DELHI INSTITUTE OF ADVANCED STUDIES
Plot No. 6, Sector-25, Rohini, Delhi-110085
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TECHNO TRYST 2017: DIGITAL TRANSFORMATION: COMPUTATIONAL AND TECHNOLOGICAL ADVANCEMENTS

Contemporary global economies are incredibly affected by the digital innovations and advancements in myriad of technologies today. These innovations have transformed how the organizations operate in this hyper-connected age. What the world witnesses today is the digital economy. Advent of Internet and access to high end computational devices to the masses have made the engineers and industrial researchers look at the ways of upgrading their strategic thinking in terms of customers, competition, data, innovation and value. The strategists need to adapt and optimise the business processes. They must also determine how to harness customer networks, platforms, big data, rapid experimentation disruptive business model and to integrate these into their existing organizations.

Digital transformation is the profound transformation of these business activities, processes, competencies and models to fully harness the changes and opportunities of digital technologies which have an impact on the society in a strategic and prioritized way. Digital transformation can play a significant role in terms of more effective and efficient decision making, better customer experience, product and service innovation, marketing and sales, risk optimization, intelligent information management, customer service and customer relationship management, human resource management and agile operations, workforce enablement, enterprise collaboration, learning and education, procurement and supply chain management.

All these aspects, functions and processes are interconnected and digital transformation has a role to play in various contexts. This enhances the existing applications and operations within the organizations.

Among many, the main elements of digital transformation to enable a business success are change management, digitization, then restructuring organizational silos and creating skills for digital transformation. Change management involves looking at what can be done better and what should be reconnected in terms of processes, technology and people. This can be achieved using techniques such as data analytics, web analytics, new technological concepts, architectures and frameworks such as cloud computing, MEAN (MongoDB, ExpressJS, AngularJS, NodeJS) stacks, Internet of Things, advanced intelligence systems, robotics, mobility technologies and so on. Digitization involves automation of the existing processes and data, and make people as well as processes digital-savvy.

Role of digital transformation spans across all sectors, silos of the industry and governance including utility, retail, banking and finance, business process outsourcing and so on. Besides

corporate world, the governments are also facing disruptive challenges in their various departments such as public healthcare, transport, public infrastructure, policing and defence, citizen services or regulation, smart city development plans and others.

Studying the profound advantages and wide scale applicability of digital transformation in terms of computational and technological advancements is therefore an utmost area of research.

In this context, Delhi Institute of Advanced Studies has organized a national seminar, "Techno Tryst 2017: Digital Transformation: Computational and Technological Advancements" on 25th March 2017 to corroborate technology advances and innovations by the intellectuals from academics, government sectors, and industry that play a key role in bringing digital transformation and making our cities smarter and more effectively livable. The seminar has also given the participants an insight on various aspects of evolving technologies for digitizing India and technological advances in Internet Governance and Internet of Things. The focus of the conference is to bring forth and provide a platform to deliberate upon the technological and computational advances in Digital Transformation, significance of digital transformation in Internet Governance and Internet of Things, novel technological ideas for smart city development and digitizing India, and the challenges in adopting the innovative technologies.

INAUGURAL SESSION

The seminar started with inaugural session that was presided over by the Chief Guest, Professor Yogesh Singh, Honorable Vice Chancellor, Delhi Technological University and the Guest of Honour, Mr. Praneeth Pentakota, IT Business Partner, Philips Lighting, Philips India Ltd. Dr. S.N. Maheshwari, Professor Emeritus and Academic Advisor, DIAS and Dr. N. Malati, Director, DIAS.

WELCOME ADDRESS BY

DR. S. N. MAHESHWARI,

PROFESSOR EMERITUS AND ACADEMIC ADVISOR, DIAS

Digital technology is one of the globally-tested chief drivers of economic growth. The pace at which people are taking to digital technology defines our stereotypes of age, education, language and income. In this digital age, we have an opportunity to transform lives of our people in ways that was hard to imagine just a couple of decades ago. Today digital technology is seen as a means to empower and as a tool that bridges the gap between hope and opportunity. Now it is not important whether you are awake or asleep but whether you are online or offline. It has, therefore, been rightly said that "Building I-ways are as important as building highways".

Digital Technologies are changing the face of business. This change is accelerating at a pace faster than transformation in the Organizations. Organizations now need to evolve strategies to address

the changing business landscapes to give optimum results in terms of business innovation and continuous improvement. These strategies should aim to create the capabilities of fully leveraging the possibilities and opportunities of new technologies and their impact faster & better in the future. Digital technologies are now completely revolutionizing and transforming business activities. As a result some people prefer to use the term "Digital Business Transformation" rather than simply the term "Digital Transformation". Digital transformation is thus acceleration of business activities, processes, competencies and models to fully leverage the changes and opportunities of digital technologies and their impact in a strategic and prioritized way.

In view of the above it is now correct to say that digital business transformation is the ultimate challenge in change management. It impacts not only industry structures and strategic positioning but it affects all levels of an organization (every task, activity, process) and even its extended supply chain. Business leaders must, therefore, constantly update and innovate their organizations' infrastructure to ensure that they can both unlock productivity gains and significant competitive advantage besides delivering exceptional customer satisfaction.

In this context, it may be pertinent to mention here that our Honorable Prime Minister Mr. Narendra Modi had launched "Digital India Programme" on July 1st, 2015. The main objective of the Digital India Programme is to improve the service delivery to our citizens, business, government employees and others by blending information and communication technology with administrative reforms. In the programme, there is an ambitious plan to build 100 smart cities across the country, making them citizen friendly and sustainable. Our Honorable Prime Minister Mr. Modi had quoted:

"Cities in the past were built on river banks. They are now built along highways. But in future they will be built on availability of optical fiber networks and next-generation infrastructure".

Dr. Maheshwari introduced the guests to the august audience.

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INAUGURAL ADDRESS BY

PROFESSOR YOGESH SINGH, HONORABLE VICE CHANCELLOR,

DELHI TECHNOLOGICAL UNIVERSITY

Everyone is talking about Digital India. Our Prime Minister has also said about Digital India. He has some vision about digital transaction, issues related to digital- cyber world and after it is returned to two important things computational and technological advancements.

In 2001, there were issues related to IT and its applications, IT Bubble-Burst or so many words were coined. Everyone was thinking about the future of IT. Many companies in US became bankrupt, many people came in trouble due to the sudden demise of confidence in IT and its applications. AT & BELL laboratories are used to be one of the fine companies of the world, they were in the business of networking, company were laying cables in the sea, they wanted it to network the world, they did it also but they could not have developed the business model out of it and unfortunate situation happened. The whole IT sector of US and some of the European countries came in trouble but we are the beneficiary of that trouble, because cables were available, many other things were available and many things were available and then new business applications were developed and as a nation we took advantage of that. Now after 15 years when we talk about the advancements there are some historical reasons. Similarly, when it happened with electricity, when electricity was discovered nobody would have thought about. Everybody was talking about captive power plant. It means that there is an industry, we know how to produce electricity, we

will produce electricity which will be use in a particular reason. In those days, nobody would have thought of providing such large size electricity grids. Now in India also, we have northern grids, Southern grids, Eastern grids and if there is no requirement of power in northern India, electricity can be transferred to southern India. Everything is connected so these two important things, Internet, where we have connected the whole globe and prior to that electricity which connected all houses in a particular nation but there is a difference it is difficult to store electricity but here we are storing data, we are analyzing data, developing business applications on a data, integrating various technologies. An example of google maps, So much billion of instructions are being processed on a real time data and it is also accurate. At technological advancements things are happening at a faster pace but the point is we have to find and create our role in such technological advancements. This is very important. Google maps are only two years old systems and is best human produced technological integrated system. One should understand the working because this working will provide not many seeds but the grounds of many upcoming invitations in next five years. We really do not know what will happen. So these are the pillars of modern automated civilization. One is electricity and other is Internet.

Now people are talking about Internet of Things, It means what sensors will play is very important role. Now we can't imagine a day without cellphone or without sending a mail, WhatsApp. First physically we connected and now on those highways we all are connected, we can use in our own ways and means and try to develop business applications there. But worthy is not that whether we want it or we don't want it is going to happen. We have to create our own space here as a nation, as an individual, both. Ours is very highly populated country of 125-130 crore people. When it comes to import below of our country, maximum we are spending on oil import and second largest bill is on electronic import. Can this be sustain for very long time, no it is not possible, nation cannot afford, cannot sustain. We don't even produce a single

chip in our country and India is a second largest technology user country in the words. 125-130 crore people cannot sustain on imported technologies, we have already survived for 70 years after Independence but now time has come where we must create our role because India without technology cannot survive. Technology should be on our side. In last 300-400 years we have suffered because of lack of technology, technology is not good or bad but it should be on our side, never be on other side and if it is on other side then square of technology should be on our side, we have lost so many wars not because of bravery, not because of strategy, management principles, good leaders but because of lack of technology. One point has rightly said "Charkhon se nahi lada jata, seema par sholon kea age, ramayan nahi padhi jaati yuddhon mein topon k aage". When someone is using technology is using technology we should have that technology but we cannot survive on a borrowed technology all the time. This is a real situation which we have to address somewhere. Last year TIMES OF INDIA, published a news, news was "India's GDP share inverts

GDP has doubled. GDP- Gross Domestic Produce means what is the value of services and goods produce in a financial year. Times of India published this news very proudly. They published India's GDP share has doubled in last 15 years. Everyone should be happy about it right? But no, doubled means what it is a mathematical jargon. In 2001our GDP share inverts GDP, GDP was 1.43%, Now in 2016 it has become to 2.83%. 2.83% inverts GDP, Yes it has doubled no doubt. In last 15 years of the world we contribute to 18% of the world's population. So our share should be 18%. Sometimes these news they are indicative, they are telling our people that it has doubled but only 2%. But the statistics shows where are we today and why are we today 2.83 % is nothing for the country of 130 crore, because when we brought independence in 1947 it was 1%, 1947-2001 was only 1%, 1% to 1.43% and another 15 years to 2.86% and when we got independence we were 33 crore including Pakistan and Bangladesh, now we are 125 crore excluding Pakistan and Bangladesh. 1%-1.43% and 2.83%. Imagine the situation where we are but this situation is because of lack if technologies, because lack of innovation and discoveries Another Statistics show that in 1835 our GDP was 16% of world's GDP, US was 2%, China was 20%. Now in 2016, US has increased from 2% to 21%. We have reduced to 16% to 2.83%. The situation has changed drastically. Prior to 1835, our share was 23%, China's share was 28%. It means the two old civilizations of the world we are contributing to more than 45%. 31st Dec 1600, When east India company was established and prior to 1600 BC to 1300 AD, India could maintain 36% share of GDP. What has happened in 1835. 1835 lord Macaulay father of modern education system introduced a billion British parliament for the establishment of modern education system in India and based on his recommendation, three universities were established, University of Mumbai, University of Madras, University of Calcutta in 1857. When he was proposing Modern education system in British parliament he said that "I have travelled across the length and breadth of India, and I have not seen one person who is a beggar or a thief. Such wealth I have seen in this country, such high moral values. People with such caliber. I don't think we could ever conquer this country unless we break the very backbone of this country, which is her spiritual and cultural heritage and therefore I propose that we replace its old and ancient education system, her culture, if Indian thinks that English is good and greater than all they will lose their self esteem, their native culture and then they will become dominant nation as we want".

He concluded by saying that Vivekanand has said similar things that "My dear fellow countrymen, please come out of low self esteem, if others can do it, you can also do it. You are not second to none". This type of confidence Vivekanand wanted to impose on India.

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KEYNOTE ADDRESS BY GUEST OF HONOUR

MR. PRANEETH PENTAKOTA

Mr. Pentakota discussed the power of social media and the power of digital revolution which has been brought through twitter, amazon, facebook etc. Social platforms brought crores of products at user's end and thousands of customer reaches every day for different products but they should ensure their experience with the companies, so that's the concept of whole user experience can be managed. There is a whole unit, which is working on it. We can compare with tata click and new e-commerce site running today. With the quick growth of the Internet, many companies are finding new and exciting ways to expand their business opportunities. To the average web surfer, e-commerce means online shopping. Internet surfers go on the web purchasing anything from books to movie tickets.

He futher asked "How many of you purchase something online or booked a flight"? Have you ever had issue with a product and write it to the brand, where they can't replace it on time or you frustrated and left the comment on the site like facebook, twitter. Brands like us, i.e Philips invest on social listening.

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VOTE OF THANKS BY DR. N. MALATI,

DIRECTOR, DIAS

Digital transformation is the profound and accelerating transformation of business activities, processes, competencies and models to fully leverage the changes and opportunities of digital technologies and their impact across society in a strategic and prioritized way, with present and future shifts in mind. Digital transformation has created a rapidly changing business environment and is disrupting value chains and compelling companies to rethink nearly everything they do.

It is seen a journey with multiple connected intermediary goals, in the end striving towards continuous optimization across processes, divisions and the business ecosystem of a hyper-connected age where building the right bridges in function of that journey is key to succeed. A digital transformation strategy aims to create the capabilities of fully leveraging the possibilities and opportunities of new technologies and their impact faster, better and in more innovative way in the future. The core changes that it brings to the system include augmenting traditional business models, emergence of wholly new types of business models and offer better customer experiences, streamline operations and increase profitability

Dr. Malati, thereafter, welcomed the esteemed guests to the seminar and extended her heartfelt thanks to them for gracing the occasion and sharing their knowledge and experiences with the audience.

TECHNICAL SESSION I

The technical session 1 was chaired by Dr. P.K. Saxena, Scientific Consultant (Cyber Security), Office of the PSA to Government of India & Former Director, SAG DRDO (Ministry of Defence). The speakers deliberated on topics like E-governance, digital authentication, image processing, data analytics and big data, and Internet of Things.

ADDRESS BY

DR. P.K. SAXENA,

SCIENTIFIC CONSULTANT (CYBER SECURITY)

FORMER DIRECTOR, SAG DRDO (MINISTRY OF DEFENCE)

Dr. Saxena elucidated the advances in IOT and its applications. There are millions of devices that we are using, automation of lightning systems in our houses is a good example of it. Whenever these automations happen, it facilitates smooth working of day-to-day life, but with this advancement there always remains a concern for the security. For an example, web cameras that we use may connect when we demand remotely but they can also be controlled by an unauthorized person through hacking for some unethical purpose. There are reports about few brands of LED bulb of Philips. It is reported that these bulbs are vulnerable. They can be controlled remotely and there illumination is so adjusted that exposure to this for certain duration leads to epilepsy. So, this is a threat to our health due to the vulnerability of these home appliances. Similarly, many other

devices which we use at our home will also remain a concern, unless there is a thorough analysis of the system to find out the loop holes in the security and to device a mechanism which can make them hacked proof.

Finally, he concluded that security becomes the paramount importance whenever we talk about digitization, because of our privacy, health, social engagements, etc.

ADDRESS BY

MR. ANKIT GIRI,

FOUNDER & CEO, EDUCATION360

Mr. Ankit talked about IoT, security risks and challenges. A simple IoT device has actually multiple stages to it and actually has multiple interactions with it. There is a user and a device that directly interacts with each other but the device at the end of it does interact with some gateway or the communication channel. It does have some connection as in we might be connecting it to our laptop to get some data from the smart watch or something. Similarly, that smart watch will be uploading some data to the cloud such as your mobile application or something. He better explained with the example, the Philips toothbrush that was showed (the Sonic), it is a similar thing where some data is being uploaded to the cloud and we are able to manipulate some of the data and use a device accordingly. In the direction of technological advancements, everybody

wants its devices to get connected to the internet. Moving further, the hardware of these devices are big blaming factor or they are the major concern factor for IoT industry so far. IoT devices, likely to be compact, light-weighted and portable. The focus is never on the security part, instead on the functionality. So that is where the whole of the issue arises. The industry needs to pay more focus on the security of the devices rather than only focusing upon the functionality.

M-GOVERNANCE IN FACILITATING TELECOM CONSUMERS IN INDIA

DR. RAKESH GUPTA,

SENIOR TECHNICAL DIRECTOR, NATIONAL INFORMATICS CENTER

MR. VIVEK GUPTA,

TECHNICAL DIRECTOR, NATIONAL INFORMATICS CENTER

MS. RAMYA RAJAMANICKAM

SYSTEM ANALYST, NATIONAL INFORMATICS CENTER

Mobile phone usage has increased drastically over the past decade. Growth in mobile Technology opened up new opportunities not only for development but also for spams and unsolicited commercial calls. India being the fastest growing mobile subscribers market with 936.46 million subscribers faces hindrance along with possibilities. TRAI (Telecom Regulatory Authority of India) is proactively and constantly working towards curbing of UCC (Unsolicited Commercial Communication) which has increased dramatically with the growth of Telecom Industry.

Now-a-days m-governance is the most preferred way of providing citizen centric services in the country. TRAI released its "DND (Do Not Disturb) Services" mobile app in the direction of curbing UCC. This move came as a result of the increasing unsolicited commercial calls. Through this app TRAI sets to handle concerns like making consumers choose their preference of UCC messages they wish to receive or block, partial / complete blocking, escalation / resolution of complaints with in stipulated time frame and communication to customer regarding their complain status, etc. In this paper, we explore the potential and possibilities of DND app in playing a vital role in building a smart city.

DND service is an application that is made for handling UCC calls and text messages which are not only unwanted but disturbing also. Subscriber can activate the DND by using this app. This paper investigates circumstances under which citizens' move forward and uses mobile technology to bridge the gap between the government services and its reach to the citizens. In general, the adoption of modern technologies depends on its usage and how far it reaches out to its consumers equating the success story of such innovative step.

EDI IMPLEMENTATION IN CARGO SECTOR AT INDIAN AIRPORTS: ISSUES AND CHALLENGES

DR. REENA SETHI,

PROFESSOR, DELHI INSTITUTE ADVANCED STUDIES

EDI is successfully being used world over to improve cargo sector competiveness in trade. Air cargo is a vital facet of India's growing trade with an impressive cargo traffic growth from 91.8 metric tons in 2010-11 to 153.5 metric tons in 2015-16. This article presents status of EDI implementation at various important airports in India handling cargo operations. It has been observed during the study that for imports, RMS bills are mostly cleared by Customs using EDI. However, for exports, at present issues are being faced like payment of customs duty through the banks in EDI. The linkages of EDI with systems of trade partners is in place but 100% message exchanges as envisaged is yet to be achieved. At some joint venture major airports, EDI implementation between Customs and Custodian is in place for Export/Import operations through Cargo Management System developed by airport operators. This system is capable of integrating with airlines, exporters/importers, freight forwarders and customs brokers. EDI Message exchange between all regulatory authorities involved in the air cargo supply chain is not happening leading to manual process at some stages, thus delaying cargo clearances. EDI of different allied agencies are not completely inter-linked. Banking Gateways for online transfer/payment are not available 24*7 hours. This paper highlights impediments in implementation of EDI in Indian cargo sector and suggests some policy interventions required.

AN IMPLEMENTATION BASED COMPARATIVE ANALYSIS OF VARIOUS VULNERABILITIES

IN ONLINE FORMS

MR. ASHISH PAHWA, MR. ADITYA DHAWAN, STUDENTS, VIVEKANANDA SCHOOL OF INFORMATION TECHNOLOGY, DELHI

DR. DEEPALI KAMTHANIA,

ASSOCIATE PROFESSOR,

VIVEKANANDA SCHOOL OF INFORMATION TECHNOLOGY, DELHI

In the present scenario web-baseda applications are used for business transactions, which are vulnerable to SQL injection and web spam, as the inputs they use to construct structured output are not sanitized. SQL injection allows an attacker to inject commands directly to application's database server, alter its functionality and fetch confidential data by obtaining unauthorized access. On the other hand, botnet spam attacks may cause a business to lose billions. In this paper an attempt two types of online form vulnerabilities have been discussed and the proposed algorithm for SQL injection and spambots attacks have been implemented using Selenium, jQuery and Python and results are presented.

PREVENTION OF IMPERSONATION IN EXAMINATION SYSTEM

MS. AISHWARYA KUMAR ARORA, MR. ALOK MISHRA,

STUDENTS, KIIT COLLEGE OF ENGINEERING, GURUGRAM, HARYANA

DR. KANIKA KAUR,

ASSOCIATE PROFESSOR, KIIT COLLEGE OF ENGINEERING, GURUGRAM, HARYANA

Impersonation of the candidate is a serious problem in examination system often referred to as malpractice. Hall ticket and identity cards are normally used in the examination system for fraud detection. Existing examination system mainly deals with document analysis for identification, recognition and classification of the candidate appeared for the examination. Generally fraud is detected by using document image analysis whereas the proposed model is focused on the automatic image capturing for analysis.An image capture system with embedded computing can extract information from images without need for an external processing unit, and interface devices used to make results available to other devices. The choosing of an embedded platform is very unique and easy to implement. In this paper an attempt is made to describe automated face plus barcode detection and recognition for detecting impersonation of candidate in examination system. Automated face plus barcode detection and recognition can further be used in identity verification and attendance monitoring in examination system.

SURVEY ON APPLICATIONS OF INTERNET OF THINGS (IOT)

MR. SHUBHAM SHANDILYA, STUDENT, KIIT COLLEGE OF ENGINEERING, GURUGRAM, HARYANA, INDIA

MS. SARUCHI GUPTA,

ASSISTANT PROFESSOR, KIIT COLLEGE OF ENGINEERING, GURUGRAM, HARYANA, INDIA

The phrase internet of things (IOT) heralds' vision of the future internet where connecting physical things, from bank notes to bicycles, through a network will let them take an active part in the internet, exchanging information about themselves and their surroundings. It will help to transform real world objects into intelligent virtual objects. This will give immediate access to information about the physical world and the objects in it leading to innovative services and increase inefficiency and productivity.

The aim of IOT is to connect everything in the world to each other so that we can have a common infrastructure which will not only allow us to have control of things, but also it will keep us informed of the things. The concept of a network of smart devices was discussed as early as1982, with a modified coke

Machine at Carnegie-Mellon University becoming the first internet-connected appliance and the first application of IOT to be applied. The main objective of this paper is to provide an overview of applications of IOT which can be implemented in our daily life.

DIGITAL AUTHENTICATION AND ITS APPLICATIONS IN IOT

MS. CHARRU HASTI,

ASSISTANT PROFESSOR

DELHI INSTITUTE OF ADVANCED STUDIES, NEW DELHI MS. GARIMA RAWAT, MS. KIRAN, STUDENTS,

DELHI INSTITUTE OF ADVANCED STUDIES, NEW DELHI

Today most of the businesses and government organizations utilise networks communications to perform their routine operations. Hence, the maintenance of their networks mainly the security of their networks is crucial. Digital authentication is a major goal of the network security that involves the verification of the sender data. This paper inspects the various authentication systems available for security that establish confidence for the individual's identity. This paper also briefly describes authentication, its types, existing techniques and applications in IOT. Through this, we have tried to find out the limitations of digital authentication techniques by comparing and analyzing the existing techniques for digital authentication.

FUTURE GENERATION WITH 5G - A COMPLETE WIRELESS APPROACH OVER 4G

MS. ANJANI GUPTA,

ASSISTANT PROFESSOR,

DELHI INSTITUTE OF ADVANCED STUDIES

MS. GARIMA PANDEY, MS. ASHU PAL

STUDENTS,

DELHI INSTITUTE OF ADVANCED STUDIES

Cellular industry is growing at a rapid pace, therefore they are busy with the standardization of the existing networks. The search for a new technology is always the main concern of the foremost cell phone companies to out innovate their competitors. This fast revolution in mobile computing brought the 5th generation (5G) wireless network. The main purpose of the fifth generation wireless technology (5G) is to design the ultimate wireless world that is free from limitations and impediments of the previous technologies. This paper focuses on all preceding generations of mobile communication along with fifth generation technology. Fifth generation network provide affordable broadband wireless connectivity (very high speed). In fifth generation researches are being made on development of World Wide Wireless Web (WWWW) that will support IPv6. Fifth generation technology will offer the services like Documentation, supporting electronic transactions (e-Payments, e- transactions) etc.

TECHNICAL SESSION II

The second technical session was chaired by Mrs. Usha Saxena, Technical Director, NIC. The speakers deliberated on topics like E-governance, software engineering tools, virtual reality, data analytics and big data, and digital money.

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ADDRESS BY

MRS. USHA SAXENA,

TECHNICAL DIRECTOR, NATIONAL INFORMATICS CENTRE

Mrs. Usha Saxena discussed the importance of digital transformation in our lives. Today, nothing is untouched from digital aspect. The government of India and NIC started Digital India program which is the flagship of the Prime Minister's vision that the country should be digitally empowered. There is 65% of the youth population which is very aware of it and all of them have the know how of the digital use, at least the basic knowledge about what to do and what not to do and all.

She further talked about the things, that are essential to progress. Whatever the students are studying in, whichever aspect of the internet or the human technology people will take, whether they are going to big data or cloud or cyber security or whatever stream they pick up, do in best possible way, because there are lots and lots of job opportunities waiting for them. But most of the time the employer won't be able to get the right person for the job, even if there are surplus people who know things, but in depth knowledge and expertise really needs to be turned up.

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ADDRESS BY

MR. SANJAY YADAV,

TECHNICAL MANAGER, HCL TECHNOLOGIES LTD

Mr. Sanjay elucidated the advancements in digitalization that have driven up the efficiency in operational paradigms among various corporate and institutional users of technology. The Internet is transforming the conventional urban and rural planning models and compelling the planners to regard the deployment of Information Technology as the efficiency drivers of the economy, environment, mobility and governance of an area. Indian cities must develop sustainable partnerships and cooperation strategies for ensuring the effective sharing of common city resources among citizens and businesses. Utilization of high speed cost effective networks, using smart devices, developing energy efficient infrastructure and applying latest developments in cloud computing and the emerging IoT, open data, semantic web, and future media technologies would make cities grow smarter.

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AN OVERIVEW OF THE STATE-OF-THE-ART SOCIAL ENGINEERING: ATTACKS AND THEIR MANAGEMENT

MS. NIDHI SRIVASTAVA,

ASSISTANT PROFESSOR

INSTITUTE OF INFORMATION TECHNOLOGY AND MANAGEMENT, NEW DELHI

The term "social engineering" (SE) has gained wide acceptance in the Information Technology (IT) and Information Systems (IS) communities as a social/psychological process by which an individual (called attacker) can gain information from an individual (called victim) about a sensitive subject. This information can be used immediately to by-pass the existing Identification-Authentication-Authorization (IAA) process or as part of a further SE event. Social engineering methods are numerous and people using it are extremely ingenious and adaptable. Nonetheless, the field is new but the tactics of the attackers remain same. Therefore, this paper provides an overview of the current scenario in social engineering and the security issues associated with it.

STUDY OF VARIOUS PRIVACY THREATS AND METHOD TO SECURE THE DATA ON SOCIAL NETWORKING

DR. BARKHA BAHL,

PROFESSOR & HOD,

DELHI INSTITUTE OF ADVANCE STUDIES, NEW DELHI

MR. RAHUL AGGARWAL, MS. AKANSHA AGGARWAL STUDENTS,

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Internet is one of the most efficient and effective ways to communicate and share the information especially in terms of social networking sites. With over billions of users connected through online social network and due to the popularity of social networking sites, more people are concerned about the privacy and it has become an important issue. The focus of this research work is to provide security on social networking sites and analyze the personal information being influenced by internet and social network and also to study various privacy risks and ways to avoid these privacy risks.

SOCIAL NETWORKING SITES – A POWERFUL TOOL TO ENHANCE EDUCATION SYSTEM:

A CASE STUDY OF POST GRADUATION STUDENTS OF DELHI

MR. PRASHANT KUMAR,

ASSISTANT PROFESSOR,

BANARSIDAS CHANDIWALA INSTITUTE OF PROFESSIONAL STUDIES, NEW DELHI

MS. SUSHMA MALIK,

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WWW (World Wide Web) has changed the methods of communication for retrieving the information. We are living in the electronic world, where contact someone, sharing thoughts as well as opinion is just one click away. SOCIAL NETWORKING SITES are the place of communication for the people in which they share and exchange information and thoughts in different communities and networks. Social networking sites have made it possible for us to chat with friends who live apart in distant places as well as they share with them pictures and videos. Social networking sites are websites that make online place where people from all over the world can meet and share common interests by setting up a "profile page". Face book, Twitter, MySpace, LinkedIn etc are the example of SOCIAL NETWORKING SITES and nowadays, it is very hard to find a youngster who doesn't have an account on these sites. These sites are use to keep in touch with each others, to express or share what they have in mind and to use for study -related purposes. The purpose of this study is to examine the Perceptions of Post Graduate level students of Delhi about the use of SOCIAL NETWORKING SITES in Education. The study is conducted through the Questionnaire.

IMPLICATIONS & FUTURE TRENDS IN THE COST-ESTIMATION MODEL

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Cost-estimation is a major part of every type of the projects management. Precise Cost-estimation helps us to finish the whole the project within time and budget. Cost-estimation become very powerful as it may lead to unfavourable results if the forecast estimates are wrong. The cost-estimation model is based upon the size-estimation of the project, which works on lines of codes (LOC) and function point (FP)s (FP) as metrics. The Software researchers are providing many Cost- estimation techniques for several decades. There are various techniques for executing the software cost-estimation, which includes expert judgements and algorithmic models. This paper supplies an overview of existing software cost- estimation models and its techniques. For this work, we have knowledge of all obtainable techniques and the tools. This paper focuses on the common overview of Cost-estimation dissimilar techniques and metrics including latest trends in this field.

Virtual reality is computer generated simulation of a three dimensional image or environment that can be interacted with a person using software. Virtual reality uses different software and virtual

devices to replicate a real environment. This paper provides a short survey on virtual reality technology. It describes a historic view of VR. The paper then focuses on enabling technologies, applications in virtual reality, and virtual reality devices. The paper then proposes a few more applications where the virtual reality technology can be put to use. The paper also summarizes the security issues and challenges faced in implementation of secure virtual reality applications.

CASE STUDY ON ISSUES AND CHALLENGES FACED BY PAYTM

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The case study pose a strategic question on whether the Paytm will be able to survive in future or not. Whether they have scope in future or they have to shut down there working. The case study shows the problem and issues which are faced by the Paytm during its working. This case study also shows the losses which is faced by the company due to frauds in internal management and also how they lose the confidence of their customers. Digital payments & commerce platform Paytm saw its net losses climb four fold to Rs 1549 crore for the year ended 31st march 2016,

according to documents filed with the registrar of company the company had reported a loss of Rs 372 crore a year ago in 2015 compared to a profit of over Rs 5 crore during financial year ended 31st march 2014 as cashbacks, marketing & discounting have hit the company over the past two years.

A STUDY ON CONSUMER DURABLE PRODUCTS WITH INFLUENCE OF DIGITAL MARKETING IN LLOYD'

RICHA ARORA,

ASSISTANT PROFESSOR,

DELHI INSTITUTE OF ADVANCED STUDIES, NEW DELHI

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Digital Marketing is a collective name for marketing activity carried out online, as opposed to traditional marketing through print media, live promotions, and TV and radio advertisement. The rapid growth of Digital Marketing Industry is a direct consequence of the global phenomenon that is the Internet, and effectiveness of Digital Marketing channels in generating revenue and awareness. "Marketing is the management process responsible for identifying, anticipating and satisfying customer requirements profitably." Lloyd Group is an established diversified Engineering Group with a history of over 60 years in business excellence. It is an acknowledged name in Heating, Ventilation, Air Conditioning & Refrigeration (HVAC & R), Defence Equipment and Consumer Durables. The main purpose of the study is to analyze the approach which helps them to get more business and to study the growth of Digital Marketing. To meet the objectives, the study used qualitative research. The descriptive study was done through a review of existing literature that helped in validation and extraction of the important variables and factors. Lloyd is a consumer durable product brand which shows the complete process of how they work at each functional level, especially about the Digital Marketing as it entered this platform recently. It is a basic process for which intensive research is to be conducted to find out the target audience, clients, etc. The business development process starts from research and ends at project closure. This project has made clear the various key- points which are to be considered in promoting and selling a consumer durable product online.

THE COMPARISON OF MACHINE LEARNING MODELS TO PREDICT INDIAN INFLATION RATE

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Inflation Index is one of the most important measure of a country's financial growth. It reflects the market conditions of an economy and helps measure and regulate the market, to suit the economy. Prediction of inflation index plays a vital role in planning of cost models for the corporates. This prediction is important and difficult task, as it requires analysis of time series by the Reserve Bank. Government's Policies are affected by the changes in purchase power of Rupee and Inflation Index. The research reported in this paper aims to investigate and compare the potential of artificial neural networks (ANN) and other machine learning techniques such as Logistic Regression, K-Neighbors, SVM (support vector machine)etc. in solving the forecasting task as a general case, when the time series inflation index (annually) is provided i.e. using the previous year's data . In this Researcher paper, we have considered several economic variables of which, we have tried to cater few data parameters by checking their dependency on the inflation index. This dependency is evaluated through Correlation factor. The comparative analysis through RMSE (root mean squared error) leads to the conclusion that which of proposed models can be successfully applied to forecast the financial data. Proposed models are implemented through Open source libraries in Python: Sklearn and Tensorflow, which provides precompiled tools for scientific analysis of data.

VOTE OF THANKS BY

DR. BARKHA BAHL

EVENT IN-CHARGE

Dr. Barkha Bahl, the Event In-charge extended her heartfelt thanks to the distinguished guest for agreeing to be the Chairperson & gracing the occasion. She also thanked all the paper presenters for sharing their work, findings & opinions. She expressed hearty thanks to Dr. S.N. Maheshwari, Professor Emeritus and Academic Advisor, for developing the culture of organising conferences, FDPs and seminars in the institute and also for being the guiding and inspiring force behind all the activities. She thanked Director, Dr. N. Malati, for providing continuous support and encouragement.

Dr. Bahl expressed her deep sense of appreciation to the co-coordinators, Ms. Charru Hasti and Ms. Anjani Gupta for their involvement and willingness to take on the completion of tasks beyond their comfort zone for organizing the event right from the beginning. She thanked her colleagues and staff members for their whole-hearted support. Lastly, she thanked the sponsors and all the students for participation in the coordination of the event and being patient listeners and expressed her expectation to receive the same efforts from all in the future events to come.