

Lecture #0

CSE332

**INDUSTRY ETHICS
AND LEGAL ISSUES**

Course Overview

L T P : 2 0 0

Credits:2

Text Book:

- 1. ETHICS IN INFORMATION TECHNOLOGY by GEORGE W REYNOLDS, CENGAGE LEARNING
- **Reference books:**
- “INTELLECTUAL PROPERTY RIGHTS-LAW AND PRACTICE” by ICSI House, 22, Institutional Area, Lodi Road, New Delhi 110 003

Marks Breakup:

Activity	Marks
Attendance	5
Continuous Assessment (CA)*	25
Mid-Term Examination (MTE)	20
End-Term Examination (ETE)	50
Total	100

* 2 Best CA out of 3 CA (Class test, MCQ).

CA1 (Class Test) will be held on 5th Week

CA2 (Class Test) Will be held on 9th Week

CA3 (Class Test) Will be held on 12th Week

What is an Industry ethics and legal issues

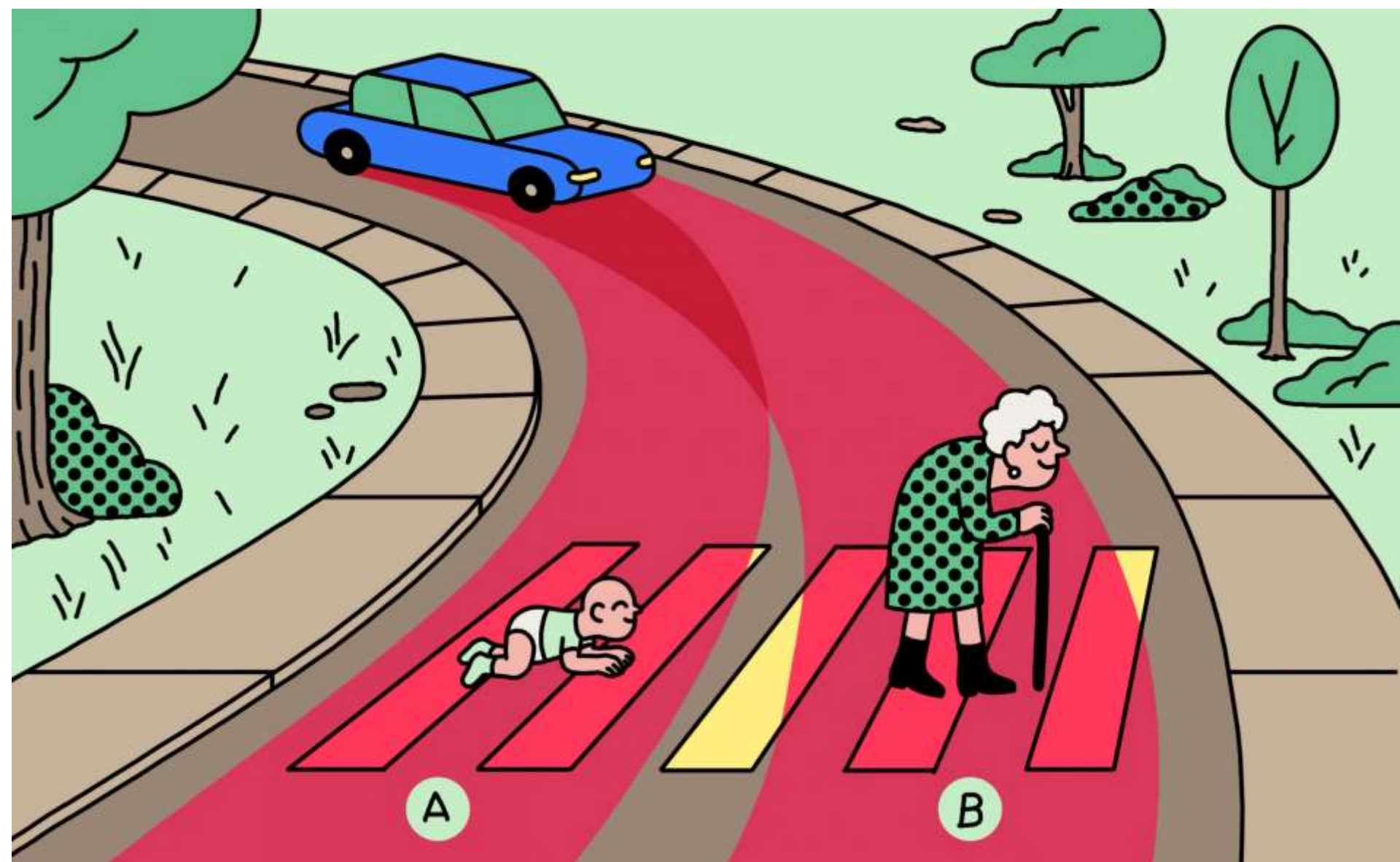


What is an Industry?

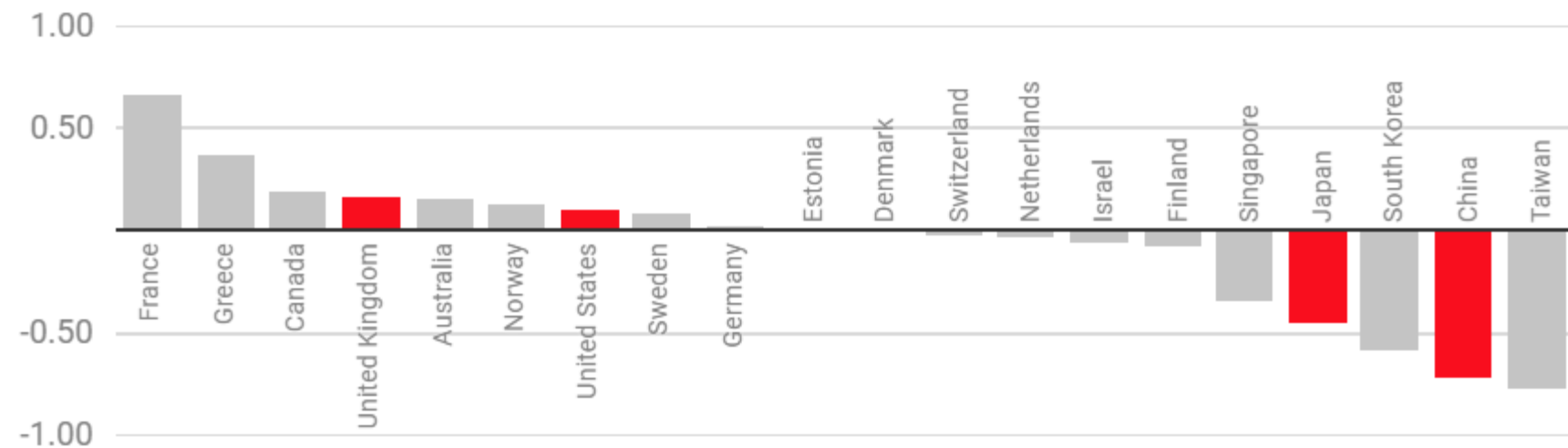
- Any type of Economic Activity producing products or Services.
- It is part of a chain –from raw materials to finished product, finished product to service sector, and service sector to research and development.
- Eg:-Google Assistant(product) launched by Google

ETHICS



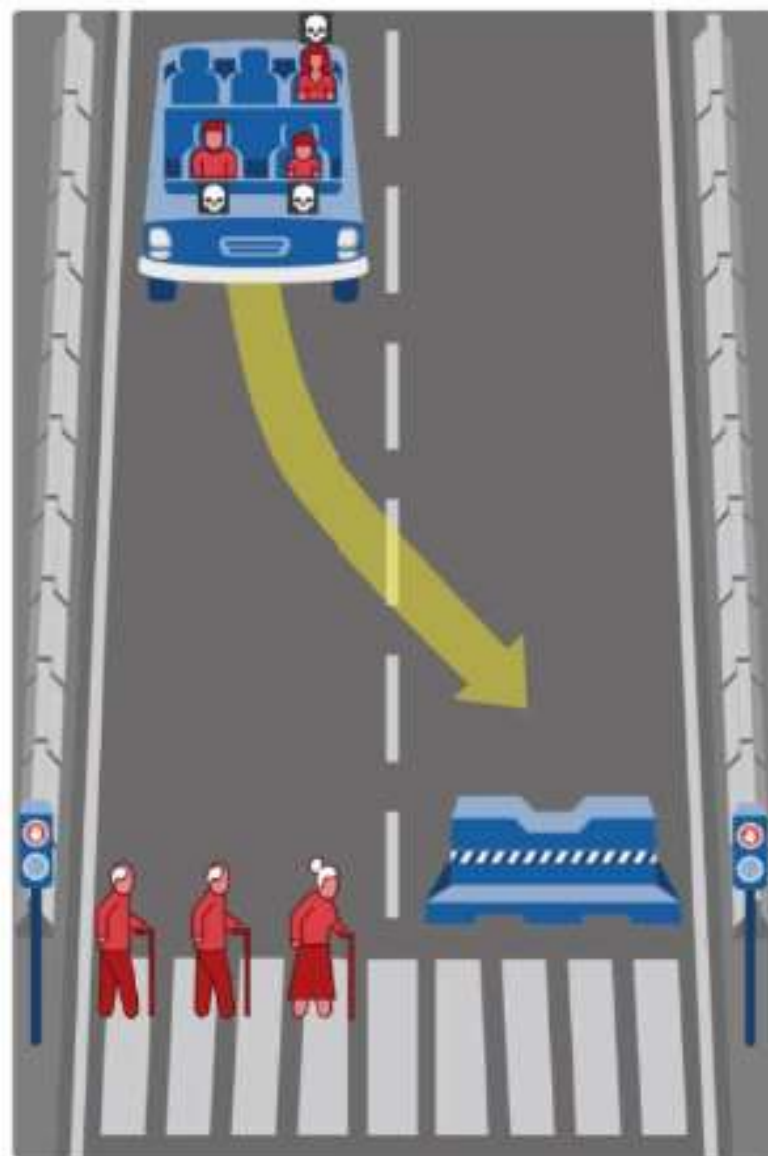
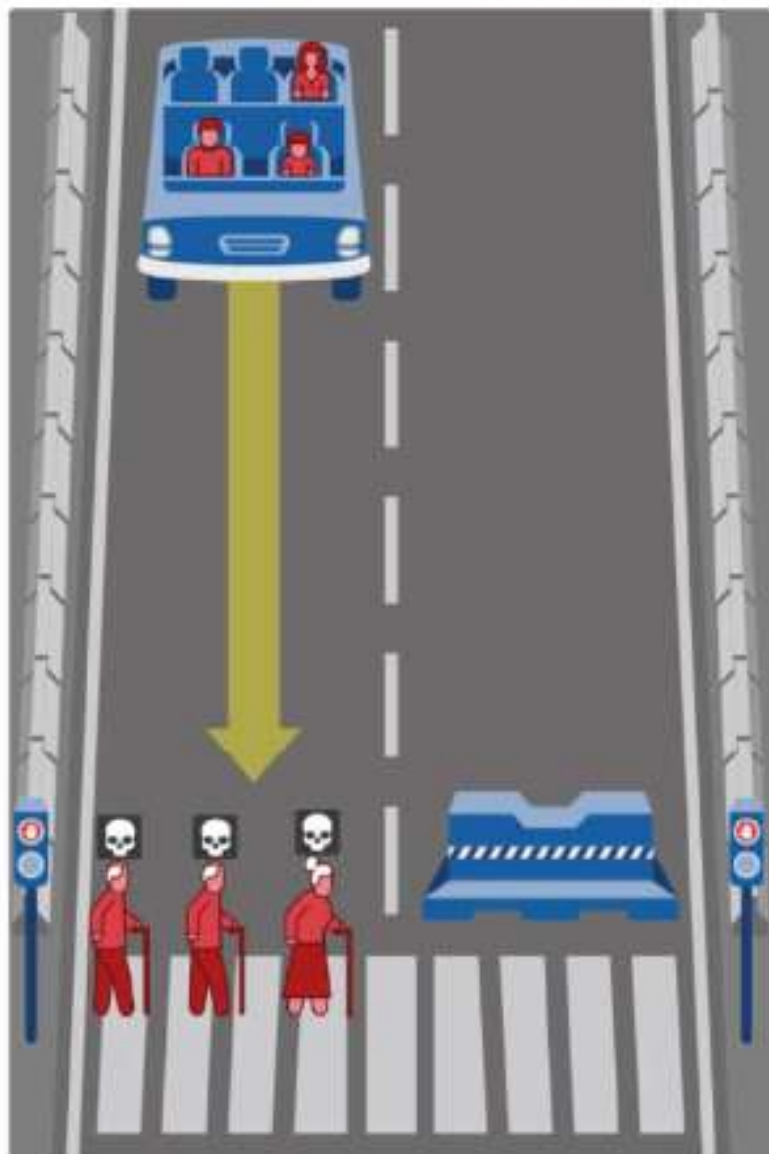


Countries with more individualistic cultures are more likely to spare the young

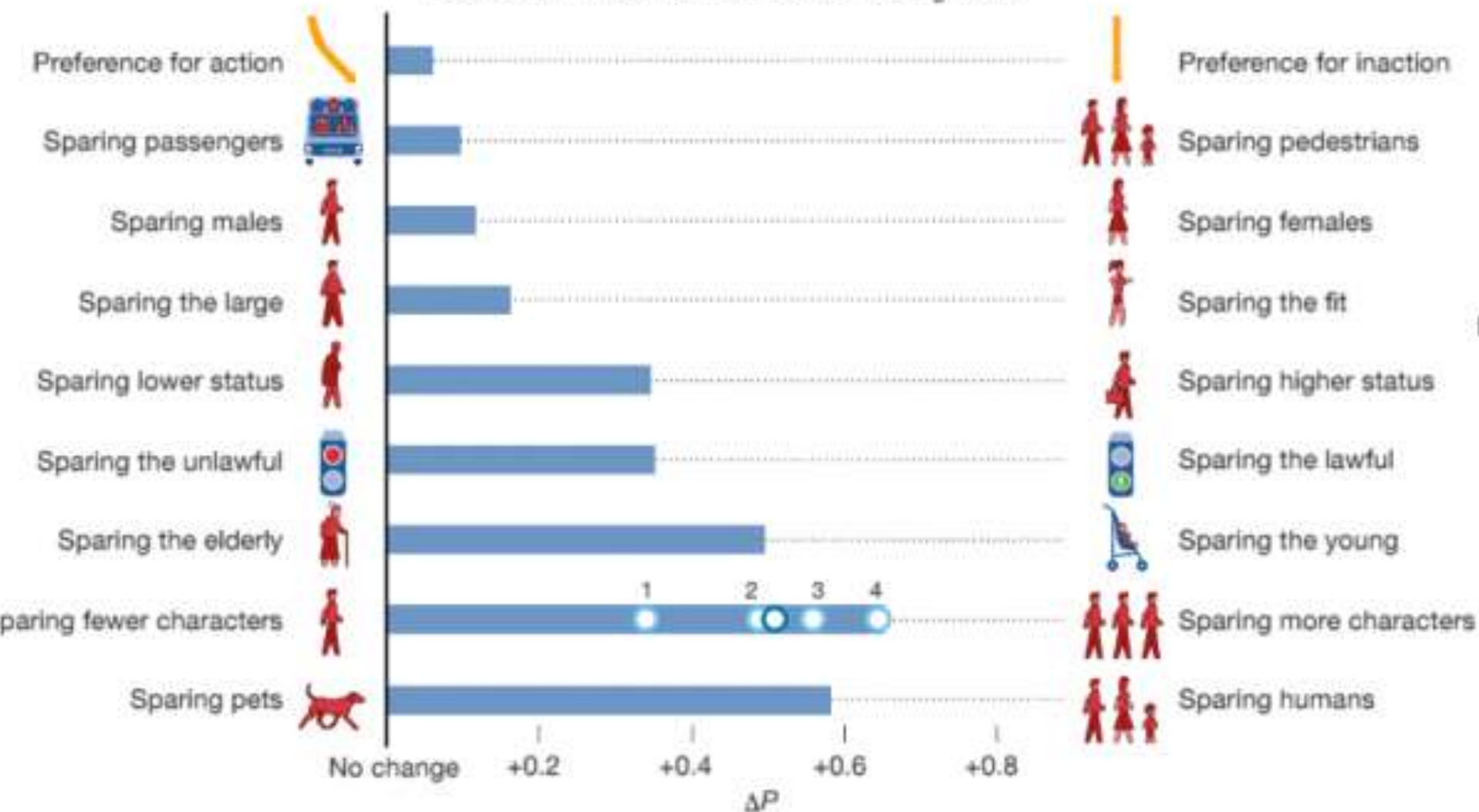


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What should the self-driving car do?

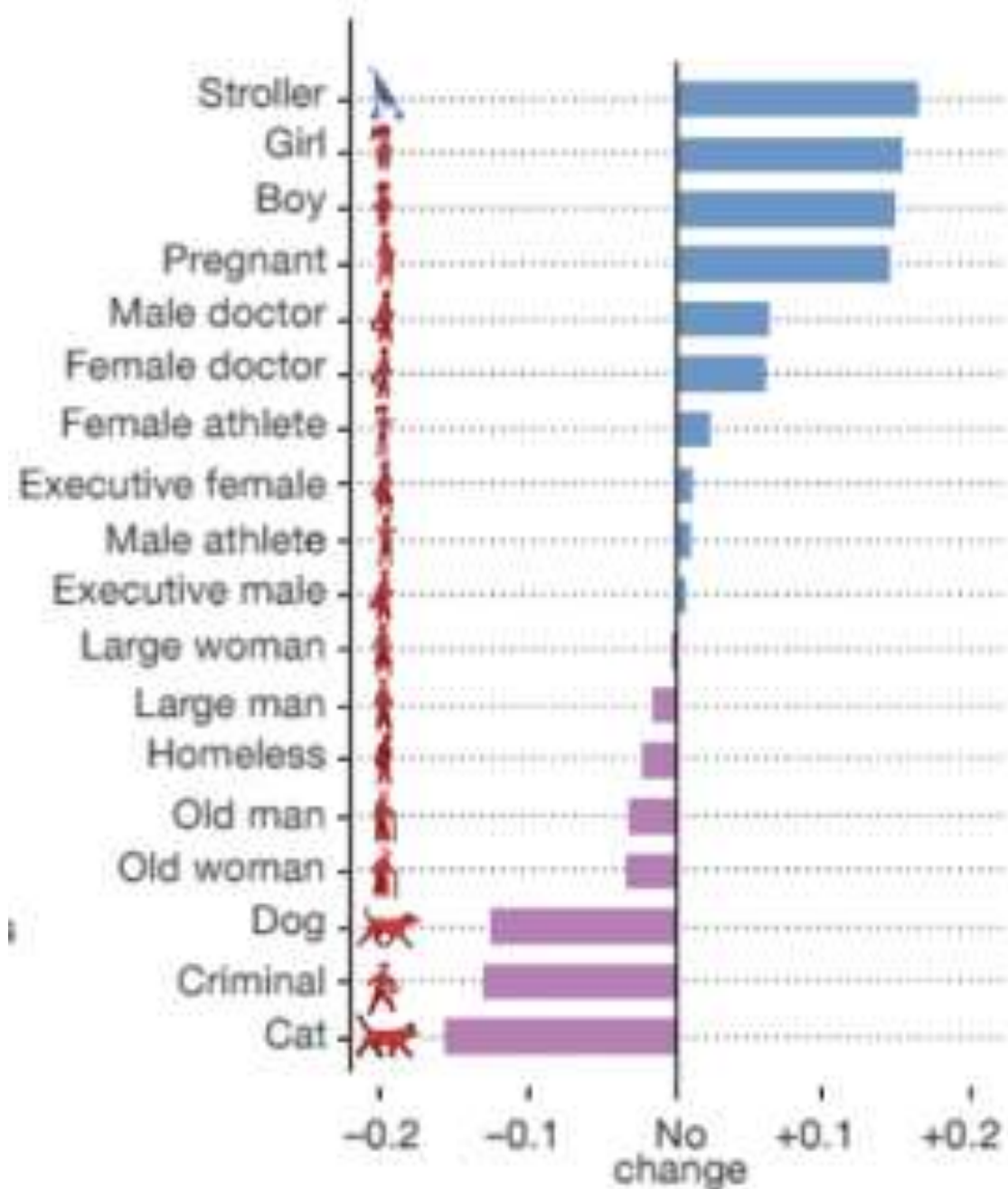


Preference in favour of the choice on the right side

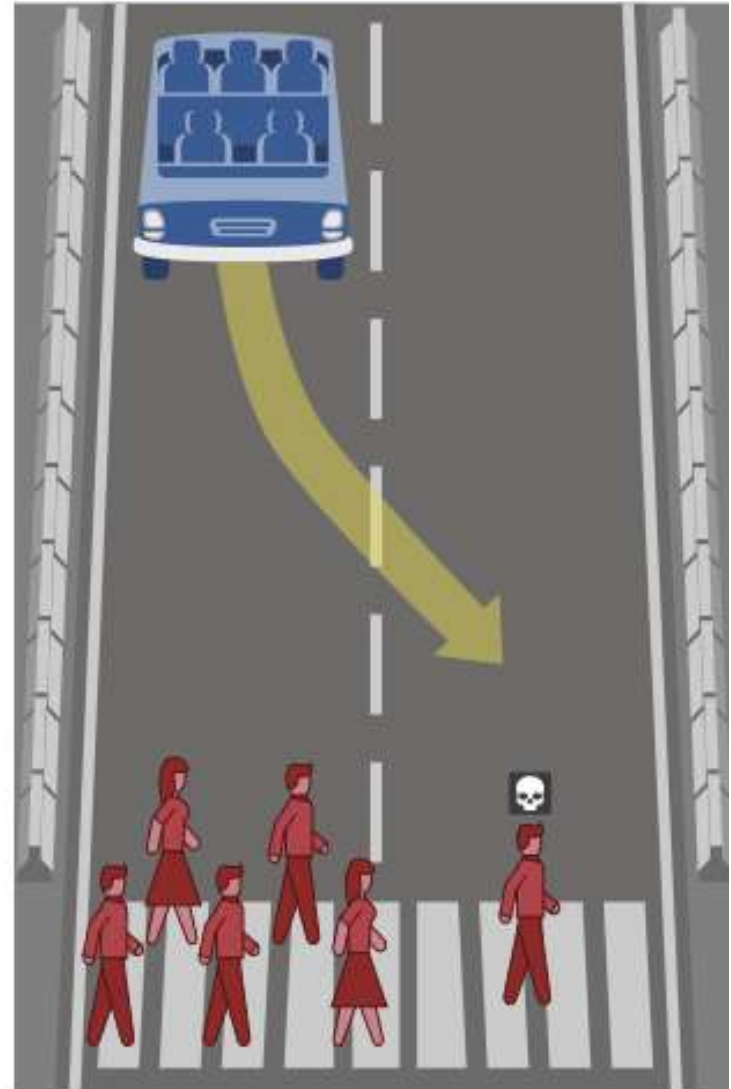
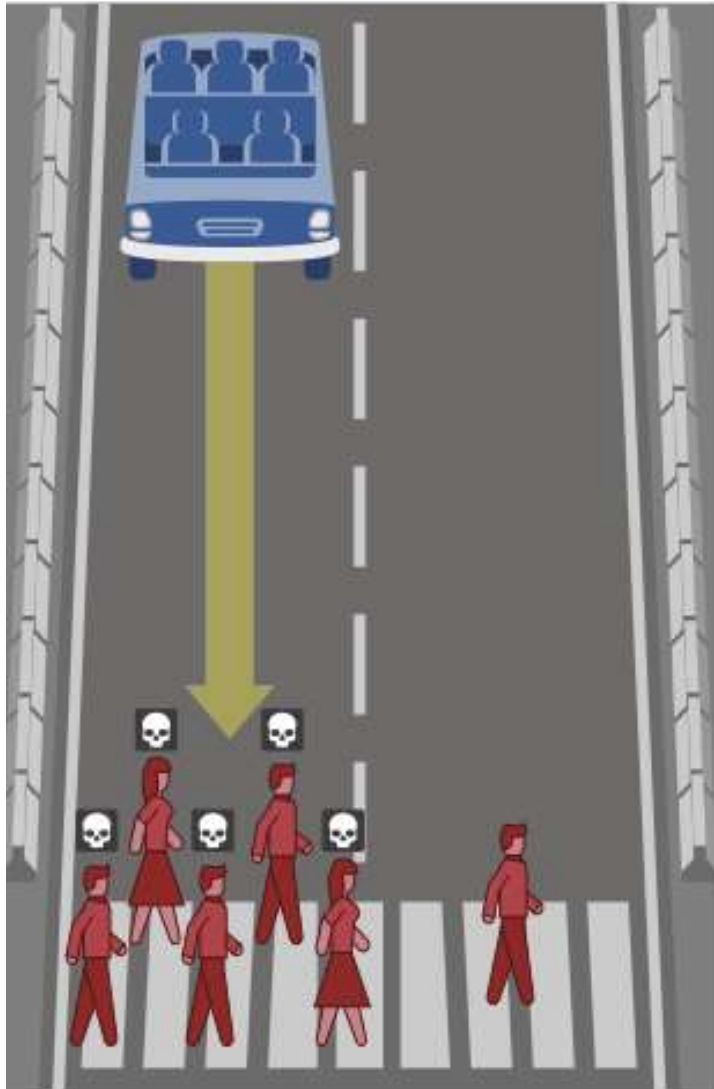


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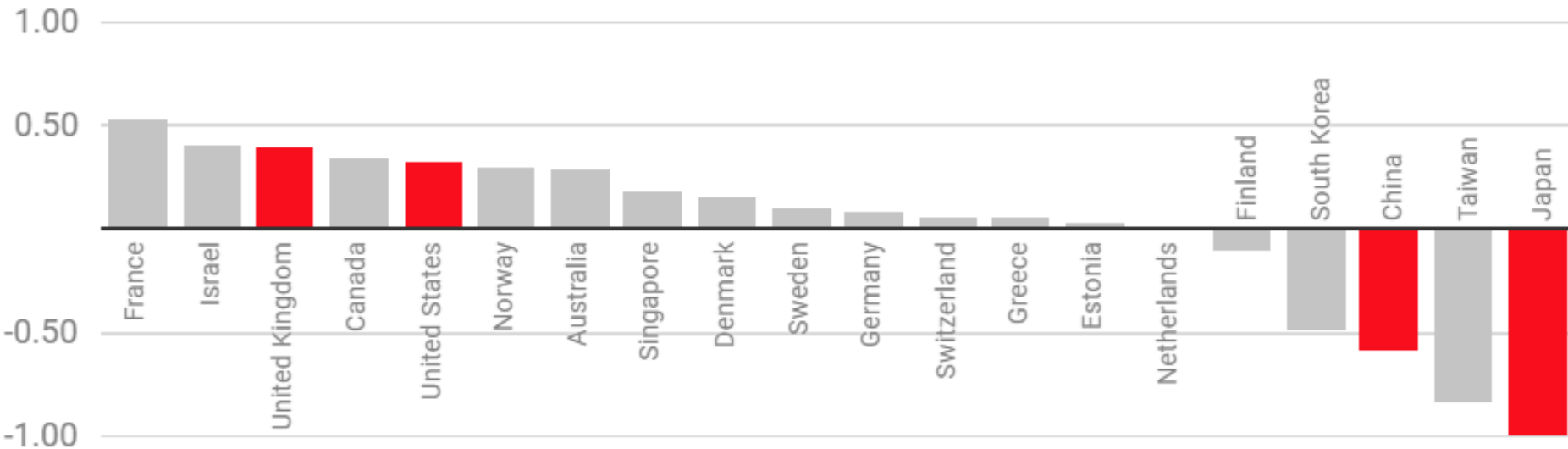
Preference in favour of sparing characters



What should the self-driving car do?



Countries with more individualistic cultures are more likely to spare more lives



ETHIC! a big question mark

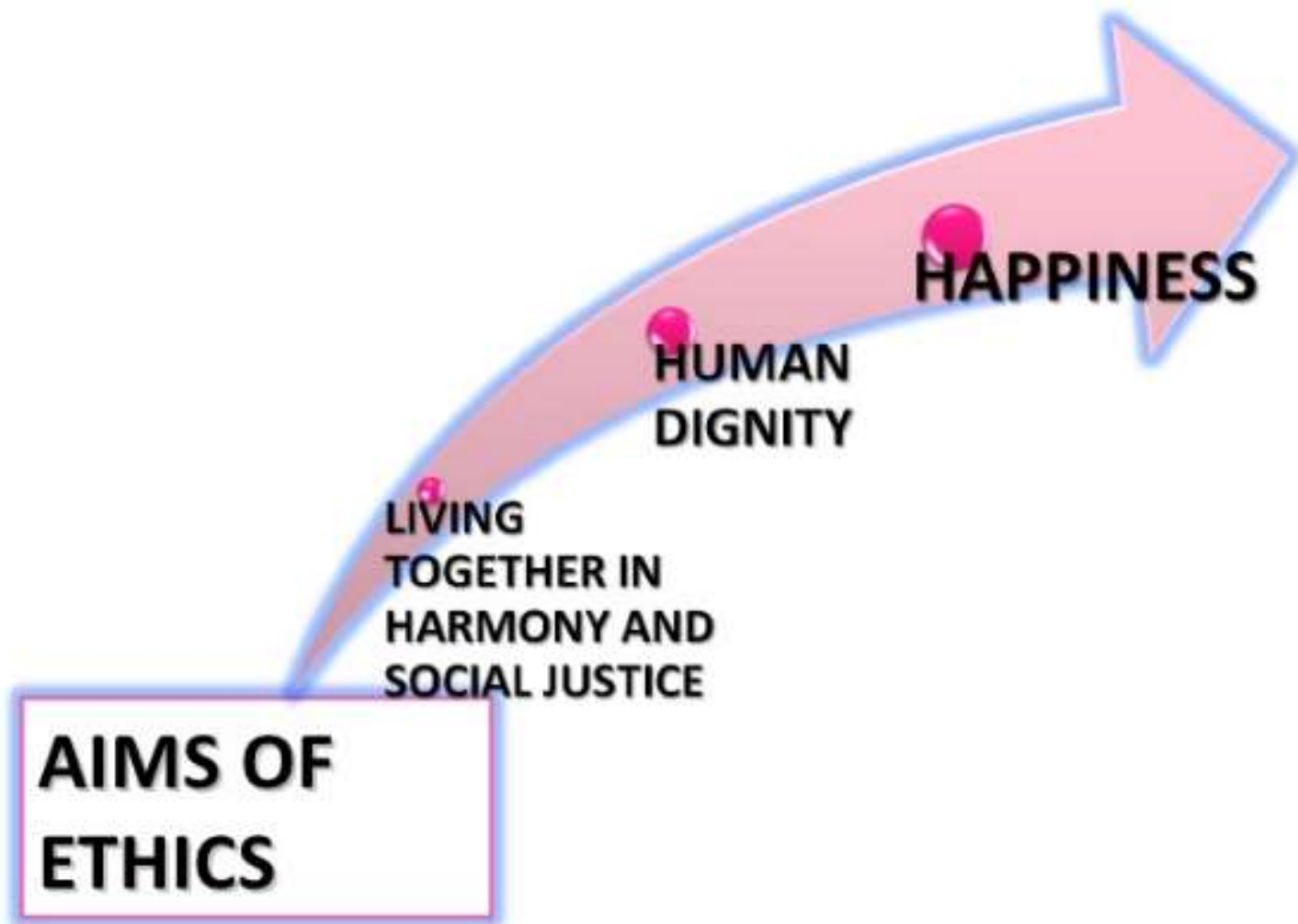


SECOND SITUATION



Ethics

- Computer ethics is a system of moral standards or values used as a guideline for computer users.
- Eg:- Google has released what is effectively a rulebook for how the company will apply AI technology
- The seven principles include making sure that AI is applied to applications that are socially beneficial, safe and won't create unfair bias.



Legal Issues

- A legal issue can be any question of law that arises from a particular set of facts.
- To prevent the misuse of computers.

Eg:- Copying and Legal Issues

make sure your research and development teams thoroughly research the patents and copyrights of your current product, to avoid a messy legal battle should you step on a competitor's toes.

Learning Outcomes

By the end of this course students will be able to:

- To understand ethical environment of work.
- Understand about the latest trends and current issues in information technology.
- Describe the various types of funding and schemes for start up business in IT sector.
- Comply with various cyber laws and related semantics for deploying security mechanisms in IT industry.
- Understand various types of legal, ethical and professional issues in Information Security.
- Understand the concept of intellectual properties.

Learning Outcomes

- Reflectively judge the morality of behaviours involving the use of computers
- Defend or attack a wide range of moral and/or legal standpoints involving the use of computers.
- Recognize and act upon legal issues and constraints in computing



UNITS

UNIT 1

Ethics

- What is an ethical work environment,
- Ethical behavior of IT professional.
- Common ethical issues for IT users

UNIT 2

Companies

- What are the companies act
- What is NASSCOM,
- What is STPI
- And Recent technology advancement,

UNIT 3

Government Funding and schemes for Startup

- What are Startups.
- Benefit of startups.

UNIT 4

Startup in IT

- Idea
- Planning
- General company Description,
- Marketing plan,
- Operational plan, Management
- And the most important.....



UNIT 5

Legal, Ethical and Professional issues in Information Security:

- What is Cyber Crime?
- Cyber law of India
- Need for cyber law in India

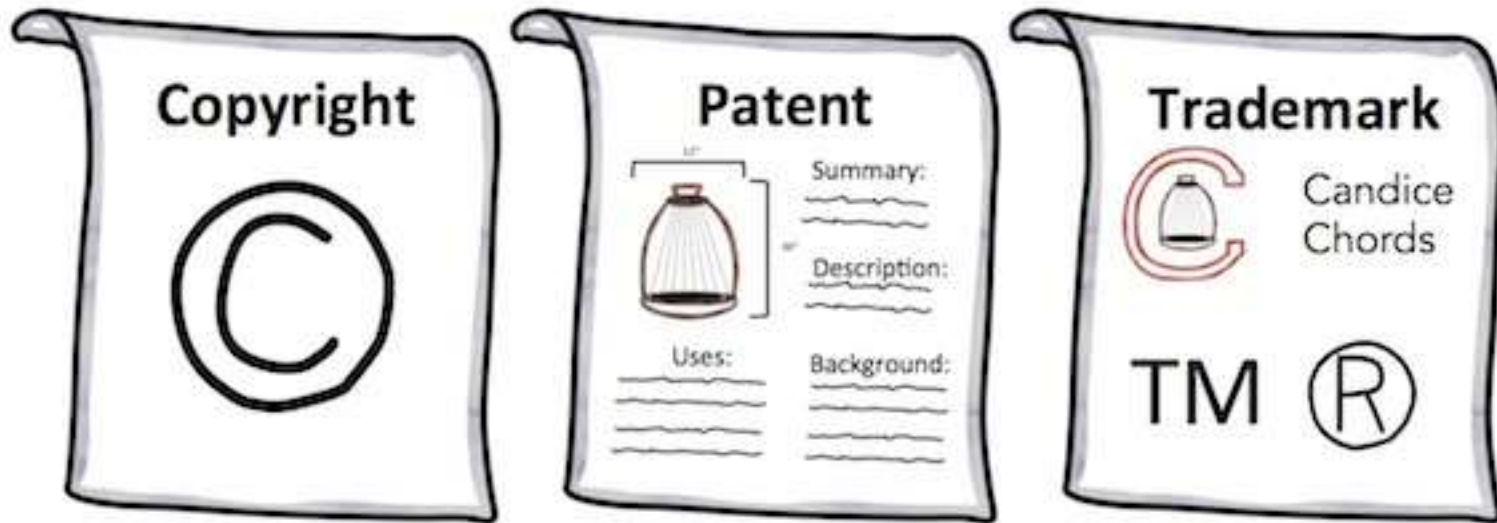
UNIT 6

- **What is Intellectual Properties ?**
- **What is the need?**
- **How we can do it**

Intellectual Properties



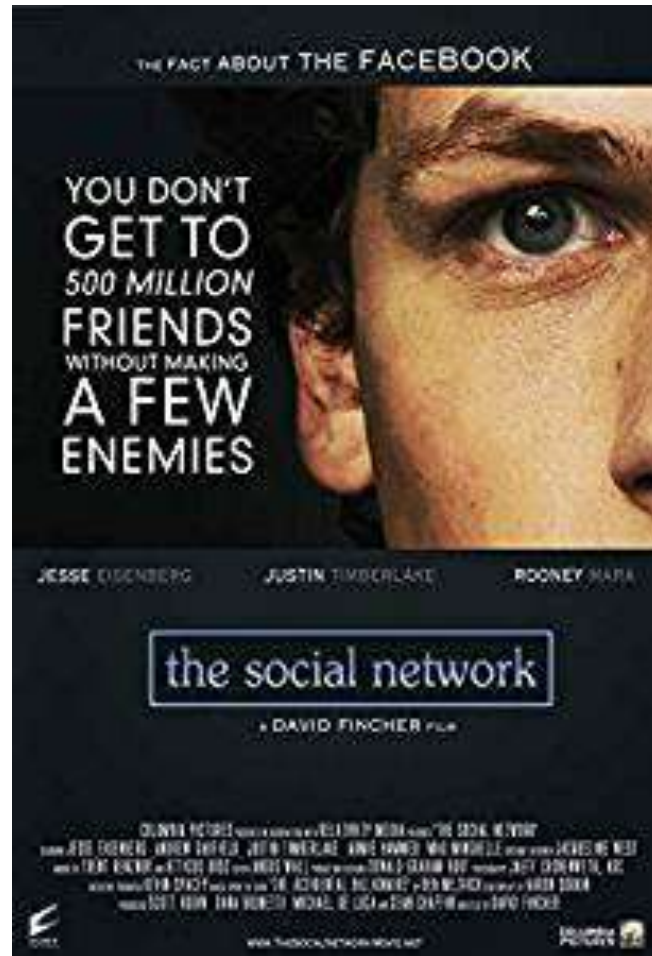
Types of IP



NEED



Any practical example



How we can?

- For this question you need to listen



ME



ETHICS

UNIT 1

ETHICS

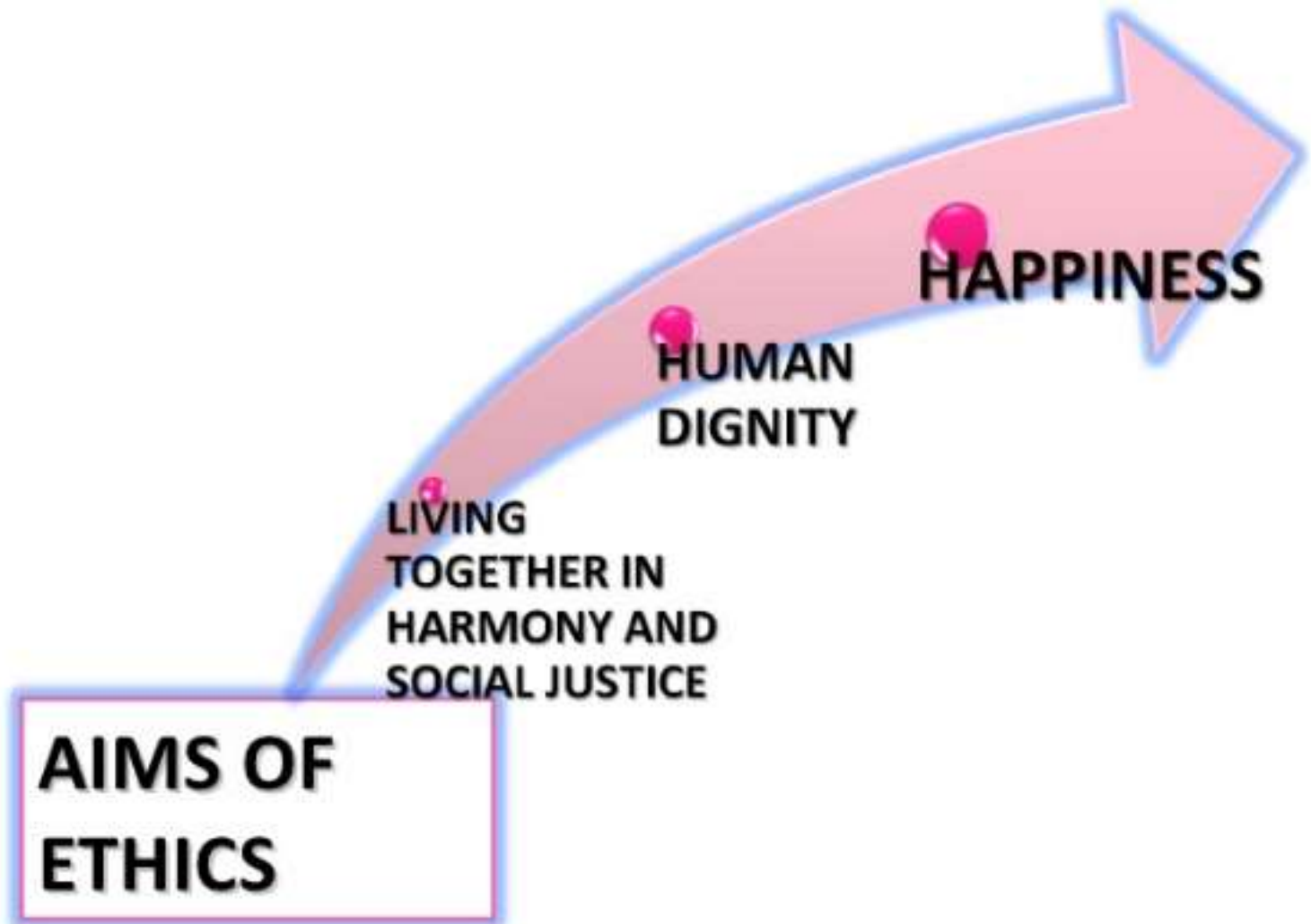
- Ethics is the field of study that is concerned with questions of value, i.e., judgments about what human behavior is "good" or "bad" in any given situation. Ethics are the standards, values, morals, principles, etc., which are used to base one's decisions or actions on; often there is no clear "right" or "wrong" answer.

ETHICS

- Ethics is a set of belief about right and wrong behaviour.

For example, how would you decide which person should live or die?

- Example already we discussed.



**AIMS OF
ETHICS**

**LIVING
TOGETHER IN
HARMONY AND
SOCIAL JUSTICE**

**HUMAN
DIGNITY**

HAPPINESS

Cisco “World’s Most Ethical Company”

Cisco 2017 Corporate Social Responsibility in EMEAR (Europe, Middle East, Africa, Russia)

Renewable Energy

59%



of FY17 EMEAR electricity consumption from renewable sources

100%

of FY17 electricity consumption from renewable sources in Denmark, France, Germany, Ireland, Italy, Luxembourg, Switzerland, and the UK

Cisco Networking Academy

This world-leading program is delivered to over one million students each year, equipping more than...

2.8



million students in EMEAR

in
+60



countries in the region with digital and career skills since 1997

Fostering Diversity

100%

score on Human Rights Campaign's 2018 Corporate Equality Index



Global Impact

\$355 million+



in cash and in-kind contributions, including \$274 million for Cisco Networking Academy

154 million+ people



positively impacted, as reported by our nonprofit grantees

358K hours



employees volunteered

Cisco “World’s Most Ethical Company”

1. It believes “A strong commitment to ethics is critical to our long-term success as a company. Any success that is not achieved ethically is no success at all.
2. Cisco conducts numerous programs aimed at fulfilling what it sees as its corporate social responsibilities, Donations, manages energy and greenhouse emission generated by its operations.
3. Cisco Chairman and CEO Advocates Ethical Behaviour It communicates its Code of Conduct to suppliers, monitors their compliance, and helps them improve performance.

Answer the question

- What does it mean for an individual to act in an ethical manner? What does it mean for an organization to act ethically?
- How should an organization balance its resources between pursuing its primary mission for existence and striving to meet social responsibility goals?

What is difference between moral,
ethics and law?

Ethics and Morality

Ethics refers to standards of conduct, standards that indicate how one should behave based on moral duties and virtues, which themselves are derived from principles of right and wrong.

Moral Relativism

Values are determined by the society we grow up in, and there are no universal values. Moral values are simply customs or conventions that vary from culture to culture.

Moral Consistency

To what extent do you think the following individuals are morally inconsistent?

A. an anti-abortionist who supports the death penalty

B. a vegetarian who buys leather shoes

C. a socialist who educates his children at a private school

D. A politician who advocates family values and has an affair

E. An environmental activist who drives an SUV

F. Someone who thinks stealing is wrong but makes illegal copies of computer software or music.



Describe the characteristics of justice.

The Relationship Between Ethics and Law

If everyone made the same ethical decisions with the same results, there would be no need for law. In the real world, however, some people engage in conduct that most people agree is wrong.

Why Law is Necessary

- **Law** is the system of rules of conduct established by the government of a society to maintain stability and justice.
- Law defines the legal rights and duties of the people and provides the means of enforcing these rights and duties.

Ethics and Legal Conflicts

- Because law is made by people, it is imperfect.
- Legislators and judges bring their own personal opinions on ethics to the lawmaking process.
- As a result, ethics and law will sometimes conflict.



Define Law

DO INDIVIDUALS MATTER?

***Should I leave
the trash or take
it with me?***



Ethics



Ethics



Software Piracy

- The software is being copied or used in a way that violates the terms of service. This often is cited as a cause for low sales of a piece of software or poor profits when the software itself is very popular.

Example

For example:-

Attitudes toward software piracy- the practice of illegally making copies of software or enabling others to access software to which they are not entitled—range from strong opposition to acceptance of the practice as a standard approach to conducting business.



Why Piracy happens?

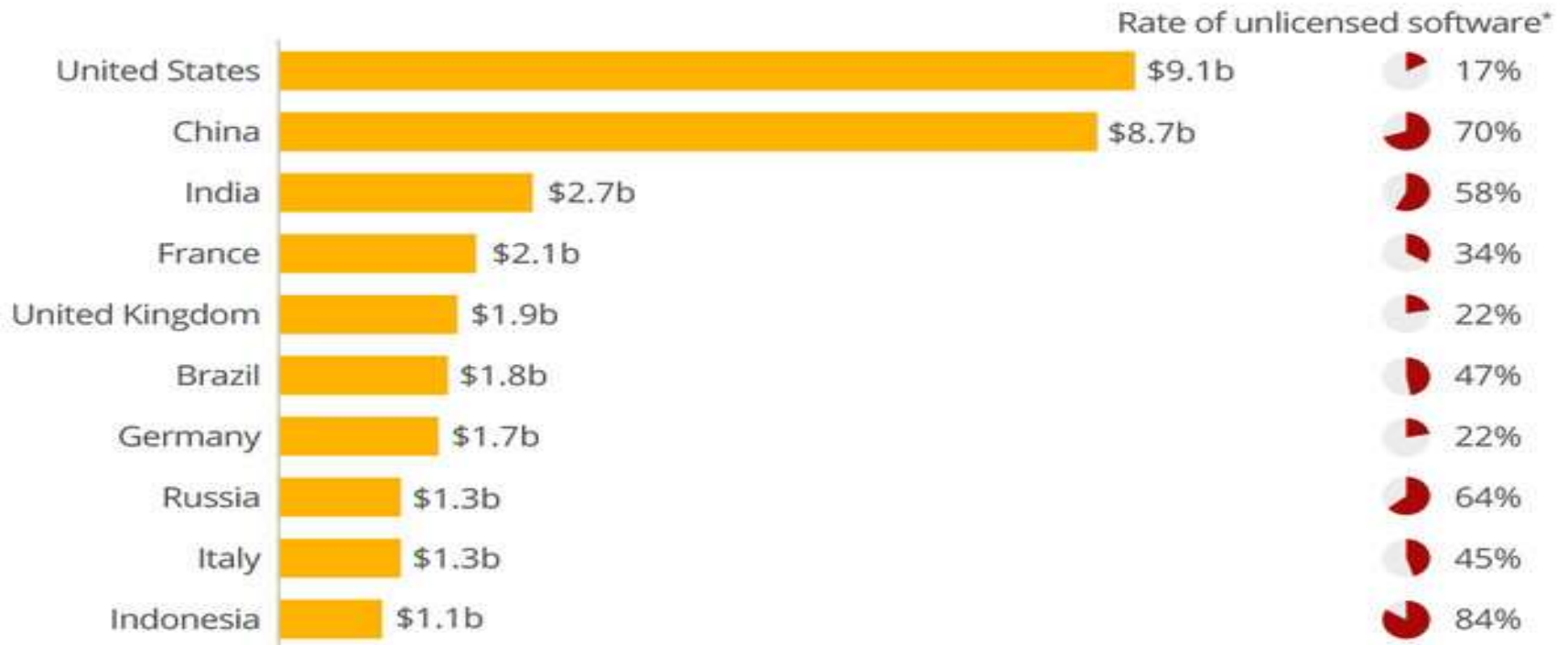


Survey

Tech  Chart of the Day

The Cost of Software Piracy

Commercial value of unlicensed software installations in 2015



* Rate of unlicensed software defined as the percentage of total software units installed that are unlicensed

IMPORTANCE OF INTEGRITY

Integrity means following your moral or ethical convictions and doing the right thing in all circumstances, even if no one is watching you. Having **integrity** means you are true to yourself and would do nothing that demeans or dishonour you..

Example:- Temptation of picking money or cell phone from the bench

Importance of integrity in business world

- Open your notebook and write ,
- If you have 1 lakh rupee only to buy a phone which phone will you buy. and why?
- Write any 5 reason.

ETHICS IN THE BUSINESS WORLD.

Why promoting Good business ethics is important:-

- To gain the goodwill of the community
- To create an organization that operates consistently.
- To produce good business
- To protect the organization and its employees from legal action
- To avoid unfavourable publicity.

Example :-the Peanut Corporation of America allegedly shipped tainted products from its plant in Georgia, which led to a salmonella outbreak in 2008 that killed at least eight people and sickened over 550 people in 43 states.

Business Ethics

- ✓ Responsibility
- ✓ Commitment
- ✓ Quality
- ✓ Reliability



To gain the goodwill of the community

Blake Mycoskie started Toms Shoes on the premise that for every pair of shoes sold, one pair would be donated to a child in need. This innovative idea resulted from a trip to Argentina where Mycoskie saw an overwhelming number of children without shoes. Toms Shoes recognized that consumers want to feel good about what they buy, and thus directly tied the purchase with the donation. In just four years, Toms Shoes has donated more than 400,000 shoes, evidence that consumers have clearly embraced the cause

CSR

Corporate social responsibility (CSR) is the concept that an organization should act ethically by taking responsibility for the impact of its actions on the environment, the community, and the welfare of its employees

No doubt organization exist primarily for profits and customer satisfaction but they also have some basic responsibilities to society.

Philanthropy is one way in which an organization can demonstrate its values in action and make a positive connection with its stakeholders.

-

Organization	Examples of socially responsible activities
Dell Inc.	Dell partners with nonprofit organizations to develop ways of using technology to help solve pressing problems. Its "Powering the Positive" program initiatives include Children's Cancer Care, Youth Learning, Disaster Relief, and Social Entrepreneurship. ¹⁹
Google	Google recently invested over \$250 million in solar and wind power projects. ²⁰
IBM	IBM employees donated 3.2 million hours of community service in 120 countries in 2011. ²¹
Oracle	Oracle supports K-12 and higher education institutions with technology education grants and programs that reach 1.5 million students each year. ²²
SAP, North America	SAP supports several major corporate responsibility initiatives aimed at improving education, matches employee gifts to nonprofit agencies and schools, and encourages and supports employee volunteerism. ²³
Microsoft	Microsoft conducts an annual giving campaign, and its employees have contributed over \$1 billion to some 31,000 nonprofit organizations around the world since 1983. ²⁴

To create an organization that operates consistently.

Consistency also means that shareholders, customers, suppliers, and the community know what they can expect of the organization that it will behave in the future much as it has in the past

- Operate with honesty and integrity, staying true to organizational principles.
- Operate according to standards of ethical conduct, in words and action.
- Treat colleagues, customers, and consumers with respect.
- Strive to be the best at what matters most to the organization.
- Value diversity.
- Make decisions based on facts and principles

Example :- Need of 30 megapixel phone

TO PRODUCE GOOD BUSINESS

- Companies that produce safe and effective products avoid costly recalls and lawsuits.

The recall of the weight loss drug Fen-Phen cost its maker, Wyeth-Ayerst Laboratories, almost \$14 billion in awards to victims, many of whom developed serious health problems as a result of taking the drug.

Example :- MAGGI

Avoiding Unfavourable Publicity

- In 2012, Google agreed to pay a fine of \$22.5 million to end an FTC investigation into allegations that the firm utilized cookies and bypassed privacy settings to track the online habits of people using Apple's Safari browser..
- ANSWER: why did Google agree to pay?

The amount of the fine, while the largest in FTC history, represented less than one day's worth of Google's profits. Why ?

- The public reputation of a company strongly influences the value of its stock, how consumers regard its products and services,
- The degree of oversight it receives from government agencies,
- The amount of support and cooperation it receives from its business partners.

Thus, many organizations are motivated to build a strong ethics program to avoid negative publicity

Lecture 2

Unit 1

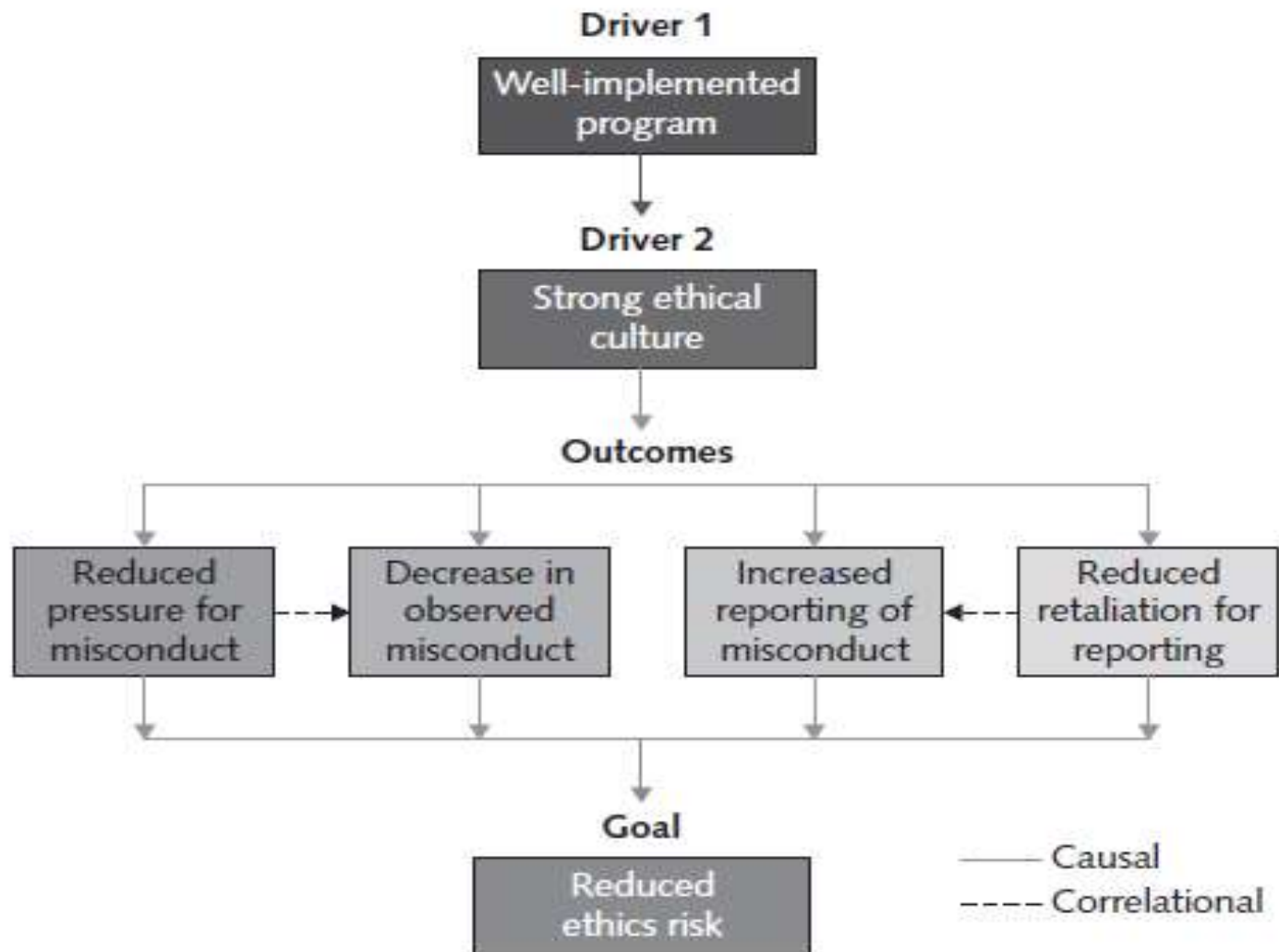
Improving corporate ethics

- Assume one scenario, you want to start a company (any company) what type of rules you will going to make for your employee.

Improving corporate ethics

- Ethics Resource Centre found

Attended Ethical workshop	NOT attended ethical workshop
86% of them are perceiving strong ethical culture	25% of them are perceive a culture that promote integrity



Characteristics of a successful ethics program

- Employees are willing to seek advice about ethics issues.
- Employees feel prepared to handle situations that could lead to misconduct.
- Employees are rewarded for ethical behaviour.
- The organization does not reward success obtained through questionable means.
- Employees feel positively about their company.

Survey after completion of workshop

- National business survey

Finding	2007 survey results	2009 survey results	2011 survey results
Employees who said they witnessed misconduct on the job	56%	49%	45%
Employees who said they reported misconduct when they saw it	58%	63%	65%
Employees who felt pressure to commit an ethics violation	10%	8%	13%
Percentage of employees who say their business has a weak ethics culture	39%	35%	42%

How can we improve business ethics ?

Appointing a Corporate Ethics Officer

- A corporate ethics officer (also called a corporate compliance officer) provides an organization with vision and leadership in the area of business conduct.
- the corporate ethics officer should be a well-respected, senior-level manager who reports directly to the CEO.
- Ethics officers come from diverse backgrounds, such as legal staff, human resources, finance, auditing, security, or line operations.

Need of appointing CEO

- Started in 1980 when series of defence-contracting scandals when firms used bribes to gain inside information that they could use to improve their contract bids.
- increase in appointments followed in the aftermath of the mortgage loan scandals uncovered beginning in 2008.

Specific responsibilities include the following:

- Responsibility for compliance—that is, ensuring that ethical procedures are put into place and consistently adhered to throughout the organization
- Responsibility for creating and maintaining the ethics culture that the highest level of corporate authority wishes to have
- Responsibility for being a key knowledge and contact person on issues relating to corporate ethics and principles

Ethical Standards Set by Board of Directors

- responsible for careful and responsible management of an organization.
- In a for-profit organization, primary objective is to oversee the organization's business activities and management for the benefit of all stakeholders
- A board of directors fulfils some of its responsibilities directly and assigns others to various committees. The board is not normally responsible for day-to-day management and operations
- However, the board is responsible for supervising the management team. Board members responsibilities are :-
 1. set highest standard for personal and professional integrity
 2. ethical conduct
 3. compliance with laws and regulations.

- News Corporation is a media conglomerate founded by Rupert Murdoch—with recent annual revenue over \$30 billion generated by its cable networks (including Fox News Channel), film and television production subsidiaries, and publishing units. In 2009, it came to light that News Corporation's British subsidiary, News International Ltd., publisher of the highly popular Sunday tabloid paper, News of the World, used telephone hacking and bribes to police to obtain stories about celebrities, sports figures, politicians, and ordinary citizens. It was alleged that the practice was well known to senior executives within the company. Based on strong negative public reaction, News Corporation stopped publication of the News of the World tabloid, and the British government blocked a major deal in which News Corporation was to fully acquire the highly successful British broadcasting company BSkyB. These actions resulted in a \$3 billion drop in the stock value of News Corporation. In addition, the scandal led to the arrest of over 60 former and current journalists, and many high-level executives resigned from the firm. In a lawsuit filed in March 2011, shareholders claimed lack of board oversight for failing to react to warning signals that should have alerted them to the telephone hacking.

Establishing a Corporate Code of Ethics

- A code of conduct defines how a company's employees should act on a day-to-day basis.
- It reflects the organization's daily operations, core values and overall company culture
- every code of conduct is unique to the organization it represents.

ENRON SCANDAL (2001)

COMPANY

Houston-based commodities, energy and service corporation



WHAT HAPPENED

Shareholders lost \$74 billion, thousands of employees and investors lost their retirement accounts, and many employees lost their jobs.



MAIN PLAYERS

CEO Jeff Skilling and former CEO Ken Lay



HOW THEY DID IT

Kept huge debts off the balance sheets.



HOW THEY GOT CAUGHT

Turned in by internal whistleblower Sherron Watkins; high stock prices fueled suspicions.



FUN FACT

Fortune Magazine named Enron "America's Most Innovative Company" for six years in a row prior to the scandal.



SOX Section 404 Internal Controls



What are the requirements for Section 404?

- a. Management document controls and assess the effectiveness of internal controls over financial reporting and
- b. The external auditors to test internal controls over financial reporting



Sarbanes–Oxley Act of 2002

- Enron's complex financial statements were confusing to shareholders and analysts. In addition, its complex business model and unethical practices required that the company use accounting limitations to misrepresent earnings and modify the balance sheet to indicate favourable performance. The combination of these issues later resulted in the bankruptcy of the company.

INTEL CODE OF CONDUCT

JANUARY 2012

Code of Conduct

Since the company began, uncompromising integrity and professionalism have been the cornerstones of Intel's business. In all that we do, Intel supports and upholds a set of core values and principles. Our future growth depends on each of us understanding these values and principles and continuously demonstrating the uncompromising integrity that is the foundation of our company.

The Code of Conduct sets the standard for how we work together to develop and deliver product, how we protect the value of Intel and its subsidiaries (collectively known as 'Intel'), and how we work with customers, suppliers and others. All of us at Intel must abide by the Code when conducting Intel-related business.

The Code affirms our five principles of conduct:

- Conduct Business with Honesty and Integrity
- Follow the Letter and Spirit of the Law
- Treat Each Other Fairly
- Act in the Best Interests of Intel and Avoid Conflicts of Interest
- Protect the Company's Assets and Reputation

Conducting Social Audits

- conduct regular social audits of their policies and practices.
- In a social audit, an organization reviews how well it is meeting its ethical and social responsibility goals, and communicates its new goals for the upcoming year.

Intel CSR report 2011

Each year Intel prepares its “Corporate Responsibility Report,” In 2011, Intel focused on goals in three primary areas:

(1) the environment—with targets set for global-warming emissions, energy consumption, water use, chemical and solid waste reduction, and product energy efficiency

(2) corporate governance—with goals to improve transparency and strengthen ethics and compliance reporting

(3) social—with goals to improve the organizational health of the company as measured by its own Organizational Health Survey, to expand the number of supplier audits, and to increase the number of community education programs

Requiring Employees to Take Ethics Training

- The ancient Greek philosophers believed that personal convictions about right and wrong behaviour could be improved through education.
- organization's code of ethics must be promoted and continually communicated within the organization, from top to bottom.

- Motorola, designer of wireless network equipment, cell phones, and smartphones, is committed to a strong corporate ethics training program to ensure that its employees conduct its business with integrity. The focus of the training is to clarify corporate values and policies and to encourage employees to report ethical concerns via numerous reporting channels. Motorola investigates all allegations of ethical misconduct, and it will take appropriate disciplinary actions if a claim is proven—up to and including dismissal of all involved employees. All salaried employees must complete an online introduction to the ethics program every three years. All managers in newly acquired businesses or high-risk locations must take further classroom ethics training. Motorola operates a 24-hour toll-free service for reporting any suspected ethical concerns. In 2011, the firm introduced a Code of Business Conduct in 10 languages and updated its suite of ethics training courses to include new anticorruption and anti bribery training

Including Ethical Criteria in Employee Appraisals

- Performance
- Self improvement
- Successful completion of projects
- Initiatives
- Maintenance of good customer relation

Think !

- You and your best friend both are working in a same company and you are doing very well and you are expecting a promotion in a week and your friend is not serious about his job. He got so many warnings from boss ,a small mistake and he can lose his job and this morning he calls you at 9 a.m. at work and ask for a favor that he is having trouble this morning and will be an hour late for work. He ask you to mark his manual attendance . And one thing for sure boss is on checking. What would you do?

- Creating an ethical work environment
- Ethical decision making
 - Ethics in information technology


UNIT 1

Creating an Ethical Work Environment

In a unethical working environment


- no corporate code of ethics and no strong examples of senior management practicing ethical behavior.

Employees in highly competitive workplaces often feel pressure from aggressive competitors, cutthroat suppliers, unrealistic budgets, unforgiving quotas, tight deadlines, and bonus incentives.




"My boss wants results, not excuses, so I have to cut corners to meet the goals my boss has set."

"I have seen other successful people take unethical actions and not suffer negative repercussions."



"Because the company has not established any guidelines, I don't think my conduct is really wrong or illegal."



@#\$\$@S!
!!!!????

"read it when you have time and sign the attached form that says you read and understand the corporate policy."

Creating an Ethical Work Environment

Employees must have a knowledgeable resource with whom they can discuss perceived unethical practices

INTEL ROLE

Intel expects employees to report suspected violations its **code of conduct to a manager, the Legal or Internal Audit Departments, or a business unit's legal counsel**. Employees can also report violations anonymously through a **Web site** dedicated to ethics. **Senior management** at Intel has made it clear that any employee can report suspected **violations of corporate business principles without fear of retaliation**.

Creating an Ethical Work Environment

Manager's checklist for establishing an ethical work environment

Question	Yes	No
Does your organization have a code of ethics?		
Do employees know how and to whom to report any infractions of the code of ethics?		
Do employees feel that they can report violations of the code of ethics safely and without fear of retaliation?		
Do employees feel that action will be taken against those who violate the code of ethics?		
Do senior managers set an example by communicating the code of ethics and using it in their own decision making?		
Do managers evaluate and provide feedback to employees on how they operate with respect to the values and principles in the code of ethics?		
Are employees aware of sanctions for breaching the code of ethics?		
Do employees use the code of ethics in their decision making?		

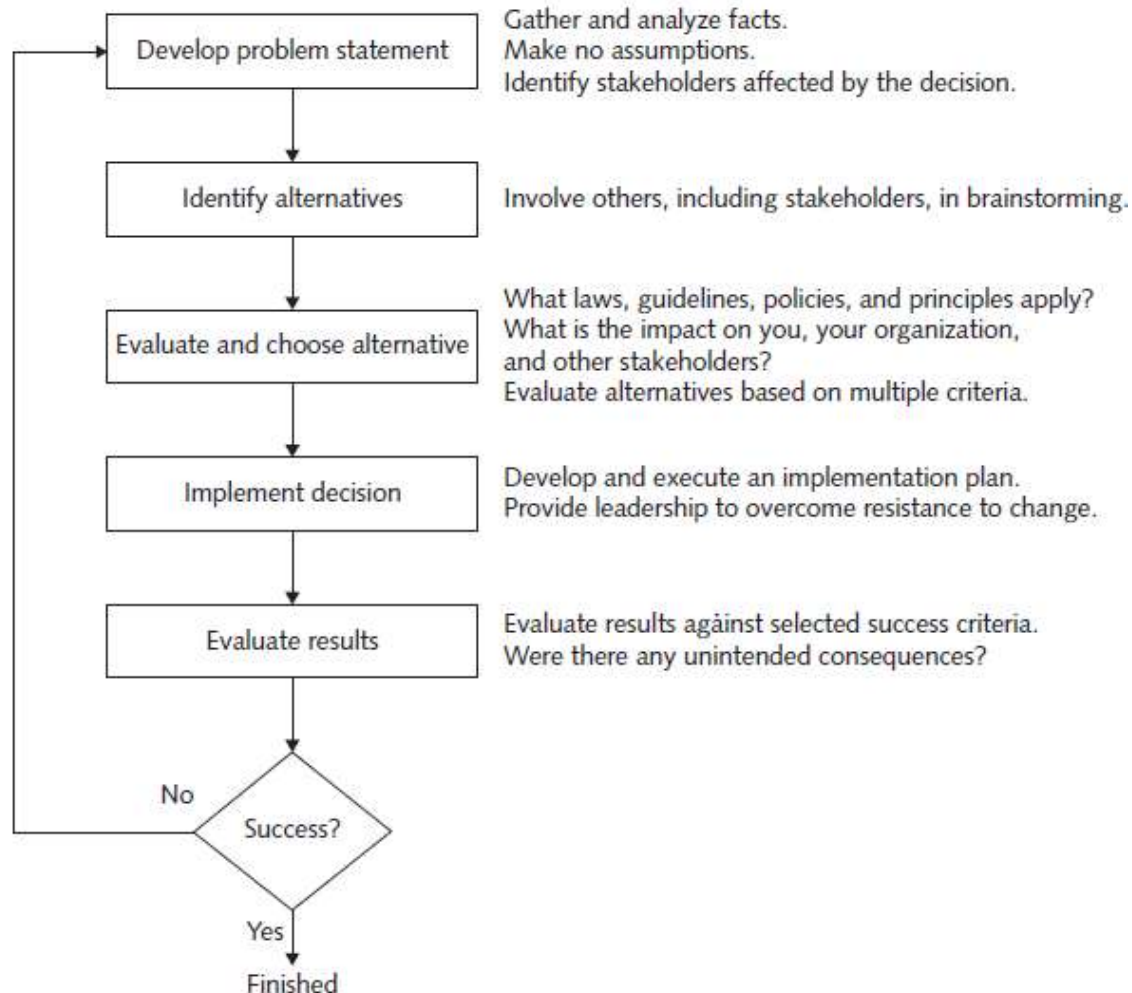
DECISION



DECISION MAKING



INCLUDING ETHICAL CONSIDERATIONS IN DECISION MAKING



- Lets take a general scenario , you are a carrier consular and suppose a parent visit you with their ward and according to them their child is pursuing a B.Tech CSE and he is in third year and he was doing well academically but recently he scored very less marks and he is not interested in this field, he is interested in fine arts then how you will going to do the right decision making

DEVELOP A PROBLEM STATEMENT

- A problem statement is a clear, concise description of the issue that needs to be addressed.

It Answers-

- What do people observe that causes them to think there is a problem?
- Who is directly affected by the problem?
- Is anyone else affected?
- How often does the problem occur?
- What is the impact of the problem?
- How serious is the problem?

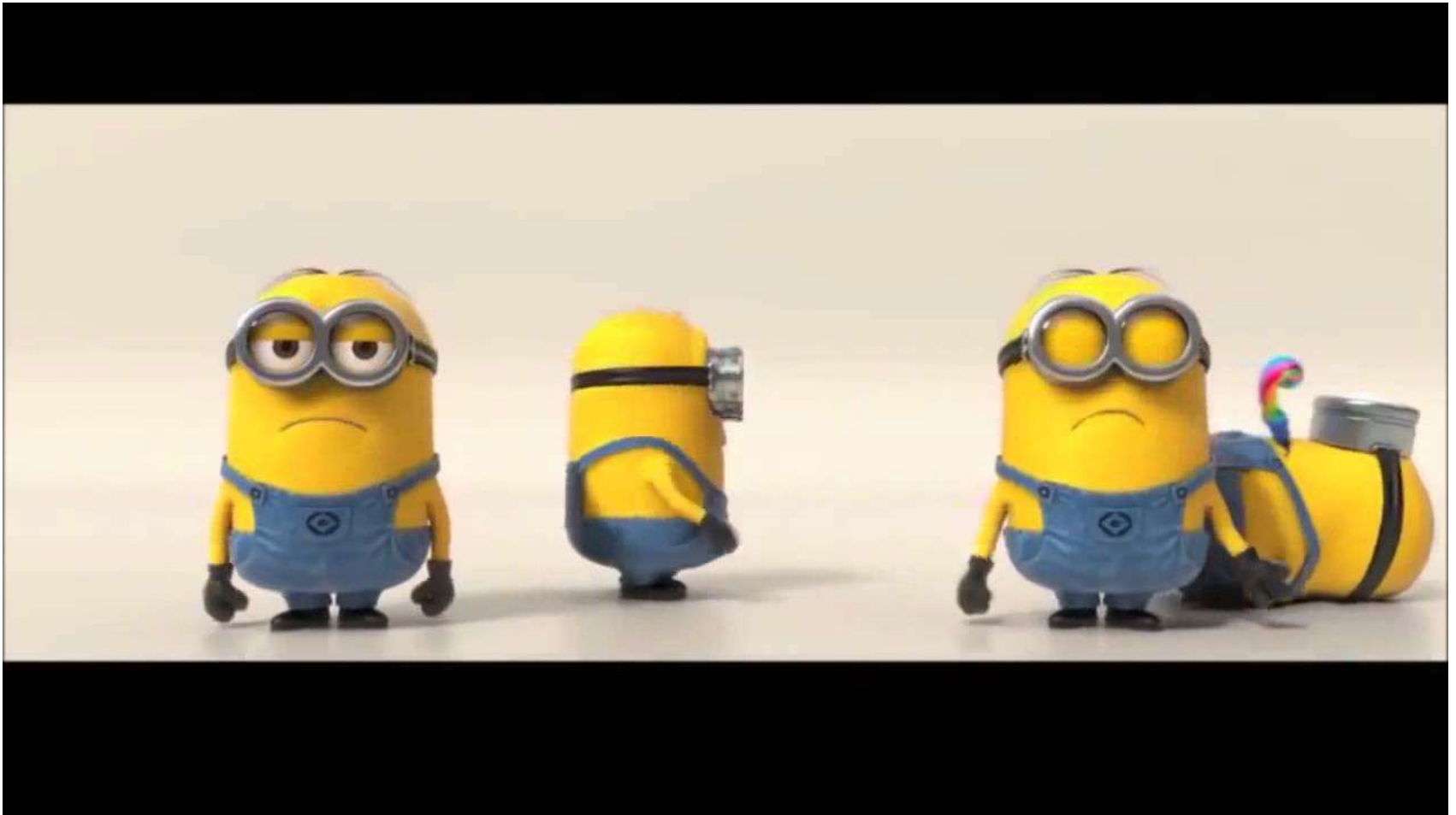
Problem statement

- Why does new generation like Hollywood movies more than Bollywood movie.

Poor problem statement



It's not cool



Good problem statement



DEVELOP A PROBLEM STATEMENT

- **Good problem statement:** Our product supply organization is continuously running out of stock of finished products, creating an out-of-stock situation on over 15 percent of our customer orders, resulting in over \$300,000 in lost sales per month.
- **Poor problem statement:** We need to implement a new inventory control system. (This is a possible solution, not a problem statement.)
- **Poor problem statement:** We have a problem with finished product inventory. (This is not specific enough.)

IDENTIFY ALTERNATIVES

- It is ideal to enlist the help of others, including stakeholders, to identify several alternative solutions to the problem.
- Brainstorming with others will increase your chances of identifying a broad range of alternatives and determining the best solution.
- Try not to be critical of ideas, as any negative criticism will tend to shut down the discussion, and the flow of ideas will dry up.
- Simply write down the ideas as they are suggested.

EVALUATE AND CHOOSE AN ALTERNATIVE

Approach to dealing with ethical issues	Principle
Virtue ethics approach	The ethical choice best reflects moral virtues in yourself and your community.
Utilitarian approach	The ethical choice produces the greatest excess of benefits over harm.
Fairness approach	The ethical choice treats everyone the same and shows no favoritism or discrimination.
Common good approach	The ethical choice advances the common good.

- **Virtue Ethics Approach**

- ❖ It focuses on how you should behave and think about relationships if you are concerned with your daily life in a community.
- ❖ Example-honesty and openness when dealing with others are generally considered virtues; however, a corporate purchasing manager who is negotiating a multimillion dollar deal might need to be vague in discussions with potential suppliers.

- **Utilitarian Approach**

- ❖ You should choose the action or policy that has the best overall consequences for all people who are directly or indirectly affected.
- ❖ Example- Business managers, legislators, and scientists weigh the benefits and harm of policies when deciding whether to invest resources in building a new plant in a foreign country, to enact a new law, or to approve a new prescription drug.

- Fairness Approach

- ❖ The fairness approach focuses on how fairly actions and policies distribute benefits and burdens among people affected by the decision.
- ❖ The guiding principle of this approach is to treat all people the same.

- Common Good Approach

- ❖ It is based on a vision of society as a community whose members work together to achieve a common set of values and goals.
- ❖ It attempt to implement social systems, institutions, and environments that everyone depends on and that benefit all people.
- ❖ Examples include an effective education system, a safe and efficient transportation system, and accessible and affordable health care.

IMPLEMENT THE DECISION

- Once an alternative is selected, it should be implemented in an efficient, effective, and timely manner.
- It is often much easier said than done, because people tend to resist change.
- It is imperative that someone whom the stakeholders trust and respect answer the following questions:
 1. Why are we doing this?
 2. What is wrong with the current way we do things?
 3. What are the benefits of the new way for you?

EVALUATE THE RESULTS

- After the solution to the problem has been implemented, monitor the results to see if the desired effect was achieved, and observe its impact on the organization and the various stakeholders.
 - Were the success criteria fully met?
 - Were there any unintended consequences?

ETHICS IN INFORMATION TECHNOLOGY

Here are some examples that raise public concern about the ethical use of information technology:

- Many employees have their email and Internet access monitored while at work, as employers struggle to balance their need to manage important company assets and work time with employees' desire for privacy and self direction.
- Millions of people have downloaded music and movies at no charge and in apparent violation of copyright laws at tremendous expense to the owners of those copyrights.

- Organizations contact millions of people worldwide through unsolicited email (spam) as an extremely low-cost marketing approach.
- Hackers break into databases of financial and retail institutions to steal customer information, then use it to commit identity theft—opening new accounts and charging purchases to unsuspecting victims.
- Students around the world have been caught downloading material from the Web and plagiarizing content for their term papers.
- Web sites plant cookies or spyware on visitors' hard drives to track their online purchases and activities

- You are a recent graduate of a well-respected business school, but you are having trouble getting a job. You worked with a professional résumé service to develop a well-written résumé and placed it on several Web sites; you also sent it directly to contacts at a dozen companies. So far, you have not even had an invitation for an interview. You know that one of your shortcomings is that you have no real job experience to speak of. You are considering beefing up your résumé by exaggerating the extent of the class project you worked on for a few weeks at your brother-in-law's small consulting firm. You could reword the résumé to make it sound as if you were actually employed and that your responsibilities were greater than they actually were. What would you do?

ETHICS FOR IT WORKERS AND IT USERS

Lecture 4

Profession

A profession is a calling that requires specialized knowledge and often long and intensive academic preparation.

Professional ?



Professionals

Professional Employee

The United States Code of federal regulations defines a “professional employee” as one who is engaged in the performance of work:

- requiring knowledge of an advanced type in a field of science or learning customarily acquired by a prolonged course of specialized intellectual instruction and study in an institution of higher learning
- requiring the consistent exercise of discretion and judgment in its performance
- which is predominantly intellectual and varied in character
- which is of such character that the output produced or the result accomplished by such work cannot be standardized in relation to a given period of time

Professionals such as **doctors, lawyers, and accountants** require advanced training and experience; they must exercise discretion and judgment in the course of their work; and **their work cannot be standardized.**



Many professional roles carry special rights and responsibilities

Supreme Court stays J&K HC order allowing outside food inside theatres

If the apex court's verdict on the matter turns out to be in favor of these multiplex chains, it could positively affect similar decisions in other high courts across the country.

August 10, 2018 16:02 IST | India Infoline News Service



The Supreme Court (SC), on Friday, has put a stay on the Jammu & Kashmir High Court's (HC) order that allows outside food inside theatres, as per media reports. SC will hear the case again in six weeks from August 10, 2018.

Jammu & Kashmir HC had allowed outside food inside theatres in July 2018. As leading

multiplexes such as [PVR](#) and [INOX](#) do not have a presence in Jammu & Kashmir, this decision is not expected to affect these chains. However, if the apex court's verdict on the matter turns out to be in favor of these multiplex chains, it could positively affect similar decisions in other high courts across the country.

Are IT Workers Professionals?

- IT Professional can be:
 - Marketing analysts, financial consultants, and IT specialists such as mobile application developers, software engineers, systems analysts, and network administrators.

One could argue, however, that not every IT role requires **“knowledge of an advanced type in a field of science or learning customarily acquired by a prolonged course of specialized intellectual instruction and study,”** to quote again from the United States Code.

From a legal perspective, IT workers are not recognized as professionals because they are not licensed by the state or federal government

- IT workers often have the skills and knowledge to abuse systems and data or to enable others to do so.
- Software piracy is an area in which IT workers may be tempted to violate laws and policies. Although end users often get the blame when it comes to using illegal copies of commercial software
- Software piracy in a corporate setting is sometimes directly traceable to IT staff members—either they allow it to happen or they actively engage in it, often to reduce IT-related spending.

Common Ethical Issues for IT Users

1) Software Piracy

- software piracy in a corporate setting can sometimes be directly traceable to IT professionals—they might allow it to happen, or they might actively engage in it.
- Sometimes IT users are the ones who commit software piracy. A common violation occurs when employees copy software from their work computers for use at home. When confronted, the IT user's argument might be: "I bought a home computer partly so I could take work home and be more productive; therefore, I need the same software on my home computer as I have at work."

2) Inappropriate Use of Computing Resources

- Some employees use their computers to surf popular Web sites that have nothing to do with their jobs, participate in chat rooms and play computer games. These activities eat away at worker productivity and waste time.
- Example :- executive director of the **Pentagon's Missile Defence Agency** issued a memo to its **8,000 employees** warning them to stop using their work computers to access **Internet objectionable sites**. One concern of government officials is that these sites are infected with computer viruses and other malware; criminals and foreign intelligence agencies often use such sites as a means to gain access to government and corporate computer networks. **For example, a foreign agent can embed malware capable of stealing data or opening computer communications ports whenever certain photos or videos are downloaded to a computer**

3) Inappropriate Sharing of Information

- Every organization stores vast amounts of information that can be classified as either private or confidential. Private data describes individual employees—for example, their salary information, attendance data, health records, and performance ratings. Private data also includes information about customers—credit card information, telephone number, home address, and so on.

Business Software Alliance (BSA)

- The Business Software Alliance (BSA) is a trade group that represents the world's largest software and hardware manufacturers.
- Its mission is to stop the unauthorized copying of software produced by its members. BSA is funded both through dues based on member companies' software revenues and through settlements from companies that commit piracy.
- BSA membership includes two dozen or so members such as Adobe, Apple, Intel, McAfee, Microsoft, Symantec, and The Math Works



- More than 100 BSA lawyers and investigators prosecute thousands of cases of software piracy each year.
- BSA investigations are usually triggered by calls to the BSA hotline, reports sent to the BSA Web site (www.nopiracy.org), and referrals from member companies.
- Many of these cases are reported by disgruntled employees or former employees.

Failure to cooperate with the BSA can be extremely expensive.

- The cost of criminal or civil penalties to a corporation and the people involved can easily be many times more expensive than the cost of “getting legal” by acquiring the correct number of software licenses.
- Software manufacturers can file a civil suit against software pirates with penalties of up to \$150,000 per copyrighted work.
- The government can criminally prosecute violators and fine them up to \$250,000, incarcerate them for up to five years, or both.

Example:

- In 2012, the Alexander Automotive Group paid \$325,000 to settle claims that it was using unlicensed Microsoft software on its computers. As part of the settlement agreement with BSA, the firm deleted all unlicensed copies of software from its computers, purchased the licenses required to become compliant, and agreed to implement more effective software management procedures. BSA was alerted to this situation by a report sent to its Web site

Trade secret

- A trade secret is information, generally unknown to the public, that a company has taken strong measures to keep confidential. It represents something of economic value that has required effort or cost to develop and that has some degree of uniqueness or novelty.

Example

- Colonel's secret recipe of 11 herbs and spices used to make the original KFC chicken, the formula for Coke, and Intel's manufacturing process for the i7 quad core processing chip.
- Employers worry that employees may reveal these secrets to competitors, especially if they leave the company. As a result, companies often require employees to sign confidentiality agreements and promise not to reveal the company's trade secrets.

Supporting the Ethical Practices of IT Users

The growing use of IT has increased the potential for new ethical issues and problems; thus, many organizations have recognized the need to develop policies that protect against abuses.

Establishing Guidelines for Use of Company Software:-

- clear rules that govern the use of home computers and associated software
- companies negotiate contracts with software manufacturers and provide PCs and software so that IT users can work at home

Defining the Appropriate Use of IT Resources:-

- Companies must develop, communicate, and enforce written guidelines
- Effective guidelines allow some level of personal use while prohibiting employees from visiting objectionable Internet sites

Structuring Information Systems to Protect Data and Information:-

- Organizations must implement systems and procedures that limit data access to just those employees who need it.
- For example, sales managers may have total access to sales and promotion databases through a company network, but their access should be limited to products for which they are responsible.

Installing and Maintaining a Corporate Firewall

- A firewall can be configured to serve as an effective deterrent to unauthorized Web surfing by blocking access to specific objectionable Web sites

Certification and licensing

- Certification indicates that a professional possesses a particular set of skills, knowledge, or abilities, in the opinion of the certifying organization.
- Licensing applies only to people and is required by law, certification can also apply to products (e.g., the Wi-Fi CERTIFIED logo assures that the product has met rigorous interoperability testing to ensure that it will work with other Wi-Fi-certified products) and is generally voluntary.
- IT-related certifications may or may not include a requirement to adhere to a code of ethics, whereas such a requirement is standard with licensing.

- **Vendor Certifications**

Many IT vendors—such as Cisco, IBM, Microsoft, SAP, and Oracle—offer certification programs for those who use their products

- Example:- Cisco Certified Internetwork Expert (CCIE) certification, also require a hands-on lab exam that demonstrates skills and knowledge

Industry Association Certifications

Certification	Subject matter
Microsoft Certified Technology Specialist	Designing and optimizing solutions based on Microsoft products and technologies
Cisco Certified Internetwork Expert	Managing and troubleshooting large networks
Cisco Certified Network Professional Security	Configuring and designing firewalls and the security settings on routers and switches
CompTIA A+	Performing computer and network maintenance, troubleshooting, and installation—including addressing security issues
Project Management Institute's Project Management Professional (PMP)	Leading and directing projects

Government Licensing

- A government license is government-issued permission to engage in an activity or to operate a business.
- Countries have enacted legislation to establish licensing requirements and protect public safety in a variety of fields

Example :- National Council of Examiners for Engineering and Surveying (NCEES) has developed a professional exam for electrical engineers and computer engineers

Some Notes Points- (Shubhankar)

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In accordance with their
commitment to the health,
safety and welfare of the public,
software engineers shall adhere
to the following Eight
Principles:

1. PUBLIC – Software engineers shall act consistently with the public interest.

2. CLIENT AND EMPLOYER – Software engineers shall act in a manner that is in the best interests of their client and employer consistent with the public interest.

3. PRODUCT – Software engineers shall ensure that their products and related modifications meet the highest professional standards possible.

4. JUDGMENT – Software engineers shall maintain integrity and independence in their professional judgment.

5. MANAGEMENT – Software engineering managers and leaders shall subscribe to and promote an ethical approach to the management of software development and maintenance.

6. PROFESSION – Software engineers shall advance the integrity and reputation of the profession consistent with the public interest.

7. COLLEAGUES – Software engineers shall be fair to and supportive of their colleagues.

8. SELF – Software engineers shall participate in lifelong learning regarding the practice of their profession and shall promote an ethical approach to the practice of the profession.