IIM-K: RESEARCH PROJECT – '*IMPACT OF IT ETHICS ON VARIOUS SECTION OF INDIAN SOCIETY*'.

By Anirban Roy Choudhury(001),Gaurav Pratap Singh(004),Satyajit Mohanty(020),Siddharth Verma(023)

Agenda

- **Introduction**
  - **Understand Ethics**
- **Ethics in IT**
- **Effect on Indian Society**
- **Conclusion**
- **A one liner**

Introduction

- India – 5000 plus years of history
    - with 100 plus Billion people
    - Most diversified from culture, food and geography
    - Different religion , language
- Ethics in India
    - **Ethics**, also known as **moral philosophy**, is a branch of philosophy that involves systematizing, defending, and recommending concepts of right and wrong conduct.[1] The term comes from the Greek word ethos, which means "character". Ethics is a complement to Aesthetics in the philosophy field of Axiology. In philosophy, ethics studies the moral behavior in humans, and how one should act. Ethics may be divided into four major areas of study:
        - Source - http://www.iep.utm.edu/ethics/ - Wikipedia
- Emergence of IT in India
    - 20th – 21st Century
    - Lot of opportunities
    - Share of issues

Ethics related to IT

Ethics in Information technology are related to the following

- Data Governance
- Copyright violation
- Usage of computer
- Sniffing
- Email and Internet usage policy
- Usage of explicit information from other companies to your gain
- Spam / unsolicited email / Sexual harassment
- Phishing
- Computer Program and its affect
- Transparency
- Acceptance of gifts – Promoting fairness
- Legal binding – HIPAA
- Volunteer Time off – Giving back to society (VTO)
- Green Technology Initiatives – IT Sustainable Computing

Data Governance

- Data Availability
  - Right data at the right time for the right person
  - On a need to know basis
- Data Security
  - Who is accessing what
  - Who all can access what
  - Who is responsible for change of data ?
  - SOX Compliant – Audit trail
- Impact
  - Positive
    - Trust building – Inclusiveness
    - More people from the society gaining faith on society
    - More business – Banking Industry
  - Negative
    - Difficult to get more people into IT
      - http://articles.timesofindia.indiatimes.com/2004-10-05/lucknow/27153745_1_gis-mapping-data-theft-scientist-couple
      - http://articles.timesofindia.indiatimes.com/2012-07-13/ahmedabad/32663176_1_data-theft-iims-confidential-data

Copyright Violation

- Nothing comes free
- Copying of
  - Software / Application – Not open source
  - Downloading Songs
- Impact – Economy and reputation (Perception)
  - Loss of revenue to the tune of 50 Billion $ - WW
  - India not a destination for many company for doing business
  - Many city gaining the reputation for the place to get illegal SW at a fraction of cost

Usage of Computer – Internet / Email

- Personal Property Vs. Company
  - Personal use
  - Sending offensive emails / jokes
  - Visiting prohibited sites
  - Sharing information on computer
- Impact
  - Perception – It is OK to use company property for personal use
  - Decrease in Productivity
  - Decrease in Revenue

Sniffing

- Physical
  - Overlooking email, content, password over some ones shoulder
- Virtual
  - Sending emails to provide information
  - Planting programs to capture personal information
- Impact
  - Lack of Trust
  - Poor team work
  - Productivity

Usage of explicit information from other companies to your gain

- Sharing company confidential information or 'trade secrets' is a serious ethical violation and could involve legal consequences.

- Many companies use 'Non disclosure agreements' to reduce the risk for company explicit information.

- Strong company policies and training for this type of ethical scenario.

- Impact on Society

  - People across various regions are better equipped to handle such scenarios

  - Low earning income group can easily fall for this for monetary gains

- Example : when a corporate meeting happens which discusses company proprietary information, future plans etc. in a Hotel then the meeting discussion agenda can be disclosed for monetary gain by any hotel personal who is attending to facilitate the meeting.

Spam – Unsolicited/Sexual harassment email

- Sending hate mail, sentiment related email, sending chain mails.

- Spam emails which generally falls under 'Email marketing' such as illegal prescription drug offers, pornography, sexually explicit emails, unwanted product offers, lottery's, etc.

- Strong company policies and training for this type of ethical scenario.

- Impact on Society

  - Recent issue of mass exodus of NE people from Bangalore.

  - Spam emails often leads users to malicious websites or even can infect users machines.

  - Sexual explicit or pornographic spam E-mail can be Sexual Harassment for any gender.

  - May also increase social crimes like rape, child abuse etc.

  - Can affect Kid's in urban areas using computing devices

  - Hostile Work Environment

  - Loss of productive hours, network jams, server crashes etc.

  - Environment , energy & financial loss - worldwide spam email contributes 18.6 billion kg of CO2 emissions.

Phishing

- Phishing is planting a company look a-like page and asking people to login or share personal/financial details for personal gain

- Phishers use social engineering (exploiting natural helpfulness of people) & email-spoofing to get to their victims.
  Example - Social engineers may call the employee with a sense of urgency to request network access to fix a immediate problem.

- Strong company policies and training for this type of ethical scenario.

- Impact on Society

  - Phishing crimes produces threat to the society as they steal company or individual information & money.

  - Aged people in society may not be very careful in reading the masked URL in the Phishing message. E.g. Difference to spot between icici.com and icicii.com domains.

  - Lost trust and credibility on the brand for the fear of future fraudulent transactions.

  - Malware execution to halt entire IT systems used by public.

  - Impact genuine 'e-mail marketing' tracking for multiple URL redirections.

Computer program and effect

- Not following the process while developing the program and not doing the correct testing for s/w systems used in Automotive, Avionics, Healthcare etc. industries.

- Publishing of information in media without checking the authenticity of information.

- Software programs used in health care equipment devices e.g. Ultrasonography, CT-Scan machines etc.

- Software programs used in in Aircraft control systems such as flight control, collision avoidance, communications, black boxes etc.

- Companies should follow processes laid out by law for the safety and reliability.

- Software programs used in public systems should follow stringent guidelines & quality processes.

- Impact on Society

  - Could be a matter of Life & Death.

  - Bad publicity – negative impact.

  - Legal consequences for NOT following processes.

  - Chaos resulting from public system malfunction.

Transparency

- Making the process related to

    E-Governance, Public Accountability,

    public procurement, public facilities/amenities

    and other areas related to public welfare online
- Making the public servants and other private governing officers more accountable
- This has a significant impact on controlling the corruption, highlighting the important issues of the daily life of a common man
- E-governance, E-Ticketing, UID program (AADHAAR), E-Seva etc.

Acceptance of Gifts – Promoting Fairness

- To promote fairness maintain a professional relationship in work place.

- Reaffirm that every individual

  receives an equal opportunity to be

  recognized across the organization

- IT staff cannot accept gift for any

  amount more than INR 1250 (US$ 25).

Legal Binding – No place for negligence

- No place for negligence while coding - The Health Insurance Portability and Accountability Act of 1996 (HIPAA)/(COPA)

- Organizations should have strict policies

  and guidelines around

  HIPAA/COPA compliance.

- This will prevent an Indian IT

  organization from unethical issues

  arising from HIPAA compliance.

Volunteer Time Off

- Volunteer take-off to do the community work
  - Helping poor children
  - Providing them good education
  - Participating in Natural Calamities Response Taskforces

- IT Companies collecting money for the public welfare
- This helps in improving the public image of IT industry
- Good initiative to show humanity and ethical responsibilities from the IT organizations

Green Technology Initiatives

- Use of green business technologies.

- E-Waste disposal carbon regulations

- Better manage, measure and report of ones carbon foot prints

- Help to save the energy as well as the recyclable cost

Conclusion

- IT – Provides lot of opportunities as well as issues
- Any action has a far reaching consequences in the society
- Be certain about what you are doing

Closing Remark – One liner

"DO NOT DO A THING THAT YOU CAN NOT TELL YOUR SPOUSE, CHILDREN AND PARENTS"

- Intel Ethics discussion and training