





Management & Information Technology Newsletter

a Salesian College Association for Professionals initiative

Role of Youth in Water Management

Strategic Planning and Flawless Execution

Management of Technology & Innovation in Mobile Phone Co...

Report 22 Triennial Xavier Board ..

**Conference of** 





Do not leave water running for Leaky taps waste over 10 litres of water daily













Install rainwater harvesting systems



Cistern displacement device in flush tanks to restrict amount of water used in each flush



Apartment associations can expedite water conservation methods

The activity of sustainability which assures the availability of required water and also develops its quality is known as 'Water Management'. These activities can be broadly divided into four pillars which are conservation, recycling, restoration and population control. 'Youth' is the backbone of any nation and without the proper participation and coordination of the backbone, a body can never stand or walk. India is a country that is blessed by rich and adequate supply of water. Firstly, India, being a peninsula, is

surrounded by water on most sides. Secondly, a huge number of rivers criss-cross the land, most of which are fed by glaciers. As a result India does not face any problem with freshwater supply. Still, India is one of the most water inadequate countries in the world. India currently is facing the ill-effects of improper water management. With its distinctly growing population coupled with illiteracy, the shortage of fresh water and other water supplies is prominently seen in cities like Mumbai, Delhi, Rajasthan and

# Pole of Youth in Water Management

Atmadeep Chakraborty, Hooghly Mohsin College Chinsurah, Hooghly, West Bengal

Madhya Pradesh. Added to the woes, waste water from homes, factories, agricultural fields and other polluted places enter the fresh water sources like rivers and lakes without proper treatment and these later seep into the groundwater table leading to water pollution. People becomes victims of polluted water because they are blind to the urgent need for freshwater and tend to use any source of water that is easily available. For examples in 1991, many children in Kanpur were affected by Hepatitis B, which was distinct from the jaundice which was rampant throughout the state. In the state of Maharashtra, in 2003, highly chlorinated water caused the teeth of children under the age of eight to become yellow.

Agriculture being the source of income for more than sixty percent of the country's population, is suffering due to the inconsistent supply from its major source, i.e, rainfall. Every year we see thousands of farmers committing suicide due to the incurred loss in their businesses, due to the lack of water supply in the fields. In 2000, an NGO in Gujarat reported that the Tata Chemicals firm had taken out much more than what was permissible for its use, the extra

water extracted was supposed to be used for irrigation purposes. Also, in Kanpur in 1982, a water treatment plant was built on the right bank of the river Ganga. A thermal power plant was built one kilometre downstream to run the plant and also to help the de-silting operations, every summer, to maintain water flow in the channel. Due to changing course of the Ganga, a diversion channel was constructed to feed the plant. In 1990, the powerhouse was shut, as it was outdated. Later in 1991, a research team noticed that open city drainage was discharging sewage into the diversion channel, which was completely unnoticed by the authorities because of adequate water flow and effective chlorination. The diversion channel was blocked by the back pressure of sewage drain, which gave out silt. The plant was thus being fed sewage water, instead of water from the river. Another case in Madhya Pradesh states that for ten years, the village of Dewa has been facing the grim prospect of desertification, following unregulated use of groundwater in the region. Many more such examples can be seen from states of Gujarat, Delhi and Bangalore. So, we see how ineffective water management can cost us the lives of people and also can harm the economy of the nation.

In such a situation when the country is going through a serious phase of mismanagement and crisis of water, it is the youth alone, who can bring about a change in the mechanics of the system. Awareness is the most useful weapon of youth in this battle. The curse of our nation is that the majority of its population is half-educated; they are polluting the water sources unknowingly. By telling the farmers about the cost effective methods of using water in the fields like tillage, mot, dal, shadouf, noria, etc, water can be both properly used and not polluted. Today, in the age of social media and technology, it has become very easy to spread a message among masses. The thinkers and change-seekers should explore this option and organise posters and awareness programmes through

social websites. People in villages also need to be told about sanitation, hygiene, healthy habits and both the necessity for clean water and should be made aware of the hazards caused due to polluted water. These goals can be easily achieved by putting up seminars and awareness camps in villages by local clubs and small scale government bodies. However, a ray of hope for betterment and perfection is still prominent, when on numerous occasions in the past, it has been noticed that youth cooperation has brought about a change in a dying area. The local club called the Nava Jagaran Club in Bhaonta-Koyala and other areas of Rajasthan, through community participation had shown that it is possible to revive ground water through rainwater harvesting. The check dams built by the club in the watershed of the river Arvari, allow them to collect five hundred to six hundred millilitres of rainfall in the region. This replenishes the wells that have been lying parched for years, and due to this, the Arvari, which had been reduced to seasonal drains, now flow continuously. Again, the Dashori Gram Swarajya Mandal in Mathura had successfully put up trees along the banks of the river Yamuna and has helped immensely in stopping the erosion of the banks, thus saving the river from drying out. Another study shows how the population ranging between the ages of twenty two to twenty eight, in the states of Rajasthan, Kerala and Meghalaya have helped in rising the water table and have contributed majorly to the fresh water supplies of these states by practicing rainwater harvesting in roof tops.

Thus, we see how water can be effectively managed and the problems caused due to scarcity of fresh water, can easily be wiped out by the soldiers of this modern age, who have completely new enemies to fight with. The goal of our generation should be 'Sustainable Development', i.e, use, let use and preserve for future. We must ourselves change first in order to change the habits of others. Our country has already started walking the path of water management. Now,

with our efforts and changing habits, we should be able to complete the journey of a clean and developed country which has properly protected its natural boons. We should understand that a drop of water is more than a sack of gold to a thirsty man. So let us join together to protect water for our survival and survival of the future generation.





"Victorious warriors win first and then go to war, while defeated warriors go to war first and then seek to win." Sun Tzu

It is over a year now since I have been dealing with students from business background. The interactions and occasional chat I had with them while walking on the corridors led me to conclude that all are focused towards starting a business firm which is something, innovative and creative. These students have realized the fact that innovation is the key driver of growth and profitability and has become part and parcel of any business enterprise. Innovation transforms industries and helps in adjusting to ever shifting marketing dynamics. However, one needs to be aware of the fact that success does not necessarily come from breakthrough innovation but from flawless execution. A great strategy alone won't win a game or battle: the win comes from basic blocking and tackling (Naveen Jain).

Vast majority of the students are not so keen on just simply inheriting what their parents own. They want to start their own, stand on their own feet and show that they are capable of achieving the target that they have set before them. In order to realize their dreams and aspirations, strategic management plays a vital role. Strategic planning is like: victorious warriors win first and then go to war, while defeated warriors go to war first and then seek to win. I feel that a person who is capable of

strategic management is able to accomplish more as far as an industry is concerned. Strategic planning is an organization's process of defining its strategy and making decisions on allocating its resources to pursue this strategy, including its capital and people. "If you can't describe your strategy in twenty minutes, simply, and in plain language, you haven't got a plan. 'But' people may say, 'I've got a complex strategy. It can't be reduced to a page.' That's nonsense. That's not a complex strategy but complex thought about the strategy." (Larry Bossidy)

Strategic management is difficult in part because it requires extraordinary qualities and skills in dealing with the paradoxical demands of situations. We can understand this by first seeing the different types of managers there are and then realizing how the qualities and skills of the different types may be present in single individual, who have to bring them together in complementary ways to deal with the strategic tension they confront. The outcome of a strategic plan defines the functional and divisional plans and the direction in which a business should proceed. When developing strategies, analysis of the organization and its environment as it is at the moment and how it may develop in the future, is important. The analysis has to be executed at an internal level as well as external level to identify all opportunities and threats of the new strategy. It has to be analysed on a regular basis to see that the strategy yields desired outcome. One of the most important areas where the strategic management plays a vital role is in understanding the consumer.

Consumers, the final buyers and users of products, have specific wants and needs. Their incomes range from high to middle or low. They are bombarded daily with variety of choices of products, from luxury items to basic necessities. They have different traditions, tastes and preferences. In this complexity of situations, our tactics to be productive, the mind, emotions, and colour preferences of today's consumer and the pricing of the product need to be researched in a detailed manner. Marketing today is all about consumer empowerment and consumer preference. We need to manufacture the product in the form that consumers want and make it when consumers want it, sell it in places where consumers want it and sell it at prices consumers are willing to pay. To accomplish this in a competitive world, one needs to master the dynamics of innovation and seize opportunities in the face of technological change. In short, strategic planning and flawless execution is a must.



Rupam Majumder, Head of Department

Welcome to the Department of the Business Administration, Salesian College Siliguri Campus, one of the renowned academic departments in the heart of Siliguri. The curriculum of this department is addressed to students who wish to be distinguished graduates and wish to play an important role in the country's wider economic, social and political life.

The Department of Business Administration has a carefully designed curriculum which offers a wide range of knowledge (Management, Accounting, Marketing, Finance, and Human Resource) aiming at the integrated education and training of future leaders in the private and public sector. The combination of a dynamic and innovative curriculum that takes advantage of the latest technologies, with the experienced and reputable assistant professors of the Department, creates a fertile ground for the effective dissemination of knowledge and the development of the necessary skills for future professional recognition of the Department's students.

Moreover, the Department promotes the advancement of the research through the development of distinguished graduate program and research council, thus contributing both in creating future scientists and strengthening the research effort of all members of the academic community. Our mission, besides the development of cognitive and administrative skills, is to cultivate and develop organizational, consulting, communicational and social forms of behaviour that will create executives who will not only able to play a key role in organizations, but also to open new prospects of forming and developing the leaders of tomorrow.

The Website of the Business Administration Department

entails significant information for both current and future students of the Department. In particular, detailed information is included about the Undergraduate Program detailed curriculum vitae of the Teaching and Research staff, as well as other useful and interesting information.

Our objective is to teach the skilful execution of management. Business Administration is an eclectic field with quantitative (finance) and qualitative (marketing, human resources) counterparts. In the Business Administration program at Salesian College we combine business and Guest Lectures from business field. As a student you will discover today's challenging economic and social issues in a way that goes beyond the traditional business education and shape a program fitting your interests and strengths.

Upon graduation, you will be able to find jobs at domestic as well as multinational corporations, manufacturing or services firms, banks, consulting and auditing agencies, financial institutions, and in the public sector as managers, experts, and researchers.

I would like to communicate to you our timeless vision: the creation of a fruitful area of leaders who are not content with operating in a standard way but by being adaptive to a dynamic environment, they will be able to face every difficulty as a new challenge. By changing the future, leading our world to the progress and setting internal incentives and cultivating high sense of purpose regarding not only the success, but above all, the human value.

I invite you to visit our Department's webpage and our department on our campus at the heart of Siliguri to further learn about how to run a business together with a strong and distinguished faculty.



## Management of technology & Innovation in Mobile Phone Companies

Aditya, Prashant, Megha & Poonam, BBA IV Semester

Innovation and creativity have played a very important role in the development of technology. The two have mostly had a very close link with human life. Creativity has been serving as a very significant survival skill beginning from the time human beings came into existence. It has helped human beings to move beyond what worked in the past in each and every undertaking, and discovering fresh approaches. More recently, there have been significant changes in the global economy, which make it completely vital for any country to make its technological competitiveness to be sharper, and this is a direct product of the nation's innovative ability. In the ancient times people communicated using smoke. Then birds were used for communication. The Chinese invention of paper and ink enabled people to write messages and pass them to others. In the current times, people are familiar with the mobile phone. They are making use of it as being a medium of communication. This

device is supported by the internet network. Through the use of the internet network, one is able to communicate with other people across the world.

The world's first mobile phone call was made on April 3, 1973, when Martin Cooper, a senior engineer at Motorola, called a rival telecommunications company and informed them he was speaking via a mobile phone. The weighed was about 1.1kg and measured in at 228.6x127x44.4mm. With this prototype device, one can get 30 minutes of talk-time and it took around 10 hours to charge. In 1983 Motorola created its first commercial mobile phone, known as the Motorola Dyna TAC 8000X. The handset offered 30 minutes of talk-time, six hours standby, and could store 30 phone numbers. The cost was £2639 (\$3995). In the very early days of the mobile space handsets weren't designed with consumers in mind. You'd need a couple of thousand pounds to get hold of one, and even then performance wasn't great. Even at the start of the 1990s

this was still the case despite Nokia and NEC (Nippon Denki Kabushiki Gaisa, Japanese Multinational Company) entering the fray. Nokia's first 'handheld' mobile phone, the Mobira Cityman 900, launched in 1989 weighed just 800gm – a huge improvement over 1982's 9.8kg Mobira Senator model. The period between 1990 to 1995 represented an upward movement in design and portability, with mobile devices gradually starting to appear in the hands of average consumers for the first time. By the late-1990s, mobile devices were fast becoming the norm, thanks to the

Almost everyone has a mobile phone these days. Everywhere you go, you'll see people sporting the latest mobile phone models. Mobile phones have completely changed the way people interact. You can call, send text messages, read emails, play games as well as read and edit documents on the go. Today, the mobile phone has become part and parcel of many people's lives. Leaving home without your phone is like leaving without the shoes on foot. Clearly, the mobile

inventions of this age. It has the uses and useful in emergency possibility of privacy leakage, interaction between people. While users and other external balance between various conflicting assumptions and develop new and radical approaches to solving key creative employees and by systematically determining which considered an individual trait, with some people being more naturally placed in the context of the firm as a collaborative environment, where even the most brilliant individual company to succeed. New ideas can come from a wide variety of sources, and it is hard to predict domains of knowledge needs to be balanced by corporate decisions on what areas of investigation have the greatest promise of paying off and

focusing research in those areas. Radical innovations often take years to progress from concept to tangible product. For example, the digital computer invented in the 1950s had its roots in research conducted in the mid-1800s on logic and mathematics. Unfortunately, most firms cannot spend money on research that will only begin generating revenues in ten or twenty years. Most innovative activity in firms by necessity is focused on short-term improvements and technologies. Still, firms should not lose sight of long-term innovations, as those are the technologies that can undermine existing market dominance.

Various forces outside the direct control of the firm can also affect the innovation process. One set of forces relates to the tension between the demands of the market and the capabilities of the technology under development. A conventional way of analyzing technology development is to contrast the influence of technology push with that of market pull. The primary difference between a push and pull scenario is between solving a problem and accommodating a solution.

Technology push is the process of solving a problem by providing a technical answer to a market need which can be either anticipated or existing. Market pull involves solving a problem to provide a market answer to a technical need, or accommodating a technical solution by finding market uses. The dynamic balancing act between technology push and market pull drives the speed and acceleration of technological change, and in the process creates significant windows of market opportunity as well as competitive threats to the established technologies.

As a result of the liberalization, privatization, and globalization initiatives taken by the government of India, the technology sector is experiencing a historical growth. The trend is expected to continue in the segment, as prices are falling as a result of competition in the segment

The beneficiaries of the competition are the consumers, who are given a wide variety of services. In the years to come the country is predicted to witness a communication revolution, which would increase the subscriber base to match that of the developed world. The need of the time is a new revolution in telecom services and technology services is imperative that service providers work towards the same and make it a reality. An important contribution of this write-up is how marketing strategy is developed and sustained over different target market in telecommunication sector and technology sector. The future commitment of the customers to organization depends on perceived marketing elements. The issue and challenges is therefore increasingly recognized as a critical success factor in the emerging scenario. By seeing the present scenario of the development it could be easily made out that the future of mobile phones is going to be highly profitable and adaptable. These small devices will surely change the work load and task.

#### **References:**

- Business Week Available (on-line):
   http://bwnt.businessweek.com/interactive\_reports/most\_innovative/index.asp
   ?sortCol=rank\_2006andsortOrder=ASCandpageNum=1andresultNum=50 (accessed on June 22, 2008)
- Manaing for Innovation (Part 1) Available (on-line):
  http://media.wiley.com/product\_data/excerpt/69/04700932/0470093269.pdf
- Roger Smith. "The CTO and Innovation" Available (on-line):
  - http://www.ctonet.org/documents/CTOinnovation.pdf
- Vijay Vaitheeswaran. "Something New Under the Sun". Special report on Innovation, The Economist, October 13th 2007.
- Cohen W., Levinthal D. (1989), "Absorptive Capacity: a new Perspective on learning and Innovation", Administrative Science Quaterly, Vol. 35, N° 1, pp. 128-152.



# **Cyber Security in India**

- Priyanka Agarwal & Nikkita Agarwal, BBA IV Semester

Today's users rely heavily on computers for everythingcommunication, travel, entertainment, shopping, and so on. Using computers for so many applications involves storing personal information such as bank account numbers, credit card information to mention a few. This calls for securing the system and information over the internet. Computer security is essential for any technology-driven industry/organization and even for home computers. Possible losses that a user/organization may have to suffer due to security breaches include:

**Financial Loss:** An organization may stand to lose huge amounts of money if the systems are stalled because of an attack. Also, security attacks may result in the loss of trade secrets or other sensitive data worth millions of dollars. Even users using

systems at home may lose money if their bank accounts or credit card information is compromised.

Unavailable Resources: Security attacks on a computer may deplete the system's resources, such as the space on the hard drive, the memory, or the speed of the processor, making the system sluggish.

Identity Theft: Security attacks may result in the cyber-criminal accessing users' personal information such as their social security number [SSN], driving license number, and more. The cyber-criminal may use this information to steal the identity of the user.

Loss of Trust: Security breaches may result in the customer of an entity/organization/business losing

trust in it. Also, if a user's system is used to launch attacks on other computers, the user loses the trust of his/her associates.

**Data Loss/Theft:** Computers may be used to store other information such as research material and more, which could be stolen.

#### Misuse of Computer Resources:

Users tend to configure their systems for high performance and a faster internet experience. These resources may be used by the cyber criminal to launch attacks on more computers.

**Types of Security** 

*User Security:* User security allows the system to set security rules to determine what is displayed to which user. There are two elements of user security:

- Authentication: Ensures that authorized users are logged into the system. User authentication is done using login information [user name and password].
- Authorization: This element of user security allows the loggedin user to use an application or perform an operation.

Application Security: Application security is the use of software, hardware, and procedural methods to protect applications from external threats. The source of vulnerabilities in an application is the presence of bugs or design flaws. The purpose of application security is to protect the confidentiality, integrity and availability of the information.

System Security: System security refers to protecting the system and its information from theft and corruption by untrustworthy individuals or through unauthorized activities. System security involves using a series of security procedures, for example, using programs such as antivirus, firewall, anti-spyware, and so on; using password policies to create strong and complete passwords; and more.

Network Security: Network security refers to protecting networks and their services from unauthorized modification, destruction, or disclosure. It starts with authenticating the user, using login information, and then enforcing access policies with the firewall so that the specific users can only access specific applications/information. Network security also uses an antivirus program, intrusion detection system [IDS] or intrusion prevention system [IPS] to detect malware.

Physical Security: Physical security refers to protecting personnel, hardware, programs, networks, and data from physical threats. The system must be protected from any unauthorized physical access. This can be done using physical security

such as locks or with more complex method such as fingerprint scanning.

### Types of Threats to Computer Security

Computer security threats are relentlessly inventive. Masters of disguise and manipulation, these threats constantly evolve to find new ways to annoy, steal and harm. Arm yourself with information and resources to safeguard against complex and growing computer security threats and stay safe online.

Computer Virus Threats: Perhaps the most well known computer security threat, a computer virus is a program written to alter the way a computer operates, without the permission or knowledge of the user. It replicates by copying itself to other programs, system boot sectors, or documents, and alters or damages the computer files and applications. A virus can do anything from popping-up a short message to wiping key files so that your computer does not work.

Rootkit: Rootkit is a set of programs or utilities that allows a user to maintain root level access to the system. The primary purpose of a rootkit is to allow an attacker repeated unregulated and undetected access to a compromised system. Rootkits can crack the password at the administrator level as well as exploit the system's vulnerability.

Trojan: A Trojan is a program that seems to be legitimate but acts maliciously when executed. It appears to the user as an apparently harmless program or data in such a way that it can get control and execute its chosen form of damage. It can damage or erase information on hard drive. It can also open a discreet entry point for an attacker to revisit and "own" the system.

**Spyware Threats**: A serious computer security threat, spyware is

any program that monitors your online activities or installs programs without your consent for profit or to capture personal information. It includes Trojans and other malicious software that steals personal information from a system without the user's knowledge. It can result in undesired advertising [pop-up ads in particular], the rerouting of page requests to illegally claim commercial site referral fees, and Hackers & Predators: People, not computers, create computer security threats and malware: Hackers and predators are programmers who victimize others for their own gain by breaking into computer systems to steal, change or destroy information as a form of cyber-terrorism.

Phishing Threats: Masquerading as a trustworthy person or business, phishers attempt to steal sensitive financial or personal information through fraudulent email or instant messages.

Social Engineering: Social engineering is tricking people into revealing their password or other information that can be used to guess a password. An attacker can impersonate a user or system administrator in order to obtain the password from a user. It can be a simple telephone call from someone claiming to be the Internet Service Provider [ISP] asking for details to reset the account.

### **Scenario of Cyber Security in India**

Smart cities are the future of urbanisation and population sustainability. The aim of smart cities is to provide an appropriate environment for living, commercial activities, healthcare and overall development. Smart cities also predominantly rely upon use of information and communication technologies (ICT) to render public services. Wherever applicable, Internet of Things (IoT) (PDF), cloud computing and virtualisation and machine to machine (M2M) system usage is also there. However, this omnipresent usage of ICT, IoT, M2M,

cloud computing, etc has a potential drawback as well in the form of indifference towards smart cities cyber security. It is not difficult to visualise a scenario of cyber attacks against the critical infrastructures of the smart cities that are run by ICT and technology. Such a cyber attack can cripple the entire smart city if properly executed. Critical infrastructure protection in India is still at nascent stage. The national cyber security policy of India 2013 is weak and has not implemented by the Indian government so far. The much awaited cyber security policy is also missing so far.

A strong cyber security infrastructure of India is need of the hour especially when there is no well settled international legal issues of cyber attacks that can be invoked in the case of a cyber incidence. It is very important that international legal issues of cyber attacks must be resolved by various government and non government stakeholders. There is no globally acceptable cyber law treaty and cyber security treaty that can govern the relationships between various countries. Even the Tallinn Manual on the International Law Applicable to Cyber Warfare is just an academic document with no legal binding obligations. The cyber security related projects in India must be not only expedited but also be successfully implemented as soon as possible. Unfortunately, cyber projects like National Cyber Coordination Centre (NCCC) of India, **National Critical Information** Infrastructure Protection Centre (NCIPC) of India, Grid Security Expert System (GSES) of India, National Counter Terrorism Centre (NCTC) of India, Cyber Attacks Crisis Management Plan of India, Crisis Management Plan of India for Cyber Attacks and cyber terrorism, Cyber Command for armed forces of India, tri service cyber command for armed forces of India, Central Monitoring System (CMS) Project of India, National Intelligence Grid (Natgrid) Project of India, Internet Spy System network and traffic analysis system

(NETRA) of India, Crime and Criminal Tracking Network and Systems (CCTNS) Project of India, etc have still not been implemented successfully by Indian government.

#### **Combating Cyber Crime**

For combating the cyber crime in India, the CDIs (Cyber Defence Institute) of different cities have made Cyber Crime Cells. One needs to register to cyber cell and complaint against cyber crime online.

**Step 1-** Write an application addressing the head of cyber crime cell.

**Step 2-** Furnish the following data along with the application: Name, Address, Email address, Telephone No.

**Step 3- D**ocuments are provided based on the types of cases.

Case-I: In case of vulgar emails, abusive email etc the following details is required

- The header of email which is offending you.
- · The email address of offending sender.

Case-II: In case of hacking the following details is required for cyber crime complaint

- · Logs of the server.
- · A hard copy and soft copy of the defected page.
- · If the data of the defected site is compromised, then one needs a soft copy of original data as well as compromised data.
- · Control mechanism details of access in which one has to tell who has accessed the computer.
- · If one has any doubt or suspicion about anyone then provides the list of these suspicions.

**Step 4-** Complaint can be done from any cyber cell of any of the cities and also send direct email to Cyber Cell Police Station.

#### Conclusion

The users of computer system and internet are increasing worldwide, because of the ease to access any information easily within a few seconds by using internet which is the medium for large volumes of information and a large base of communications around the world. Certain precautionary measures should be taken by citizens while using the internet which will assist in challenging this major threat cyber crime. The cyberspace holds the fifth place in common space and it is vital to have coordination and cooperation among all nations regarding cyberspace. The need of cyberspace and its exploitation is growing rapidly. The cyberspace is becoming important area for large number of terrorists to attack on crucial information infrastructure. The existing laws are inefficient to restrain the cyber crimes and, thus urging a need to modify the existing laws through which these activities can be put on a check. There is a need of international cooperation of nations to crack down the efficiency on cyber crime, thereby ensuring a development of the internet cybercrime is not limited to states of boundaries, thus it requires a universal collaboration of nations to work together to reduce the ever growing threats and risk to a manageable level.

#### References:

http://hackmageddon.com/category/security/cybe r-attacks-statistics/ "2013 Cyber Attacks
Statistics(Summary)· http://ncrb.nic.in/, —Cyber

http://en.wikipedia.org/wiki/National\_Cyber\_Security\_Policy\_2013, "National Cyber Security Policy 2013-

http://www.indexoncensorship.org/2013/10/indiachallenges-cyber-governance-cyber-security/, "India challenges cyber governance and security"



Tourism Industry is growing at a phenomenal rate across the globe. Thus, there are plenty of requirements of Human Resources in the tourism sector worldwide. At various forums, in different parts of world, the discussions are ongoing for acute shortages of human resources in tourism industry. India is also one of the countries of discussion for this burgeoning issue. As per UNWTO Report Hospitality, Catering & Tourism is among the world's top creators of jobs requiring varying degrees of skills and allows for quick entry into the workforce for youth, women and migrant workers. It accounts for 30 per cent of the world's export services. The UNWTO is expecting the sector's global economy to provide 296 million jobs in 2019. The Ministry of Tourism, Govt. of India reports that the demand on manpower is huge in Hospitality & Tourism Sector in India. Education plays a pivotal role in

developing Human resources.

Tourism experts both, from developed & developing countries have appropriately acknowledged the dynamics of tourism education. The success of tourism seriously depends upon the tourism education in India. The proper training & education can only help to create professionals in the emerging field like tourism in the knowledge economy. This write-up attempts to discuss the various aspects of tourism educations scenario in India. It also suggests that as tourism is a new area and an emerging field of higher study in India.

India is a country of all reason & all season and full of various varieties of tourist attractions & tourism resources. India's rich tradition of heritage has created magnificent architectural styles, temple cities and towns with other fascinating glorious monuments. India's Hills &

mountains offer some of the finest sites in the globe to linguistically chill out & rejuvenate the mind, body & soul. The vast coastline covering nine states offers a unique experience of beach tourism. So, in a true sense, India poses the essential qualities of 'Incredible India', it's a paradise for all types of Tourists.

#### **Indian Tourism education Scenario**

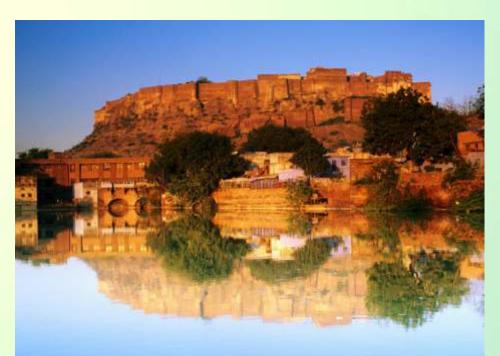
International and Domestic tourists' flows are growing day by day. To cater to the needs of today's highly enriched & sophisticated tourists and tourism Industry the entire nation urgently needs the trained manpower in different regions of the country. University Grants
Commission allotted Travel and Tourism course in the under graduation level in different nomenclatures like Bachelors of travel and tourism Management (B.T.T.M), Bachelors of Tourism
Studies (B.T.S), B.B.A in (Tourism &

Hospitality Management) etc. On the other side, a number of Universities are running MBA in Tourism, MTA, and MTM etc. Some private institutes are also running certificate, diploma & Degree course in various nomenclatures. The University departments or Institutes integrated all the essential components of tourism study.

Tourism is a major social and economic phenomenon of a country like India with enormous economic implications; it is an important instrument for peace and harmony, socio-economic development, Entrepreneurship & Employment generation. It is also an important activity for actual interaction, social upliftment of back ward classes and environmental conservation through sustainable and eco tourism. In the global context, Indian tourism resources have become one of the prime attractions to the international tourist community in a large scale. Tourism experts both, from developed & developing countries have appropriately acknowledged the dynamics of tourism education. Therefore, quality education, industry institute partnership, collaboration with consultants, rethinking of vocational education, higher education, research & training in the field have to incorporate for the smooth functioning of tourism industry. International organizations like World Travel & Tourism Council (WTTC), World Tourism Organization (WTO), and World Leisure & Recreation Association (WLRA) have realized the importance of tourism in job creation and the benefits to emerging & developed nations.

### Present Tourism Education Scenario in India

The World Tourism organization has realized the fact that the absence of trained manpower in many countries is a major impediment to the growth of tourism business. Thus, it has accorded a top priority to the human resource development in this sector. A study report on 'Economic Impact of Tourism in India' conducted by the



Economic and Social commission for Asia and Pacific (ESCAP) reveals that 1.2 international tourists' visit provides employment to one person for a year. Similarly one person gets a job form the visit of 17 domestic tourists. Keeping in view the need of the Tourism sector in India to be managed professionally and efficiently; the tourism planners, both in the government and private sectors, realized the importance of the tourism education in a systematic manner in the late 1970's. The Government of India under its Ministry of Tourism established the Indian Institute of Tourism and Travel Management (I.I.T.T.M) in 1983 as a registered Society for teaching and research in tourism and travel management. However, in 1969 the preparation of the initial blue print for setting up Institute of Tourism and Travel Management in India was prepared by a Technical Mission of UNDP( United Nation Development Programme) led by Dr. Timothy O' Driscoll a former head of NTO (National Tourism Organisation) of Ireland to study the tourist set up of India. Impetus to the growth of tourism education received further support from the National Committee on Tourism in 1988. This committee in its report in May 1988 gave the following recommendations to the Government of India:

> I.I.T.T.M. (Indian Institute of Tourism

& Travel Management) should be effectively developed to enable it to perform its assigned role.

> It should be reconstituted by a resolution of the Government to enable it to function effectively as an apex body in the tourism education development; and to empower it to award diplomas and degrees.

> Full time management course should be taken up in the existing universities. This is an area where we should draw a lesson from the developed countries, which have introduced courses in the universities and institutes.

Tourism education in India also received encouragement from the National Action Plan for Tourism announced in May 1992. This action plan stated that I.T.T.M should be strengthened in staff and equipments to become the premier institution for providing trained manpower for this industry. National universities should also be involved in this effort, and would be given financial and other assistance for introducing courses in India.

As a result of these measures, I.T.T.M. at its Gwalior campus has started full time course in Tourism Management since the academic year 1995-96. These courses have been recognized by AICTE.

Apart from the course on Tourism management run by the I.T.T.M., a



large number of Indian universities have started tourism education at the Master Degree and Post Graduate Diploma levels. Notable among them are the universities of Gwalior, Kurusksetra, Aligarh Muslim University, Jodhpur, Pondicherry, and Indore, IITM Bhubaneswar, Maduri University, Lucknow, Kumaun University etc.

### Outcome of the present Tourism Education in India

A thorough study of the existing tourism and its ancillary services education system in India brings to the light following shortcomings

- > Tourism industry in India having tremendous scope of employment opportunity is still going to suffer from the lack of trained manpower in the coming years as there is a wide gap between the demand and supply of well-trained manpower.
- > There is a lack of trained teachers and researchers in the field of existing tourism education in India.
- > There is a complete lack of teaching materials, books, journals and other equipments in the field of tourism education in India.
- > There is an absence of the processes of technical up gradation of the existing tourism training institutes and university departments.
- > There exists a lack of understanding and interaction between tourism faculty members and students on the

one hand and the industry people on the other.

- > Lack of training facilities for the state government tourism officials in India; often tourists face awkward moments in these offices.
- > A number of Indian universities have started vocational courses in tourism at Bachelor degree level in its colleges, but do not have provision for further studies at Master degree level for the Bachelor holders in tourism.
- > The universities, which are running courses in India, are situated mostly in developed states of India from tourism point of view. However, the states in eastern and northeastern part of India in spite of having tourism potentials do not have tourism education institutes or university departments.
- > Many state governments of India are yet to realize the potential of tourism as an important factor of economic development of their states, and still running their tourist offices and tourism development corporations through semi-skilled workers and state level bureaucrats instead of running through trained tourism management degree holders or hotel management diploma holders. Thus, tourism corporations are running into heavy losses.
- > In the absence of proper tourism education, a large number of sociocultural vices, which are corollaries of tourism activities like, drug abuse, prostitution etc; have taken roots in

the many tourist destinations in India.

#### **Conclusion:**

In order to cater to the imbalances of demand and supply of the trained professionals in tourism sector of India it is essential that the tourism departments of the country have to rethink about the proper tourism education in India. The tourism planners and other stake holders of tourism field in India should give top priority towards the spread of tourism education. Various institutions from different parts of the world, students and researchers from abroad may be interested to know about tourism in India through the on-line education. Still in India there is no such scope of on-line tourism education. This will not only reduce the wide gap that exists between demand and supply positions for trained tourism manpower in India & abroad, but will also enable the tourism business in India to emerge as a viable tool for social, culture, environmental and economic developments in a meaningful way. In a nutshell, it can be summed up by stating that at the dawn of the century the Indian tourism planners, experts, academicians, consultants and professionals should not go for traditional solutions for the spread of tourism education; but adopt creative, non-traditional and dynamic approaches.

### Reference:

- > Dahiya A.(2008) "Hospitality & Tourism Education in India: In search of innovative programs"
- > Bagri, Dr. S.C., Tourism and Travel Education in India: opportunities and challenges; University News, New Delhi.
- > Mair J., Jago L., (2010), "The Development of a Conceptual Model of Greening in the Business Tourism Sector?, Journal of Sustainable Tourism, Vol. 18, No.1, pp. 77-94
- > Srivastava P.K., (2008), "The HR Challenges in Tourism Industry in India? Conference on Tourism in India - Challenges Ahead, 15-17, IIMK
- > Karakas B.,(2012),? Marketing business tourism in suburban areas? IJOHAT Vol. I, No.2,
- > www.ibef.org
- > www.tourism.gov.in