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NATIONAL SEMINAR TECHNO TRYST 2015: INNOVATIONS & CHALLENGES OF INFORMATION TECHNOLOGY

The penetration and massive progress of Information Technology (IT) has drastically altered our lives for the past few years. Life has become much less manual and a lot hassle-free for people all around the globe that have active access to the innovations of information technology.

Information Technology innovation can be defined as the creation and new organizational application of digital computer and communication technologies. IT innovation can take many forms. For instance, it can be used to turn business processes into automated IT functions, develop applications that open new markets, or implement desktop virtualization to increase manageability and cut hardware costs. There are four key technologies that have converged to drive innovation: social networking, mobile computing, big data analytics and cloud computing.



The era of innovations has ushered in a wealth of opportunities to advance science, improve health care, promote economic growth, reform our educational system and create new forms of social interaction and entertainment. To compete in a globally-integrated economy, today's organizations need a comprehensive understanding of markets, customers, products, regulations, competitors, suppliers, employees and more. This understanding demands the effective use of



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information and analytics offered by big data. The capabilities of big data enable management of large multi-structured data and provide analytic applications to improve decision making across the organization. Big data environments require clusters of servers to support the tools that process the large volumes, high velocity and varied formats of data. Cloud computing offers a cost-effective way to support big data technologies. Social media has provided a platform for business to directly access a global audience. The scope of social networking sites is not only limited to business. It also facilitates better student learning, awareness and networking with outside world. Due to increasing internet connectivity and rapid adoption of mobile devices, social networking has migrated to mobile platform.

Yet these opportunities bring with them increasing challenges related to data security and privacy. The network is becoming more complex, with different applications being deployed, and external devices and solutions interfacing with it. The technology stack also poses a potential information security risk for organizations, as they open more doors for hackers to enter and cause damage. New technologies are opening more doors for information leakage, so organizations need to revisit their security policies regularly, have more stringent controls over access rights and re-define authentication mechanisms.

Delhi Institute of Advanced Studies organized a seminar, "Techno Tryst 2015: Innovations and Challenges of Information Technology" on 14 March 2015 to corroborate innovative thoughts in the IT field by intellectuals from academics and industry as well as to give the participants an understanding of the recent and upcoming innovative developments in information technology. The focus of the seminar was, therefore, to discuss at length the innovations and challenges of Social Networking, Mobile, Analytics and Cloud (SMAC).

The conference started with the inaugural session which was later followed by Technical Sessions I and II.



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INAUGURAL SESSION



The inaugural session commenced with lighting of the lamp of knowledge by the Chief Guest, Shri Akshay Bhargava, Head PMO Government ISU, Tata Consultancy Services, The Guest of Honour, Shri Gulshan Kharbanda, Director and CTO Progressive Infotech, Dr. S. N. Maheshwari, Professor Emeritus and Academic Advisor, DIAS and Dr. Barkha Bahl, Director, DIAS.

This was followed by the welcome address by Dr. S. N. Maheshwari.



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WELCOME ADDRESS BY

DR S. N MAHESHWARI,

PROFESSOR EMERITUS AND ACADEMIC ADVISOR, DIAS



Information Technology is one of the globally-tested chief drivers of growth. It plays a significant role in running a borderless economy today. It not only empowers us to do what we want to do, but also makes us creative and productive. Mr. Steve Ballmer, former Microsoft CEO, once correctly said, "Information Technology lets people learn things they did not think they could learn before." In a way the story of Information Technology is all about human potential.

It is to be noted that many countries, especially those in the developed world and some of the developing countries, are putting in place policies and plans designed to transform their economies into an information and knowledge economy. As a matter of fact, the revolution taking place in Information Technology has been the central and driving force for the globalization process and has resulted in dynamic changes in all aspects of human existence. Today as a result of Information Technology revolution, national boundaries between countries and continents have become indistinct. Information Technology today is being treated as the tool for the post-industrial age and the foundation for a knowledge economy.



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It is now a well-accepted fact that complexities with regard to the management, governance and compliance of businesses have increased manifold. In this vibrant context, the surge of information technology, adds to the efficiency of business executives. At the same time, it opens for the entrepreneurs new possibilities in the emerging areas of knowledge economy. Information Technology based domain eg. Social Networking, Mobile Computing, Big data Analytics, Cloud Computing, XBRL, ERPL Control Design and Implementation, Cyber Forensics and Forensic Accounting, Information System Audit, E-Commerce, M-Commerce, E-Governance etc. have amazing offers in their kitty for the well-educated and trained information technologists. To be successful, they have to be constantly innovative and visionary to ensure that their enterprises do not become laggards and ultimately may have to opt for shut out.

It will be pertinent here to quote Prof. Peter Drucker: "The enterprise that does not innovate inevitably ages and declines and in a period of rapid change, such as present, the decline will be fast".

Information Technology through its growth, development and innovation has become a mixed blessing. It has given speed, pleasure, joys to the younger generation but also deprived them of peace, pleasures and susceptible to cyber frauds and burning out soon.

INAUGURAL ADDRESS BY CHIEF GUEST

SHRI AKSHAY BHARGAVA,

HEAD PMO GOVERNMENT ISU

TATA CONSULTANCY SERVICES





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Mr. Bhargava inaugurated the conference by his words of wisdom. He put light on the impact of technology on the human life.

Use of technology has increased manifold in the recent years; massive progress has been made in this field of Information Technology. With the rise in IT innovations, our lives are now completely dependent on technology in ways which we could not have imagined even a decade ago. Despite the numerous positives we attain from these advancements, a critical matter that seems to be surfacing in our lives is our values. Such progress in innovation should not leave our values such as patience and perseverance behind. Technology has decreased the amount of patience in the lives of people which has led to a negative impact on our values.

He emphasised on the fact that today's generation needs to mould itself to face the hindrances and convert these hindrances into opportunities. For innovation to be encouraged, such technical sessions play an important role in stimulating the minds of the youth of the country.

KEYNOTE ADDRESS BY GUEST OF HONOUR

SHRI GULSHAN KHARBANDA,

DIRECTOR AND CTO PROGRESSIVE INFOTECH



DIAS

DELHI INSTITUTE OF ADVANCED STUDIES

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Technology has completely altered the human life. The continuous progress in the area of technology has made our lives more effective, efficient, convenient and easy. But at the same time we have become dependent on technology to a very large extent which unfavourably affects our lives. It is impossible for us to think of a life without gadgets like mobile phones, computers, internet or any other electrical device.

Mr. Kharbanda's main concern was how this technology can be absorbed by maintaining proper balance between IT and communication.

He emphasized that , today's students must understand, that in order to make their careers in the IT industry, they ought to set up a firm foundation of education along with ethical and human values, and continue to improve their knowledge in synchronisation with the new technology and research activities that are taking place in different fields. The most significant characteristic for running a business venture is the attitude of the person and not a tag of an IIT or MIT. The only difference is that one has to prove his/her ability if he/she doesn't carry a tag from the beginning. And to make a place in the organization, one needs to innovate. An analytical mind and dedication are the only things that is the need of the hour.

VOTE OF THANKS BY

DR. BARKHA BAHL

DIRECTOR, DIAS





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Technology is all pervasive and also dynamic in nature. Organizations that constantly rethink, reform, regroup and re-innovate stay in business. The methods adopted may be specific to an organization but the goal of every organization would be to excel and become leaders in their respective domains. With product life cycles shortening, a constant need for innovation is the greatest challenge for the corporate. The emerging areas bring forth both opportunities and challenges. The organizations in the last couple of years have offered products and also created markets for the same. The focus of the seminar was on the impact of information technology innovations with specific emphasis on Social Networking, Mobile Computing, Big data Analytics and Cloud Computing covering data models, open sources, Data analysis techniques and various networking aspects.

Dr. Bahl, Director, DIAS thanked the dignitaries for agreeing to share their valuable knowledge and experiences with the august audience on "Innovations and Challenges of Information Technology" and all participants for coming from far and wide to participate and present papers on the key focus area.

TECHNICAL SESSION I

The technical session I was chaired by Mr. Susheel Chandra, Senior Consultant, Tata Consultancy Services. The presenters at the session deliberated upon e- governance, quality assurance, digital forensic, face recognition, etc. Also, guest speaker, Mr. Ashish Rastogi shared his thoughts and experiences on the theme of the seminar, thus, enlightening the august audience.



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ELECTRONIC- GOVERNANCE

DR. DHANI RAM,

ASSISTANT PROFESSOR, DEPARTMENT OF COMMERCE, RAMJAS COLLEGE, UNIVERSITY OF DELHI



With the continuous improvements in technology, it is essential to use IT to make the functioning of processes easier and smoother. IT can be used to simplify many processes which were done manually in the past. One of these areas to use technology is government functioning. This is called e-governance. E-governance or electronic governance refers to the application of information technology to the process of government functioning in order to bring about Simple, Moral, Accountable, Responsive and Transparent (SMART) governance.

Dr. Ram highlighted how technology can be put to efficient use in order make the filing of documents for any official work with the government agencies and creating a network of e-services and e-administration. Nowadays companies can file applications or any other document in electronic form over the internet and also pay the fee using credit card and internet banking. His paper attempted to understand the importance of E–Governance as good governance and discussed the legal aspects of the IT Act, requirement of Companies Act, 2013 and government's commitment to governance reforms.



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MOVING AHEAD OF TESTING, TOWARDS QUALITY ASSURANCE

MS. AAKANKSHA MALHOTRA,

SOFTWARE ENGINEER-TESTING AND QUALITY, U2OPIA MOBILE PVT. LTD., DELHI



Testing is a well-known concept, it can be described as a "Process of evaluating a system to check for errors, gaps, or any mismatch from requirements." Even though testing is considered as a process to be taken once the development process is completed, it has now been taken as part of each phase in software development life cycle.

The paper presented by Ms. Aakanksha included the importance of testing in the field of information technology and the challenges it offers. The focal point of the topic referred to how testing has progressed from sheer manual testing to quality assurance which includes a means of monitoring the software engineering processes and methods used to ensure quality. She also explained how the latter is divided into a broad spectrum of prevention, rectification and improvisation. She also stressed on how software with good quality can be developed by blending man power and technology to create better products.



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INTELLIGENT ENVIRONMENT ENHANCES MOBILE SECURITY ARCHITECTURE

MS. ARUSHI GOYAL, MS. TARISHI SHARMA

STUDENTS, DELHI INSTITUTE OF ADVANCED STUDIES, DELHI



In today's day and age, technology is continuously being improved thus making a path for highly architectural, integrated and persistent storage network devices. As a result, pervasive computing comes into existence. Thus, many applications depend on the existence of small devices that can exchange information and build communication networks.

A large amount of information has been delivered and published on pervasive computing. Pervasive computing environments with their interconnected devices and services assure seamless integration of digital infrastructure into our everyday lives. Pervasive computing augments an environment as an intelligent environment by providing security, adaptability, context-aware computing, invisibility, confidentiality, integrity and availability in the field of mobile computing. The paper presented by Ms. Arushi and Tarishi Sharma elucidated the challenges in the area of security regarding the mobile devices and providing an architectural view for it. It also explored high-quality theoretical as well as practical concepts on a wide range of problems significant to pervasive computing.



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DIGITAL FORENSIC IN CLOUD COMPUTING ENVIRONMENT: A SERVICE FOR SOCIAL BENEFIT OF THE COMMUNITY

MS. VAISHALI JOSHI,

ASSISTANT PROFESSOR, BVICAM, NEW DELHI



Digital Forensic is a fairly novel scientific concept but it is one that has evolved greatly in the past decade. Digital Forensic can be defined as, "The use of scientifically derived and proven methods toward the preservation, collection, validation, identification, analysis, interpretation, documentation and presentation of digital evidence derived from digital sources for the purpose of facilitation or furthering the reconstruction of events found to be criminal or helping to anticipate unauthorized actions shown to be disruptive to planned operations". Digital Forensic is roughly a forty year old concept. Previously, forensic techniques were used primarily for data recovery. Today most of the last decade's development is quickly becoming irrelevant. Digital Forensics is

now in an appalling position. Ms. Vaishali presented a paper to put forth the use of the cloud for digital forensics in mass storage and remote processing, and to split a single data structure into elements. The prime advantage of cloud computing is centralized data, having the data all in the same place assists in forensic readiness, which leads to faster, coordinated response to incidents. With centralized data (Infrastructure-as-a-Service) (IaaS) providers can create a dedicated forensic



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server within the cloud, which is ready for use when needed. The expected outcome of the research work is to propose forensics as a service for social benefit of the community.

FACE RECOGNITION USING NEURAL NETWORK

MS. RATANDEEP KAUR,

FACULTY, SRI GURU TEGH BAHADUR INSTITUTE OF MANAGEMENT AND IT DELHI



Developing a computational model for face recognition is difficult as face is a complex, multidimensional, visual mode. Ms. Ratandeep in the seminar proposed a methodology for coding and decoding face image which is a connection of two stages- feature extraction using principle component analysis and recognition using the feed forward back propagation Neural Network. Face conveys identity and emotion. The human ability to recognise faces is remarkable. Many security systems, credit card verification, criminal identification, etc, have started using face recognition because the ability to detect faces, as against to recognise them is vital. Only after research for more than twenty years has a computational model of face recognition been developed. Therefore, face recognition is a very high level computer vision task, in which many early vision techniques can be involved.

The biggest challenge is faced when one needs to quantize facial features so that a computer is able to recognise a face with the given set of features. Two fundamental ways for face recognition



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are based on extorting feature vectors from basic parts of the face and then converting them into feature vector.

A STUDY ON UNDERSTANDING DISTRIBUTED DEADLOCK DETECTION

MR. PRASHANT KUMAR,

ASSISTANT PROFESSOR, IT DEPARTMENT, BANARASIDAS CHANDIWALA INSTITUTE OF PROFESSIONAL STUDIES, DELHI



A deadlock may occur among the processes in a distributed operating system or database whenever they compete for limited resources and are allowed to obtain a lock by acquiring a resource and

thus preventing others from using the resource while the process waits for other resources. This occurs whenever distributed transactions are performed or access control is executed. No progress would take place without an outside intervention. Several processes can be involved in a deadlock when there exists a cycle of processes waiting for each other. The deadlocks may be local to a site or global if the deadlocked sites are on different networks.

There are many well-known techniques for handling deadlocks through prevention, avoidance, and detection. In prevention, the focus is on denying one of the necessary conditions of deadlock to happen. These include mutual exclusion, hold and wait, no-pre-emption and circular wait. Implementing prevention techniques enables a distributed system to smoothly perform without runtime support. Avoidance schemes require anticipation and assessment of the system for a possibility of the deadlock. Detection techniques however focus on dynamically identifying correctly whether the system is in a deadlock and then recovering from them. Mr. Kumar discussed



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some techniques for deadlock detection in distributed systems such as Wait-for-graph (WFG) and the challenges involved in different deadlock models in message communication systems.

A MULTI-AGENT BASED PERSONALIZED SEARCH ENGINE WITH TOPICAL CRAWLING CAPABILITIES

MS. DISHA VERMA,

ASSISTANT PROFESSOR, DIAS



Ms. Verma elucidated the concept of the web search engine services which have a vital role, since they form an information broker between the user and the huge amounts of disseminated information. Conventional search engines aim at fetching maximum results which match the specified keyword. The presenter proposed a search engine which had a layered architecture (multiple agents) which personalized the results on the basis of different parameters and domain. The domain under consideration is education. The search engine was merger of client side and server side personalization. The search engine personalized results on the basis of user browsing history and explicit profile created by him. The server side personalization worked on the profile created by him whereas users browsing pattern would be stored in his personal computer in the form of cookies. For maintaining the speed and reliability, the technology used in computation is in-memory data grid.

The presenter concluded that the search engine will fetch results from search engines like Google and will then refine the results according to user preferences and choices. User also has a choice for levels of personalization according to the information provided by him. Though the major focus



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would be academia searching. A vision for the system would be inclusion of user search profile sharing system.

CONCLUDING REMARKS FROM SESSION CHAIRPERSON MR. SUSHEEL CHANDRA,

SENIOR CONSULTANT TATA CONSULTANCY SERVICES



Mr. Susheel Chandra concluded the first technical session of the conference by elaborating on the importance of innovation. He quoted the famous author John Kaoby, "The job of an innovation activist is to imagine and innovate to confront the enforceable future."

Innovations materialize when different bodies of knowledge, perspectives, and disciplines are blended well. What is necessary is to develop a thinking that looks into the future to predict its needs, identify white spaces for innovation, plan for different future scenarios and align opportunities with innovation strategy.

According to Mr. Susheel, innovation is just a small step towards the big idea. He believes that there are two main elements of innovation. First one is Imagination. Imagination which is the realm of the mind where you see things that do not yet exist in this world, but which one day might exist. The second component is sensitivity and necessity of the people around. He believes that keeping in mind the needs of the people around you and then initiating innovation is what the need of the hour is.



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He concluded by sharing with the audience that if we renew our commitment to being the world's leading innovator, we must teach foundational values – the desire to thing big, initiation with small steps, will to mastery, the spirit of risk taking, and the embrace of continuous change.

TECHNICAL SESSION II

The technical session II was chaired by Dr. Devendra Tayal, Associate Professor, Indira Gandhi Delhi Technical University for Women. The speakers at the session delved upon topics like software quality models, big data, green cloud computing, etc.

BIG DATA TRANSFORMING INFORMATION TECHNOLOGY: SENTIMENT ANALYSIS CASE STUDY

MR. SAHARSH JAIN AND MR. ISHAN SHARMA, STUDENTS, B.TECH (IT),

MAHARAJA AGRASEN INSTITUTE OF TECHNOLOGY



Big data has not only changed the way we store data but also we analyse the data. The reason for storing big data has changed from just looking up in history to predict the future. Enterprises are using tools to analyze the past in order to reveal the opportunities for data driven decisions on where to invest in the future for market space leadership and differentiation. Business intelligence is dictated by information about people, places and things adding on to the data stored by enterprises. Whether it's fine-tuning supply chains, monitoring shop floor operations, gauging consumer sentiment, or any number of other large-scale analytic challenges, big data is having a tremendous impact on the enterprise. With more types of data information being stored in digital formats, the business built has increased steadily.



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GREEN CLOUD COMPUTING: A REVIEW

MS. ASHEMA HASTI, ASSISTANT PROFESSOR, DKES-SCS

MS. CHARRU HASTI, ASSISTANT PROFESSOR,

DELHI INSTITUTE OF ADVANCED STUDIES, DELHI



Cloud computing has come into view as a commonly accepted as well as a sought-after technology because of its several advantages like scalability, low cost maintenance, and utility based sharing of computing resources. These are a few reasons why cloud computing is now gaining popularity and being commercialised in big enterprises as well as small and medium sized businesses.

Cloud computing is a model for enabling ubiquitous, convenient, on demand access to a shared pool of configurable computing resources such as Applications, Application Development Platforms, Data and Infrastructure. Nevertheless, because of the growing demand of cloud infrastructure, the energy consumption of data centers has been a disturbing issue. High power and water consumption in order to sustain cloud data centers in terms of backup as well as cooling effectively leads to high functioning cost and high carbon footprint harming the environment. Therefore, energy-efficient solutions are necessary for reducing the effect of Cloud Computing on the environment.



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Ms. Charru Hasti and Ms. Ashema Hasti explained how different measures can be taken in order to reduce these harmful effects on the environment. They discussed the projected approaches for "Green Cloud Computing". Through optimised utilisation and reuse of non renewable energy resources and adoption of renewable resources, becoming green is achievable and is a rewarding experience which enables organisations to reduce both costs and environmental damage.

STEPS TOWARDS GREENNESS IN IT

MS. JASVINDER KUMAR & MR. AMANDEEP SINGH ARORA,

ASSISTANT PROFESSORS.

SRI GURU TEGH BAHADUR INSTITUTE OF INFORMATION TECHNOLOGY AND MANAGEMENT DELHI



Even though the terms "Green Computing" or "Green IT" have lately become widely accepted and become very important, they were conceptualized almost two decades ago.

Green computing refers to the practice of using computer and related resources in an environment friendly way. It is an idea that studies, constructs and assists methods for enhanced energy efficiency and reducing wastage in the full life cycle of computing equipment from the initial stage i.e. from manufacturing, then through delivery, use, maintenance, recycling and then finally, the last stage, disposal in an economically realistic way.



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Computers have now become a necessity in the lives of humans. The increasing demand of computers has led to an increased amount of energy consumption as well, which in turn has resulted in increasing the carbon content in the atmosphere. This issue has been recognised by people and steps are being taken which help in reducing the power usage of computers. Hence, this approach is called as Green Computing. The objective of this paper was to examine how the users can develop their energy effectiveness and manage the resources connected with it. The speakers gave their opinions on the topic and ways to minimise the wastage of energy.

ROLE OF BIG DATA IN ROAD TRAFFIC MANAGEMENT MS. LIPI PASSI, MS. SHREYA GUPTA, STUDENTS,





Since the emergence of the Internet, the volume of data that needs to be indexed and queried has been increasing in multiples. In the initial stages, database technology worked well but soon it was found that it was neither well-suited nor cost-effective. These days, organisations have started to use the information such as the search histories of the customers on search engines so that this information can be put to better use and serve advantageous for the organisation.

The stakeholders of large companies worldwide speculate whether they are getting full value from the huge amount of information they already have within their organizations.



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Several new technologies have been used to gather more data than ever before, yet many organizations are still struggling to understand how to obtain value from their data and compete in

the industry. Problems related to traffic control like congestion and long delays can be easily tackled if data analytics tools are employed. The speakers talked about latest deployment of dig data analytics in traffic management. These include solutions provided in diverse global cities by large organisations with big data analytics capabilities such as IBM, Google, Oracle and SAP.

ARCHITECTURE OF BIG DATA: A COMPARISON WITH TRADITIONAL STORAGE

MS. NAGAMANI MUTTENI, MS. B. RAJESWARI,

ASSISTANT PROFESSOR (IT), MERI



The need to analyse the large volumes and types of data to obtain maximum business value are rising swiftly because of the popularity of social media and networking sites like Facebook and Twitter. Data is being generated every second by network devices. Traditional data warehouses and other management tools are not up to the mark so as to resourcefully process and analyse Big Data in a time or cost effective way. Data must be organized into relational tables, neat rows and columns, before a traditional enterprise data warehouse can ingest it.



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More than 200 hexabytes of information is being generated by the current digital world every year. Sadly, these large-scale storage warehouses are generally not supportive for long-term preservation of data. New methods of creating and capturing the content are required to be adopted by organisations. The speakers examined the concept of Big Data as another important storage area with different characteristics and requirements. The paper compared the traditional storage architecture and the architecture of Big Data on the basis of the long expected lifetime of digital preservation systems and their need for complete reliability, the nature of storage failure and threats.

MONITORING CRIME- A STEP TOWARDS A SAFER WORLD

MR. NEERAJ JUNEJA,

ASSISTANT PROFESSOR, DIAS





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It has always been a challenge for the governance authorities and crime management organizations to analyze and beat the criminal activities before their occurrence. Technological innovations are being made in this field for maintaining crime statistics as well as keeping a tab on the persistent offenders.

The role of several business intelligence tools such as spreadsheets, efficient data warehousing techniques, OLAP, and accurate reporting and querying software such as Cognos, is significant in facing these challenges. This paper uses real life past crime instances and saves the data in a star schema data model, to create fact and dimension tables in Microsoft excel. Data from the fact table is extracted for a Dashboard creation and summarized using a pivot. Some key performance indicators presented that are helpful in tracking the crime are Region wise crime rate, Age group wise number of crimes, Gender wise number of crime, Time wise number of crimes, Region wise involvement in crime of age group.

CONCLUDING REMARKS FROM
THE SESSION CHAIR PERSON
DR. DEVENDRA TAYAL
ASSOCIATE PROFESSOR

INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN





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Dr. Dayal emphasized on the evolution of Information Technology from being a specialist subject to a universal tool with operational and strategic impacts. Use of IT in businesses has transformed the way organizations are operating. Every process is automated now, gone are those days when a single process needed huge amounts of paper work, effort and times of the employees. He gave an insight on how the Electronics Commerce has developed business strategies to reduce time and distance, free flow of information has altered organizational culture, Decision Support Systems have supported the managerial skills and tellework has granted flexibility in work using work from home and work on the move. SMAC –Social Media, Analytics and Cloud Computing is the buzz word to envelop all such activities. SMAC, in many ways, is quickly eclipsing the significance of such old standbys such as ERP, network infrastructure and basic communication and messaging services.

SMAC aims at giving the customer a delightful experience, which has become an essential ingredient in the survival of all organizations. The biggest obstacle organisations are facing is to make proper use of the SMAC for achieving goals and making profits. At the same time as SMAC trends have made a deep positive impact on the business for some organizations, not all organizations have been able to exploit the value of their SMAC investments. The value of these investments depends on various aspects, such as business model, operating model, type of business service/product, customer demographics, organization size, processes, applications, integrations, organization culture, etc. Organizations that invested in these emerging technologies without doing a proper assessment of the value (business impact) of the investments are not only far from realizing the value of those investments, they are also ending up with increased complexity and wasted resources.

He congratulated the organizers of this seminar for giving a platform for discussions on the Innovation as well as challenges of Information Technology.



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VOTE OF THANKS BY
DR. SONIA GUPTA
EVENT CO-ORDINATOR



With the quote, "There is one thing one has to have: either a soul that is cheerful by nature or a soul made cheerful by work and knowledge.", the event co-ordinator, expressed her belief that the audience has benefited from the words of wisdom, experience and knowledge by the eminent speakers at the national conference.

She thanked the dignitaries, eminent speakers, the audience and the college staff for gracing the occasion by their benign presence and making the event a grand success with the hope that this association will strengthen in the times to come.