacher Education

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ROLE OF ADVANCED ICT FOR FUTURE TEACHER EDUCATION

Suchita Fatale, Rachana Shinde.

Suchu.ritu@gmail.com , rachana21.shinde@gmail.com

Savitribai Phule Pune University, India

Abstract:

Information and Communication Technology (ICT) are increasingly becoming crucial part of the education system. ICT has changed the style of functioning of the educational system and its governance. This paper is considering the rapid spread of ICT applications has brought about markedly drastic technological, social and economic transformations. These changes have caused educational institutions, administrators, teachers to rethink their roles, teaching and vision for future. An exploratory case study was designed to obtain preservice teachers' expectations of and attitudes toward the learning and integrating of Information and Communication Technologies (ICT) into their teaching and learning. Given the diverse demographic backgrounds and social conditions of the teacher candidates, such as age, gender, English language proficiency, and previous education, a wide range of responses to the online survey and the semistructured focus group interview questions was expected. Implementation of the sequential mixed method research design resulted in emerging themes related to participants' social conditions that impact their perceptions and attitudes regarding the ICT and beliefs about the use of ICT in their future careers. Findings from this study are compared to earlier studies done in the same setting. This study could be employed as a useful reference for the redesign of an ICT curriculum for future Teacher Education programs.

Key Words:

Higher education ,ICT teacher education, ICT use.

Introduction:

Information, Knowledge, and Communication Technology plays very important role in 21st century. The ICT changed the way of imparting education in modern era. The role of Information and Communication Technology (ICT) plays a great role in strengthening the



three traditional branches that make up the mission of higher education i.e teaching, research and service to the society. ICT changed the style of functioning of the educational system and its governance with the help of digital data, its storage, retrieval, manipulation and transmission. ICT works in three ways: - (i) communication and decision implementation, (ii) automating tedious task, and (iii) supporting new and existing tasks and processes. ICTs can help process information, create knowledgebase and make them available wherever and whenever necessary. Information and Communication Technologies (ICTs) have tremendous success in providing services at reduced costs to the people's door steps i.e online shopping. ICTs is trying to do same the for making the higher education available to all students throughout the country at a lower cost. As a result, on one hand people will have the access right on higher education and on the other hand will gain the necessary knowledge, skills, and experiences to serve the nation and prosper accordingly.

ICT enabled schools, where students are attending their classes, discussing with teachers, accessing learning resources, seating exams, joining forums/clubs, submitting assignments etc. virtually interactions between teacher and students. having the facility of real-time ICT is defined as new information-processing and information-transmitting technologies that include computer-related commodities and technologies such as broadcasting and wireless mobile telecommunications etc. Personal computer (PC) that connects Internet has become a vital tool for communication during the past few decades since its proliferation among the masses. It is observed that penetration of ICT is faster in developed nations rather than developing nations. The penetration of ICT can be linked to socio-economic conditions of a nation such as education, freedom for information exchange, promotion of basic telecommunications infrastructure and market. Its helps in growth pattern of enrollment and the relationship between level of education and diffusion of ICT; focuses on Internet and personal computers (PCs). ICT is defined as "diverse set of technological tools and resources used to communicate, create, disseminate, store, and manage information". Technologies included in ICTs are: Radio and Television (broadcasting technology), Telephony, Computers, and the Internet helps in providing e- learning and open and distance learning.

The major benefit of ICT implementation in education is it extending courses of choice to students of different backgrounds, cultures, perspectives. Learners are free to participate in learning activities at their convenience through online technologies. Eminent teachers from different parts of the country and abroad can be utilized for teaching at their convenience through mobile technologies and seamless communication technologies that support 24x7 teaching and learning for instance these education can be provided through Teleconferencing, Videoconferencing, Web-based conferencing, Audio conferencing and other ICT technologies.



Statement of aim : To study role of advanced ICT for future teacher education

Objective :-

1. To identify the nature of ICT .
2. To highlight the expectation .

Description of objectives:

Nature of ICT:

Information and Communication Technologies (ICT) in educational process. A key objective of the course is the acquisition of the necessary expertise and the adoption of attitudes on basic approaches (models) for the use of ICT in learning process. The course provides students with the opportunity to:

- perceive the meaning, and scope of ICT in Education,
- understand ICT supported teaching learning strategies,
- develop understanding of the ICT effects to learning, working life and society,
- be familiar with ICT tools, applications and services for education,
- obtain the ability to design and create educational material and web-based information systems for teaching and learning,
- evaluate instructional material / system / service,
- make reasoned judgments about when and how to apply aspects of ICT to achieve maximum usefulness.

Highlightsof ICT:

1. Digital convergence and education: General Impact of Technology on Education
2. e-learning: technological infrastructures and ICT services and tools for educational process.
3. Educational software: implementation, exploitation and evaluation.
4. Educational material: planning, development, evaluation, e-learning standards (AICC, SCORM, IMS)
5. Open distance learning: asynchronous teaching infrastructures (CMS/LMS platforms), synchronous teaching infrastructures (videoconference, VoIP)



6. Learning theories: pedagogical issues involved in the integration of ICT into classroom practice.
7. Collaborative learning tools, international practices and standards (Web.2 tools, concept maps, scratch, etc.)

Conclusion:

Rapid changes in technology will ensure that ICT will proliferate in the classroom. It is predicted that there will be many benefits for both the learner and the teacher, including the promotion of shared working space and resources, better access to information, the promotion of collaborative learning and radical new ways of teaching and learning. Ultimately, the use of ICT will enhance learning experiences for children, helping them to think and communicate creatively, and work collaboratively. It will also prepare our children for successful lives and careers in an increasingly technological world.

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Examination conduction is always a confidential issue, for Universities as well as for colleges. With increasing strength of pupil it is getting harder to keep it confidential. It is becoming cumbersome for Universities to conduct examinations smoothly and to maintain the records. Universities and institutions are using new technologies to resolve the issues. The wireless technology is playing major role in information exchange. Most of the examinations which are objective, are conducted by on line method. Most of the universities also prefer on line data transfer. Even though all the computerization has been completed in universities, examination is not online. The papers can be solved on line. This paper discusses use of tablet pc in conduction of examinations and its effects on environment and quality.

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I Introduction

Today, education is must for everybody. In India, higher education offers better job opportunities. Even though education is costlier, people prefer higher education for good life style. Universities are also offering many courses and colleges affiliated to University conduct them. In India, most of the Universities are spread over 2-3 districts and for them, examination conduction is a challenge. Along with the exam conduction, late in declaration of results, reevaluation, malpractices in examination are also serious issues. Many methods are used to solve the issue. Now a day Universities are providing many facilities on-line. Here a method is proposed to simplify most of the issues in the exam procedures and make the exam paperless, without hampering its any aspect. It is also seen that even having computerization, operating systems like android and tablets with stylus no researcher have thought

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Digitalized Examination System: A Strong Step towards Quality Improvement

Ambarish Kulkarni

Abhinav Education Society's College of Computer Science and Management, Ambegaon (Bk), Pune, India.
Ambarish.a.kulkarni@gmail.com

Swapnil Adewar

Abhinav Education Society's College of Computer Science and Management, Ambegaon (Bk), Pune, India.
swapniladewar@rediff.com

Abstract— Examination conduction is always a confidential issue; for Universities as well as for colleges. With increasing strength of pupil it is getting harder to keep it confidential. It is becoming cumbersome for Universities to conduct examinations smoothly and to maintain the records. Universities and institutions are using new technologies to resolve the issues. The wireless technology is playing major role in information exchange. Most of the examinations which are objective, are conducted by on line method. Most of the universities also prefer on line data transfer. Even though all the computerization has been completed in universities, examination is not online. The papers can be solved on line. This paper discusses use of tablet pc in conduction of examinations and its effects on environment and quality.

Keywords— Examination, on-line exams, Question paper delivery, Confidential.

I. INTRODUCTION

Today, education is must for everybody. In India, higher education offers better job opportunities. Even though education is cordier, people prefer higher education for good life style. Universities are also offering many courses and colleges affiliated to University conduct them. In India, most of the Universities are spread over 2-3 districts and for them, examination conduction is a challenge. Along with the exam conduction, late in declaration of results, revaluation, mal-practices in examination are also serious issues. Many methods are used to solve the issue. Now a day Universities are providing many facilities on-line. Here a method is proposed to simplify most of the issues in the exam procedures and make the exam paperless, without hampering to any aspect. It is also seen that even having computerization, operating systems like android and tablets with stylus no researcher have thought about this aspect of examination procedure.

II. EXISTING COMPUTERIZED EXAMINATION SYSTEM

With computers sometime on line examinations are conducted [1] [2] [3]. These exams have objective type question papers. The candidate has to log-in by user name and password. Then from set questions, one question appears on e screen with 3-4 possible answers. Candidate has to select the answer and submit. Then one by one question appears on

the screen by random selection method and in due time the exam ends. Result is displayed immediately. Many researchers have solved issues safety and security related with such exams [2][3].

Main limitation of this system is the question paper pattern; it is objective. So, judgment of understanding [4] and ability to explain the subject cannot be tested. Thus it is not suitable in higher education.

III. EXISTING EXAMINATION SYSTEM

As on line examinations are not suitable for University level, In India, most of the Universities conduct exams manually as follows.

Universities get exam forms from colleges manually and prepare a data base for generation of hall tickets, mark-sheets and summary sheets of written exam. Hall tickets are given to colleges first and then with proper time table question papers, answer papers are distributed from university to college. Students are called to write the exam in exam hall where a supervisor validates the student. Then the question papers and answer papers are distributed in the exam halls. Written papers are collected back and sealed at college. Afterwards collected answer papers are sent to CAP (Central Assessment Program) where papers are checked. After few days result is declared. This all process is completed as per the time table given by examination section. All this work along with is done manually. Checking of answer papers, data entry of marks are also done manually.

Here lot of stationary is used to keep proper record to find identity with confidentiality. Also, the system consumes more time and money.

To reduce these pains, lot of computerization is completed by many Universities. It includes on line submission of examination forms, on line distribution of question papers and on line declaration of results.

Even though these procedures are applied, the main work of exam is still carried out by print and writing and that is from distribution of question papers up to verification of marks. This system is shown in "Figure 1" where most of the work is carried out in off-line mode.



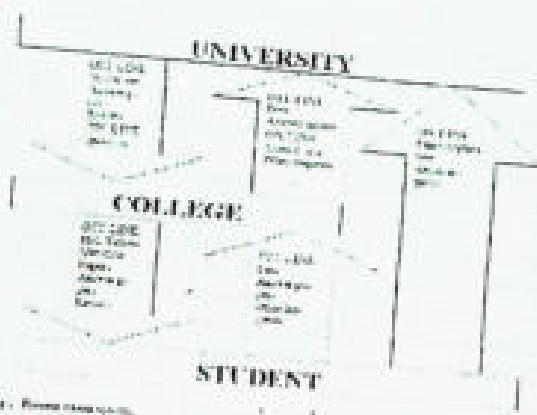


Figure 1 Existing Examination System of Universities

IV. PROPOSED EXAMINATION SYSTEM OF UNIVERSITY EXAMINATIONS

The main focus of this paper is on digitalization of distribution of question papers, collection of answer papers and CAP. Thus, handling of question papers and answer papers is carried out by on line mode as shown in "Figure 2"

In this proposed system, students will get their exam papers on the tab and will write them by using stylus and thus the question paper will be possible in objective type format as well as descriptive type format. Tabs will be equipped with wi-fi and exam app. for student only. The data on tab will be given and collected by university server through college. Colleges will have to distribute tabs before start of paper and will have to collect back at the end.

The data on server will be made available to CAP center for assessment purpose. Examiners will get tab with wi-fi and exam app. for examiner only for assessment on daily basis.

Due to this the major work of printing will get finished. Also, packaging, sealing, transportation and storage work will get eliminated.

A. Detailed working

This system involves following parts:

1) System for college:

- a) Universities will provide online platform for colleges with ID and password. Colleges will get details of papers and students applied for it. In case of mismatch of record, colleges will have authority to add student in the record after proper verification.
- b) Senior supervisor will activate the question paper for present students.
- c) Students will enter their details on tab provided to them and will get verified and signed by junior Supervisor.
- d) At completing step 2 and 3 and at the event of start of paper (e.g. at 10:30 am or at 2:30 pm) student will be able to write the paper
- e) At the end of exam student will submit the paper or after due time paper will be automatically submitted.

- f) Senior supervisor will verify that all papers are correctly up-loaded to University server and deactivate the paper.

2. System for CAP center:

- a) Universities will provide online platform for CAP centers with ID and password. CAP centers will get details of papers and students applied for the paper.
- b) CAP centre will provide ID and password for examiner and moderator according to their subjects.
- c) Examiners and moderators will log on tab. They will check the paper and enter marks. By hiding identity of student, papers will be made available one by one for checking/ moderation. Papers need moderation will be given to moderator one by one and the papers need not moderation will be submitted directly.
- d) Director, CAP will verify that all papers are checked and will close the subject.

B. Specifications for Software:

Since, everything is carried on tab using stylus and wi-fi, it needs apps.

- a) Exam app for student tab: Student will be given tab and stylus for writing paper. The app on this tab will include an interface to student where student will fill date, his seat no, class, subject, paper code and sign. The junior supervisor will verify the details with hall ticket and sign the tab. Then at proper time question paper will appear on the screen. Student will click the question to write answer. Space for answer will be made available below question and whole document can be scrolled for review and edit purpose. All answers will be stored temporarily on tab and can be edited again till time ends. Once submit button is clicked by student or time ends, the paper will be uploaded to college. The system will be cleared on reception acknowledgement from college server.
- b) Exam app for College: College authorities will log in and will receive subject wise summary and question papers from University. Summary can be edited as per needs. After verification of the summary college will assign question paper as per summary to student. At the end college will receive all answer papers and will update all the date (updated summary, system generated attendance report and answer papers) to university's CAP server either by on line or by DVD or by HD (manually). Acknowledgement report will be generated by university's CAP server to college server and then data on college sever will be deleted.
- c) Exam app for Director, CAP: Director, CAP will log in to CAP server using his PC and will get details of total answer papers available on the server (class-wise and subject-wise). He will also receive information about the colleges and their students whose data is not received. Then he will assign

examiners and moderators for the paper. Every day he will receive reports of examiners and moderators for work completed, as well as pending work.

d) *Exam app for examiner and moderator* - examiner/moderator will be given tab and stylus for writing paper. The app on this tab will include an interface to examiner/moderator where he will fill date, designation and log-in in to the system. Then he will verify class, subject and paper code. He will check the paper and will give marks. Total will be carried out automatically. After pressing "submit" checked / moderated paper will be submitted. If he needs, he can get one more paper as per the rules of CAP.

C. Hardware configurations:

- 1) *Minimum Configuration of TAB for student and examiner/ moderator:* P4 processor, 1GB DDR3 RAM (667MHz), 15" TFT screen, 4 GB SD card, Wi-fi connectivity up to as per campus needs, Battery up to 6-7 hours.
- 2) *Minimum Configuration for college PC/ CAP PC:* Standard server configuration with wi-fi connectivity up to nodes required.
- 3) *Security:*
 - a) Log-in and password type security will be required for Senior supervisors to log-in to University server.
 - b) Examiners, moderators will also use log-in and password.
 - c) To open question paper, there will be password of question paper.
 - d) Students will log-in using Wi-Fi password. Before this, class supervisor will check the details of the student in conventional way and verify them by their thumb impression or signature. Then log-in to will be validated by college server.

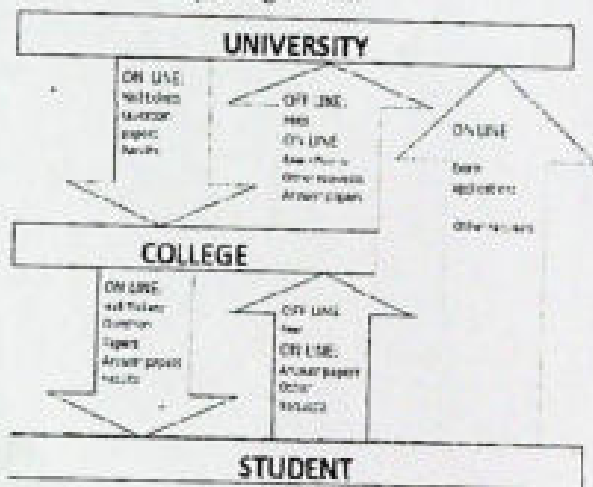


Figure 2 : Proposed examination system

V. ADVANTAGES

Major advantages of this system are:

- A. The exam becomes paperless.
- B. More secure system as compared to existing system because of no human interface.
- C. No objective type of questions and hence no malpractices at exam centre.
- D. Fast result is possible.
- E. Paper checking and verification is easy.
- F. Easy to store record of complete work.
- G. Less space is required.
- H. System is economic except one time cost of complete system and infrastructure.
- I. Malpractices at every stage will reduce.
- J. Misplacement of answer papers, supplements is removed.
- K. No bar code, no masking, no identity verification till printing of answer paper for purpose of "demand of Xerox copy by student".
- L. Exam work at every level will reduce.

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Role of Advanced ICT For Future Teacher Education

Ms.Rachana Shinde¹,Alkawati Magadam²

(MCA, MCOM, MESC (IT), MBA (HR))²

Dept. of Computer Science, University of Pune

rchansa21shinde@gmail.com,alkawati_magadam@rediffmail.com

Abstract: Information and Communication Technology (ICT) has become one of the basic building blocks of modern society. It has an important role to play in changing and modernizing educational systems and ways of learning. ICT has changed the style of functioning of the educational system and its governance. This paper is considering the rapid spread of ICT applications has brought about markedly drastic technological, social and economic transformations. These changes have caused educational institutions, administrators, teachers to rethink their roles, teaching and vision for future. An exploratory case study was designed to obtain preservice teachers' expectations of and attitudes toward the learning and integrating of Information and Communication Technologies (ICT) into their teaching and learning. Given the diverse demographic backgrounds and social conditions of the teacher candidates, such as age, gender, English language proficiency, and previous education, a wide range of responses to the online survey and the semi-structured focus group interview questions was expected. Implementation of the sequential mixed method research design resulted in emerging themes related to participants' social conditions that impact their perceptions and attitudes regarding the ICT and beliefs about the use of ICT in their future careers. Findings from this study are compared to earlier studies done in the same setting. This study could be employed as a useful reference for the redesign of an ICT curriculum for future Teacher Education programs.

Index Terms: Higher education, ICT teacher education, ICT use

Introduction:

Information, Knowledge, and Communication Technology plays very important role in 21century. The ICT changed the way of imparting education in modern era. The role of Information and Communication Technology (ICT) plays a great role in strengthening the three traditional branches that make up the mission of higher education i.e teaching, research and service to the society. ICT changed the style of functioning of the educational system and its governance with the help of digital data, its storage, retrieval, manipulation and transmission, ICT works in three ways: - (i) communication and decision implementation, (ii) automating tedious task, and (iii) supporting new and existing tasks and processes. ICTs can help process information, create knowledgebase and make them available wherever and whenever necessary. Information and Communication Technologies (ICTs) have tremendous success in providing services at reduced costs to the people's door steps i.e online shopping. ICTs is trying to do same the for making the higher education available to all students throughout the country at a lower cost. As a result, on one hand people will have the access right on higher education and on the other hand will gain the necessary knowledge, skills, and experiences to serve the nation and prosper accordingly.

ICT enabled schools, where students are attending their classes, discussing with teachers, accessing learning resources, seating exams, joining forums/clubs, submitting assignments etc, virtually interactions between teacher and students, having the facility of real-time ICT is defined as new information-processing and information-transmitting technologies that include computer-related commodities and technologies such as broadcasting and wireless mobile telecommunications etc. Personal computer (PC) that connects Internet has become a vital tool for communication during the past few decades since its proliferation among the masses. It is observed that penetration of ICT is faster in developed nations rather than developing nations. The penetration of ICT can be linked to socio-economic conditions of a nation such as education, freedom for information exchange, promotion of basic telecommunications infrastructure and market. Its helps in growth pattern of enrollment and the relationship between level of education and diffusion of ICT; focuses on Internet and personal computers (PCs). ICT is defined as "diverse set of technological tools and resources used to communicate, create, disseminate, store, and manage information". Technologies included in ICTs are: Radio and Television (broadcasting technology), Telephony, Computers, and the Internet helps in providing e- learning and open and distance learning.



The major benefit of ICT implementation in education is it extending courses of choice to students of different backgrounds, cultures, perspectives. Learners are free to participate in learning activities at their convenience through online technologies. Eminent teachers from different parts of the country and abroad can be utilized for teaching at their convenience through mobile technologies and seamless communication technologies that support 24x7 teaching and learning for instance these education can be provided through Teleconferencing, Videoconferencing, Web-based conferencing, Audio conferencing and other ICT technologies. The uses of ICT is making major differences in the learning of students and teaching approaches.

Statement of aim : To study role of advanced ICT for future teacher education

Objective:

1. To identify the nature of ICT.
2. To highlight the expectation .

Description of objectives:

Nature of ICT:

Information and Communication Technologies (ICT) in educational process. A key objective of the course is the acquisition of the necessary expertise and the adoption of attitudes on basic approaches (models) for the use of ICT in learning process. The course provides students with the opportunity to:

- perceive the meaning, and scope of ICT in Education,
- understand ICT supported teaching learning strategies,
- develop understanding of the ICT effects to learning, working life and society,
- be familiar with ICT tools, applications and services for education,
- obtain the ability to design and create educational material and web-based information systems for teaching and learning,
- evaluate instructional material / system / service,
- make reasoned judgments about when and how to apply aspects of ICT to achieve maximum usefulness.

Highlightsof ICT:

1. Digital convergence and education: General Impact of Technology on Education
2. E-learning: technological infrastructures and ICT services and tools for educational process.

3. Educational software: implementation, exploitation and evaluation

4. Educational material: planning, development, evaluation, e-learning standards (ARCC, SCORM, IMS)

5. Open distance learning: asynchronous teaching infrastructures (CMS/LMS platforms), synchronous teaching infrastructures (videoconference, VoIP)

6. Learning theories: pedagogical issues involved in the integration of ICT into classroom practice.

7. Collaborative learning tools, international practices and standards (Web.2 tools, concept maps, scratch, etc.)

Conclusion:

Rapid changes in technology will ensure that ICT will proliferate in the classroom. It is predicted that there will be many benefits for both the learner and the teacher, including the promotion of shared working space and resources, better access to information, the promotion of collaborative learning and radical new ways of teaching and learning. Ultimately, the use of ICT will enhance learning experiences for children, helping them to think and communicate creatively, and work collaboratively. It will also prepare our children for successful lives and careers in an increasingly technological world.

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Use of Dance, Drama, Music and Arts in Special Education

Rathod.

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Co-ordinator



Dr. Radhika Inamdar

Dr. Radhika Inamdar
Principal

The Effects of Arts in Students' Academic Performance

Prof.Rachana V Chavan

AES College of Computer Science & Mgnt,Pune

Abstract

Arts have long been considered part of the human affective experience and needed by our young people as a medium for safe expression, communication, exploration, imagination, cultural and historical understanding. Thus, the challenge for Visual Arts integration should not focus only on a particular art discipline alone like Humanities (Art Appreciation) somewhat it should extend across the curriculum. The major problem of this study was to assess the impact of visual art on the performance of the students from the College of Education, Bulacan State University. The study made use of experimental research design. Results of the study revealed that significant difference exists in the posttest performances of the experimental and control groups, in other words, the group who utilized the visual arts in studying art appreciation recorded significantly helps performance than those who used the traditional lecture-discussion method. Moreover, further analysis of data suggested that using visual arts in different learning areas encourages students to participate and this will develop their confidence and advantage in the learning process. Some pedagogical implications were drawn based on the findings of the study.

Introduction:

Globalization necessitates people from different continents to form connections despite having different norms and culture. It is imperative for the people of every country to understand one another along with their standards, and traditions. A way to achieve this understanding is through arts education.

Through the arts education, people may learn to address and embrace diversity, present emotions and differentiate values in the world. Arts education allows schools to provide the students with knowledge of ethics, see social realities and understand their rights and responsibilities.

Jolley (2016) in his article "The Importance of Arts Education" recapped that arts education promotes some benefits in a variety of ways. Some of the advantages of arts education are: developing the students' imagination and creativity; allowing them to understand and express their feelings and ideas; aiding them to understand and visualize other core subjects; helping them to observe the world around them; supporting them in the decisions- making and in solving problems; and in developing values such as concentration and persistence.



Ochshorn (2016) asserted that Arts Education is important because it improves performance. She claimed that it improved learning skills, school attendance, critical thinking skills and creativity. A good arts education is built on and reflects recognition of the specific and unique way that the arts shape people's thinking and their lives. Eisner, (2013).

The noteworthiness of art is immeasurable and innumerable. Booth, D. (2016) asserted that the techniques are ways of learning, of exploring, of responding, of revealing and demonstrating, of imagining, and of depicting and making meaning. They belong to the school curriculum as they belong in the minds and hearts of lifelong learners.

For this matter, it is essential to conduct a study on how the Filipino students perceive the arts about their academic performance. This study aims to look into the respondents' perceptions and attitudes about visual arts as predictors in the students' academic success. Many teachers integrate visual arts into other content areas. Its inception in the elementary curriculum, arts education positively benefits students' learning. Based on analysis of some relevant research literature, findings revealed that visuals positively impact students' behavior, engagement creativity, and academic performance.

Education has been conceived as a continuing process of adjustment and experience. In the 21st century, one of the goals of education is to open new windows that would make the skills and standards relevant to the Digital Age learners. It means developing students' knowledge and higher-order skills; creativity, critical thinking, communication, and collaboration. In line with this goal, the Commission of Higher Education (CHED) sets an aim to upgrade the quality of Higher Education continuously; its programs and system to be at par with international standards. Higher educational institutions' faculties are advised to research in line with the goals of the Commission on Higher Education Research. Investigating the effective utilization of visual arts in teaching Humanities (Art Appreciation) in the tertiary education is a reasonable undertaking, hence, this study.

The primary focus of this study is to investigate the effectiveness of integrating or using visual arts in the teaching and learning Humanities (Art Appreciation).

The study restricted its coverage to the 1st year Bachelor of Elementary Education Students major in General Education of College of Education – Bulacan State University School Year 2017 - 2018 only. From the total population of 100 First Year students enrolled in the Humanities (Art Appreciation) course, 44 will constitute the sampling. The primary purpose was to identify the impact of visual arts or art integration in the students' academic performance.

This procedure guarantees that all subjects have the same chance of being in the experimental or control group. The pretest-posttest control group design included pre and post-testing the subjects to measure the effectiveness of visual arts or art integration in the students'



academic achievement. The analysis of the effectiveness was done through comparison of pre-oral and post oral communication skills results. The significance of differences was tested using the t – the test of correlated mean procedures.

Discussion:

Eisner, E (2017) coined the term "cognitive pluralism" as among the orientations to the curriculum. This perspective highlights the idea that students should be afforded opportunities to learn and communicate their understandings through various forms of representation. Lowenfeld (2005) published the book "Creative and Mental Growth" that describes the characteristics of child art at each stage of development and prescribes appropriate types of art media and activities for each age. His views of child art were grounded in constructs drawn from two sources. One was the psychoanalytic school of psychology in which evidence of aesthetic, social, physical, intellectual, and emotional growth is reflected in the art of children. The second was the concept of stages of growth in art, which originated in German and Austrian sources.

Art Integration. According to Efland (2002), arts have long been considered part of the human affective experience. One reason proponents cite for integrating the skills with academic curricula is the perception that works of art can engage the students emotionally with the curricula (Greene, 2001; Eisner, 2002; Kindler, 1997). Elkins (2001) agreed that by merely looking at paintings humans one might be overwhelmed by emotions. In one of the arguments from the Platonic tradition, art objects were thought of as models, imitations of nature, used to help humans understand abstract concepts. More significantly, in the study of Gardner's (2006, 2007), on the Theory of Multiple Intelligence, Goleman's (2006) work and Eisner's (2002) perspective on aesthetics will guide the philosophy of arts integration across the curriculum. The teachers serve as the model and will initiate the teaching process of art integration using Multiple Intelligences, Emotional Intelligences, and aesthetic understanding of the artistic process.

Art as a Learning Process. In the study of Lampert (2006), there have been a few studies focusing on creativity and critical thinking at the university level that provide a foundation for further research. An assessment of the techniques in public universities establishes that learning in the arts exerts its most significant effect on truth-seeking, critical thinking maturity, and open-mindedness. In a landmark study by Simon & Hicks (2006), they concluded that hearts have the ability to enrich individuals of different ages and varying achievement levels because "the creative arts do not discriminate" They also revealed that the skills broaden the constructs of a formal education and boost the imagination and discover new ways of understanding especially for those students who are economically disadvantaged and academically struggling.

Arts Education and Brain Function. Findings in the study of Goleman (2006) showed that there are two kinds of intelligence: intellectual (left brained) and emotional (right brained) which comprise the learning process of the individual. Emotional intelligence skills are synergistic with those of cognition, and top performers possess both. Emotional Intelligence is the ability to "monitor and regulate one's own and others' feelings, and to use emotions to guide thought and action." Emotional Intelligence encompasses five characteristics and abilities: (1) **Self-Awareness.** Knowing feelings and using them to guide decision making. (2) **Self-Regulation.** Handling

feelings, so they enhance rather than interfere with preferences to move and guide one towards goals.



(3) **Motivation.** Using

(4) **Empathy.** Recognizing feelings in others and tuning into their verbal and nonverbal cues.

(5) **Social Skills.** Handling emotions in relationship interaction, conflict resolution, and negotiations.

Social, Physical and Cognitive Development

According to Wooten (2008) passion for education emanates from the motivation of students through art education. The role of art played a significant role for the students for the sustenance of that passion. Gazziniga (2008) cited the result of Dana Arts and Cognition Consortium in 2008 from the reported findings from neuro-scientific regarding the possible causal relationship between art exposure and the capacity of the brain in learning other cognitive domain.

Purposes of Art in Education

According to Galvez (2018) learners respond to information differently. Thus, it is often to the advantage of the teachers to use many different formats and modes to teach the subject matter of a lesson. Numerous authors like Caldwell and Vaughan (2012), Dwyer (2011), Hartle (2015), Melnick, Whitmer and Strickland (2011) and Reeves (2007) noted that art education deserve an extraordinary part in the heart of education curriculum because of its numerous counts regarding its benefits mainly in reasoning and critical thinking. He likewise said that art education as one of the main component of greater heights for academic instruction. Besides Melnick (2011) revealed many cognitive advantages from art education like higher academic achievement, creativity, imagination, self-expression, rouses the mind of students and stimulates the brain. He suggested that art education as a future model for useful educational hopes and practices. Expert researcher Eisner (2000) assumed four listed four effects or findings from art education experience.

Students learn the process of putting ideas and expressions into a form or creation.

Students gain greater perceptual abilities and become more analytical.

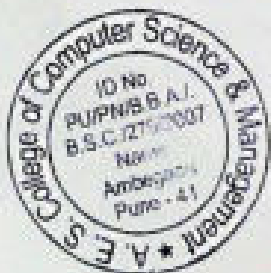
Students see interconnectedness between arts, culture, and history.

Students demonstrate perseverance through ambiguity.

Art as Teaching Method. Children do learn well through play and experimentation, and technique can be used to encourage this learning across all curriculum areas. Using visual arts in different learning areas helps students to participate, and this will develop their confidence. As they enjoy doing artwork, their knowledge and abilities also escalate. Each student may respond well to the individualization of learning. Arts can be used in other learning areas such as in drawing activities; learning science concepts through art (light, colors and color mixing, etc); learning mathematical concepts through art (space, perspective, angles, shapes, etc); learning society and environment concepts through art and crafts (dress, lifestyles, housing, etc); and some assessment through technique rather than other methods such as tests. Virtually any subject can be enhanced.

Kinds of Visual Arts Drawing

Painting. It is often called the most important form of visual art. It is about putting colors on a canvas or a wall. Paintings became important in ancient Egypt, where tombs of pharaohs were covered with scenes of everyday Egyptian life.



Printmaking. Printmaking is art that is made by covering a plate with ink and pressing it on the surface of another object. Today prints are mostly produced on paper today, but initially, they were pushed onto the cloth or other purposes.

Photography. Photography is making pictures by letting light through the lenses of a camera onto a film. In analog photography, the fire was recorded onto a movie, which had to be chemically developed. Images could then be printed on special paper. Today most photography is digital. Cameras have no documentary; the images are recorded onto silicon chips.

Computer Art. Today, art is no longer limited to brushes, paint, and pencils. In the last few decades, artists have been working with computers to capture images and change them.

Sculpture. Sculptures are three-dimensional pieces of art that are created by shaping various kinds of material. Among the most popular are stone, steel, plastic, ceramics, and wood. The sculpture is often referred to as plastic arts.

The researcher utilized the experimental approach, the pretest-posttest correct – control group design in determining the effectiveness of using visual arts on the students' academic performance. The researcher formulated a teacher-made test based on the following topics; Introduction to Humanities (which includes Humanities, Art, Art Appreciation, Imagination, Creativity, Expression, Assumption of Art, Art and Experience, Art and Nature, Subject of Art, Sources of Art, Importance of Art, Forms of Art and Classification of Art). Functions of Art, Philosophical Importance of Art and Artist and Artisan and Elements and Principles of Art.

The result were obtained through Mean and Standard deviation procedures from the performances of the members of the experimental and control groups using the following sampling distributions. The t – test for correlated means was used in testing the significance of the differences in the performance of the experimental and control groups using the mean of the experimental and control groups, standard error of the mean, and standard deviation.

Conclusions:

In the light of the findings of the study, the following conclusions were drawn:

1. It was concluded that no significant IQ and age differences exists between the experimental and control groups in terms of IQ and age.
2. Generally, no significant difference exists in the pretest scores of the experimental and control groups.
3. It may be concluded that the use of visual arts or art integration was effective. An active participation from the experimental group regarding various activities was outstanding. The overall findings revealed the advantage of art integration and the use of visual arts in learning process of the students. The traditional lecture-Discussion method used in the control group revealed a less active participation and difficulty in the learning process.
4. It may be safely stated that significant difference exist in the posttest performances of the experimental and control groups, in other words, the group who utilized the visual arts in studying art appreciation recorded significantly helps performance than those who used the traditional lecture discussion method.



The null hypothesis that there was no significant difference exist in the posttest scores of the experimental and control group has been rejected.

5. Using visual arts in different learning areas encourages students to participate and this will develop their confidence and advantage in learning process.

Recommendations:

The conclusions recommended the following:

1. The teachers are challenged to use visual arts or arts integration and creative teaching strategies in conducting visual arts related activities.
2. The Philosophy and Humanities department must ensure the continuous programs related to visual art integration and use of visual arts in teaching Humanities (Art Appreciation)
3. That the future researchers conduct experimental investigations on the impact of visual arts or art integration in the academic performance of the students.

Teachers in the field of other disciplines like Math and Geometry, Science, English the like may implement or use art integration based from the findings that arts allow creation from understanding and deepened engagement with a topic.

4. Teachers can help students having difficulty to learn via traditional methods through the introduction of visual arts. Visual arts can be an interesting tool for learning that can give students a point of reference for future learning.

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Distributed Database

Mrs. Varsha P. Gidde
 Abhinav Education Society's
 College of Computer Science and Management
 Ambegaon (Bk.), Pune

ABSTRACT: A distributed database is a single logical database, parts of which are located at more than one location or more than one server. It acts as a single collection of data but the database itself is geographically in separate locations. For instance a shop may store some of their data on site for their cash registers but other information within their database may be stored at head office but it can still be accessed by the store. This way all stores have access to up to date information and do not need to worry about wasting time downloading updates for their own computers. It can be updates centrally requiring only one source of data to be changed. Another part of this database may be located at the warehouse.

Distributed databases require synchronization of locations so that all sites will receive any updated information. A two-phase commit is part of the DBMS used to maintain consistency across a distributed database. It checks whether both parts of the database are ready for transmission and then performs the transmission. If all of the transmission is not completed then none of the transaction will take place if it involves money. Data is important organizational asset, it is used for management, planning, analysis and etc. the distributed database system distributes all data, so that it is easy to user while processing. There are various types of distributed database such as non-partitioned & nonreplicated, partitioned & nonreplicated, replicated & portioned, nonpartitioned & replicated. The distributed database has many advantages, one of is that it is generally use in business Organizations the alternatives such as increasing parallelism, independence, availability, control Security risk provides greater flexibility and hence it can be better tailored to the organizational structure and the organizational process. It also requires control otherwise loss of data integrity may cause. because of control and possible integrity problems, distributed databases infrequently used for business information systems

Index Terms: Distributed database, homogeneous, heterogeneous, transaction processing, Database security.

1. Introduction

In distributed database, the database itself is distributed; it is distributed only in the Architecture Neither the client-server nor the file sharing architectures distribute the database to multiple Computers. Most people would not refer to the file sharing system or client-server architecture As distributed database. There are two Ways in which Databases can be distributed are :

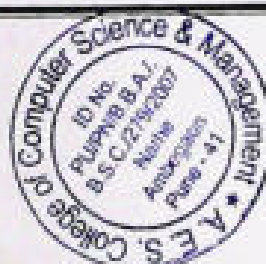
1.1 Replicated Database

Part of the database at the central site may be duplicated at the remote site. The data chosen for

duplication would, of course be related to activities at that remote location. In this scenario of "replicated databases" you need a whole raft of synchronization technologies and rules to maintain the database integrity. With this duplication of data, however, the advantage of reduced redundancy, which is one of the principal reasons for having a data base system in the first place, would be lost.

1.2 Duplicated Database

There may be complete databases at each remote location. Similarly "duplicated databases" can be useful in



some instances (e.g. when there is little change over time). This model is often used for publishing.

2. Distributed Database Architecture

A distributed database system allows applications to access data from local and remote databases. In a homogenous distributed database system, each database is an Oracle Database. In a heterogeneous distributed database system, at least one of the databases is not an Oracle Database. Distributed databases use client/server architecture to process information requests. This section contains the following topics:

2.1. Homogenous Distributed Database Systems

A homogenous distributed database system is a network of two or more Oracle Databases that reside on one or more machines. Figure 1 illustrates a distributed system that connects three databases: hq, mfg, and sales. An application can simultaneously access or modify the data in several databases in a single distributed environment. For example, a single query from a Manufacturing client on local database mfg can retrieve joined data from the products table on the local database and the depts table on the remote database. For a client application, the location and platform of the databases are transparent. You can also create synonyms for remote objects in the distributed system so that users can access them with the same syntax as local objects.

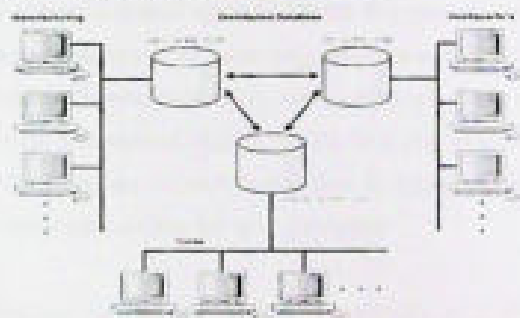


Fig. 1 Homogenous Distributed Database"

For example, if you are connected to database mfg but want to access data on database hq, creating a synonym on mfg for the remote dept table enables you to issue this query:

```
SELECT * FROM dept;
```

In this way, a distributed system gives the appearance of native data access. Users on mfg do not have to know that the data they access resides on remote databases. Fig.1, homogenous distributed database system.

2.2. Heterogeneous Distributed Database Systems

In a heterogeneous distributed database system, at least one of the databases is a non-Oracle Database system. To the application, the heterogeneous distributed database system appears as a single, local, Oracle Database. The local Oracle Database server hides the distribution and heterogeneity of the data. The Oracle Database server accesses the non-Oracle Database system using Oracle Heterogeneous Services in conjunction with an agent. If you access the non-Oracle Database data store using an Oracle Transparent Gateway, then the agent is a system-specific application. For example, if you include a Sybase database in an Oracle Database distributed system, then you need to obtain a Sybase-specific transparent gateway so that the Oracle Database in the system can communicate with it. Alternatively, you can use generic connectivity to access non-Oracle Database data stores so long as the non-Oracle Database system supports the ODBC or OLE DB protocols.

Heterogeneous Services (HS) is an integrated component within the Oracle Database server and the enabling technology for the current suite of Oracle Transparent Gateway products. HS provides the common architecture and administration mechanisms for Oracle Database



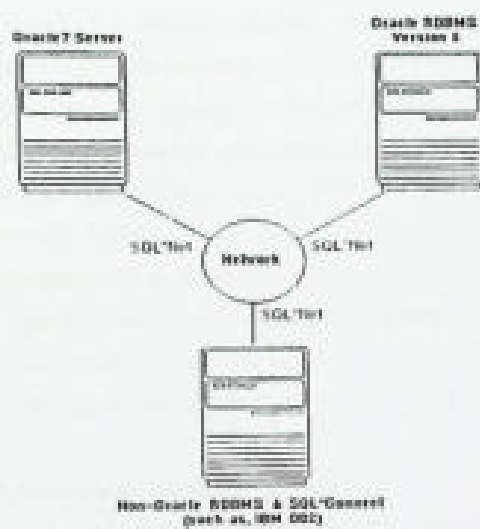


Fig. 2 Heterogeneous Distributed Database Systems gateway products and other heterogeneous access facilities. Also, it provides upwardly compatible functionality for users of most of the earlier Oracle Transparent Gateway releases.

2.3. Client/Server Database Architecture

A database server is the Oracle software managing a database, and a client is an application that requests information from a server. Each computer in a network is a node that can host one or more databases. Each node in a distributed database system can act as a client, a server, or both, depending on the situation. In Figure 2 the host for the hq database is acting as a database server when a statement is issued against its local data (for example, the second statement in each transaction issues a statement against the local dept table), but is acting as a client when it issues a statement against remote data (for example, the first statement in each transaction is issued against the remote table emp in the sales database).

A client can connect directly or indirectly to a database server. A direct connection occurs when a client connects to a server and accesses information from a database

contained on that server. For example, if you connect to the hq database and access the dept table on this database as in `SELECT * FROM dept.`

This query is direct because you are not accessing an object on a remote database.

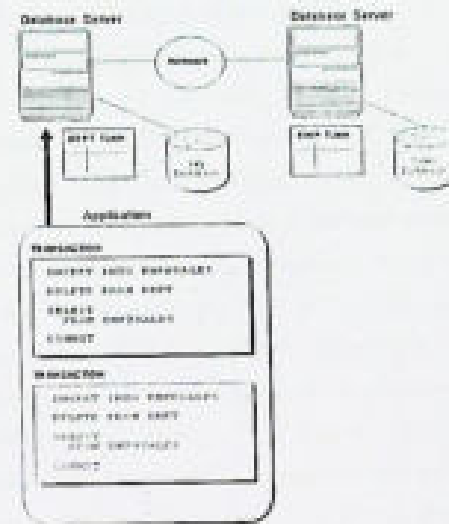


Fig. 3 Client/Server Database Architecture

In contrast, an indirect connection occurs when a client connects to a server and then accesses information contained in a database on a different server. For example, if you connect to the hq database but access the emp table on the remote sales database, you can issue the following: `SELECT * FROM emp@sales.` This query is indirect because the object you are accessing is not on the database to which you are directly connected.

3. Transaction Processing in a Distributed System

A transaction is a logical unit of work constituted by one or more SQL statements executed by a single user. A transaction begins with the user's first executable SQL statement and ends when it is committed or rolled back by



that user. A distributed transaction contains statements that access more than one node.

The following sections define important concepts in transaction processing and explain how transactions access data in a distributed database:

- Remote SQL Statements
- Distributed SQL Statements
- SQL for Remote and Distributed Statements
- Transactions
- Distributed Transactions

4. Distributed Database Security

The database supports all of the security features that are available with a non-distributed database environment for distributed database systems, including:

- Password authentication for users and roles
- Some types of external authentication for users.
- Login packet encryption for client-to-server and server-to-server connections
- Authentication Without Passwords
- Supporting User Accounts and Roles
- Centralized User and Privilege Management
- Data Encryption

5. Distributed Database Application Development

Application development in a distributed system raises issues that are not applicable in a nondistributed system. This section contains the following topics relevant for distributed application development:

- Transparency in a Distributed Database System
- Remote Procedure Calls (RPC)
- Distributed Query Optimization

5.1. Transparency in a Distributed Database System

With minimal effort, you can develop applications that make an Oracle Database distributed database system

transparent to users that work with the system. The goal of transparency is to make a distributed database system appear as though it is a single Oracle Database. Consequently, the system does not burden developers and users of the system with complexities that would otherwise make distributed database application development challenging and detract from user productivity.

5.2. Remote Procedure Calls (RPCs)

Developers can code PL/SQL packages and procedures to support applications that work with a distributed database. Applications can make local procedure calls to perform work at the local database and remote procedure calls (RPCs) to perform work at a remote database. In order for the RPC to succeed, the called procedure must exist at the remote site, and the user being connected to must have the proper privileges to execute the procedure. When developing packages and procedures for distributed database systems, developers must code with an understanding of what program units should do at remote locations, and how to return the results to a calling application.

5.3. Distributed query optimization

It is an Oracle Database feature that reduces the amount of data transfer required between sites when a transaction retrieves data from remote tables referenced in a distributed SQL statement. Distributed query optimization uses cost-based optimization to find or generate SQL expressions that extract only the necessary data from remote tables, process that data at a remote site or sometimes at the local site, and send the results to the local site for final processing. This operation reduces the amount of required data transfer when compared to the time it takes to transfer all the table data to the local site for processing.

6. Managing the Distribution of Application Data

In a distributed database environment, coordinate with the database administrator to determine the best location for the data. Some issues to consider are:

- Number of transactions posted from each location.
- Amount of data (portion of table) used by each node.
- Performance characteristics and reliability of the network.
- Speed of various nodes, capacities of disks.
- Importance of a node or link when it is unavailable.
- Need for referential integrity among table.

7. Conclusion

Thus distributed database provides many applications including security. It acts as a single collection of data. It also provides data management, application development etc.

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S. Miller

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Impact and Challenges of women participation in politics

Prof.Rachana V Chavan

AES's College Of Computer Science & Mgmt,Pune

Abstract

Women equality with men is almost necessary in all aspect of life. Equal voting right in election represents country's initiative to establish equality among men and women in democracy. But the current scenario of policies has witnesses that a woman does not get equal opportunities like men to participate in political affairs. Numbers of constrain affect women participation in politics and decision making. This paper aims to explore issues and challenges faces by women in political participation. This is conceptual paper that based on review the literature from various research generals, articles and case studies to explores important aspect of women's' political participation.

Keywords: women equality, equal voting right, women participation, politics

Introduction

It is very difficult for a woman to make up her mind to enter politics. Once she makes up her own mind, then she has to prepare her husband, and her children, and her family. Once she has overcome all these obstacles and applies for the ticket, then the male aspirants against whom she is applying makeup all sorts of stories about her. And after all this, when her name goes to the party bosses, they do not select her name because they fear losing that seat.

Women's participation in politics of any country gives a strong message globally not only in terms of equality and freedom of liberty but also in the space provided for women in the democratic framework of electoral politics. India has one of the strongest laws that provide women a life with full honor and dignity. But the customs, patriarchal set ups and societal norms have always treated them as subordinate to men. They are always taught to be submissive. Because of unequal distribution of resources, women do not have adequate resources, be it economic, material or human. It should come as no surprise, therefore, that women's under-representation in American politics raises grave concerns regarding democratic legitimacy and fundamental issues of political representation. Electing more women increases the likelihood that policy debates and deliberations include women's views and experiences. Political participation means which allows for political agendas to be developed by women 'taking part in politics' through a range of activities such as discussion and debate, lobbying and activism in formal and informal ways. The prime obstacle that hinders women's representation and participation is patriarchy. It is the very basis that makes most of the society realize and even forces them to think that women are incapable of political participation and representation. And, so they should be restricted inside the four walls to perform household chores. Some of the facets of patriarchy that play major role are (a) public-private divide (b) lack of family support especially husband (c) the belief that

politics is man's arena (d) political parties also believe that women lack the 'wis-ability' characteristics.

Literature review

Many researchers including Randall (1987)^[6], Matland and Taylor, (1997) Rule, (1981)^[9] explores various factors hinders women participation in politics such as lack of time for politics due to their domestic obligations, their lack of socialization for politics, their lower social capital and weaker asset base than men owing to discrimination in schools and in the market, their under representation in the jobs that favor political careers, their marginalization within male-dominated parties, their inability to overcome male and incumbent bias in certain types of electoral systems. Research by Browne and Barret (1991) found a strong association between female education and socio-economic development at both the individual and societal level. Oduol (2008)^[12] found access to education and lack of quality education still remains a barrier for many women. That shows education ill-equips women for leadership.

Some of the researcher including Kellerman & Rhode (2007)^[10], Klamba (2008)^[11] found gender stereotype was one of the important barriers for women leadership. That explained women face a 'double edged sword' ascribed to gender role stereotypes, as there is a long-standing and widespread belief that male traits are consistent with leadership. Kunovich, Paxton and Hughes (2007) explained that cultural ideas about women can affect women's levels of representation throughout the political process, from an individual woman's decision to enter politics, to party selection of candidates, to the decisions made by voters on Election Day.

Bari, (2005)^[1] in a study formulated and narrated some important factors which hinder the women political participation. Ideological factors, political factors, socio-cultural factors, economic factors are very important in this regards. Besides these lack of capital and strategy for women



political participation are also in the same regard. Bano, (2009) [12] conducted a study to observe the situation of women in Parliament in Pakistan. The focus of this research is on the role of Pakistani women in the political arena. The study observes how this numerical strength in parliament has contributed to the empowerment of women. The study concluded that in relative terms, the status of women has improved in contemporary society with the passage of time, but the ideal of women's empowerment is still a distant dream.

McCarthy and Sultana, (2004) [11] conducted a study to explore the possible hindrance in the women political participation. Domestic violence and other forms of violence are flourishing in families, society and also in the state as a means of controlling women. Their subordinate social and legal status and domination by men in the family, society and state obstruct their participation in public life. Hence the patriarchal mind-set is considered to be a key issue in limiting the women political participation. National Commission on the Status of Women (NCSW, 2010) [13] in its report suggested that women are not much active despite coming into the field of politics. Although women are brought into political institutions, no effort is made to transform the patriarchal nature and culture of institutions. MoWA (2006) [8] shows the number of elected women representatives is still low; More and more women are engaged in formal employment, but are underrepresented in middle and higher management positions; The number of women leaders and decision makers at the various level of the decentralized government structure is still very low.

There are numbers of obstacle of women participation in politics such as:

1. **Illiteracy** is one of the main hurdles in making women as politically empowered. Because of lack of understanding they do not know about their basic and political rights. Gender disparities in terms of education, ownership of resources and continual biased attitudes still act as barriers for women leaders. Education influences the social mobility of women. Formal education such as provided at educational institutions created opportunities for leadership, and imparted leadership essential skills (Walters & Mason (1994) [14]).
2. **Work and family-** uneven distribution of house hold work between men and women also one of the important factors in this regards. Uneven distribution of family care responsibilities means that women spend far more time than men in home- and child-care. It relating not just to the time, effort, and medical care of pregnancy and childbirth, but to the far greater maternal involvement necessary for breastfeeding, and to the persistent tendency of women to do a larger share of childcare as the child grows.
3. **Lack of political networks-** The lack of openness in political decision-making and undemocratic internal processes poses a challenge for all newcomers, but particularly for women as they tend to lack insider knowledge or political networks.
4. **Private-public divide** in terms of domain identification and male preponderance in political institutions. Because of their low proportion in inner political party structure of India, they are failed to gather resources and support for nurturing their political constituencies.

5. **Lack of financial support** - Women do not get adequate financial support from the political parties to contest the elections.
6. **Societal and cultural norms** imposed on women bar them from entering politics. They have to accept the dictates imposed on them and bear the burden of society. They also bear their deprivation and undermining status thinking as a culture of the society. Public attitudes not only determine how many female candidates win a general election, but also directly and indirectly how many are considered and nominated for office (Welch and Sigelman, 1982) [15]

Conclusion


It is the need of the hour in a country like India to have equal participation of women in mainstream political activity. Society needs to deconstruct the stereotype of women as limited to household activities only. Overall political parties' environment too is not women friendly, they have to struggle hard and face multi-dimensional issues to create space for them in the party. It is important for all institutions (state, family and community) to respond to women's specific needs such as bridging gaps in education, renegotiating gender roles, the gender division of labor and addressing biased attitudes

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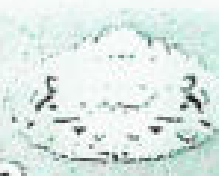
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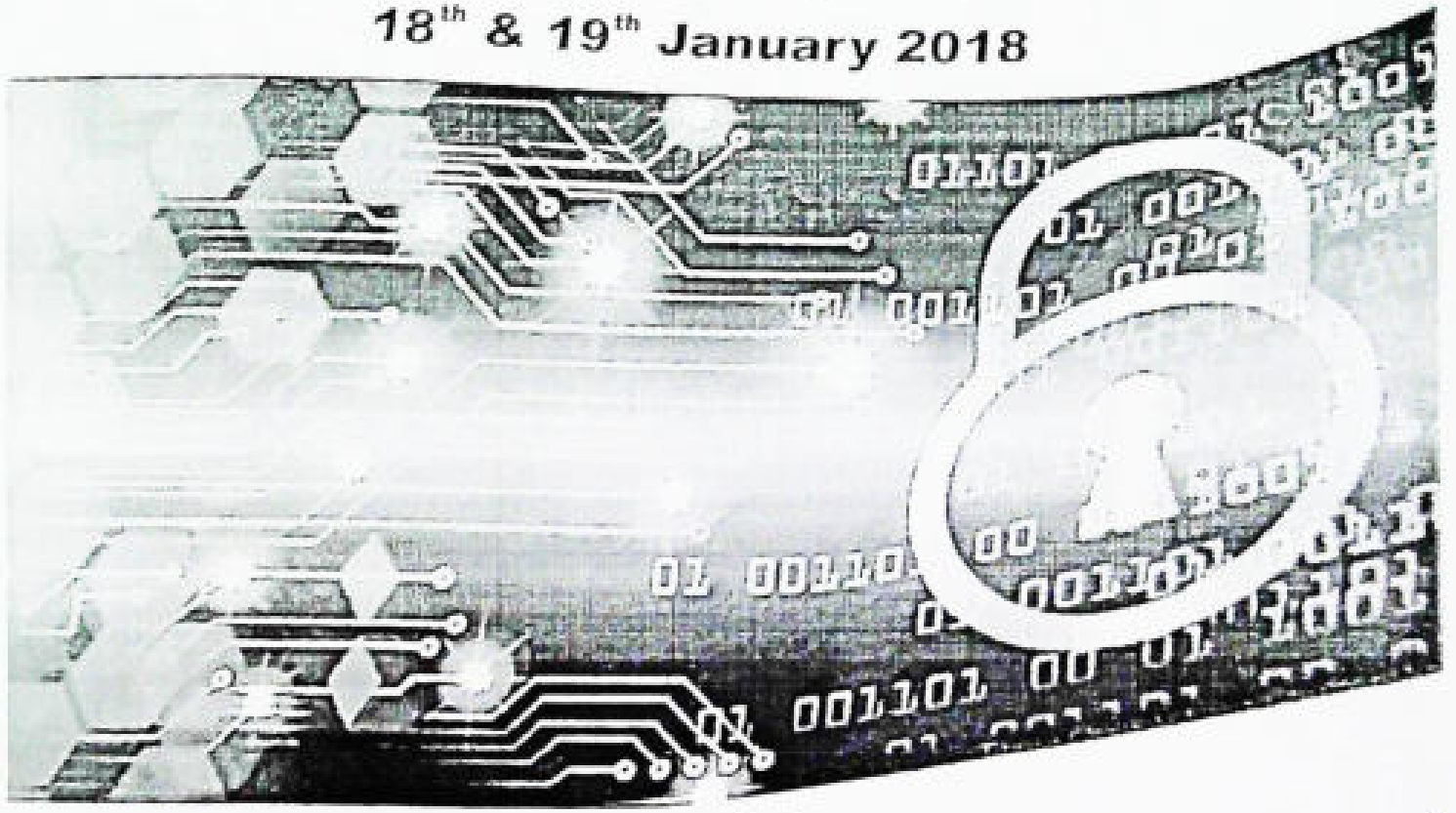


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Security in Cloud Computing

Varsha Prashant Gidde

Abhinav Education Society's

College of Computer Science and Management, Pune.

varshagidde30@gmail.com

Abstract-Cloud computing is known as one of the big next things in information technology world. Unlike other traditional computing system, cloud computing paradigm that provide unlimited infrastructure to store or execute client's data/program. Cloud computing is a long dreamed vision of computing as a utility, where data owners can remotely store their data in the cloud to enjoy on- demand highly-quality application and services from a shared pool of configurable computing resources. This paper gives a brief introduction of cloud computing its types and security issue and approaches to secure the data in the cloud environment.

Keywords- Cloud Computing, Security, SAAS, PAAS, IAAS, Public cloud, Private cloud, Hybrid cloud, threats.

I. Introduction

Cloud computing can also be defined as it is a new service, which are the collection of technologies and a means of supporting the use of large scale Internet services for the remote applications with good quality of service (QoS) levels. Cloud computing is has many technologies such as SaaS i.e. "Software as a Service", PaaS i.e. "Platform as a Service", IaaS i.e. "Infrastructure as a Service". Cloud Computing is a paradigm that focuses on sharing data and computations over a scalable network of nodes. Examples of such nodes include end user computers, data centers, and Cloud Services. We term such a network of nodes as a Cloud. Cloud service delivery is divided among 978-1-4673-2008-5/12/\$31.00 ©2012 IEEE 547 three archetypal models and various derivative combinations.

The US National Institute of Standards and Technology (NIST) define cloud computing as "a model for user convenience, on demand network access contribute the computing resources (e.g. networks, storage, applications, servers, and services) that can be rapidly implemented with minimal management effort or service provider interference".

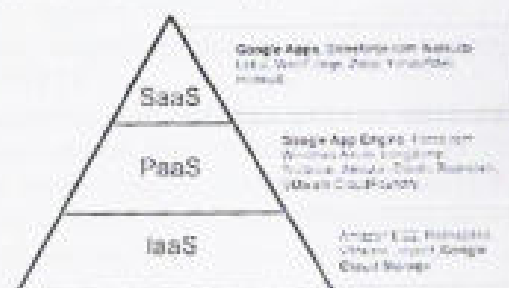


Fig.1 General Representation of cloud

We study the structure of a cloud in which the cloud uses the several application such as Amazon, Google apps for storing the data. Now we explain the architecture of a cloud. Cloud architecture involved in the delivery of cloud computing. the two most significant component of cloud computing architecture are known as the front end and back end. The front end is the part seen by the client, like computer user. This includes the users network (computer) and the application used to access the cloud via a user interface such as a web browser. The back end of the cloud computing architecture is the cloud itself, comprising various computers, servers and data storage devices.

1.1. Cloud Service Models.



- **Cloud Software as a Service (SaaS)** operates on the virtualized and pay-per-use costing model whereby software applications are leased out to contracted organization by specialized saas vendor. The capability provided to the consumer is to use the provider's applications running on a cloud infrastructure. The applications are accessible from various client devices through a thin client interface such as a web browser (e.g., web-based email)
- **Cloud Platform as a Service (PaaS)** is a middle layer in cloud services. It enables programming environment to access and utilize additional application building block. The capability provided to the consumer is to deploy onto the cloud infrastructure consumer-created or acquired applications created using programming languages and tools supported by the provider (e.g., configurations)
- **Cloud Infrastructure as a Service (IaaS)** is the foundation of all the cloud services (bottom layer) . It supplies a set of virtualized infrastructural component such as virtual machines. The capability provided to the consumer is to provision processing, storage, networks, and other fundamental computing resources where the consumer is able to deploy and run arbitrary software, which can include operating systems and applications.(e.g., host fire walls)

1.2 Cloud Deployment Models

Regardless of the service model utilized (SaaS, PaaS, or IaaS) there are four deployment models for cloud services, with derivative variations that address specific requirements are depicted

- **Public Cloud:** The cloud infrastructure is made available to the general public or a large industry group and is owned by an organization selling cloud services.
- **Private Cloud:** The cloud infrastructure is operated solely for a single organization. It may be managed by the organization or a third party, and may exist on- premises or off premises.
- **Community Cloud:** The cloud infrastructure is shared by several organizations and supports a specific community that has shared concerns (e.g., mission, security requirements, policy, or compliance considerations). It may be managed by the organizations or a third party and may present on-premises or off-premises.
- **Hybrid Cloud:** The cloud infrastructure is a composition of two or more clouds (private, community, or public) that remain unique entities but are bound together by standardized or proprietary technology that enables data and application portability.

II CLOUD SECURITY

- Cloud computing and web services run on a network structure so they are open to network type attacks. One of these attacks is the distributed denial of service attacks. If a user could hijack a server then the hacker could stop the web services from functioning and demand a ransom to put the services back online. To stop these attacks the use of syn cookies and limiting users connected to a server all help stop a DDOS attack. Another such attack is the man in the middle attack. If the secure sockets layer (SSL) is incorrectly configured then client and server authentication may not behave as expected therefore leading to man in the middle attacks. It is clear that the security issue has played the most important role in hindering Cloud computing. Without doubt, putting your data, running your software at someone else's hard disk using someone else's CPU appears daunting to many. Well-known security issues such as data loss, phishing, and botnet (running remotely on a collection of machines) pose serious threats to organization's data and software. Moreover, the multi-tenancy model and the pooled computing resources in cloud computing has introduced new security challenges that require novel techniques to tackle with.

2.1 Service Provider Security Issues



The public cloud computing surroundings offered by the cloud supplier and make sure that a cloud computing resolution satisfies organizational security and privacy needs. The cloud supplier to provision the safety controls necessary to safeguard the organization's information and applications, and additionally the proof provided regarding the effectiveness of these controls migrating organizational information and functions into the cloud.

- **Identity and access management**

• Identity and Access Management (IAM) features are Authorization, Authentication, and Auditing (AAA) of users accessing cloud services. In any organization "trust boundary" is mostly static and is monitored and controlled for applications which are deployed within the organization's perimeter. In a private data center, it managed the trust boundary encompasses the network, systems, and applications. And it is secured via network security controls including intrusion prevention systems (IPSs), intrusion detection systems (IDSs), virtual private networks (VPNs), and multifactor authentication.

- **Privacy**

Privacy is the one of the Security issue in cloud computing. Personal information regulations vary across the world and number of restrictions placed by number of countries whether it stored outside of the country. For a cloud service provider, in every jurisdiction a single level of service that is acceptable. Based on contractual commitments data can store within specific countries for privacy regulations, but this is difficult to verify. In case of Private and confidential customer's data rising for the consequences and potential costs of mistakes for companies that handle. But professionals develop the security services and the cloud service privacy practices. An effective assessment strategy must cover data protection, compliance, privacy, identity management, secure operations, and other related security and legal issues.

- **Securing Data in Transmission**

Encryption techniques are used for data in transmission. To provide the protection for data only goes where the customer wants it to go by using authentication and integrity and is not modified in transmission. SSL/TLS protocols are used here. In Cloud environment most of the data is not encrypted in the processing time, but to process data, for any application that data must be unencrypted. In a fully homomorphism encryption scheme advance in cryptography, which allows data to be processed without being decrypted. To provide the confidentiality and integrity of data-in-transmission to and from cloud provider by using access controls like authorization, authentication, auditing for using resources, and ensure the availability of the Internet-facing resources at cloud provider.

- **User Identity**

In Organizations, only authorized users across their enterprise and access to the data and tools that they require, when they require them, and all unauthorized users are blocked for access. In Cloud environments support a large enterprise and various communities of users, so these controls are more critical. Clouds begin a new level of privileged users working for the cloud provider is administrators. And an important requirement is privileged user monitoring, including logging activities. This monitoring should include background checking and physical monitoring.

- **Audit and Compliance**

An organization implements the Audit and compliance to the internal and external processes that may follow the requirements classification with which it must stand and the requirements are customer contracts and regulations, driven by business



objectives, internal corporate policies and check or monitor all such policies, procedures, and processes are without fail. In traditional Out sourcing relationships plays an important role for Audit and compliance. In Cloud dynamic nature, increase the importance of these functions in platform as-a service (PaaS), infrastructure-as-a-service (IaaS), and software-as-a-service (SaaS) environments.

2.2 Infrastructure Security Issues

Cloud suppliers provide security-related services to a good vary of client types; the security equipped to the foremost demanding clients is additionally created on the market to those with the smallest amount stringent necessities. Whereas Infrastructure Security Solutions and product are often simply deployed, they need to a part of an entire and secure design to be effective.

- **Securing Data-Storage**

In Cloud computing environment data protection as the most important security issue. In this issue , it concerns include the way in which data is accessed and stored , audit requirements, compliance notification requirements , issues involving the cost of data breaches, and damage to brand value. In the cloud storage infrastructure, regulated and sensitive data needs to be properly segregated. In the service provider's datacenter, protecting data privacy and managing compliance are critical by using encrypting and managing encryption keys of data in transfer to the cloud. At the cloud provider, the best practice for securing data at rest is cryptographic encryption and shipping self encrypting is used by hard drive manufacturers. Self-encrypting provides automated encryption with performance or minimal cost impact. Software encryption is less secure and slower because the encryption key can be copied off the machine without detection.

- **Network and Server Server-Side Protection:**

Virtual servers and applications, very like their non-virtual counterparts, have to be compelled to be secured in IaaS clouds, each physically and logically. Example, virtual firewalls are often used to isolate teams of virtual machines from different hosted teams, like production systems from development systems or development systems from different cloud-resident systems. Rigorously managing virtual machine pictures is additionally vital to avoid accidentally deploying pictures underneath development or containing vulnerabilities. Preventing holes or leaks between the composed infrastructures could be a major concern with hybrid clouds, as a result of will increase in complexity and diffusion of responsibilities. The supply of the hybrid cloud, computed because the product of the supply levels for the part clouds, also can be a concern; if the % availability of anyone part drops, the availability suffers proportionately. In cloud environment, purchasers want to form certain that every one tenant domains are properly isolated that no probability exists for data or transactions to leak from one tenant domain into successive.

2.3 End User Security Issues

End Users need to access resources within the cloud and may bear in mind of access agreements like acceptable use or conflict of interest. The client organization have some mechanism to find vulnerable code or protocols at entry points like servers, firewalls, or mobile devices and upload patches on the native systems as soon as they are found.

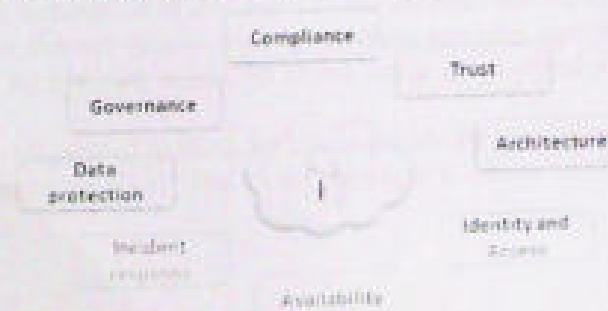


Figure 2 Various Point of View of Cloud Security

1 Governance – Policies and procedures for privacy, security, and oversight could be overlooked and the organization put at risk. Audit mechanisms and tools should be in place to determine how data is stored, protected, and used; to validate services; and to verify policy enforcement.

2 Compliance – Compliance involves conformance with an established specification, standard, regulation, or law. Various types of security and privacy laws and regulations exist within different countries at the national, state, and local levels, making compliance a potentially complicated issue for cloud computing. The ISV or an IT organization must scrutinize its customer's legal requirements together with its cloud vendors' compliance. As an example for an IaaS compliance you are welcome to check the up to date Risk and Compliance publish by Amazon AWS.

4 Trust – The SaaS vendor (developer) relinquishes direct control over many aspects of security hence choosing the cloud vendor should be carefully done taking in mind that the IaaS and PaaS providers have an inside system access including their employees, contractors and other parties that have received access to an organization's networks, systems, and data to carry out operations. There must be a tight collaboration of the cloud providers in the IaaS and PaaS layers but this doesn't mitigate responsibility of the SaaS vendor to make sure that the arrangements be disclosed in before closing the agreement with different cloud providers.

3 Architecture – The architecture of software in the cloud comprises hardware and software. NIST report provides more details about the different layers that need to be protected:

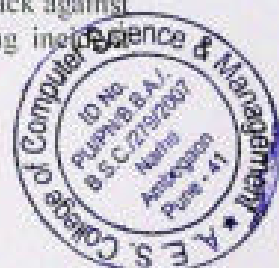
1. The 'hypervisor' or the virtual machine software.
2. The virtual network including software-based switches and network configurations
3. Ancillary Data – cloud providers hold significant details about the subscribed accounts as well as the stored virtual machine images data.
4. Application security in both client side and server side.

4 Identity and Access Management – Data sensitivity and privacy of information have become increasingly an area of concern for organizations and unauthorized access to information resources in the cloud is a major concern. On this matter you will find market standards such as SAML for identify the user and XACML to control access to resources. There are today many initiatives and startups that delivers tools for access management and user provisioning for SaaS systems. The company products support the enterprise with universal single sign that works across SaaS systems that serves the enterprise users.

5 Data protection – The data isolation is one of the major security issues that are raised by potential SaaS users and customers. Data isolation basically means that a specific subscriber (user) will not be able to browse to other tenants' data using the shared environments. Data protection includes also strict procedures when storage is moved or backups are kept. Data must be secured and encrypted while at rest, in transit or in use. Standards for communications protocols and public key certificates allow data transfers to be protected using cryptography.

6 Availability – Always and also since Amazon failure last month, the discussion about availability valid and now it is even more intense. The level of availability hence reliability of a cloud vendor should be examined carefully including its capabilities for backup and recovery to ensure the recovery and restoration of disrupted cloud services and operations. The SaaS vendor should also plan its own disaster recovery using alternate services, equipment, and even offshore locations. This should be planned inside its cloud using cross cloud facilities and even cross cloud vendors.

7 – Incident response -Organized method for dealing with the consequences of an attack against the security of a computer system. The cloud provider's role is vital in performing incident response



response activities, including incident verification, attack analysis, containment, data collection and preservation, problem remediation, and service restoration. As in the last section for availability the SaaS vendor should also take its own security measures to protect the application layer as well include using VPC/VPN, application audits, antivirus, etc.

What with the security of private clouds? Some also offer certification summaries on their data processing and data security activities and the data controls they have in place, e.g., SAS70, ISO 27001 or PCI DSS. Data flowing from the Internet is filled with malware and packets intended to lure users into unknowing participation in criminal activities.

The overall conclusion self-evident, it is absurd that an organization would prefer to go through the hassle and cost of getting audited themselves in order to keep their IT in-house, when the organization could instead choose an IaaS vendor that is already have all the compliance, assurance and accreditation boxes ticked.

3. Limitations of Cloud Computing

1) Downtime

This may be **one of the worst disadvantages of cloud computing**. No cloud provider, even the very best, would claim immunity to service outages. Cloud computing systems are internet based, which means your access is fully dependent on your Internet connection. And, like any hardware, cloud platforms themselves can fail for any one of a thousand reasons.

2) Cloud Computing disadvantages: security and privacy

Any discussion involving data must address security and privacy, especially when it comes to managing sensitive data. We mustn't forget Code Space and what happened to it after its AWS EC2 console was hacked and its data eventually deleted, forcing the company to close doors forever. By leveraging a remote cloud based infrastructure, a company basically outsources everything it has.

Of course, your cloud service provider is expected to manage and safeguard the underlying hardware infrastructure of a deployment, however remote access is your responsibility and, in any case, no system is perfectly secure. You'll have to carefully weigh all the risk scenarios.

After the recent leaks of celebrity pictures and countless millions of user login credentials, the privacy of your cloud-based data is another consideration. How much can you trust your provider? Can you face this, which is one of the riskiest disadvantages of cloud computing?

3) Cloud Computing disadvantages: vulnerability to attack

In cloud computing, every component is potentially accessible from the Internet. Of course, nothing connected to the Internet is perfectly secure and even the best teams suffer severe attacks and security breaches. But since cloud computing is built as a public service and it's easy to run before you learn to walk. No one at AWS checks your administration skills before granting you an account: all it takes to get started is a valid credit card.

4) Limited control and flexibility

To varying degrees (depending on the particular service) cloud users have limited control over the function and execution of their hosting infrastructure. Cloud provider EULAs and management policies might impose limits on what customers can do with their deployments. Customers are also limited to the control and management of their applications, data, and services, but not the backend infrastructure. Of course, none of this will normally be a problem, but it should be taken into account.

5) Cloud Computing platform dependencies

Implicit dependency, also known as "vendor lock-in" is another of the disadvantages of cloud computing. Deep-rooted differences between vendor systems can sometimes make it impossible to migrate from one cloud platform to another. Not only can it be complex and expensive to

reconfigure your applications to meet the requirements of a new host, but migration could also expose your data to additional security and privacy vulnerabilities.

6) Cloud Computing costs

Cloud computing – especially on a small scale and for short term projects – can be pricey. Though it can allow you to reduce staff and hardware costs, the overall price tag could end up higher than you expected. Until you're sure of what will work best for you, it's a good idea to experiment with a variety of offerings. You might also make use of the cost calculators made available by providers like Amazon's AWS and Google's GCP.

CONCLUSION

In this paper, I focused on the security issues at various levels of cloud computing service architecture. Cloud computing is a new way of delivery computing delivering computing resources which introduce a lot of benefits to its user. Security of customer information is a major requirement for any services offered by any cloud computing. We investigated ongoing security issues in Software-as-a-service (SaaS), Platform as a service (PaaS) and Infrastructure as a service (IaaS). Cloud computing systems challenge is assessing and managing risk. In the system lifecycle, risks that are identified should be rigorously balanced against the protection and privacy controls out there and therefore the expected edges from their utilization. However, one must be very careful to understand the security risks and challenges posed in utilizing these technologies. Cloud computing is no exception.

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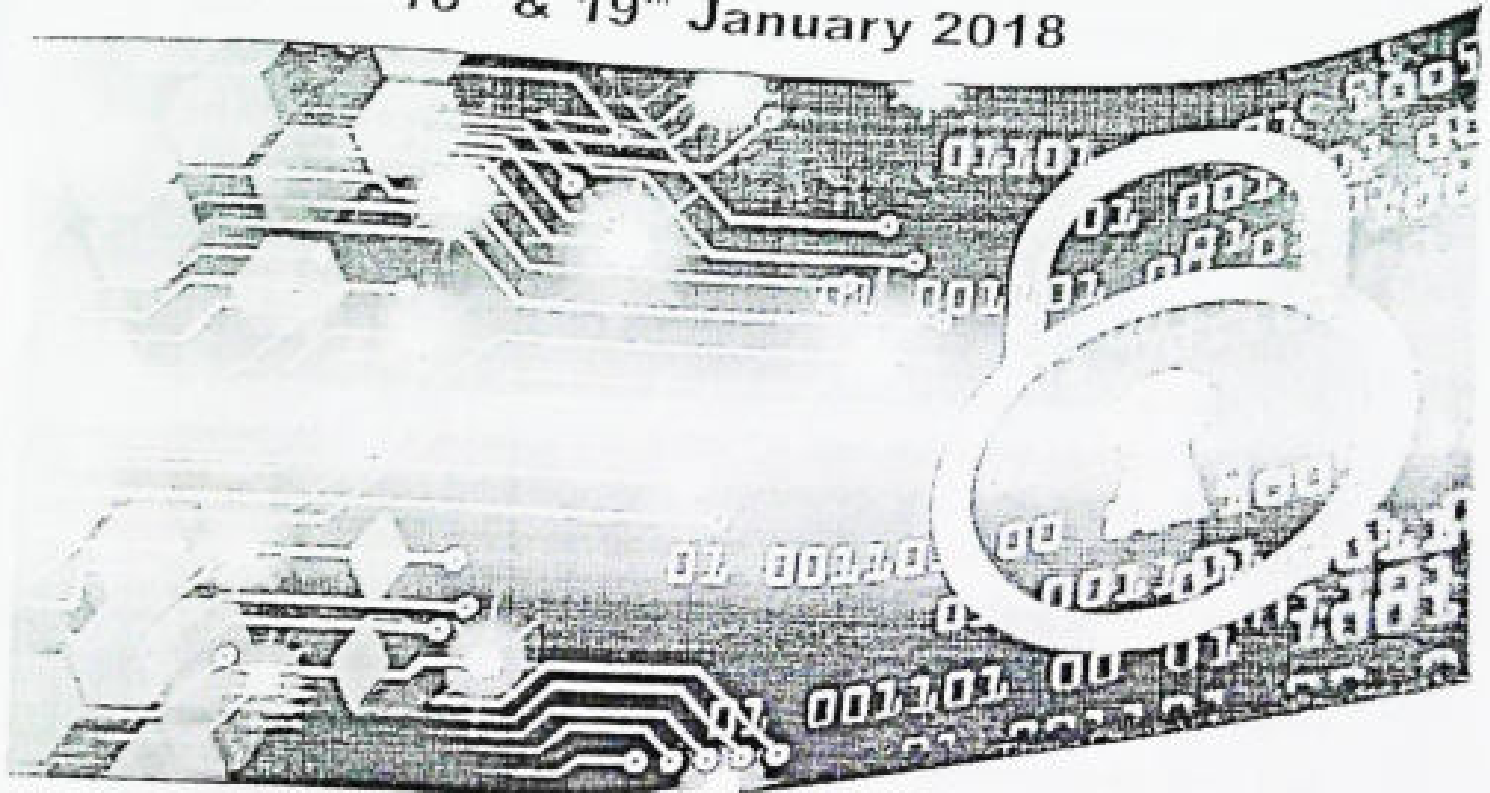
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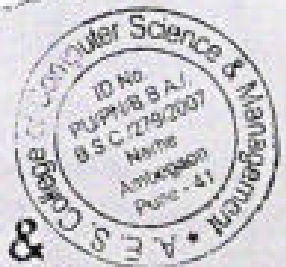


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Cyber Security is the cornerstone of E-Commerce

Mrs. Alkawati, A. Magadum, Msc[IT]

E-mail: alkawati_magadum@rediffmail.com

Abhinav College of Computer Science & management, Pune.

Abstract

Cyber Security plays an important role in the development of information technology as well as Internet services. According to approximate estimate 60% people in India use e-commerce rest 40% still depends on traditional market. Although the foreign people totally depends on e-commerce. Timesaving is a big advantage of online shopping through which our shopping becomes faster. With the help of online shopping we can shop anytime, anywhere, any product. There is no need to go outside for shopping. It enables us to choose a variety of products of every range from compatible to exclusive products. There is need to take some necessary steps to protect our self at the time of shopping online. Anything linked to the internet, which can include mobile devices like smart phones and tablets need to be use safely. The hackers can also target the peoples those who shop online. Everyone should have an alert for emails so that quick response can be made. We should be aware of our e-mails about problems with our credit cards or an account or the status of online order. Efforts should be done to increase more cybersecurity. Whenever a user has to enter his/her credit/debit card details his thumb impression should be verified every time whenever she or he do purchases. Introducing Bio-metrics can secure our e-commerce market. Being a safe and secure shopper starts with STOP.THINK.LINK. Take Security precautions think about the consequences of your actions online and enjoy the convenience of technology with peace of mind while you shop online. Remember these tips during all online purchase and have a secure and happy shopping. In online shopping online electronic payment function is the key issue to ensure the consumers are fast and convenient for electronic trading systems.

Keywords: *Stop, Think, Link, timesaving, Cybersecurity, E-commerce.*



1. Introduction

The e-commerce has transformed the way business is done in India. It refers to online business activities of buying and selling of products and services. In today's world most of the people are working in offices or working for their business they don't have the time to do shopping. Therefore they prefer to do shopping online. E-commerce plays a very significant role in the lives of working professionals. But still the growth of e-commerce is not more because there are also some people those who don't prefer online shopping because of the lack of security in e-commerce websites. Indian people demand on e-commerce less as compared to traditional market due to security. Although ecommerce site is password protected still hackers can crack it. So efforts should be made to secure ecommerce. The Indian e-commerce industry has been on an upward growth trajectory and is expected to grow at a Compound Annual Growth Rate (CAGR) of 28 per cent from 2016-20 to touch US\$ 63.7 billion by 2020 and overtake the US by 2034.¹ The sector reached US\$ 14.5 billion in 2016.

This research will help the e-commerce website to increase their security which will also help them to increase their business. Cyber security work as a cornerstone because if there is more security more people will prefer to choose e-commerce and this will also help to make the digital world. The encryption and biometrics can make the e-commerce website more secure. People should not use their permanent passwords while payment from credit/debit card. Digital signatures can be used as security purpose. Beside this 3d password and biometric security can be used. Adhar-card can also be link with our ecommerce account. As biometric security is in passport services and also prove useful. The face recognition can be used as a password for the credit payment and thumb impression can also be used to increase the security of e-commerce. Hackers can crack our password but they do not crack thumb impression. As our credit/debit information is saved by the application when we shop but if our smart phone is lost there may be chances that it can harm our credit/debit card. So to secure this applications should not save it, every time we have to enter the details. With the help of online shopping people can do shopping from their smart phone anywhere on the move and at home by using the internet they don't need to go to the stores for shop anything. Few well financed e-commerce companies are Flipcart, Snapdeal, Amazon India, Paytm have succeeded in establishing the trust and they are also increasing their business. There should be more security in e-commerce websites for online payment which will also help to increase e-commerce market.



2. Literature Review

In today's scenario with vast extend of Information Technology e-commerce security and its legislation are critical issue. There is a harmony that security matters are the important foundation of e-commerce, electronic consumers and firm privacy. To develop a security policy e-commerce prepare a friendly consumer infrastructure. Firms in developed countries have adopted e-commerce in their operation while firms in developing countries failed to meet the suit. It is important to visualize a full range of issues related to the e-commerce strategy of using social networking as a way to attempt to connect with customers and increases economy. Indian customers still depend less on e-commerce due to security concerns and companies also loss money. There are many security issues viz. phishing, denial of service attack Trojan horse, Logic bomb. Some people make their permanent account so it is more severe to attack. An important part of e-commerce that is new are Facebook, twitter whatsapp as a way to connect directly to customers.

3. Challenges of E-Commerce:

Cyber Crime- Cyber-crime is the most important alarm that consumers have regarding e-commerce. No one wants to become a cyber-crime. Cyber-crime is ecrime. Cyber-crime includes criminal acts such as computer viruses, phishing, and denial-of service attacks that cause e-commerce website to lose revenues. Companies involved in e-commerce should take serious efforts in cyber-security. Many customers feel uncomfortable to do online shopping due to security concerns E-commerce have a great loss of money due to cyber-security so, recommendations should be made to protect security.

Payment Collection -India economy is low and Indian consumers are used to pay through cash. Merchant's responsibility is to charge back and fraudulent change that is to be accounted in business model. Another problem in Indian market is to pay through COD. They pay for the product once the courier is received. It's a hard problem to pay through credit card as it is risky to provide financial information online and credit card penetration is also low in India.

Ethical and Privacy Issues- Another issue is privacy and ethical issues. Privacy includes privacy of a individual security concerns .The internet provides security concerns to the array of goods and services. Online shopping is easy customers came select products



online. This task looks easy but developers and business know how difficult is to protect customers security.

Premise- Another big problem is logistics. Customers should get rights products safe and secure within limited time period. For orders delivery outside the major cities, individual courier have to hire for the delivery of products to the door-step of customers.

4. Recommendations to Cyber Security:

Biometrics :Biometrics is one of the methods to provide security to e-commerce. As different people have different biometrics so there is less/no chance for attacker to attack the site. Biometrics related to human characteristics. It refers to authentication technique that depends on physical characteristics which automatically verified user. There are several types of biometric identification schemes which can secure our site viz. fingerprint, hand geometry, retina, iris, vein, voice.

Hand Geometry- Hand Geometry identifies shape of the hand of users. So in laptop hand geometry device should ported to verify user identity.

Finger Print- Finger print is another way to secure our website. There are several apps available which should be attach with site security. Finger Print sensor is an electronic device to capture pattern of finger print. Different O.S. use different fingerprint sensor e.g. iPhone.

Facial Recognition- A facial recognition is a computer application to authenticate user face. It identifies a user face from a digital image or video frame and compare the selected image with the database. Recently Indian govt is going to implement Adarno with face recognition. This one is the one of method to secure ecommerce site.

Retina- As per the advancement in technology Laptops should come with retinal camera. The retinal scan is performed by casting an unperceived beam low-energy infra light into a user's eye when they look through the scanners eyepiece.

3D Password- Authentication can be used to make a system more secure .Many authentication techniques can be used for proving authentication, Such as textual password, Graphical password, etc. but each of this individually having some limitations &drawbacks. To overcome the Drawbacks of previously existing authentication technique. A new better authentication technique is used, which is called as 3D password. The 3D password is multi-password &multi-factor authentication system as it uses a various authentication techniques such As textual password, Graphical password etc. Most important thing of 3d password scheme is inclusion of 3d virtual environment. 3d virtual environment is virtual environment which consist real time object scenarios. It is not actual real time environment, it is just



interface provided to scheme which looks like same as real environment. 3d password is more secure authentication scheme than any other authentication techniques. Because this authentication scheme is more advanced than any other schemes. Also this scheme is hard to break & easy to use. To protect any system authentication must be provided, so that only authorized persons can have right to use or handle that system & data related to that system securely. There are many authentication algorithms are available some are effective & secure but having some drawback. Previously there are many authentication techniques were introduced such as graphical password, text password, Biometric authentication, etc. generally there are four types of authentication techniques are available such as:

- Knowledge based: means what you know. Textual password is the best example of this authentication scheme.
- Token based: means what you have. This includes Credit cards, ATM cards, etc. as an example.
- Recognition Based: means what you recognize. Includes graphical password, iris recognition, face recognition, etc.

Digital Signature - For minimizing operational costs and provide enhanced services applications such as banking, stock trading, and the sale and purchase of merchandise are increasingly emphasizing electronic transactions because of this the phenomenal increases in the amounts of electronic documents that are generated, processed, and stored in computers and transmitted over networks. The electronic information managed in these applications is valuable and sensitive and must be protected against tampering by malicious third parties. Sometimes, there is a need to prevent the information or items related to it from being tampered with by the sender (originator) and/or the recipient. Traditionally, paper documents are validated and certified by written signatures, which work fairly well as a means of providing authenticity. For electronic documents, a similar mechanism is necessary. Digital signatures, which are nothing but a string of ones and zeroes generated by using a digital signature algorithm, serve the purpose of validation and authentication of electronic documents. Validation refers to the process of certifying the contents of the document, while authentication refers to the process of certifying the sender of the document. A digital signature should have all the aforementioned features of a conventional signature plus a few more as digital signatures are being used in practical, but sensitive, applications such as secure e-mail and credit card transactions over the Internet. Since a digital signature is just a sequence of zeroes and ones, it is desirable for it to have the following properties: the signature must be a bit pattern that depends on the message being signed the signature use some information that is unique to the sender to prevent both forgery and denial;



it must be relatively easy to produce; it must be relatively easy to recognize and verify the authenticity of digital signature; it must be computationally infeasible to forge a digital signature either by constructing a new message for an existing digital signature or constructing a fraudulent digital signature for a given message; and it must be practical to recopies of the digital signatures in storage for arbitrating possible disputes later. To verify that the received document is indeed from the claimed sender and that the contents have not been altered, several procedures, called authentication techniques, have been developed. However, message authentication techniques cannot be directly used as digital signatures due to inadequacies of authentication techniques. For example, although message authentication protects the two parties exchanging messages from a third party, it does not protect the two parties against each other.

5. Conclusion

This research is all about why Indian people rely less on e-commerce due to security concerns as phishing, loss of money, threats to customer's financial information etc. How Cyber-security is the backbone of e-commerce. E-commerce market can be increase in India which can save customers time also and he can have a look to variety of products. This can be possible if the methods described above came in to practice. No permanent password should be allowed. To increase more security biometrics security should come into practice.

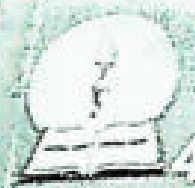
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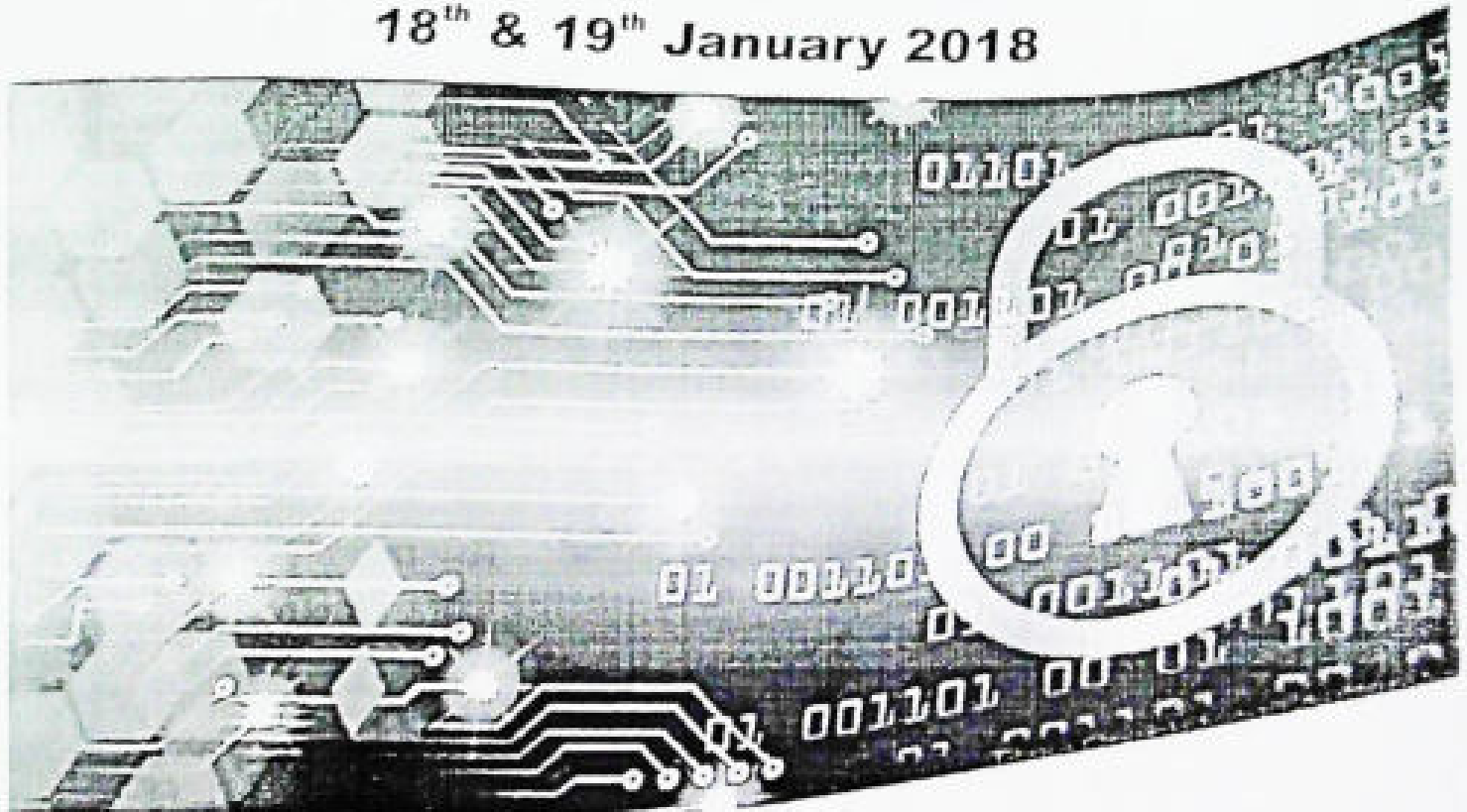
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A Mobile Tehnology For School Students with Learning Impairment

Mrs.Rachana V.Chavan

Rachana21.shinde@gmail.com

AES College Of Computer Science and Mgmt,Pune

Abstract

Dyslexia is most common learning challenge experienced by children. A huge amount of research is frequently being conducted for the benefits of using computer Technologies as a learning platform for individuals and especially children with such learning difficulties. Hence, I will be focusing on a mobile Technology which could help children improve some of their vital skills, such as reading comprehension, orthographic coding, short-term memory and mathematical problem solving .My attempt is to design a stimulating and interactive experience for children, which could encourage the learning process. My focus is to assess the usability of the technology,evaluate how it affects the learning experience,its consequences and the benefits it offers to each user. In this paper, I present the methodology, setup design choices, implementation and the results expected of my preliminary evaluation and assessment of a Mobile Technology for School Students with Learning impairment.

Introduction

1.1.Problem Description & Related Work

Recent research estimates that a staggering15% of the world's population may have dyslexia. Dyslexia is the most common learning disability that affects one's ability to read and write. Individuals with dyslexia typically read at levels significantly lower than expected, despite having normal or average intelligence scores. Although the disorder varies from person to person, some common characteristics among people with dyslexia are, difficulties with phonological processing (the manipulation of sounds), spelling, and/or rapid visual-verbal responding. Dyslexia is a life-long condition and its symptoms might vary at different stages in a person's life, but timely and appropriate intervention can deliver significant results. Many intervention methods are currently in use, and more studies need to be done to determine which interventions work best. Research is now focusing among others and on the potential benefits of employing Information and



Communication Technology (ICT) to develop interactive experiences and optimistic learning surroundings, which can motivate and help children, thus helping them address their disability early on and possibly mitigate its various negative effects.

Digital technologies can be used in order to train, assist and even enable the learning process. Specifically designed applications can stimulate students interest, but may also help students with disabilities fit into and progress with in mainstream school environments. Various implementations of ICT in education and learning, have been researched, such as the use of websites as educational motivators for adults with learning disabilities, virtual environments, and computer games, implementations of portable writing aids and configurable wordprocessing environments to support people with writing difficulties. The use of multimedia is also believed to assist dyslexic learners. Multimedia applications do not only allow, but also reinforce the bimodal presentation of information via visual and auditory channels; thus, information processing is accelerated and mnemonic recall is facilitated.

However, much less research has been conducted in the emerging field of mobile learning (m learning). The adoption of mobile phones in the last decade has been explosive, but the potential of using these devices to transform teaching and learning has not yet been fully explored. M-learning is considered to be intersecting with mobile computing and e-learning technologies; it combines individualized learning with anytime and anywhere learning. Mobile learning provides an educational experience, which is altering the nature of knowledge (formal and informal) and is focusing on the user's experience of learning through mobile devices. It provides a wide range of educational and learning material in a uniquely engaging manner (touch-screens), whilst giving them the option to choose from information that will enrich their knowledge and improve their skills. Educational applications for mobile devices motivate the children and engage their attention while focusing on solving problems, improving their memory, their reading and writing skills. In addition to the traditional classroom contexts, the use of advanced technology in the learning process and its assessment through them learning tests enables the learner to develop; the time of use according to his/her needs, by personalizing their experience. M- Learning seems to be favored by students, as it can potentially accommodate a wide range of features and sections, which offer a highly interactive learning experience. It provides a stress free environment that is enhanced by specially designed user-friendly interface. The design and text layout can



eliminate the frustration and confusion, while making the information a much easier source to take in.

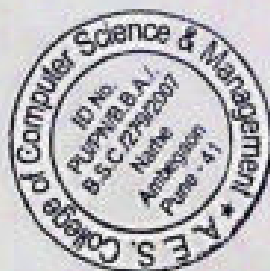
1.2 Research Question

Given the potential benefits of a mobile application for children with special learning needs, will be focused on designing .My goal is to design a mobile application, in collaboration with students, which could potentially decrease their learning difficulties. I attempt to design a stimulating and interactive experience for children, which could encourage the learning process. My focus is to assess the usability of the technology, how it affects experience, its consequences and the abilities it offers to each user. My essential research question (Q1) focuses on analyzing whether a mobile phone application, designed specifically for children, can foster learning and help children with their learning difficulties by improving some of their fundamental skills, such as language and mathematical skills. Additionally, I am attempting to explore the mobile application's ability to improve the learning process, all in an interactive, playful and game like that it engages children's attention (Q2). This would eventually mean that students would use the application as an extracurricular activity outside of the school premises, while maintaining a continuous interaction with the source of the educational process. Finally, from a software engineering and design point of view, I am willing to examine the features and design elements, which are required and utilized, in the best possible way, for an application such as this, in order for it to be appropriate and appealing to children (Q3). All of the above factors will be principally measured as the "usability of the application". In the following sections I present the methodology, environment setup, design choices and the results of my preliminary evaluation and assessment research.

Methodology

2.1 Methodology ,School and Pilot Setup

From start, it was obvious that for the design of such an application, I needed together the most possible input from students and experts in the field. I will be employing an agile methodology that encourages an iterative approach and offers rapid response to change. Differentiating from the traditional software development methodologies, a combination of Agile and Extreme software development methods stresses on the importance of iterative and incremental development, where requirements and solutions evolve though the software development cycle.



The design and development will occur in collaboration with the students and the teaching staff from the "Speech Therapy Center". I will conduct my design and evaluation process during two successive semesters visiting the Center. I am planning to use a mixed method of quantitative and qualitative analyses in order to reveal statistically significant information related to learning outcomes, gains and insights in to the procedure.

Lastly, I will survey the children's parents in order to record their point of view and opinions, offering me helpful information, which help me achieve a better understanding of the environment in which children with dyslexia function in, and the difficulties they encounter every day.

Design Choices

3.1 Analysis&requirements specification

During the "Design Phase "of my application, I will survey addressed to parents with children with dyslexia, aged from 7 to 12 years old. The process relies on carefully chosen questions; based on research and specialized methods, so that I could gather the response data and deliver reliable results. I will develop questions that involved the following areas: demographic characteristics of their children(age, gender, etc.),type of dyslexia the child struggled with, when and where the symptoms will be first noticed, which tasks children had difficulties with, which will be their treatment and their familiarity with ICT and mobile phones.

The survey's questions assess the parent's view point and opinions while offering me a better understanding of the problems and difficulties their children face. The survey will be carried out with 5 parents and the results provided insight main indicators of dyslexia and how parents come to observe and react to the first symptoms.

3.2 Application Design and Features:

The benefits of game playing as a learning process (in a pedagogical perspective) has been widely acknowledged. Current research shows that games designed for mobile devices have considerable potential to encourage learning. Hence, I designed an application as a level based score game that implements a number of puzzles and quizzes(tests).The particular tests included in the application will be selected according to the principles of existing educational methods coupled with the needs of children with



dyslexia .In order to assist the users ,I will be implementing specific techniques based on research and advice from speech language therapists. My goal with the use of these tests, is to develop a positive and optimistic surrounding, by combining the positive effects of the use of new technological tools with the specialized tests that have been suggested and also evaluated by therapists and scientists that have been working in the field of " Specific learning disabilities" or dyslexia.

The application will be structured around four basic categories:

(i)"Words" Category, the goal of which is to support children's reading skills and also enrich their vocabulary, although vocabulary is not considered to be a writing convention; it is a significant contributor to correct writing.(ii)"Numbers" Category, which is aimed at developing and supporting mathematical logic.(iii)"Memory" (visual memory) Category, aims at improving children's short- term memory and concentration.(iv)"Books" Category, a unique section aimed at strengthening children's concentration through reading whilst increasing their interest inreading. Each category will be comprised of three different games, each of which have four levels of increasing difficulty, offering each child the ability to "play" and proceed to the next level in accordance with his other individual needs and learning capacities. The scoring system employs a calculating feature, which is very lenient, in order to enhance children's confidence. In addition, it potentially motivates them to increase their involvement with the application while simultaneously increasing the possibilities of achieving the said goals of the application. All of the games will carefully designed in order to offer the children a suitable and user-friendly interface.

4. Evaluation

The main objectives for evaluating my application are to:

- Observe students interacting with my application in a classroom and under the supervision of their teacher while obtaining qualitative and quantitative feedback. Also, identify design issues and possible breakthroughs (indicating productive new forms of learning or important conceptual change) or breakdowns (where a learner is confused with the technology, is asking for help, or appears to be struggling under a unclear understanding)
- To allow students to use the application without supervision when evaluators purposefully leave the room, in order to engaging or fun and if they would continue to use it outside of the"classroom premises".



5. Results

By evaluating the application with a group of students, my first significant observation will be that all of the student should show their preference in practicing and completing the tests on a mobile device rather than on paper. The application helps children with, avoiding distractions, by targeting their attention on the device's touch screen. A result that will indicate the significance of technology in today learning methods.

Regarding research "Question1", whether a mobile phone application, designed specifically for children, can foster learning and help children with learning difficulties improve some fundamental skills in language and mathematics, although the data is preliminary, I would be able to identify a potential increase in overall scores over a short period of time. Students will be possibly able to enjoy using the application in a game like fashion.

Last, the clarifications and instructions, which will be needed, gave the children the opportunity to collaborate and ask each other what their next action should be. I encourage reading and writing collaboration, since idea scan be contributed while stimulating their imagination, therefore it made important gains in their ability to interact, promoting idea-sharing and cooperating with others.

6. Conclusion

Given the potential benefits of a mobile application for children with special learning needs, I will be focused on designing an application which is directed at improving children's fundamental learning skills through the use of advanced technology (m-learning). The application will be designed and implemented in a two-phase iterative research and development methodology with the collaboration of students and teaching staff at the "Speech Therapy Center". I will be focused on developing a mobile application, which could potentially foster learning and help children with their learning difficulties by improving some of their elementary skills, such as language and mathematical abilities. Although at this stage my present work cannot be conclusive, the preliminary results show the promising prospects mobile learning holds in such contexts a as students showed progress in their overall game performance over a short period of time usage. It is my intention to further continue my research in the field, by testing the application's effectiveness over an extended period to better assess them-learning methods and their outcomes reflected in the user's skill improvements. Lastly, I plan to expand the list of compatible devices and



consider integrating the application in to a tablet, after having evaluated the specific device, out weighing its pros and cons.

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B. A. J.
PRINCIPAL

COLLEGE OF COMPUTER SCIENCE & MANAGEMENT
NARHE-AMBEGAON, PUNE-411 041