Introduction

_}] Profession: A paid occupation, especially one that involves

prolonged training and a forma} qualification.

_] Professional: A professional is a member of a profession or any
person who earns their living from a specified professional
activity. The term also describes the standards of education and

training that prepare members of the profession with the

articular knowledge and skills necessary to perform their

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frole Within that profession.

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 Engineering Counci states that other than
professional Knowledge, an Engineer must
know

LJ Technical decision making and its commercial and economic
implementation;...knowledge of government legislation
affecting work, e.g. safety, health, environmental requirements;
an understanding of the principles of management and
industrial relations; some knowledge of trade unions and their

rganization; an understanding of the engineer's responsibility

 The Professionalism

L] A profession isn't just what you do, it's who you are.

LJ Professionalism is a way of thinking and living rather than an

accumulation of learning.

Traits of a Profession

Four Traits of Profession
1. Varied activities requiring special skills
2. Society-centric motivation
3. Personal standards of excellence

4. Giving back to society

A professional behaves ethically

LJ Ethics means something more than 'law' and 'morals'.
L] It carries an additional connotation of 'rightness'.

= Breaking the law: can earn a fine or jail time

= Breaking amoral: can ruin your reputation

= Breaking an ethic: can ruin your conscience

It's possible to break all three, simultaneously:

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Traits of a Professional

L) Being a professional means that they are certain traits which are

expected from you.

LJ We will go through Each of them

Trait # 1 of a professional: Seriousness

LJ Serious about job

LJ The job is only a job. A means to an end

Trait # 2 of a professional: Wanting to do
better

LJ Exhibit a never-ending quest to improve their performance in
every variable, every project, every relationship, and every

detail.

Trait # 3 of a professional: Dealing with the
Unexpected

L) Stuff happens, things change, and the true professional rises to

the occasion

Trait # 4 of a professional: Communication
Skills

L) Clear
LJ Concise

LJ Confident

Trait #5 of a professional: Enthusiasm

UL) Attitude is everything. Those who exhibit enthusiasm for what
they do and greet each day with a positive attitude inevitably

become a leader

Trait # 6 of a professional: Helpfulness

LJ Understand that real success in the workplace requires teamwork
LJ Always ready to lend a hand
LJ Make a suggestion

LJ Offer a compliment when it's deserved

Trait # 7 of a professional: Taking the Initiative

LJ Takes the initiative to get things done

Trait #8 of a professional: Cool under Pressure

LJ Level headed and calm

LJ Cheerful demeanor-even under stressfwl times

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Trait # 9 of a professional: Remains Focused

LJ Stay focused on the task at hand and the goal ahead

L) Navigate through obstacles or setbacks but never lose sight of where they headed

Trait # 10 of a professional: Don't Follow, Lead

LJ True Professionals aren't faint of heart

LJ Analyze the situation and willing to take new paths and try new

solutions

LL) That's why they call it LEADERSHIP:

Applying Professionalism in Real Life

Scenario #1

L) You are the owner of a software engineering company. Your

employees (engineers) want you to pay for them to attend training.

LJ How would you respond in a way that is legal, moral, and

ethical?
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 Scenario #2

L)J You are the owner of a software engineering company. Your employees (engineers) want you to let them do pro bono work

for a local non-profit organization on company time.

LJ] How would you respond in a way that is legal, moral, and

ethical?

 Scenario #3

L) You are a software engineer at a company where management routinely encourages you and your colleagues to use pirated

software.

L} How would you respond in a way that is legal, moral, and

ethical?

 Introduction

L) Law:
Rules that mandate or prohibit certain behavior in society.

L) Moral Values:

The fixed moral attitudes or customs of a particular group

L) Ethics:

» © Define socialy acceptable behaviors.

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 Code of Ethics

LJ Established by various professional organizations
= Produce a positive effect on judgment.

= Establishes responsibility of professionals to act ethically
according to the policies and procedures of their employers,

professional organizations, and laws of society.

= Organizations assume responsibility to develop, disseminate,

and enforce policies.

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 Code of Ethics' Goals

Provides an aid to individual decision making, presentation
addresses nine different cases (with some overlap).

() Intellectual property

CJ Privacy

L} Confidentiality
LJ Professional quality

LJ Fairness or discrimination

QO) Liability

Bh epoftware risks

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 IEEE Code of Ethics

LJ IEEE Code of Ethics: Actions

1. PUBLIC - Software engineers shall act consistently with the

public interest.

2. CLIENT AND EMPLOYER - Software engineers shall act ina

manner that is in the best interests of their client and employer
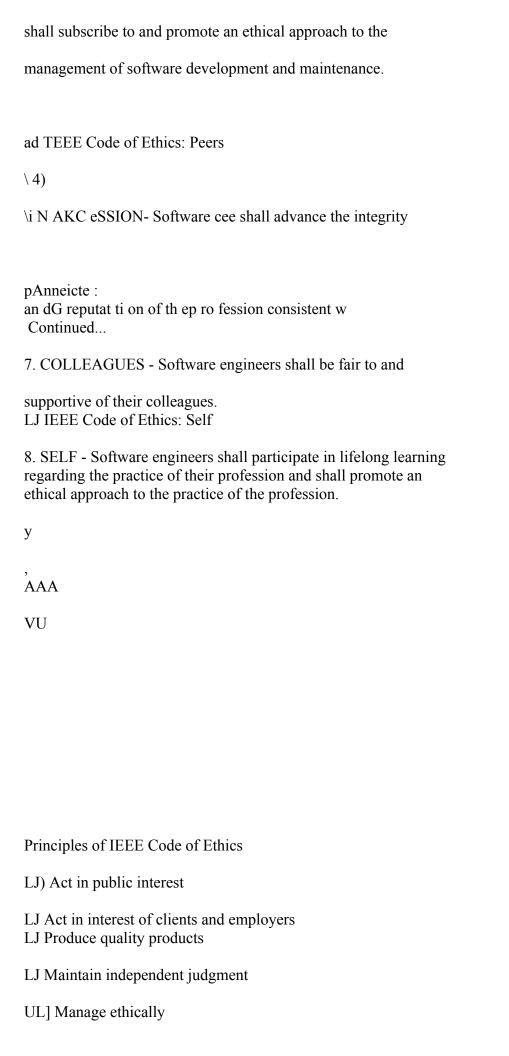
consistent with the public interest.

EE Code of Ethics: Products

ftware engineers shall ensure that their products

 Continued...

LJ IEEE Code of Ethics: Hierarchy

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.

ad TEEE Code of Ethics: Peers

\ 4)

\i N AKC eSSION- Software cee shall advance the integrity

pAnneicte :
an dG reputat ti on of th ep ro fession consistent w
 Continued...

7. COLLEAGUES - Software engineers shall be fair to and

supportive of their colleagues.
LJ IEEE Code of Ethics: Self

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.

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Principles of IEEE Code of Ethics

LJ) Act in public interest

LJ Act in interest of clients and employers
LJ Produce quality products

LJ Maintain independent judgment

UL] Manage ethically

LJ Protect integrity of profession

LJ Support colleagues

petens learning

 ACM Code of Ethics

General moral imperatives: "Asan ACM memberI will..."
LJ Contribute to society and human well-being.

(J Avoid harm to others.

LL) Be honest and trustworthy.

O) Be fair and take action not to discriminate.

QO) Honor property rights including copyrights and patents.

QO) Give proper credit for intellectual property.
¢

spect the_privacy of others.

 specific professional responsibilities: "As an ACM computing

srofessional I will":

) Strive to achieve the highest quality, effectiveness and dignity in both the

process and products of professional work.
-| Acquire and maintain professional competence.
| Know and respect existing laws pertaining to professional work.
-| Accept and provide appropriate professional review.

-1 Give comprehensive and thorough evaluations of computer system and their

impacts, including analysis of possible risks.

-! Honor contracts, agreements, and assigned responsibilities.
¢

ove public understanding of computing and its consequences.

nputing and communication resources only when authorized to do so.

Compliance with the Code: "Asan ACM member, I will:"

LJ Uphold and promote the principles of this Code.

LJ Treat violations of this code as inconsistent with membership in

the ACM.

Ethical decision making: Case 1

L) Aliisa database programmer

Large statistical program needed by his company.
Company programmers are encouraged to publicize their work

LJ Ali has found himselfstuck ona problem

He has persisted at this for several months.
His manager does not recognize complexity of problem.

She insists job be completed in the few days.

L) Ali remembers:

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LY fnother company

Co-worker had given him source listings of their current work.

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, He alsochas an early version of commercial software developed at

Lets Le = iE: 5

Scann
L) Alistudies these programs

Sees two areas of code which could be directly

incorporated into his own program

He uses segments of code both from his coworker and

from the commercial software

LJ He does not tell anyone or mention it in the documentation.

) He completes the project and turns it in a day ahead of time.

ow does the Code of Ethics help us understand this case?

Applying the code: Case |!

WL) This case highlights issues involving intellectual property
WL) Ali violated professional ethics in two areas:
1. Failure to give credit for another's work

2. Using code from a commercial package that was

copyrighted
UL If Ali only "looked" at co-worker's source code:

Could he then write his own program and still have an

aOhhication to give credit?

e should have acknowledged credit in documentation.

Continued...

L] Use of commercial software code was also not appropriate:

Ali should have checked to determine whether or not

company was authorized to use source code before using it.
1) In general:

Desirable to share and exchange intellectual materials

But using software is definitely a violation of code.

Ethical decision making: Case 2

L) Aisha's company has been hired by a client to builda security system.
Because of cost overruns, client has decided to opt for a less secure

system.
LJ Aisha believes information they will store is extremely sensitive.
L) With weak security:
Employees on workstations could figure out how to access this data.

Online intruders would also have access

- Aisha feels strongly that system should be muchmore secure.

ac has tried to explain the risk.

ae - Aa 'ingest jould Aisha SO? Should she refuse to buildthe system as Same

Applying the Code: Case 2

) This case highlights issues involving privacy.

LY Company officials:

Have an obligation to protect privacy of their employees. Therefore they should

not accept inadequate security.
LJ Aisha's first obligation:
Attempt to educate company officials

If that fails, she needs to consider her contractual obligations in honoring

assigned responsibilities.

f don't have Aisha's contract, but she may have to choose between her

(i

md herobligation to honorprivacy and security.

 Ethical decision making: Case 3

_) A contractor is determining requirements for an employment
agency.
LJ Client describes what is needed when displaying applications

whose qualifications appear to match those for a particular job

_) Client also further states that names of white applicants are to

be displayed ahead of nonwhites

 Applying the Code: Case 3

LJ Thiscase highlights issues involving faimess and discrimination. In this case,

system designer is asked to build a system that, it appears

LJ Will be used to favor white males and discriminate against non-whites and

females

Li} From this is would appear that:

System designer should not do what he or she is told, plus

Should also point out the problematic nature of what is being requested

and ask client why this is being done

Ey If client answers that they plan to use information to favor white males, then:

vl

AND

mputer professional should refuse to build the system as proposed.

Ethical decision making: Case 4

LJ A software development company has just produced a new software package.

L} It incorporates new tax laws and prepares both individual and small busimess

tax returns

L) The president of the company knows that the program has a number of bugs

L) He also believes the first firm to put this kind of software on the market is likely to capture the largest market share.

L) The company widely advertises the package.

a When the product is shipped, it includes a disclaimer of responsibility for

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zors resulting from the use of the program.

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 LJ] The company expects it will receive a number of complaints, queries, and suggestions for modification. The company plans to use these to make changes and eventually issue updated, improved and debugged versions. The president argues that this

is general industry policy:

LJ "Anyone who buys version 1.0 of a program knows this and will

take proper precautions."

_) Because of bugs, a number of users filed incorrect tax returns

and were penalized by Rev Canada.

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Organization

LJ Impossible to live in a civilized society without close contact

with many large organizations

LJ Like schools, universities, public utilities, government and

local government departments, the Health Service, commercial

and industrial companies, and so on.

LJ In many ways, these organizations resemble each other.

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Legal Form of An organization

LL) Law recognises individuals
= Enter into contracts

= Tried for crimes
= Sued

= Act of Parliament impose duties on the individual etc

LI Incorporation

» ." Making into a body (Corpus)

rocess known as incorporation. —

Incorporated Organisations

LJ Incorporated
* Royal Charters -IET, BCS, IMechE, RAeS
" Acts of Parliament — Ceredigion County Council

, 2 »" Public or Private Companies (Companies Act 1985 and 1989)

i =

Types of Commercial Organizations

1. Sole Trader

Local Shop, Plumber

2. Partnership

Doctors, Lawyers, Accountants

3. Limited Company

Private or Public

Sole Trader

LJ Individual

" Sole person responsible for all debts

* All assets including "private" at risk

"= Does NOT have to be the only employee

Partnership

LI Two or More People

LJ All at Risk. Similar to sole trader but >1 person
LJ Normally professionals

* Doctors

= Lawyers

= Accountants

UW Inflexible in Normal Commercial World

¢ no Movement of key Personnel

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vey x ,
"Loorisky —

 Companies

L) Public or Private Companies

Public — Public Limited Company (PLC)
LI Trades shares to public

= Private -Company Limited (Co Ltd)
LiCannot sell shares to Public
LiCan sell shares privately
LI Limited by Shares
L}Commercial Companies
LILimited by Guarantee

LICharities, Profiessional Bodies
LI Unlimited Companies)

 Companies (Contd)

LI Independent Existence

_) Divided
#® Shareholders

*" Or Members of the Company

LI Normally > 1 shareholder

11992 Act allows single member

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Company Constitution

Share Capital
Company Constitution

Directors responsibilities

=age 1

1. Share Capital

WL Shareholders (Subscribers) own Company
UL) At start of Company
= Authorised share capit: .
LJNumber & Nominal (par) V .tue

LISay 100 shares @ £1

LIIf debts > assets Shareholder lose shares

ay

2. Company Constitution

a. Memorandum of Association

a. Controls External Relations

b. Articles of Association

a. Control Internal Relations

hareholders Agreement

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a. Memorandum of Association

LI Company Name

= Restrictions

LI Country of Registration

= England & Wales, Wales, Scotland

LI Objects of Company

= Companies Act 1989 allow general commercial company

LIA Liability Clause

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* Liability of members is limited

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thgqweeedkS hare value
Mominal Share Value and Number

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Ai'

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LJ Rules of Share capital

LJ Transfer of Shares

L) Meetings of Members

LJ Rules Governing Directors' Appointments
L) Power of Directors

L) Dividends and Reserves

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VL ,

c. Shareholders Agreements

LJ Protect interests of minor shareholders
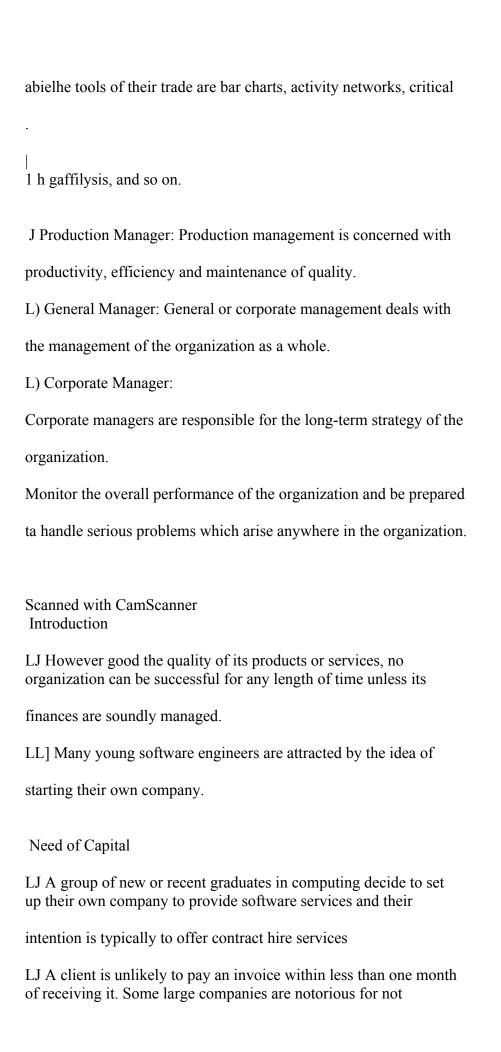LU) Article of Association

= Changed at General Meeting

= Needs 75% majority

LJ Agreement Between Shareholders

= All must sign

= Can govern way voting is done

3. Directors Responsibilities

L) Directors Elected by Shareholders

= Act In best Interest of Company
= Honest
=" Declare Interests

= Aware of Company's Trading Position
" Executive & Non-Executive Directors

L} Company Secretary

'il 7 Could be Director

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Functional Units of An Organization

Five groups of functions exist in almost any organization:

1.Production: Activities that directly contribute to creating the products or

services that the company sells.

2.Quality management: Quality - ztivities necessary to ensure that quality of

the products and services produced s maintained at the agreed level.

3.Sales and Marketing: Sales is concerned directly with selling the product,

while marketing is concerned with establishing the environment in which the product is sold (e.g. through advertising) and with deciding how the range of Da | icts sold by the company should develop.

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Nini Za) ;

rr ministration: To pay bills, to look after its funds, All

5. Research and development:
How can the company do better the things that it already

Does and what other things might it profitably be doing?

Geographical organization:

An organization operates in more than one country.

The most obvious examples are in the field of food and drink.

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 Centralization v. decentralization

LJ In a centralized organization, the detailed operational decisions

are taken at the centre.

LJ In a decentralized organization, as many details as possible are

settled at local level.

 Management

() Mangers of organization can project manager, production

manager, general manager & Corporate manager.

Q) The goal of project managers is to produce systems which meet

the users' needs, on time and within budget.

L] Their main concerns are therefore planning, progress
monitoring, acquisition and allocation of resources, and quality

control.

abielhe tools of their trade are bar charts, activity networks, critical

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1 h gaffilysis, and so on.

J Production Manager: Production management is concerned with

productivity, efficiency and maintenance of quality.

L) General Manager: General or corporate management deals with

the management of the organization as a whole.

L) Corporate Manager:

Corporate managers are responsible for the long-term strategy of the

organization.

Monitor the overall performance of the organization and be prepared

ta handle serious problems which arise anywhere in the organization.

 Introduction

LJ However good the quality of its products or services, no
organization can be successful for any length of time unless its

finances are soundly managed.

LL] Many young software engineers are attracted by the idea of

starting their own company.

 Need of Capital

LJ A group of new or recent graduates in computing decide to set
up their own company to provide software services and their

intention is typically to offer contract hire services

LJ A client is unlikely to pay an invoice within less than one month
of receiving it. Some large companies are notorious for not

paying invoices for as much as six or even twelve months.

LJ There will be a need to have some money with which to start

e the venture.

Need of Capital (continued)

L) The group needs enough cash in hand to be able to live for at least three months. Additional money will be needed for the

expenses of starting the company

LJ For large projects or packages, a much larger sum of money is likely to be needed while they are being developed because

there will be no revenue coming into the company.

Need of Capital (continued)

LJ For starting period cash will be needed for:
= Salaries
" rent rates, heating and lighting of the premises used
= equipment and consumables
= costs of advertising and marketing the products

= miscellaneous expenses, ranging from company stationery

to travelling expenses

Need of Capital (continued)

LJ How does one set about raising this money? The first step is to

produce a business plan.

LJ It typically contains:

= adescription of what the company will be doing, together with information to show that it is technically feasible and

that founders of the company have the necessary expertise
= an assessment of the size of the market and the competition

a prediction of the financial performance of the company

Sources of funds

L) They can be grouped into:

= Grants

Loans

" Sale of Equity

Grants

O) A grantis asum of money given to the company; while the company is obliged to demonstrate that it has been used for the

purposes for which it was intended, it is not intended that the

grant should ever be paid back to the organization which gave it

UL) The availability of grants and other help for new companies depends very much on where the company is located, how

many people it expects to employ, and on government policy at

Loans

L) A loan is asum of money lent to the company; interest is payable on it, at a rate that may be fixed or variable, and the

loan is usually for a fixed period

_] The company is liable to pay back the loan and, if the company goes into liquidation, the lender 1s entitled to recover the loan

from the sale of the assets of the company.

LJ In most cases, security is required for the loan

Sale of Equity

UL) Equity capital is money paid to the company in exchange for a

share in the ownership of the company

L) Shareholders are at a much greater risk of getting a poor return

on their capital or even losing it completely than are lenders but, in compensation for this, they stand to make a greater profit

than lenders if all goes well

PUUHCLIIIY CO IVIVILILUIIIL

L) A budget is a prediction of the future financial position of an

organization covering , usually, the current or the next financial

year

L) The ordinary manager in a company is, however, much more

concerned with budgeting for income and expenditure

LJ Budgeting is an iterative process

Budgeting & Monitoring

UL The first version of the budget is likely to show expenditure exceeding income, since the operating managers will want to expand their operations while the sales and marketing department will not wish to give hostages to fortune by being over-optimistic about the volume of sales it can generate. Adjustments will have to be made repeatedly until a situation 1s reached in which budgeted sales exceed budgeted expenditure with a reasonable profit margin; the operational managers are happy that they can service the predicted

» « svolume of sales with the budgeted staff levels; andthe salesmen are

ey can produce the predicted sales

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Working Capital & Cash Flow

LJ} It is perfectly possible for a company to be consistently profitable and yet be unable to pay its bills

LJ Accounting normally operates on an accrua/ basis
LI The value of work in progress

LJ It is usual to negotiate stage payments rather than leaving all

payment until the work is completed.

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 Working Capital & Cash Flow (continued)

J Cash has therefore to be found to cover the gap between what a company has to pay out in cash and what it receives in cash— working capital

LJ A document "cash flow prediction" is the amount of cash

expected to be received an.' disbursed in each of the next twelve

months

J The bank specifies the maximum that can be borrowed on an

verdraft but interest is only payable on the amount actually

 Week 7 Topic: Intellectual Property Rights

LJ Introduction

LJ Confidential Information

L} Patents

L) Copyright

LJ Acts permitted in relation to copyright
 _} Remedies for breach of Copyright

ul } Plagiarism

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 Introduction

LJ Intellectual property rights are often the most valuable assets

owned, used and developed by a software house.

L] Intellectual property rights include:

#" Confidential information
= Patents

=" trade marks

" Designs

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pi Copyrights protecting computer programs
@&«€€

 Introduction (continued)

_) They protect information stored by electronic means and all of
the paperwork which accompanies a program, such as the user
manual, plus any multimedia packages and most items on the

Web.

L) Great care should be taken to protect, exploit and enforce

intellectual property

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 Introduction (continued)

_] The name under which a product is sold may be registered as a

trade mark

_] the hardware or a process used in its manufacture may be

protected by a patent

LJ the look of the product may be registered in the Designs Registry

L) software can be protected by copyright

LJ the know-how which goes into the development of the product

ted as confidential information

Introduction (continued)

LJ Unauthorized use of intellectual property can be stopped by injunction and damages may be sought for infringement of

these rights
LJ The law is constantly changing with technological advance

LJ General Agreement on Tariffs and Trade (GATT) concerned the protection of intellectual property rights in the face of

_ Wanrepread piracy of software products

(co

Confidential Information

QC) Information "which is not public property and public knowledge"

QO) Any category of information, from personal confidences, to trade secrets and sensitive government information, any or all of whicha computer scientist might handle in the course of his or her work, or all or any of which a firm may want to protect against unauthorized use

or disclosure by others

L) Information will be protected only if it is confidential. Non-confidential information, unless protected, e.g. by copyright or a

* patent is deemed to be in the public domain and can be used by

 Confidential Information

LL) Three conditions must be satisfied before an action for breach

of confidence can succeed:

= the information must be confidential

= the information must have been disclosed in circumstances

which give rise to an obligation of confidence

= there must be an actual or anticipated unauthorized use or

disclosure of the information

Week 6 Topic: Human Resource Management

LJ Introduction

CL) A model of Human Resource Management

UL) Training and Human Resource Management
LJ Health and Safety at Work
UL) Health and Safety Act 1974

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 Introduction

LJ It is a function in organizations designed to maximize employee

performance in service of an employer's strategic objectives

LL) Management of people, staff training and development with a
strategic approach suggest that human resource management is

particularly appropriate for software work

A model of human resource management

LI A corresponding commitment to the organization is expected from employees. They are therefore autonomous in the sense

of, to some degree, managing themselves.

LJ Human resource management is the responsibility of

all managers

LJ Maximum utilization of human resources available to the

* enterprise.

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 i-Long-term, strategic and proactive in style

LJ) The problems associated with personnel in an information technology environment require a disciplined approach to establishing numbers of staff; the utilization of personnel; the development and education of employees, together with the construction of comprehensive human resource management

policies that are not only responsive to immediate needs but

also are building blocks for the medium- and long-term
C

orate requirements

 2-Commitment to the organization

CJ The real challenge is to shift employee attitudes from mere

compliance with rules at work to commitment and self

motivation

L) This signifies a commitment to staff development as part of the "learning organization" and firm-specific skills that are less

transferable between firms. Skills include attendance,

flexibility, responsibility, discipline, identification with the
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mpany and, crucially, work-rate.

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Week 4 Topic: Anatomy of Software House

WU Introduction

LJ The Company (Software House)
LJ Structure of Company

L) Management of Staff

LL) Producing the budget

LJ Monitoring Financial Performance

LJ Long term Planning

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ragec
 Introduction (The Company)

LJ A Hypothetical company

UL) Syniad Software Ltd was founded some ten years ago by four friends.

LJ All four are members of the Board of Directors, along with two

others who were recruited later.

LJ The company specializes in the production of bespoke software

for clients who demand work of high quality.

○
avi yniad's head office is in London. Other offices are in Man-

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' 1'ehh , Delft, Netherland.

 Operations Director

LL] The Operations Director is responsible for all the revenue

earning operations of the company.

LJ It is his job to ensure that all projects are completed

satisfactorily

LJ And resources are available to carry out the projects that the

company wins;

LJ The personnel reports to him.
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 Technical Director

The Technical Director is responsible for:
LJ Quality management;
L) Research and development;

LJ Marketing at a technical level (e.g. arranging for staff to give

papers at conferences)

L) Technical training (as opposed to training in, say, project

management or _ presentational skills, which are the

¢ ponsibili

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of the personnel function).

Syniad's Organizational Structure Type

L) shows elements of all three of the types of organizational

structure.
1. Functional division of responsibilities

2. Geographical element (represented by the director responsible

for overseas operations)

3. Centralization and decentralization has little meaning
(Centralized policies and procedures are widely used but they

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1) at ve usually been developed within one part of the company and

if
VG bye been adopted by general consent.

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 Centralized vs. Decentralized
] In theory, staff have a sense of belonging to a group and regard their

group manager as the manager who is permanently responsible for

their career in the company.

] In practice, because projects often require expertise from more than
one group, staff often find themselves working on projects fot

groups other than the one to which they belong.

JIn a company of the size of Syniad, the distinction betweer

centralization and decentralization has little meaning. Centralizec
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ies and procedures are widely used but they have usually beer

d within one part of the company and have been adopted by
iat (e LA}

oeneral cancent
 Management of staff

L} New employees vs. Old employees.... OUTSIDER

Staff Appraisals:

LJ Employees' achievements and contributions to the company

were properly recorded;

LJ Staff knew what was expected of them and what they needed to

achieve in order to gain promotion;

_] Proper plans for training and career development were made and
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r 4 wy BS ng fees. were aware of the company : opinion of their

sularly reviewed;

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nertormane
 Producing the Budget

LI) Staff in the company are broadly divided into

1. Technical or Revenue earning staff and

2. Nonrevenue earning staff

WL) Both require different capital to work.

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Monitoring Financial Performance
LI Monitoring Syniad's performance against the budget should, in
principle, be straightforward.

LJ Each month, the income and expenditure under the various
heads are compared and, if significant deviations are observed,

corrective action is taken.

LJ In practice, this simple procedure presents many difficulties.

L To monitor financial performance, company focuses on;

Cost& Revenue

 1. Costs and revenue

LJ A major problem is caused by random fluctuations, themselves

the product of many individual factors, for example:
1. Annual Budgetn Staffhiring
2. Large projects cause deviation in Budget

3. Fixed Price ProjectEstimation

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 2. Project costing

LI Because of these difficulties in monitoring the overall
performance of the company, Syniad also tries to monitor the
financial performance of individual projects, through a project

costing system.

LI The costs and revenue of each project are calculated each
month and the cumulative gross margin (i.e. the difference
between total costs and total revenue to date on the project)

» © calculated as a percentage of the total revenue.

He rages: Mis system does not work well.
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 3. Sales (Continued...)

|. The confirmed sales report shows, for each grade, the number

of staff in that grade who are committed to contracts in each of
the following twelve months and the total expected revenue

from that grade in each month.

2. The sales prospects report shows, for each sales prospect, the
potential value of the sale, its likelihood and the likely start
date.

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 3. Sales

() The budgeted increase in revenue derives partly from increased
charge rates, partly from better staff utilization and partly from

an increased number of staff.

L) All these factors are influenced by the forward sales position,
that is by the staff required and the rates earned on the work to

which the company is committed in the coming months.

L] Two reports are used for assessing and monitoring the sales

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 Long Term Planning

LJ Strategic Planning for future

O) The ability to plan strategically and to achieve strategic objectives

is the hallmark of well run, successful companies.

L) Strategic planning in Syniad has two related aspects.

1. The first is to identify appropriate long-term goals

2. Second is to identify and formulate plans to overcome

those problems which are inhibiting it from attaining these

 Conclusions

C) Syniad, despite its problems, is a successful and well-managed

company, however, they need to go multinational.

C) Do directors have the expertise to manage this transition or to run the resulting company?(agreements for collaboration with

comparable companies)

LJ Syniad has now reached a point where it can no longer thrive as

, a private company and its future must, inevitably, be very

ferent from its past.

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Long Term Planning involves

LJ Expansion Plans
L) Company Image
LJ Product mix (Fee based revenue vs. Package Software)

LJ Finance (under-capitalization)

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