

Social Issues in Computing

- ▶ Analyzing and evaluating the issues of new technology: We consider:

ATM (Automated Teller Machine):

1. Why do you use ATM?

- Enables us to check our account balance
- Deposit and withdraw cash
- Make other banking transactions at any time of day and night
- At locations that are more accessible than our bank branch
- Transaction statement for a period

Social Issues in Computing

2. What are the negative aspects of ATMs?

❑ Unemployment

- Automation led to a decline in employment

❑ Alienation and Customer Service

- Removes the human contact between customers and a live teller
- Can be confusing to operate
- You may forget password
- You might have questions; it cannot answer

Social Issues in Computing

▶ Crime

- People are robbed after withdrawing cash at ATM
- Stolen and counterfeit ATM cards are used by thieves to steal millions of dollars each year
- The anonymity of the machine makes ATM fraud easy

□ Loss of Privacy

- Transactions of ATMs are recorded in a database at a bank
- Records of a person's transactions at various ATM about the person's activities

□ Errors

- Amount to be debited twice the amount of the actual withdrawal

Solutions of the Problems

- ▶ **Unemployment problem:**
- ▶ Fewer people employed as bank tellers but there are more people employed in computer related issues:
 - Computer's shop
 - Production
 - Sales
 - Computer's learning
 - Use of computers for performing different applications

*These did
not exist in
early
1980s.*

Solutions of the Problems

▶ Alienation and Customer service:

- Anyone who wants to talk to a human teller can go into a bank during banking hour
- But Banking hours: 10 AM to 3 PM/5 PM
days :Sunday to Thursday *or*
: Monday to Friday

▶ Crime

- ATM Fraud is a serious problem
- The banking industry developed many approaches to reducing fraud and ATM crime.

Solutions of the Problems

▶ A large portion of our financial transactions including:

- Supermarket purchase
- Credit Card purchase
- Loan payments
- Income
- Web surfing can be tracked when we are browsing
- Cameras record our movement in public places

*Recorded in
computer
database*

Solutions of the Problems

- ▶ Governments maintain huge databases with personal information on us

Who should have access this information and how should it be protected from abuse and errors?

- ▶ **ERROR:**
- ▶ There is no such technological system in the world that has
 - ▶ i) Some ideal or perfect service
 - ▶ ii) Zero side effects and risk

For any endeavor people continue seek cost-effective improvement and solutions to problem

In this course we consider

- ▶ **Problems related to computer:**
 - Technical, Managerial, Legal, Educational, Market-based etc.
- **Solutions of several kinds**
 - **Technical:** Hardware and Software
 - **Managerial solutions:** Helpful for business policies
 - **Legal solutions:** Law enforcement, criminal penalties, lawsuits, legislation and regulations
 - **Market mechanisms** such as competition and customer demand generate many improvements

Privacy and Personal Information

- ❑ Privacy is probably the "Computer Issue" that worries people most.
- ❑ There are three key aspects of privacy:
 - Freedom from intrusion– being left alone
 - Control of information about oneself
 - Freedom from surveillance (from being followed, watched and eavesdropped upon)
- ❑ Concerned for privacy may be regarded with a suspicious.
 - "What do you have to hide?"