

**Bismillah**

**slides 05:**

Director's:

In small companies, share holders run the company directly but some share-holders only want to invest money, not run a company

Company law says that share-holders appoint director's to run the company on their behalf

In small companies, the shareholders may actually be directors

In large companies, the shareholders don't even know who directors are

Director have obligations:

- Company employees
- Share-Holders

Board of Directors:

Members of board can be:

- Elected
- Appointed after interview

Directors jointly oversee the activities of a company

Board of Directors, Board of Governors, Board of Trustees e.t.c are same thing

There are two tier board in Euro/Asia countries:

- Executive Board: supervises Day-To-Day business through Managers
- Supervisory Board: supervises the Executive Board

The system of board of directors of different companies:

- Amazon
- Google
- Facebook
- Microsoft
- Apple

-Oracle

Directors:

directors must act in good faith for the benefit of company

Case 1:

You are a director of a company that writes software. Someone approaches you to have some very small software written.

-

Option A: You realize you can write software in your spare time so your employees can do other important stuff for the company.

Option B: You put the small software in the pipeline for your employees to complete just like any other project. - Option B: You keep quiet because the supplier is qualified to get the contract and it will not be fair to deny them the contract because they are related to you.

- Option C: .... any ideas ... ?

Case 2:

You are a director of a company who is about to make a contract with a supplier. The supplier is related to you, or is your friend. The supplier has already been shortlisted to be amongst the best and most reasonable of other suppliers.

- Option A: You tell the company that supplier is your friend/relative and hence cannot be selected.

- Option B: You put the small software in the pipeline for your employees to complete just like any other project. - Option B: You keep quiet because the

supplier is qualified to get the contract and it will not be fair to deny them the contract because they are related to you.

- Option C: ... any ideas ... ? - Option C: ... any ideas .. ?

Answer for Case 1:

Option B: You put the small software in the pipeline for your employees to complete just like any other project.

Not doing so will suggest to other employees that director has some personal interest (even though there was none)

This way everything will be more transparent.

Answer for Case 2:

Option A but with modification: You tell the board of directors that supplier is your friend/relative and hence refrain from voting when the matter is discussed

Known as Declaring Conflict of Interest

What if every director has a conflict of interest?

External obligations of director:

Responsibilities of supervisory boards

- Beaware of company's financial position

- preparation of annual report

- ensure company complies with all provision of law:

if law is breached, company will be prosecuted for violation of law, but in some cases, directors can be made personally for breach

executive director vs non-executive director:

executive director: is also employee for company

non-executive director: only works in advisory capacity to the company

- attend all monthly board meetings, with equal importance as executive directors

- paid a fee for their services

- they have same role as executive directors but may be given some additional tasks such as "Determining an executive directors tankhwa"

company secretary:

- responsible for keeping various record

- responsible for handling paper-work and administration issues with SCEP

- secretary is often a director (most common in small companies)

- larger companies hire outside staff, usually: accountants

structure and management of organizations:

how is work shared b/w employees and/or directors of the company

how people are grouped?

who reports to whom?

objectives of an organization structure:

- facilitates flow of information: so to facilitate directors in decision making

- facilitates effective co-ordination:

- pooled inter-dependence:

components are independent and only contribute financially to the company

- sequential inter-dependence:

one component has to complete its function before next component perform it. (e.g system developers complete product before testers can do their job)

-reciprocal inter-dependence:

unit-a output becomes the input of unit-b and unit-b output becomes input of unit-a

why objectives of an organization structure?

answer: so organizations will:

-allocate resources

-allocate people

to make this structure operate smoothly

hierarical structure:

-all tasks are split up into specialized jobs

-performance of each task is governed by precise rules

-all communications and tasks will be done "impersonally" and in "formal" manner

hierarchial structure:

-recruitment: based on identification of new task

-promotion: based on seniority and/or achivement

-dismissal: nobody can dismiss employee arbitrarily

hierarical structure follows "structure by function" approach where all task are accumulated to represent "core functions" of an organization

each unit of tasks will be headed by one and only one manager

hierarhical structure:

-appropriate for small organizations

-simple and easy for each department to understand their responsibilities

-easy to hold a particular department accountable if something goes wrong

structure by geograph:

mostly applied to multi-national companies

-legal presence(registered company,tax registered)

-physical presence(in terms of offices)

-market presence(sales/marketing staff,trained in local language and cultural factors)

cons of this structure:

-may lead to function duplication

-work services and process may differ from area to area

-no unified culture in organization

-coordination challenges due to distance

structure by product line:

organization arranges itself on basis of different products/services that they provide

structure by technology:

have division based on technologies:

divisions on the basis of:

artificial intelligence department

database department

cyber security department

issues:

-customer req may be of different technologies

-software developers may have expertise belonging to more than one technology. Under which structure they operate and report to?

-sales/marketing staff will have problems in guessing which clients to refer to which technology

matrix structure:

used to mix roles of different organizations components (very difficult to manage)

-unclear decision making(two bosses which one to follow)

-two bosses (which one to report)

-accountability(which one is accountable)

depth of structure:

- depth of structure (DOS): maximum number of layers in an organization hierarchy

- managerial control span (MCS): number of people that report to a manager

Centralization vs Decentralization:

centralized:

- rules from the top must be followed

- benefit: programmers can easily be moved from one part of company to another

- drawback: you cannot use another language/db even if it was much better than the company choice

decentralized:

- rules from the top can be followed (may be adapted locally if required)

- benefit: use the most suitable tools for each project

- drawback: maintenance nightmare+may also result in a large part of un-documented code using old technologies

**slide 06:**

Financing your business:

You need money to start a business, where to get this money?What to do?What to sell?

Financing your business:

- customers will not pay until you've provided them with tangible product

- individual clients pay fast

- company clients pay slow

- government clients pay even slower

where does the money go??

- salaries:

- small firm, founders/staff will take some salary
- office rent, heating, lighting
- equipment purchases
- advertising and marketing costs
- TA/DA, office equipment, stationary e.t.c
- interest on borrowed money

#### Raising finances: Business Plan

business plan is a document explaining your plans to potential investors, sponsors.

- description of what company is doing (current on going projects)
- description of expertise of company founders
- description of market that company is aiming it, i.e it's size and possible competition
- a prediction of financial performance of the company (budget, projected balance sheets, projected cash-flows, profit and loss accounts, e.t.c. )

#### raising finances: business plan

-with a business plan, you can approach people who can loan you money (e.g banks), invest in your company or even donate your money.

-source of finance:

-grants

-loans

-sale of equity

#### raising finances: Grants:

a sum of money given to the company such that the company can demonstrate that it has been used for the purpose which the money was given

not paid back

-trang resources:

-governments (local, international)



-charaties

where are the grants: PCDC

non-profit organization (portal for NGO related material) maintain list of funding organizations

raising finances:Loans

types of loans:

soft loans:

- available due to government initiatives

- usually terget new companies

- have less relaxed terms and conditions

- may have less intrest rates, and may not require security @all

SMEDA: (small and medium enterprises development authority)

- provides startup loans for engineering, agriculture, livestock, IT, food processing, minerals and many other sectors

- provides information, advice to these sectors also

- provides legal services to organizations.

- public listing of all public-projects they support, their business-plans, available online

loans from friends, Relatives:

- not recommended unless terms and conditions clearly defined in a legal document

- if not, will lead to bitter arguments, possibly spoil personal/family relations

raising finances:equity capital

equity capital: money paid to a company in exchange for a share in ownership of the company

- who pays this money? venture capitalists (companies) or business angels (individuals) pay this money

-both help the company to expand and become successful. When target is achieved, they sell their share of ownership at very high prices.

-will therefore occupy a permanent role in decision-making inside the company

-how do the equity firms get so much money??

equity company itself borrows money through bonds (who want to co-invest) or through inviting people to invest in its stocks

raising finances: equity capital

-askari equity fund

-lakson equity fund

-meezan bank tahafuz equity fund

-pakistan islamic pension equity fund

-ubl bank savings equity fund

-cyan equity fund

Exercise

- A company is in need of finances.
- You have \$\$\$, and you want to help.
- Should you give the \$\$\$ to them as loan, or should you purchase their shares?

Exercise

- Share-holders have greater risk of lower returns as compared to lenders (They may lose their worth entirely).
- Share-holders have greater profit margins than lenders if all goes well.

SCENARIO: DO it from the slides

Leverage:

-if a company has taken LOANS + Equity Capital, then difference b/w both is called leverage (or gearing)

-shareholders: Not happy with loans because most of the money will be going to pay loan interests

-lenders: Not happy because they know share-holders may encourage company to trade RECKLESSLY (no profit means no loan repayment)

-New Lenders: will not invest in a heavily leveraged company

## **slide 07:**

### Ethics:

what is ethics?

why is it important?

what are the different dimensions of IT-based Ethics

### Business Ethics:

- computers security
- freedom of expression
- software development
- social networking
- right to information
- computer crimes
- artificial intelligence

### Professional IT Ethics:

- privacy
- intellectual property
- quality of life
- e-Governance
- education ethics
- computer un-reliability
- warfare and ....many more

How do we measure History??

- seasonal and planetary motions
- relative to occurrence of important events (social,religious) e.g Hijra,AD,BC,ascension of a king, creation of a nation
- lifespan of certain people or dynasties (victorian era, ayub khan era, ming and qing dynasties, mongol and mughal empires, e.t.c)

-circumstances, arts and technology

Development of systems to record events, and hence accumulate and transmit information about the past

Pre-history: A history where such recording systems were not available, or not in practice

SOCIAL FABRIC-----

history:

human progress and welfare depends mostly on the successful and efficient management of information

Steps for progress:

discovery and design----Process and Manage-----Apply---Then again to discovery and design and so on

information technology evolved from,

recording systems-to-communication systems-to-processing systems

with this evolution, advanced economies are highly dependent of their functioning and growth upon,

-information based sources

-information based services (communication, finance and entertainment)

-information based public sectors  
(education, administration, health-care)

Information and communication technologies have changed the world

1-Deeply

2-Irreversibly

3-Problematically

few points are there for information

-management, storage and retrieval of this information

-utilization of information

-communication of information

-computation on information (analyzing this information)

Analogy of Tree: technology growth, weak branches, lead to chaos and fragile growth

To minimize chaos and fragile growth,

- develop strong philosophy and ethical use of information
- understand less visible implications of information overload
- understand impact of information on human and environmental welfare
- anticipate difficulties
- identify opportunities
- resolve problems
- resolve conflicts
- resolve dilemmas

Ethics:

branch of philosophy: studies objective and rational background of thought and actions

normative ethics: moral code on how one should react, give certain situation (virtue ethics) e.g, distinguishes between right and wrong

applied ethics: what to do given a specific situation

- de-ontological-ethics: ethics towards duties
- information-ethics: specifies related to ICT

Ethics: Moral Code:

set of rules established by society

established boundaries of generally accepted behaviour (what people should and should not do)

different rules of society can be contradictory

- A very good friend copies in Exam  
Should you tell the truth to authorities  
Should you be loyal to your friend  
which is more important?

- Employer monitoring employee Internet usage  
Is it good ethics (employer wanting more productivity)

or violation of privacy of employee  
which is more important?

ethics:morality:

social conventions about right/wrong

conventions which are so established there is no written consensus

varies with age,cultural group,ethnic background,religion,gender

most societies have uniform agreement upon:

crime,murder,theft,arson is immoral

what about:

-placing parents in an old house

-attitude towards illegal copying of software/movies

Aristotle's Meta-Physical & Physiological  
explanation of Human Behavior

- Every physical entity in the Universe is made out of matter and forms (information).

- All animals are information-processing beings (including humans) whose bodily structures account for the ways in which information gets processed within them.

- Information processing within an animal's body initiates and controls the animal's behavior

- Humans have additional sophisticated information-processing capabilities called theoretical reasoning and practical reasoning. These added capabilities make ethics possible.

information agents:

difference b/w online and offline life

agent of ethics:

proactive agents: plan and initiate actions responsibly in anticipation of future events

reactive agents: perform responsible actions once an event has occurred

Value System:

scheme of moral values:

-virtue: habits of inclining people to do what is acceptable( depends of social fabric) e.g  
fairness, generosity, honesty, loyalty

-vice: habits of unacceptable behaviour e.g  
vanity, greed, envy, anger, criminal behaviour

Integrity:

act in accordance with personal code of principles

extend to all people the same respect and consideration that one  
desire himself/herself

apply the same moral standards to all situations (individuals)

Content and Education:

search engine ethics

-SE bias per region

-SE favouritism for sites

-SE privacy issues (keywords)

-SE paid content can be misleading

-SE monitoring and surveillance

Video game ethics

virtue vs real world

-social networks

-second life

role of teachers

HUMAN BEINGS: ->Knowledge->wisdom

Computers: ->bits->data->information

research paper ethics (not to be copied, properly cited)

Copyrights:

CTRL+C, CTRL+V

lack of regulation on copyrights avoids innovators to be awarded/appreciated

types of licenses

-open source ve proprietary

Hackers:

linus Torvalds

exceptionally skilled people?

ethical hacking?

Privacy:

compromise on civil liberties vs nation security?

monitoring of communications

ambient intelligence problems

Computer Crime and Viruses:

sophistication of attacks vs expertise required

computer un-reliability:

industrial societies becomming more technology dependent

very little is known about global impact of computer failure over time

what are the sources of computer failure?

-total failure vs partial failure

-thorough testing not possible

case: automated vehicles vs automated aircraft..why different??

artificial intelligence:

should machines make decisions?

autonomous robots/vehicles?

are ethical robots possible?

WAR:



smart weapons

un-manned aerial/ground/sea-vehicles

projectile bullets (Guided)

work-place:

quantity of jobs: how many jobs are created and how many jobs are lost?

business ethics:

- are specific business practices acceptable?

- salesman hiding facts about a product's safety features

- accountant hiding inaccuracies discovered in an audit (or else company will fire him/her)

- medical company not recalling a stock after an error to avoid suffering huge losses

- developer writing exceptionally difficult coding so that employee will always have to consult him for it whenever an improvement needs to be made

- engaging in lying, cheating, plagiarizing to get promoted in an organization

why business ethics:

to gain the goodwill of community (will bring more business) (by doing charity e.t.c)

to create an organization that operates consistently (on the basis of uniform principles) (by operating business honestly )

good business environment

protect organization and employees from legal actions (by lowering the fines and punishments on employees)

to avoid unfavorable publicity (public reputation should be good so avoid such actions which can cause unfavorable publicity)

If business ethics are ignored:

business risk: negative event in business can occur

unethical business can risk destroying business

accounting malpractices: hide real worth of company with the help of accountant 2001: filed for largest corporate bankruptcy in us history

if business ethics are ignored:

workers work overtime or they are mistreated. these are violations of business ethics, due to these violations, business can face losses.

bribery:

money|property|favours that add to the value of someone in a business|government in order to get a business advantage

kickback===payoff

person offering bribe=committing crime when he offers

person receiving the bribe=guilty of crime when he/she accepts the bribe

giving a gift or giving a bribe?:

medical representatives giving gifts to medical doctors to influence drug prescriptions

-pens

-writing pads

-clocks

-calenders

-free dinners

-free event+travel tickets+foreign tours

-consultation + speaking fees

-cars + houses !!!

giving a gift or giving a bribe?:

gifts should not be hidden (if hidden=bribe)

bribes often through third party. gifts directly from donor or recipient.

bribes encourage obligation of favour to donor.gift comes with no exception of future favour

company acceptable policy:

- gifts should be declared + if above token value, should be declined

- gift pooling|redistribution, gift auctioning, re-gifting to charity organizations

government of pakistan: government service rules 1964, conduct and discipline rules section A:5.1 and 5.3

READ THESE FROM SLIDES

how to improve business ethics in corporations

appointment of corporate ethics officers

- senior level manager (or member of board of directors), responsible for improving ethical behaviour of members in organization

- encourage ethical decision making (methods will be discussed later)

- ensures legal compliance of ethical practices

- oversees ethics related investigations in the organization.

establishment of corporate code of ethics:

- highlights organization's key ethical issues

- identifies principles that are important to the organization

- our purpose & our values

conduct social audits:

- identifies ethical lapses committed in the past

- sets directives for avoiding similar missteps in the future

require employees to take ethical training

include ethical criteria in employee performance evaluations. e.g whether employees is of good moral conduct, whether employee is effectively operating in multi-cultural environment , whether employee accepts personal accountability

assessment reports e.g peer assessments from colleagues, feedback reports from sub-ordinates for managers, teacher feedback from students in universities.

good employees making bad ethical choices:

is the work environment too competitive and demanding? as a result, placing great pressure on the employees

- unrealistic budgets
- tight deadlines
- bonus incentives for performance goals
- aggressive competition from peers
- politics
- harrasment

a manager is responsible to avoid all the above issues

Good managers use check list and thus mantains the quality of organizations