ELSEVIER

CIMA

OFFICIAL

REVISION CARDS

THE OFFICIAL **CIMA** REVISION CARDS

CIMA PUBLISHING

REVISION CARDS

Paper P4

Organisational Management and Information Systems

HELPING YOU TO PASS YOUR CIMA EXAM

CERTIFICATE | **MANAGERIAL** | STRATEGIC

CIMA REVISION CARDS

Organisational Management and Information Systems

Bob Perry

Managerial Level P4

ELSEVIER

AMSTERDAM • BOSTON • HEIDELBERG • LONDON • NEW YORK • OXFORD
PARIS • SAN DIEGO • SAN FRANCISCO • SINGAPORE • SYDNEY • TOKYO

Elsevier Butterworth-Heinemann
Linacre House, Jordan Hill, Oxford OX2 8DP
30, Corporate Drive, Burlington, MA 01803

First published 2006

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging in Publication Data
A catalogue record for this book is available from the Library of Congress

ISBN 10: 0 7506 8121 7
ISBN 13: 978 0 7506 8121 6

For information on all Elsevier Butterworth-Heinemann publications visit our website at http://books.elsevier.com

Printed and bound in Great Britain

Welcome to CIMA's Official Revision Cards. These cards have been designed to:

- Save you time by summarising the syllabus in a concise form
- Jog your memory through the use of diagrams and bullet points
- Follow the structure of the CIMA Official Learning Systems
- Refer to relevant questions found within the 'Preparing for the Examination' and other sections of the Learning System
- Provide you with plenty of exam tips and hints

Ensure exam success by revising with the only revision cards endorsed by CIMA.

TABLE OF CONTENTS

Information Systems

Topics

- Hardware components of a computer system
- Software components of a computer system
- Computer system configurations
- Computer networking
- Databases
- Technology in the workplace
- Systems development
- Managing systems implementation & operation
- Management considerations

Key Learning System Questions

Question 4 chapter end
C9
C10
C13

Hardware components of a computer system

The central processing unit (CPU) is the heart of the system. It consists of:

- The control unit: directs the operations of the whole computer system. Main functions: read & interpret program instructions, direct the operation of internal processor components, control the flow of programs & data in & out of memory.
- The arithmetic logic unit (ALU): executes operations identified by the control unit. Designed to perform all computations, logic, numeric & alphabetic operations.
- Main storage: storage of the executable instructions making up a computer program & data processed by the program.

And also:

More on main storage ('primary storage' or 'main memory') consists of circuits such as RAM & ROM.

- RAM: random access memory. Allows data to be read & written to memory. RAM provides the processor with short-term storage from programs & data currently in use, which the processor then manipulates.
- ROM: read only memory. Can be read but not overwritten. A programmer cannot alter this type of internal memory. When a computer is switched on, the program in ROM automatically readies it for use.

Hardware components of a computer system

Input devices

Data-entry method. The communication links between the computer & the user. The main types of input devices are:

- ⇨ Keyboard terminals.
- ⇨ Mouse (& trackball).
- ⇨ Voice data entry (VDE): uses a microphone to accept vocal input.
- ⇨ Light pen.
- ⇨ Touch screens.

And also:

Direct entry/data capture devices, designed to allow input of large volumes of routine data with little human intervention, e.g.

- ⇨ Optical character recognition (OCR): ability to read printed information into a computer system.
- ⇨ Optical mark recognition (OMR): use of documents designed so that a mark made in a particular position represents data.
- ⇨ Scanners: read & capture text, graphics & pictures from normal documents.
- ⇨ Magnetic ink character recognition (MICR): use human-readable characters, pre-printed in special ink impregnated on a form with iron oxide.
- ⇨ Bar-code readers: use unique identification codes in a series of lines of differing widths.
- ⇨ Digital cameras: allow the input of high-quality images.

Hardware components of a computer system

Definition

Output devices

- The visual display unit (VDU) allows the operator to monitor the input & display the machine-generated output immediately on-screen. Allows verification of correctness of input instantly.
- Hard-copy devices (e.g. printers, plotters, etc.).
- Audio output devices (speakers).

Storage devices

- Main (primary) memory: as part of the CPU (see earlier).
- Backing (secondary) storage, e.g. floppy disks, DVDs (digital video/versatile disks), Flash drives.

Software components of a computer system

Software brings hardware to 'life' & controls the activities of the hardware.

Types:

- ⇨ Systems software: allows the system to provide basic operational services.
- ⇨ Applications software: carries out specific user requirements.

Applications software

Performs the specific functions the user requires from their system both personal & business (e.g. word processing, sales invoice processing, entertainment such as computer games, etc.).

Systems software includes three elements:

1. The operating system: a set of computer programs that direct the operations of the system (e.g. MS-DOS, Windows 95/98, Windows 2000, etc.).
2. Utility programs: designed into the operating system by the manufacturer (e.g. virus check programs).
3. Communications software: supports network computer systems. Helps select the best transmission medium across networks, then codes, transmits, receives & stores data.

Computer system configurations

Computer system configurations

⇨ A computer system is made up of hardware & software components. The systems configuration describes how a specific organisation combines these.

Centralised processing

⇨ Large mainframe computer to process data, connected to remote terminals that communicate with it.
⇨ Requires a special environment in which to operate & specialist staff to maintain it.
⇨ Sometimes requires a controlled physical environment.
⇨ Usually designed for processing large volumes of data & transactions (e.g. banking industry).

Distributed processing

⇨ Uses a data communications system to create & maintain a network of computers, which are equally capable of independent operation & resource sharing.
⇨ Sharing may involve access of data on a remote file (known as end-user computing). This means that responsibility for IT is delegated to users & control over processing has been decentralised.

Definition

Peripheral – hardware device that is added to expand functionality (ability of system).

Computer networking

Definition

Computer networking – a number of computers & devices, linked to one device can communicate with another.

- ⇨ Allows resource sharing between numbers of users.
- ⇨ May link computers in the same local site ('local area networks' or LAN).
- ⇨ May link computers in different organisations & involve widely distributed geographical sites ('wide area networks' or WAN).

Local area network (LAN) components:

- ⇨ Network hub: central point for physically connecting components of LAN.
- ⇨ Workstations: including microcomputer, keyboard, disk storage device & printer. Users enter data, execute software & receive output.
- ⇨ File server: a processor connected to high-speed online secondary storage. Workstations may place files on server.
- ⇨ A print server: controls high-speed printers & can be used by all workstations.
- ⇨ A communications server: a processor handling communications with other systems & networks.

Client/server computing is the division of operations in a network between end-users (clients) & processors that provide services to them. Fast, powerful client computers mean functions have moved from servers to clients. Gives users greater control & reduces costs.

Computer networking

Network topology describes the physical arrangement of a network. Some examples:

- ⇨ Star networks: a single central computer as a server that transfers data among all other computers. Each computer is linked directly to the central processor only, using a single data communications link. Peripheral computers do not have a direct link to each other.
- ⇨ Ring network: a number of computers, each connected to two others in the ring. Each maybe dedicated to processing a few related applications. Each processor has the ability to communicate to any other in the network, but normally only through a number of other computers.
- ⇨ Tree (hierarchical) network: the processor at the top is the most important & usually a mainframe. The processors at lower levels in the hierarchy are smaller computers, such as minicomputers or microcomputers.

Computer networking

Extranet

An extended Intranet that links business partners (e.g. customers, suppliers or other trade organisations). Potential for enhancing inter-organisational communication, facilitating electronic data interchange & e-procurement, etc.

Intranet

A private internal organisational network. 'Firewall' protection (access control system placed between internal network & external networks).
Accessed needs authorising. Main advantage: allows confidential internal information sharing.

Internet

A public & global communication network that provides direct connectivity to anyone over a LAN (see card 14 for more information).

Common internet uses:

- ⇨ e-mail.
- ⇨ searches on the world wide web.
- ⇨ electronic conferencing.
- ⇨ trading (see card 44 on E-Business).

Databases

Data needs to be stored, managed & retrieved. One way is a database: a collection of structured data. This structure is completely independent of any one application.

A database is a collection of data files that are integrated to provide one single file system. The main aim of a database file structure is to provide one common dataset for a variety of users & their information needs so overcoming data redundancy.

Definition

'Data redundancy' is duplication of data in two or more files leading to possible inconsistencies in data, increased storage costs & inefficiencies, etc.

Databases

Database management systems (DBMS):

A set of integrated programs designed to organise & simplify the creation, management & access of data held within a database structure. DBMS is the way in which an organisation coordinates the complex activities carried out by its department into one data location.

Aims:

- ⇨ Provide data for multiple users & their different information requirements.
- ⇨ Encourage sharing.
- ⇨ Maintain data integrity. It is important to restrict users from making unauthorised changes.
- ⇨ Be dynamic: develop & evolve in line with the organisation.

Note

Web-based technology allows access by suppliers & customers.

DBMS advantages:

- ⇨ Easy access.
- ⇨ Ability to manipulate data efficiently & effectively.
- ⇨ Integrity of the data (only one dataset).
- ⇨ Reduced storage costs.
- ⇨ Data independence: allows multiple applications to use the same data at the same time.
- ⇨ Privacy: software provides security features to protect from unauthorised access, alteration or data destruction.

DBMS disadvantages:

- ⇨ Ownership disputes.
- ⇨ Single location, so should power fail, no access is possible anywhere.
- ⇨ Contingency planning can be significant, costly & time-consuming.

Technology in the workplace

Office automation

Office automation – refers to the use of computers, communications & network technology in managing the organisation's operations & information resources.

Examples of changes in the workplace through office automation:

Teleworking (or telecommuting)

⇨ Staff working from home using a combination of technologies (phone, fax, e-mail, etc.). Staff communicate with colleagues, customers & suppliers from home.

Advantages:

⇨ Environmental by reducing pollution caused by commuting.
⇨ Travel time savings.
⇨ Reduction in office distractions & disruptions leading to improved productivity.
⇨ Reduced organisational operating costs through lower facilities costs.
⇨ Greater flexibility offered to the individual.

Technology in the workplace

Electronic data interchange (EDI) ('Paperless trading')

⇨ The computer-to-computer transmission of data contained in standard business documents & reports (intended to replace conventional business documentation with structured data transmitted electronically over networks), e.g. customer invoices, purchase orders, etc.

Advantages:

⇨ Saving in clerical/administration costs/time.
⇨ Speed of transactions & potentially reduced lead times for material purchases, which may lead to reduced stock levels.
⇨ Better customer service & more responsive to changes in customer demands.

Study tip

Now return to card number 9 (extranet) & cross reference.

Organisational information systems

⇨ Data processing systems (DPS) (e.g. stock, payroll).
⇨ Management information system (MIS): reports to middle management based on DPS.
⇨ Executive information systems (EIS): helps decision making by combining information within & outside the organisations.
⇨ Decision support systems (DSS): helps support unstructured one-off decisions.
⇨ Expert systems (ES): simulates human expertise to assist decision makers.

Technology in the workplace

Office automation technology

- Electronic mail (e-mail). Advantages: speed & versatility, allowing communication over distances with immediate response. E-mail has the facility to send electronic attachments (text or graphics). Disadvantages: risk of computer viruses being transmitted through the opening of rogue messages. Misuse of facility by staff. Encourages non-verbal communication.
- Facsimile (fax) transmission: allows the user to send an exact copy of a document, which is digitally coded, then transmitted, recoded & composed by the receiver's equipment.
- Teleconferencing & Videoconferencing: allows meetings, business negotiations & presentations without participants having to be at the same location. Advantages: cost & time savings, fast communication & timelier decision-making.
- World Wide Web (www): The Internet is a virtual network linking millions of computers globally. The World Wide Web exists on it & consists of pages of information that can be found at Websites, & accessed through the use of a Web browser. The flexibility & accessibility makes it a useful tool for business. Many organisations use the Internet to advertise, trade & search for information about competitors, customers & suppliers.

Systems development: analysis & design

Definition

The methodical investigation of a problem & the identification & ranking of alternative solutions.

A detailed analysis to assess & develop potential options to provide management with information to decide upon the best solution.
A set of procedures & tools designed to create the specifications of a new system.
Stage 1: system is clearly described by means of interviews, questionnaires & data flow diagrams.
Stage 2: alternative solutions proposed.
Stage 3: one preferred solution chosen.

Aims:

- ⇨ Define the current problem in detail in order to understand it fully.
- ⇨ Devise alternative design solutions to solve the problem.
- ⇨ Choose one of these & justify the choice, using techniques such as cost/benefit analysis.
- ⇨ Develop logical specifications for the selected option.
- ⇨ Develop the physical requirements (file size & structure, screen layouts, response times, capacity, etc.).
- ⇨ Develop a budget for systems development (including design, implementation & maintenance).

The final three form part of a single document known as the 'approved systems analysis document'. This sets out the scope, structure & functional requirements (in terms of finance, people, technology & equipment) of the final proposed solution.

Systems development: analysis & design

Requirements for a new system

Functional (logical): objectives & benefits of the system:

- A narrative of each system function, including a description of work & data flow, user needs & interfaces between applications.
- Each input, output & file described (volume, frequency, purpose, origin & major components).
- Specifications for features, e.g. editing, file maintenance controls, backup, security, etc.

Physical:

- Data storage (file structures, e.g. database).
- File size, access needs, update frequency, growth requirement.
- Transaction volumes & growth.
- Peripherals required (printers, scanners, etc.).
- Communications requirements.
- Processing requirements (centralised, distributed, client/server).
- Output, distribution formats.
- Response times.
- Layout of enquiry & input screens.

Systems development: systems selection

Selection of a new system:

- Uses the functional & physical specifications to decide what resources will be necessary.
- The aims are to decide what computer software & computer hardware will be most suitable.

Software selection options:

- Purchased or developed in-house.

Hardware selection options:

- Rented, leased or purchased.
- Architecture, type, model, speed & capacity.

Choice of computer – main factors:

- Cost: justified in terms of benefits?
- User requirements.
- Compatibility with existing systems.
- Reliability/support of the manufacturer.
- The specification of the computer.
- Built-in security features.

Systems development: systems selection

Internal versus external hardware & software options

	Internal	External
Software		
Quality	Must manage development effectively	Contract must specify quality standards & performance criteria
Cost	Often costly Difficult to estimate if new software	Usually less costly than internal More easy to determine final cost
Time	Need to wait for software to be developed – requires significant planning	If amendments not required – availability immediate
Compatibility	Should be completely compatible	May require amendments to fit in with current system
Support	Organisation must provide & perform training & maintenance programme	Vendor likely to support both own training & maintenance (built into contract)
User satisfaction	Maximum satisfaction as designed specifically for users	May not satisfy exactly – may require further tailoring
Nature of development	Develop in-house if unique requirement	Purchase if industry standard
Hardware		
Management	Organisation/user responsible	Managed by outside party
Support	Internal (IT department)	Available externally (for a fee)
Cost	Mostly fixed	Mostly variable
Satisfaction of needs	Tailored – maximum satisfaction (within budget)	Less flexibility (more determined by budget)

Systems development: design phase

Aims:

- ⇨ Convert the specifications proposed in systems analysis into a reliable, workable design.
- ⇨ Develop a test programme to ensure completeness, accuracy & security.
- ⇨ Implementation plan with testing procedures to ensure integrity of system.
- ⇨ Develop training programme & user manual to ensure full user support.

The outcome will be an approved systems design document specifying:

- ⇨ Detailed descriptions & plans of the system's logical processes & functions, including inputs, processes & outputs.
- ⇨ An implementation plan, scheduling events, with a budget for each stage.
- ⇨ A test plan highlighting tests required at each stage.
- ⇨ A training programme: (nature? who? at what stage?).
- ⇨ A user manual providing support after implementation & training completed.

Systems development: design documentation techniques

Systems analysts & designers use certain tools & techniques to describe & summarise systems information.

Benefits:

- ⇨ Capturing results of interviews or observations about a particular systems module.
- ⇨ Communicating a description to others who may have different levels of knowledge.

Some techniques:

- ⇨ Data flow diagrams.
- ⇨ Entity relationship modelling.
- ⇨ Entity life histories.
- ⇨ Decision tables.

Systems development: design documentation techniques

Definitions

An entity life history is a representation of the processes that occur in the life of each entity & is designed to show the way in which information within a system changes over time.

Data flow diagrams describe the flow of data between entities, processes & data stores. Helps understand the flow of data into, out of & within the organisation & provides a basic understanding of how a system works.

Decision tables describe the processing logic of a system. The most useful application of decision tables is in a situation where there maybe a number of alternative conditions to evaluate.

Definition

Entity relationship modelling is used mainly for database design. It is structured around three basic concepts:

- ⇨ An entity: an item (person, product, activity, job, department or business) that is important to an organisation & about which information must be stored.
- ⇨ Attributes: fact/characteristic of an entity that the organisation records.
- ⇨ Relationship: logical links between entities & the degree of relationship between entities.

Managing systems implementation & operation

- Sometimes treated as a distinct project involving formal project management techniques.
- An implementation schedule is needed, with activities required for successful implementation carefully planned.

Testing

Before going live testing occurs using test data that the program could be expected to handle.

Preparing system testing includes constructing test data, identifying those involved in testing, establishing testing procedure schedule & developing criteria for measuring test results. Sequence:

- Realistic tests: a realistic example of the environment in which the system is to operate. This also tests the understanding of users.
- Contrived tests: present the system with many unusual/unexpected events as possible, e.g. incorrect codes, wrong amounts, inappropriate commands, etc.
- Volume tests: large volume of transactions to see how the system reacts.
- Users undertake acceptance testing: tests the completeness of the system from the users' point of view.

Training

- Users: how to use specific applications, important procedures, commands & data-entry requirements, etc. Basic computer literacy & skills (if previously a manual system). On-the-job training & updates.
- Middle management: elements of the system for which they are responsible. An understanding of particular business issues, system security & control features.
- Senior management: less structured & more general level. Short demonstrations, executive-training seminars on systems features.

Managing systems implementation & operation

Changeover approaches

- Parallel – old & new systems operate together for a time, processing the same current data. The outputs of the two are compared. Advantage: greater control – the new system is not fully operational until satisfied. Problems: delays indicating a lack of confidence in the new system. Greater resource costs to operate both systems.
- Direct – the highest risk: at a predetermined time the old system entirely ceases. Management must have complete confidence in the new system. Should be carried out during a slack period, e.g. bank holiday.
- Phased (Modular) implementing one subsystem at a time.
- Pilot – can be implemented in two ways:

A restricted data pilot involved takes one whole part of the complete system & runs as the new system. If correct, remaining elements are transferred gradually.

A retrospective pilot, operates the new system with old data already processed. The results are compared.

Managing systems implementation & operation

Systems operation review

Types:

- ⇨ Post-implementation review.
- ⇨ Systems maintenance.

Post-implementation: thorough review of a new system soon after implementation (is the system operating as expected? Are users needs satisfied? Have development objectives been met? If not, why & future changes? What was the quality of systems project management? etc.). Findings/recommendations should be formalised into a final report.

Systems maintenance: the repair, correction or further enhancement of systems once operational. (Maybe in response to specific user needs or as a result of ongoing systems development?)

Managing systems implementation & operation

Forms of systems maintenance:

- ⇨ Corrective maintenance carried out to correct errors in systems normally in response to a problem. Reactive, main function is to ensure that system can operate.
- ⇨ Perfective maintenance carried out to improve performance, prevent failures & eliminate inefficiencies (often to extend user capabilities or make user interface more effective).
- ⇨ Adaptive maintenance, to adjust applications, to reflect a changing external environment.

Managing systems implementation & operation

Post-implementation challenges

'People type' challenges, could be because of:

- ⇨ Inappropriate implementation methods.
- ⇨ Faulty communication.
- ⇨ Inadequate training.

Non-usage of systems may indicate:

- ⇨ Expressions of resistance.
- ⇨ A lack of confidence in the new system.
- ⇨ That employees may lack confidence in their abilities to cope.

Study tip

Refer now to some cards from the Change Management section in particular 'attitudes to change' (see card 115).

Management considerations

Information systems & the corporate organisation

- ⇨ Effective information management can support & transform organisations.
- ⇨ IS function should understand organisational needs & seek to satisfy these through policies, practices & developments.
- ⇨ IS normally deals only with internal customers.
- ⇨ Essential roles: automating processes, networking business & providing information for management decision-making & planning.
- ⇨ The benefits of systems should outweigh the costs.

Outsourced solutions

- ⇨ Proposals on outsourcing should be consistent with organisation's values & broad policy ideas.
- ⇨ Possible advantages: cost savings & satisfying skill gaps.
- ⇨ Possible disadvantages: additional monitoring mechanisms which might be costly.

Problems with 'outsourcing':

- ⇨ External provider may not understand the business process.
- ⇨ Loss of control over information systems.
- ⇨ Future cost could escalate.

Management considerations

Problems with 'in-house' solutions:

- ⇨ Assembly & maintenance of adequately skilled & motivated workforce maybe difficult.
- ⇨ Could be unresponsive & costly.

Marketing

Topics

- Introduction to marketing
- The marketing mix
- Product placement
- Market positioning
- Marketing & business contexts
- Market research
- Technology & marketing
- Strategic marketing
- Social responsibility & marketing

Key Learning System Questions

Question 4 chapter end
B23 to B28
C14

Introduction to marketing

Definition

Marketing is 'the management process responsible for identifying, anticipating & satisfying customer requirements profitably'. (Chartered Institute of Marketing)

Key points:

- ⇨ The importance of the customer.
- ⇨ Customer requirements.
- ⇨ The planning processes needed to achieve organisational goals.
- ⇨ Marketing as a business activity.
- ⇨ The core of any organisation.
- ⇨ Relevance irrespective of organisational size or nature.

Marketing as an organisational philosophy

Types, focus & implications:

- ⇨ Product orientated. Main focus: product features. No research to identify demand. Means products may not sell sufficiently.
- ⇨ Production orientated. Main focus: efficiency & low costs. Production levels have little regard for customers. Maybe overproduction or customers might think low prices means low quality.
- ⇨ Sales orientated. Main focus: selling goods/ services. Implies need for keen sales force. Maybe high-pressure sales techniques.
- ⇨ Marketing orientated. Main focus: the customer. Products offered are determined by consumer demands.

Introduction to marketing

The marketing mix

Basic marketing tools: The 4 Ps – product (or service), price, promotion & place. The variables are mixed by each organisation to achieve the desired blend.

Product: features, quality, durability, design, brand name, packaging, range, after-sales service, optional extras, guarantees, warranties, etc.

Place: distribution channels, coverage, types of transportation vehicle, locations of sales outlets, sales layouts, stock levels, warehouse locations, etc.

Promotion: advertising, personal selling, publicity, sales promotion, etc.

Price: levels, discounts, allowances, payment terms, credit policy, etc.

And also:

Additional mix factors, especially for service organisations:

- **People:** include both staff & customers.
- **Processes:** systems involved in providing the service.
- **Physical Evidence:** as a service is intangible, it cannot be experienced before it is delivered. This means that potential customers may perceive greater risk. Reassurance is needed, e.g. testimonials & references.

The marketing mix: product

Product requirements:

- Develop the 'right' product by understanding customer needs & wants.
- Need systems to monitor customer perceptions.
- Product quality must be 'fit for purpose'.

The product life cycle (plc)

Most products have a life cycle with distinct stages.

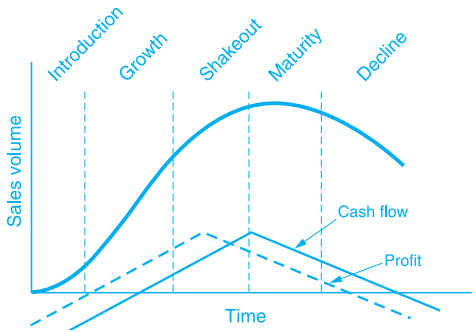
This can be used to determine strategies & help make decisions over investment in products.

Study tip

Make a note of each stage of the plc & the likely impact on:

- Price.
- Promotion & advertising.
- Profit.
- Competitor action.

The product life cycle



The marketing mix: product

Decision on investing in existing products

Products within a company's portfolio can be analysed according to market share & market growth rate using a Boston Consulting Group (BCG) Matrix as follows:

Market share	Market growth	Category	Probable decision
High	Low	Cash cow	A cash generator: keep
Low	Low	Dog	Divest
Low	High	Problem child	Decide which products to invest in. Let others go
High	High	Star	Invest in – its tomorrow's cash cow

The marketing mix: place

Some contemporary developments.

Direct marketing

- ⇨ A 'zero level channel', i.e. manufacturer interacts with the customer directly.
- ⇨ Includes direct mail shots, telesales, etc.
- ⇨ Also cyberspace, e.g. Amazon.com.
- ⇨ Increasing importance as technology advances.

Internet & the World Wide Web marketing

Introduction of powerful databases means customers are identified (incl. behaviours/characteristics). Allows more accurate targeting of marketing communications & selling on the Internet.

Teleshopping

Home shopping using TV.

Telemarketing

Telephones have potential for telesales, stimulating product interest or arranging a visit in the home. Growth of large call centres.

'M-marketing'

Telesales, etc. using mobile telephone technologies.

Note that: When Telemarketing & 'M-marketing' is unsolicited, potential customers may not welcome the approach. (Ethical concerns?)

The marketing mix: promotion

Promotion includes the tools to communicate with customers/potential customers about product/service.

Communication form maybe:

- ⇨ Non-personal & mass aimed at a market generally.
- ⇨ Personal & direct, e.g. by sending a letter.
- ⇨ Personal & interactive involving dialogue between salesperson & customer.

Main promotional tools

Advertising: non-personal presentation of ideas & goods, targeted at a market through media channel. Media examples: TV, press, radio, newspapers, billboards, fliers, etc.

Sales promotion: short-term, involving offering incentives to encourage sales (e.g. coupons, offers, giveaways, discounts, competition). Also events, displays, exhibitions, demonstrations & sponsorship.

Publicity & public relations: examples include purposefully planting news in a published medium, so projecting a favourable image, also company open days & press releases.

Personal selling: the salesperson verbally presents the benefits of the product/service.

Direct mailing of promotional literature: databases allow messages to be personalised. However maybe viewed as 'junk mail' or 'SPAM' mail?

Study tip

Reflect on today: what products & services have been advertised to you? How were they advertised? How appropriate was the mechanism? Make notes.

The marketing mix: promotion: push & pull policies

About the policies

Push policy:

- ⇨ Traditional.
- ⇨ Involves getting wholesalers & retailers to accept goods.
- ⇨ They must then sell to the ultimate customer.

Pull policy:

- ⇨ Aim is to influence final consumer attitudes.
- ⇨ A consumer demand is created which dealers are obliged to satisfy.

The selling mix

Concentrates on point-of-sale activity & involves several aspects of promotion, e.g.

- ⇨ Logos, special storage & branding.
- ⇨ Locally devised packaging.
- ⇨ Point-of-sale advertising.

The marketing mix: price

The function of pricing:

- ⇨ Meet the organisation's financial aims.
- ⇨ Be competitive.
- ⇨ Satisfy customers.

Customer attitude: reflected in what they are prepared to pay. Must believe the price is fair commensurate with the quality. (Price can also imply quality.)

Pricing strategies: Larger, well-established businesses are better able to compete on price, because of:

- ⇨ The experience curve. Reductions in the average unit cost price, as a result of learning from past experiences.
- ⇨ Economies of scale reductions in the average unit cost price, as a result of size of operation.

Perspectives on price

Economist: suppliers are in the business of profit maximisation. Price is the mechanism whereby demand & supply are brought into equilibrium.

Accountant: price is set to recover costs & make profit. Pricing should be guided by the use of ratios & techniques.

Marketeer: price is only one factor influencing demand, sales & market share. A good measure might be what 'the market will bear'.

The marketing mix: price

Some pricing approaches

Competitive	by reference to prices of competitive products.
Follow the leader	adjusting to leading competitors prices.
Loss leader	pricing below cost on a single item to attract sales of other items.
Penetration	low price for market share.
Premium	high price due to product features.
Price skimming	high price to gain short-term profit.
Selective	different pricing in different markets for same product.

Product placement

Combines two main aspects of marketing:

- ⇨ Identifying the customer group to be aimed at.
- ⇨ Identifying the best method to reach target market.

Although the total market consists of widely different groups of consumers, each group consists of people (or organisations) with common needs & preferences.

Market segmentation involves dividing a market into distinct subgroups. Any subgroup can be selected as a target & then met with a distinct marketing mix.

Market segments must be:

- ⇨ Measurable.
- ⇨ Accessible (easily reached).
- ⇨ Substantial (costs of reaching the target versus potential demand).

The basis of market segments (examples):

- ⇨ Geographical area.
- ⇨ Age (e.g. market for classical or pop music).
- ⇨ Gender (e.g. clothes).
- ⇨ Family size.
- ⇨ Income (e.g. the market for luxury goods).
- ⇨ Occupation (e.g. the market for briefcases).
- ⇨ Education (e.g. the marketing of magazines)
- ⇨ Nationality, race, culture, etc. (e.g. the market for food).
- ⇨ Social class.
- ⇨ Lifestyle.

Study tip

Add to the above listing in your notes.

Market positioning

A firm can gain a leadership position in a single market segment or in several segments. The market segments selected would:

- ⇨ have future growth potential.
- ⇨ be without a direct competitor of similar size.
- ⇨ show signs of a need for 'exploitation'.
- ⇨ be accessible & substantial.

Alternative targeting (& positioning) strategies

- ⇨ *Undifferentiated positioning* targeting an entire market with a single marketing mix. Approach ignores segmentation. It is ideal where the market is largely homogeneous (e.g. the market for safety matches).
- ⇨ *Differentiated* involves targeting certain market segments & applying distinct mix to each. Disadvantage is additional costs of marketing & production (more product design & development costs, loss of economies of scale in production & storage, additional promotion costs, administrative costs, etc.). Can be complex & time consuming, but potentially rewarding. One danger maybe to over extend a firm's resources in its marketing efforts.
- ⇨ *Concentrated* involves targeting a single market segment with an ideal product for that one segment (e.g. Rolls-Royce cars for the wealthy prestige conscious). Disadvantage is the business risk of relying on a single segment of a single market. Ideal for small firms with limited marketing resources.

Marketing & business contexts

Fast-moving consumer goods (FMCGs)

Consumer goods can be either durable goods (e.g. TVs, computers, cars) or FMCGs.

FMCGs are purchased for personal reasons & generally involve relatively low financial outlays. For FMCGs like canned foods, soft drinks & confectionery, there maybe habitual purchase patterns. Products tend to have short life cycles. The mix for FMCG will stress advertising, branding & packaging.

Factors influencing FMCG purchasing behaviour:

- ⇨ Personal (age, gender, income, etc.).
- ⇨ Psychological (perceptions, motives, attitudes, etc.).
- ⇨ Social/cultural (family & peer influence, etc.).

Business to business (B2B)

B2B involves firms that market goods & services to other firms (unlike business to consumer (B2C) markets).

B2B marketing differs because the purchaser makes purchasing decisions on behalf of the organisation.

Those involved in the B2B decision:

- ⇨ *Initiators* who start the buying process (e.g. a department that identifies a need to replace a piece of equipment).
- ⇨ *Influencers* who affect the buying decision often based on their technical expertise.
- ⇨ *Buyers* who raise orders & sanction payment.
- ⇨ *Ultimate users.*

Marketing & business contexts

Services marketing

Features of a service industry:

- ⇨ The consumer is a participant in the service process.
- ⇨ Services are perishable.
- ⇨ Services are intangible (communication is more difficult when explaining the benefits).
- ⇨ The characteristics of the workforce determine the effectiveness of the service.
- ⇨ Output measurement is less easy to evidence.

The added 3 'P' to the 'four Ps' become relevant:

- ⇨ People. Employees deal with customers & impact on customer satisfaction levels.
- ⇨ Processes. Systems involved in providing a service become crucial.
- ⇨ Physical evidence. Reassurance by references from past satisfied customers act as a substitute for physical evidence.

Not for profit (NFP) organisations form part of this group (including charities, hospitals, political parties, universities & local authorities).

- ⇨ Issues of achieving value for money (VFM) often arise.
- ⇨ Customers maybe a different grouping from those paying for the service to be provided.

Market research

Market research concentrates on a single market (marketing research is much broader & involves investigating all marketing activities).

Market research must show an awareness of the PESTLE factors (see card 46) that may affect supply & demand for a product.

When undertaking market research there is a need to:

- ⇨ Define the problem.
- ⇨ Establish the type & amount of information.
- ⇨ Decide on the type of data (secondary or primary).
- ⇨ Determine the collection method to be used (e.g. postal questionnaire, personal interview, etc.).
- ⇨ Select a research agency (if appropriate).
- ⇨ Determine the sample size & nature.
- ⇨ Collect the data.
- ⇨ Interpret the data.

Market research & sales forecasting

Forecasting current demand includes reporting:

- ⇨ Total market potential.
- ⇨ (Geographical) area market potential.
- ⇨ Total industry sales.
- ⇨ Relative market shares between main competitors.

Sales forecasting methods include:

- ⇨ Surveys of buyers' intentions.
- ⇨ A composite of sales force opinions.
- ⇨ Expert opinion: obtaining estimates of future sales from 'experts'.
- ⇨ Estimates based on past sales analysis.

Technology & marketing

Examples:

- ⇨ Use of electronic funds transfer at the point of sale (EFTPOS).
- ⇨ IT-assisted market research approaches.
- ⇨ E-Business (E-Commerce).
- ⇨ Marketing information systems (MIS) & marketing planning.

E-Business. a collective term for all electronically based systems & technologies of doing business (including the Internet).

With increased Internet usage, opportunities arise, including data collection & providing enhanced value to customers & suppliers.

Difficulties include financial security issues, computer disruptions & a possibility of firms ceasing trading.

Customer advantages of E-business in a B2C context:

- ⇨ One-stop shopping.
- ⇨ Convenience of place.
- ⇨ Ability to shop around.
- ⇨ Faster, flexible.
- ⇨ Reduces impulse buys.
- ⇨ Direct communication re:delivery/complaints.

MIS & marketing planning

Sub systems feeding a marketing database:

- ⇨ Market research.
- ⇨ Marketing intelligence.
- ⇨ Internal organisational information.

The system helps decision makers by:

- ⇨ Improving problem solving capacity.
- ⇨ Dealing with unstructured/semi-structured decisions.
- ⇨ Helping manage knowledge.

Strategic marketing

Aims:

- ⇨ Consistency with other organisational planning processes.
- ⇨ Develop key priorities identified in corporate strategy.
- ⇨ Add cohesion & co-ordinate elements.
- ⇨ Be realistic over organisational capability & finance available.

The process of developing a marketing strategy:

- ⇨ Environmental audit, involving detailed investigation of the market & targeted segments.
- ⇨ PESTLE analysis considering trends influencing the market (see next card).
- ⇨ A consideration of the position of the organisation relative to these factors.
- ⇨ Discussions of an appropriate marketing mix to achieve corporate aspirations.

Frameworks used include a SWOT analysis (strengths, weaknesses, opportunities, threats).

Analysis is required of *internal factors* including:

- ⇨ What portfolio of products or services do we offer?
- ⇨ What is our capability?
- ⇨ What are our expectations?

Strategic marketing

The PESTLE Framework

Political

- Taxation policies.
- Regulations (e.g. concerning foreign trade).
- Government stability.

Economic

- Trade cycles.
- Levels of disposable income.
- Interest rates.
- Money supply.
- Inflation.
- Unemployment.

Socio-cultural

- Demographic trends.
- Income distribution.
- Social mobility.
- Life-style changes.
- Attitudes to work, leisure, consumption, etc.
- Consumerism.

Technological

- Spending on research.
- Industry focus of technological effort.
- New discoveries/developments.
- Speed of technology transfer.
- Rates of obsolescence.

Source: Based on Johnson, Scholes & Whittington (2005).

Strategic marketing

Legal

- Monopolies legislation.
- Employment law.
- Product safety requirements.

Environment

- Energy consumption issues.
- Waste disposal issues.
- Environment protection laws.

Study tip

Reinforce your understanding of this model by applying it to your own organisation & one other organisation mentioned on the news today.

Analysis is required of *external factors*:

- Customers: buying habits, nature, expectations, etc.
- The market: is segmentation possible? What is our market position, might we want to develop markets in future?
- Competition: Who? On what basis are they competing? What is their strengths & weaknesses, track record, etc.?

Strategically *considering marketing issues*:

- Product: what is being sold?
- Place: where is it sold?
- Price: how much for?
- Promotion: how do we engage our customers?

What could be done & how do we *bridge the gap* from where we are now?

Social responsibility & marketing

The plan (strategy) should:

- ⇨ Define objectives, targets & performance measures.
- ⇨ Contain clear marketing goals & objectives.
- ⇨ Discuss strategic alternatives.
- ⇨ Make explicit choices made.
- ⇨ Contain targets: measures & performance indicators. Have a detailed action plan – incorporating SMART (specific, measurable, achievable, realistic time bound) targets.
- ⇨ Cost the plan & develop a budget.
- ⇨ Identify & cost capital requirements.
- ⇨ Be revised & updated.

Certain ethical questions arise including:

- ⇨ To whom do we sell?
- ⇨ Are our products of an appropriate standard & safe?
- ⇨ Are our products produced to environmental standards?
- ⇨ How do we advertise: is it fair, balanced & truthful?
- ⇨ Do we have policies that support dissatisfied customers?
- ⇨ Is our pricing policy exploitive of any groups in society?

Study tip

For more on ethics refer to card 62.

People Issues: Motivation, Rewards & Ethical Considerations

Topics

- Motivation in overview
- Scientific approaches
- Social groups
- Assumptions about workers
- Content theories of motivation
- Process theories of motivation
- Reward systems
- Ethics in management

Key Learning System Questions

C2
C4

Motivation in overview

Definition

'The internal psychological process of initiating, energising, directing & maintaining goal-directed behaviours'.

Importance:

- ⇨ Vital to human resource management.
- ⇨ Influences employee productivity & quality of work.

Some motivation-related classifications:

- ⇨ Economic rewards (pay, security, perks of the job).
- ⇨ Intrinsic satisfaction (from the nature of work, interest in job, self-development, etc.).
- ⇨ Social relationships (friendships, being part of a team, etc.).

Scientific approaches

Taylorism

Frederick W. Taylor developed work measurement & applied 'scientific' methods from the 1890s onwards.

Aim: maximising productivity & prosperity.

Findings:

- ⇨ Workers vary working pace to suit the conditions.
- ⇨ Managers fail to specify what is a 'reasonable day's work'.
- ⇨ No effort to train workforce.
- ⇨ Productivity depended both on the technology available & how it was managed.
- ⇨ 'Good' management constituted an application of knowledge & skills of a 'scientific' nature, rather than intuition & guesswork.

Principles:

- ⇨ Develop a 'science' of work: assess what is a fair day's work & what is a fair day's pay.
- ⇨ Scientific selection: training/development of workers so that all are capable of achieving output & quality targets.
- ⇨ The 'mental revolution': combining the science of work & scientifically selected & trained staff. Workers encouraged develop to full potential.
- ⇨ Co-operation between management & workers.

Implications for:

- ⇨ Recruitment & selection processes.
- ⇨ Work measurement & strict controls.
- ⇨ Fair expectations of the individual.
- ⇨ Training.
- ⇨ Job design & specification of task.
- ⇨ Financial rewards.

(Later, Lawrence & Lorsch (1984) supported delineation of work, particularly when an organisation operates in a complex environment. Functions should be structured as a response to their environment.)

Social groups

Schein

Emphasis: behaviours as social groups, not individuals – a human approach.

Categories:

- ⇨ 'Rational Economic Man'. Prime motivators: self-interest & maximisation of gain. Extremes are the untrustworthy (money motivated & calculating) & the trustworthy (more broadly motivated, moral elite, who must organise & manage).
- ⇨ 'Social Man'. Socialisation at work of motivated people. Morale as a way of levering superior performance?
- ⇨ 'Self-actualising Man'. Self-fulfilment as the driving force, not money. Individuals need challenge in tasks, responsibility & a sense of pride in their work.
- ⇨ 'Complex Man': a 'psychological contract', based on mutual expectations of employee & the organisation & the extent to which these are mutually fulfilled.

'Hawthorne Studies'

Reinforced value of group relationships on motivation & productivity.

Assumptions about workers

McGregor

Assumptions that managers might have:

- ⇨ Theory X: Work is inherently distasteful. Workers prefer to be directed, avoid responsibility & want security.
- ⇨ Theory Y: People want to contribute to meaningful goals they have helped to establish. Under the right conditions, workers accept & seek responsibility.

Implications for how people are managed:

Theory X: must control work tightly, supervise closely & give simple, repetitive tasks. The key 'motivators' are economic rewards & use of punishments.

Theory Y: the manager creates a participative environment where each person contributes to the limits of their ability & wants self-direction.

Limitations of a Theory X approach to management:

- ⇨ Invalid for some who are disinterested in economic rewards & unafraid of punishments.
- ⇨ Strict controls & close supervision may cause conflict & stress.
- ⇨ Individuals may respond by showing no initiative & minimal compliance.
- ⇨ More effective to encourage self-motivation & commitment.

And also:
For more on 'needs' see next card.

Content theories of motivation

What it means

Content theories

Describe/categorise the needs that influence behaviour. Theories assume that behaviour is caused by, & directed towards, the satisfaction of these needs.

Examples: Maslow's hierarchy of needs & Frederick Herzberg's dual factor theory.

Maslow

Assumptions:

- ⇨ The individual is 'a perpetually wanting animal'.
- ⇨ Only relatively unsatisfied needs are capable of motivating behaviour.
- ⇨ Five levels of needs can be arranged in a hierarchy of potency: physiological, security, affiliation, esteem, self actualisation.
- ⇨ The lowest level of relatively unsatisfied need will be the one that motivates current behaviour.

Limitations:

- ⇨ Difficult to test empirically.
- ⇨ Assumes all individuals have the same needs organised in the same way.
- ⇨ Difficult to predict actual behaviour from the theory.

Content theories of motivation

Herzberg

A motivation-hygiene (dual factor) theory:

- ⇨ Opposite of job satisfaction is the lack of job satisfaction, not job dissatisfaction.
- ⇨ Opposite of job dissatisfaction is an absence of dissatisfaction.
- ⇨ Satisfaction & dissatisfaction are affected & caused by different factors.
- ⇨ Factors associated with job satisfaction are 'motivators' (recognition, achievement, possibility of growth, etc.).
- ⇨ Factors that cause dissatisfaction are called 'hygiene factors' (status, pay, etc.).

Process theories of motivation

What it means

Process theories

Explain how individuals choose between alternative courses of action that might satisfy needs.

One example: Vroom's Expectancy Theory.

When faced with a choice between alternative courses of action, an individual considers:

- ⇨ The value placed on achieving the outcome of each alternative, i.e. 'valence'.
- ⇨ The probability of being able to achieve each outcome, i.e. 'expectancy'.

Choice is based on a relationship between valence & expectancy. If either is nil there will be no motivation.

Implications for the manager:

- ⇨ Determine what each individual values.
- ⇨ Ensure that desired levels of performance are viewed as attainable.
- ⇨ Link outcomes valued by individuals with behaviours desired by managers.
- ⇨ Make sure reward systems are seen as fair.

Study tip

Refer to Study System to see diagrammatic representations of these theories.

Motivation theories go to the heart of reward systems.

Reward systems

System aims

- ⇨ Recruitment (from the marketplace).
- ⇨ Retention (keeping up with the market).
- ⇨ Reward (paying for performance).

Managerial aims – uses

- ⇨ Fair & consistent way of motivating & rewarding. (This depends upon the motivation theory applied.)
- ⇨ Further the objectives of the organisation.
- ⇨ Reward performance by progression/ promotion via developmental pathways & career ladders.
- ⇨ Recognise various factors, e.g. job/role size, contribution, skill & competence.
- ⇨ Control payroll costs.

Elements

- ⇨ Pay ranges, with a method for moving through (progression) or up (promotion).
- ⇨ The benefits package (pensions, sick pay, medical insurance, car schemes, etc.).

Reward systems

HR design considerations (& motivation theories)

- ⇨ Money & reward systems: Herzberg sees money as a hygiene factor, Vroom sees it as an instrument for gaining several desired outcomes.
- ⇨ 'Performance-related pay' establishes closer links between results & rewards.
- ⇨ Job design: traditionally on the basis of the Taylor scientific management approach, with a high degree of specialisation & strict controls. Effective for conformity, but not commitment.
- ⇨ Groups & teamwork (Hawthorne Studies) formed because work satisfaction depends to a large extent upon the social relationships.
- ⇨ Competencies & goal setting: the core competencies needed for success.
- ⇨ Management style.

Reward systems: job evaluation

- ⇨ Can define relativities in levels of pay.
- ⇨ There maybe different structures, according to the category of employees, e.g. staff & manual workers.

Examples of job evaluation schemes:

Points-factor evaluation scheme

- ⇨ Plot job scores against the current rates of pay for every jobholder to produce a scattergram.
- ⇨ Draw a line of 'best fit'.
- ⇨ Obtain market rate information for benchmark jobs & plot trends.
- ⇨ Use detail to help decide the desired pay policy, overall shape of the pay structure.
- ⇨ Define the pay ranges for each grade.

Ranking/market rate method

- ⇨ Rank benchmark jobs & plot a line.
- ⇨ Plot market rate information on the benchmark jobs.
- ⇨ Develop the grade structure.
- ⇨ Define the pay ranges for each grade.

Reward systems

Types of pay structure – examples

- ⇨ Graded pay: a sequence of job grades, each with a payment range.
- ⇨ Broad-banded.
- ⇨ Individual job ranges (where the content & size of jobs are widely different).
- ⇨ Job family (i.e. jobs in a similar function or discipline, e.g. finance).
- ⇨ Spot rates: a specific rate for the job.
- ⇨ Pay spines: a series of incremental points.
- ⇨ 'Rate for age': a specific rate, linked to age for staff in certain jobs.

Profit-related pay:

Attempts a sense of shared ownership & corporate commitment.

Appraisal-based performance-related pay (PRP)

Individuals receive increases in pay, based on the regular & systematic assessment of job performance. PRP may arise by:

- ⇨ Replacing general pay increases with PRP awards.
- ⇨ Introducing payments above scale maximum to recognise high performance.
- ⇨ Replacing incremental progression through a pay range with PRP.

Reward systems

More about PRP:

- ⇨ Based on Taylorist idea of rewarding workers on the basis of outputs.
- ⇨ For manual work organisations can measure output. (Payment was referred to as 'piece rates' because workers were remunerated based on the number of manufactured pieces they completed.)
- ⇨ Now organisations have changed & the labour input & outputs are less clear making PRP more complex.
- ⇨ In sales, results may still be down to a salesperson's own efforts & PRP (commission) fits easily.

Total reward packages:

- ⇨ Describes the way in which organisations bundle together pay & non-pay 'rewards'.
- ⇨ Can include workplace flexibility, career possibilities & ethical position.
- ⇨ Advantages: positive statement, organisational 'branding', workforce cohesion.

Ethics in management

- Refers to the code of behaviour considered correct by a particular group, profession or individual.
- Managers face situations that require ethical judgements.
- CIMA members & students have a duty to comply with the CIMA Code of Ethics for Professional Accountants.

Study tip

Use the learning you have gained from this section to better understand the thinking behind the HR practices identified in the next section.

CIMA code highlights:

- Ethical behaviour maybe beyond that required by law.
- CIMA members must sustain their integrity.

Study tip

Refer to the code via the website: www.cimaglobal.com.

Managing Human Capital

Topics

- Human resourcing in overview
- HR dimensions
- The job & person
- Recruitment
- Selection
- Post selection
- Developing the human resource
- Resource reduction
- Flexibility & HR

Key Learning System Questions

Question 3 chapter end
C1
C7
C8

Human resourcing in overview

Personnel management

Personnel is an administrative support function.

Definition:

'Obtaining, developing & motivating employees & making best use of their skills'.

Its starting point is with people & contributes by:

- ⇨ Ensuring consistency & fairness of treatment.
- ⇨ Enforcing organisation-wide initiatives.
- ⇨ 'Fire fighting' (dealing with problems as they occur).
- ⇨ Reacting to changes in employment law, labour market conditions, trade union actions & other environmental influences.

Maybe seen as:

- ⇨ Concerned with imposing compliance but distant from the line management.
- ⇨ A buffer between the employer & employee.
- ⇨ A narrower dimension of a fuller function recognised as HRM.

Human resource management (HRM)

Definition:

'A strategic approach to the acquisition, motivation, development & management of the organisation's human resources'. (Armstrong 1996.)

Starting point is with the organisation's needs for human resources. Features:

- ⇨ Planning & resource deployment within the context of the external environment.
- ⇨ HRM staff are part of the management team, shaping & delivering strategies.
- ⇨ Determines general policies for employment relationships.
- ⇨ Long-term perspectives.
- ⇨ Coherently integrates the human aspects of the organisation.
- ⇨ Helps develop a culture that gives commitment & co-operation.

Human resourcing in overview

Relationship between HRM activities & strategy

Guest's six components:

- An HRM strategy.
- A set of HRM practices.
- A set of HRM outcomes.
- Behavioural outcomes.
- A number of performance outcomes.
- Financial outcomes.

Approaches to HRM:

- 'Hard' stresses 'resource' & adopts a 'rational' approach to managing employees. Aligns business strategy with HR strategy. People are an economic factor (& a cost that must be controlled).
- 'Soft' stresses 'human'. Emphasis: investment in training & development, adoption of 'commitment' strategies to ensure that skilled, loyal employees give the organisation a competitive advantage. Workplace learning & enlightened leadership is vital. 'Human resources' are a valued asset, not a variable cost.

Study tip

Relate these approaches to the motivation theories referred to on cards 51–55.

Human resourcing in overview

HR planning involves:

'A strategy for the acquisition, utilisation, improvement & retention of an enterprise's human resources' (Department for Education & Employment).

Advantages:

- ⇨ Establishes costs to develop budgets.
- ⇨ Rational approach to recruitment.
- ⇨ Smoother way of coping with redeployment, redundancies, retirements, etc.
- ⇨ Structure the education, development & training needed by a future workforce.
- ⇨ Plan for succession.
- ⇨ Adapt more quickly to changing circumstances.

Mullins (2002) sees the HR plan & action programmes as a means of reconciling supply & demand.

The gap between the projections of supply & demand can be made & plans developed accordingly, e.g. retraining, part-time workers, overtime, computerisation recruitment, redundancy policy, etc.

HR dimensions

The job

Job analysis can be achieved by:

- ⇨ Direct observation.
- ⇨ Interviewing existing post holder.
- ⇨ Manager trying the job.
- ⇨ Previous studies (e.g. work-study records, manuals, etc.).
- ⇨ Questionnaires.
- ⇨ Work diaries.

Job description (based on job analysis)

- ⇨ Defines the purpose of the job & main tasks.
- ⇨ Essential to successful recruitment & selection.
- ⇨ Once issued it maybe seen as contractual.

Person specification

- ⇨ Defines the personal characteristics, qualifications & experience required by the jobholder.
- ⇨ Job requirements once agreed should be analysed under a suitable structure, e.g. Seven-Point Plan (physical make-up, attainments, general intelligence, special aptitudes, interests, disposition, circumstances).

Study tip

It may help to make these ideas more tangible by sending for application forms & papers for several jobs that you see advertised. Public sector organisations in particular are likely to issue person specifications.

HR dimensions

Recruitment

Recruitment possibilities:

- ⇨ Advertising (various media): needs reviewing to ensure its effectiveness & efficiency.
- ⇨ Agencies (e.g. jobcentres, commercial temp agencies, etc.).
- ⇨ Locally maintained registers.
- ⇨ Outplacement consultants who provide practical help to redundant employees, by finding jobs & providing training.
- ⇨ 'Headhunting' through a direct approach to individuals.

Please note:

Recruitment is a separate & distinct process from selection.

HR dimensions

Selection (follows recruitment).

Typical steps:

- ⇨ Completion of a formal application form.
- ⇨ Interviewing.
- ⇨ Testing.
- ⇨ Final analysis & decision to hire.
- ⇨ Reference checks.
- ⇨ Medical examination.
- ⇨ Official job 'offer' letter.

Selection techniques should be:

- ⇨ Reliable: give consistent results.
- ⇨ Valid: accurately predict performance.
- ⇨ Fair: select in a non-discriminatory way. (maybe to fulfil legal requirements & the organisational ethical framework.)
- ⇨ Cost-effective: the costs must be justified in terms of the benefits of selecting good applicants.

HR dimensions

Selection by interview:

- ⇨ If used in isolation, likely to be unreliable & invalid.
- ⇨ Structured interviews preferable to 'open-ended' interviews.
- ⇨ Training the interviewers & careful preparation necessary.

Types of interview:

- ⇨ 'One to one': allows for establishment of a rapport. If only one interviewer, there is scope for a bias.
- ⇨ Tandem: two interviewers per candidate.
- ⇨ Panel: a number of people who interview the candidate together.
- ⇨ Sequential interviews: the candidate is passed from one interviewer to the next, until several one-to-one interviews have taken place.

HR dimensions

Selection

Tests:

- ⇨ Intelligence: normally numeric, communication & general problem-solving.
- ⇨ Ability & aptitude: originally work-related, such as typing tests, but maybe more abstract. Includes spatial awareness, manual dexterity, etc.
- ⇨ Attainment (spelling, typing, arithmetic).
- ⇨ Tests of occupational preference.
- ⇨ Personality: assessing non-cognitive & non-intellectual characteristics of an individual, the emotional make-up, reflected in the style of behaviour. Example: the Cattell 16 PF (Personality Factors) gives 16 basic dimensions.

Definition

Assessment centre: 'the assessment of a group of individuals by a team of judges, using a comprehensive & interrelated series of techniques'.

- ⇨ An approach & philosophy.
- ⇨ Can be very accurate methods of selection, as it uses multiple methods.

Group selection methods:

- ⇨ Relevant if the emphasis is on social skills, influencing, communication, intellectual ability, attitudes & personality.
- ⇨ Using group exercises involves the evaluation of individuals by several assessors trained in observation & activities scoring.

HR dimensions

Post selection

Obtaining references:

- ⇨ The purpose is to obtain in confidence factual information about a prospective employee & opinions about character & suitability for a job.
- ⇨ References are important but can be unreliable or too 'bland' to be useful.

Definition

Induction: 'arrangements made to familiarise the new employee with the organisation, safety rules, general conditions of employment & the work of the section or department in which they are employed'.

- ⇨ Maybe carried out informally but should be systematic to ensure 'essentials' are covered.
- ⇨ The induction plan should be drawn up in consultation with those usually involved, such as supervisor, training officer, safety officer, HR manager & union representative.

HR dimensions

Developing the human resource

HRM's emphasis on employee commitment & flexibility leads naturally to investing in employee development. Might be seen as short-term reward system, or longer-term career preparation.

The organisation will want to ensure that *real* learning takes place. But learning is a complex process.

Kolb explains it as a cycle involving:

- ⇨ Action or experience.
- ⇨ Reflection.
- ⇨ Theorising to form 'knowledge'.
- ⇨ Planning to try out this 'knowledge'.

Effective learning usually involves completing this cycle rather than just accessing one point.

A systematic system should involve:

- ⇨ The determination of training needs.
- ⇨ Identification of training objectives.
- ⇨ Development of criteria to assess performance.
- ⇨ Development of methods to determine current levels of proficiency to target the right people.
- ⇨ Arrangements for location, type & duration of event.
- ⇨ Methods for conducting & encouraging learning.
- ⇨ Monitoring the effectiveness of the event & comparing outcomes against criteria.

Kirkpatrick model for measuring effectiveness of event:

- ⇨ Reaction: how well the trainees liked the training.
- ⇨ Learning: extent to which trainees have learned the principles, facts & theories.
- ⇨ Behaviour: extent to which behaviour changes as a result.
- ⇨ Results: what benefits accrue (e.g. better quality, reduced costs, etc.).

HR dimensions

Developing the human resource

Development: a continuing long-term process, which may include movement of jobs (whether sideways or upwards following promotion). Managed internally by organisations or externally by the individual (who effectively self-manage their own career).

Education: a more generic process of development. This often applies specifically to accredited training & development leading to a certificated course often through a local university.

Training: a formal, often short-term process where the organisation attempts to increase an individual's skills & knowledge in order for them to perform a particular set of tasks with increased ability. Training delivery can be provided either in-house, through external trainers or by means of open learning.

Open learning: learning which enables people to learn at the time, place & pace which meets their needs & requirements.

- ⇨ May use printed packs, video, audio and/or computer-based programs, according to the individual's training needs.
- ⇨ Can be fitted around workplace operations & may not involve any absence from the site.
- ⇨ Can complement an existing training provision.

Competence-based approach: assesses the ability of the individual to carry out specified activities to predetermined standards rather than concentrating on the individual's knowledge & understanding.

HR dimensions

Developing the human resource

Job redesign

- ⇨ Can be used to help develop individuals & groups within the workplace.
- ⇨ Increased understanding, skills & empathy with others through broadened experience.

Job characteristics model:

Jobs can be analysed in terms of core dimensions & the degree to which it provides.

- ⇨ Skill variety: makes use of different skills/abilities.
- ⇨ Task identity: involves a 'whole' meaningful piece of work.
- ⇨ Task significance: affects the work of others.
- ⇨ Autonomy: gives independence & discretion.
- ⇨ Feedback: information about the level of performance attained.

These dimensions induce the three psychological states critical to high work motivation, job satisfaction & performance, namely:

- ⇨ Experienced meaningfulness (extent to which the individual considers the work to be meaningful).
- ⇨ Experienced responsibility (extent to which the individual feels accountable for work output).
- ⇨ Knowledge of results (extent to which individuals know & understand how well they are performing).

Developing the human resource: appraisals

Purposes:

- ⇨ Increase performance.
- ⇨ Developmental aid (identifying training needs, promotion or assignment opportunities).
- ⇨ Part of a reward system.
- ⇨ A mechanism to set objectives for the next period.
- ⇨ Identifying good prospects for promotion or transfer.
- ⇨ Fostering an open atmosphere.
- ⇨ Developing relationships.
- ⇨ Enhancing corporate cultural norms.

Main approaches to provide a basis for discussion in the appraisal interview:

- ⇨ Trait-orientated ratings of the appraisee on a number of personal-related dimensions (e.g. timekeeping, attitude towards work, etc.).
- ⇨ Result-orientated or 'performance appraisal' whereby appraiser & appraisee agree objectives & review progress.

Types:

- ⇨ Self-appraisal: often in preparation for appraiser/appraisee meeting.
- ⇨ Appraiser/appraisee: normally involving the supervisor.
- ⇨ 180 degree: useful for project teams/matrix organisations, etc. with responses by all team members concerning the individuals' contribution (or the lack of it).
- ⇨ 360 degree: this is where the appraisee reviews the appraiser as well as getting 180-degree feedback from colleagues.

HR dimensions

Developing the human resource: appraisals

Key factors for effective systems:

- Careful planning.
- Good preparation.
- Skill in carrying out the interview.
- Setting challenging targets that the appraisee can influence.
- Adopting a meaningful participative approach.

Setting objectives: getting agreement on SMART objectives (specific & challenging, measurable, but achievable, relevant & realistic & time-bound).

Problems:

- Inappropriate for very small firms?
- Purposes may contradict.
- Immediate supervisor is 'too close' to the appraisee in terms of job content or grading.
- Time-consuming (if done well).
- Managers might save up bad news rather than 'disciplining' staff at the time.

HR dimensions

Developing the human resource

Career development & planning

Traditionally viewed as an organisation-based activity that enabled HR managers to concentrate on building career paths so providing logical progression of people between jobs.

Succession planning was once regarded as a legitimate alternative to external recruitment.

Now process has been challenged by:

- ⇨ Lay-offs during recessions.
- ⇨ Non-traditional organisational structures emerging. These flatter structures have removed some career paths entirely & reduced opportunities in others.
- ⇨ New emphasis on multi-skilling & teamwork.
- ⇨ A workforce with their own views on career & work issues.

Career development trends:

- ⇨ Has become led by the individual who builds a portfolio of experience, qualification & networks.
- ⇨ Increasingly careers are expected to develop outside a single organisation.
- ⇨ A building of an impressive CV by the individuals at the expense of long single company service.

HR dimensions: resource reduction

Reduction can be through:

- ⇨ Retirement.
- ⇨ Resignation.
- ⇨ Dismissal.
- ⇨ Redundancy.

Dismissal is termination of someone's employment with or without notice by the employer.

- ⇨ Without notice is usually wrongful dismissal.
- ⇨ To be recognised as 'fair', the employer must show that the reason for dismissal is of a type lawfully acceptable.
- ⇨ (For some countries) whether the employer acted reasonably in the circumstances is an issue.

Redundancy is a form of dismissal justified on any of the following grounds:

- ⇨ Cessation of business.
- ⇨ Cessation of business in the place where the employee was employed.
- ⇨ Cessation of the type of work for which he or she was employed.

Before redundancy occurs, good employers will consider & discuss all possible alternatives, such as:

- ⇨ Reducing overtime.
- ⇨ Limiting recruitment.
- ⇨ Releasing those over retirement age.
- ⇨ Retraining for new jobs.
- ⇨ Transfers to jobs in other departments.
- ⇨ Work-sharing between two or more people.
- ⇨ Shorter working week.
- ⇨ More effective HR planning in the future.

HR dimensions: resource reduction

Study tip

Try combining different elements of the syllabus & make links between them, for instance link resource reduction with IS outsourcing & resistance to change. Make notes of the linkages between them.

If redundancies are inevitable, first:

- ⇨ Offer early retirement to those eligible.
- ⇨ Target part-time & temporary employees.
- ⇨ Ask first for volunteers to be made redundant.

Consequences of redundancy:

- ⇨ To the individual: feelings of frustration & anger, followed by diminished self-esteem. If another job cannot be found, long-term unemployment can damage both physical & mental health, as well as carrying financial penalties.
- ⇨ To the organisation: maintaining morale & performance of those remaining maybe difficult. Damage to external image may also result.

Claims of 'unfair dismissal' due to redundancy maybe justified if:

- ⇨ The selection for redundancy was unfair, or
- ⇨ An inadmissible reason for redundancy was used (see previous card), or
- ⇨ The organisation did not follow an agreed procedure/agreement justified by 'custom & practice'.

HR dimensions: flexibility & HR

Flexible structures

HR practices vary dependent upon specific organisational culture, size & availability of specialist HR managers to support management.

Non-traditional structures have presented new HR challenges in the areas of:

- ⇨ Planning horizons.
- ⇨ Staff appraisal where there maybe no formal supervisor/subordinate reporting relations.
- ⇨ Remuneration strategies where outputs are not easily attributable to individuals alone.
- ⇨ Use of consultants & contractors.
- ⇨ Development, promotion & succession planning.

Flexible employment

(includes casual work, 'by the hour' or 'by the day').

Drivers of the trend:

- ⇨ Lower labour costs through operating at lower staffing levels.
- ⇨ Growing international competitiveness.
- ⇨ Improved responsiveness to market changes.
- ⇨ Greater utilisation of equipment/IT.
- ⇨ Organisational flexibility to adapt, innovate & diversify.
- ⇨ Greater control of labour processes & costs.

HR dimensions: flexibility & HR

Atkinson's worker categories:

- ⇨ Core: possess key scarce skills & enjoy status, prospects, security, promotion, etc.
- ⇨ Periphery: temporary/part-time contracts, act as a buffer against changes in demand.

Task/functional flexibility

- ⇨ Demarcations between jobs less obvious.
- ⇨ Helped by IT developments that cut across previous job classifications.
- ⇨ Integration of tasks has happened:
  Horizontally: undertaking a broader range of tasks at the same level as their original task.
  Vertically: undertaking tasks previously carried out by employees at other levels.

Numerical flexibility

- ⇨ Temporary, part-time, short-term contract working as a means of responding to demand fluctuations.
- ⇨ Use of contractors & agency staff, not payrolled staff.

Financial flexibility

- ⇨ Individualised & variable reward systems.
- ⇨ Performance-related pay schemes.
- ⇨ Fees for service payments, not wages & salaries.

Operations Management

Topics

- Operations management in overview
- Purchasing & supply
- Managing inventory
- Operations flows
- Managing capacity
- Quality
- The tools of quality management
- Innovation & improvement

Key Learning System Questions

Question 4 chapter end
C12
B1 to B5

Operations management in overview

Definition

Operations: 'those activities concerned with the acquisition of raw materials, their conversion into finished product & the supply of that finished product to the customer'.

In short: 'what the company does'.

Operations management is concerned with:

- ⇨ All activities involved in making a product/service.
- ⇨ The transformation of various kinds of inputs into useful outputs.
- ⇨ Taking various inputs (raw materials, money, people, machine time, etc.) & performing operations (manufacturing, assembly, packing, etc.) that convert these into outputs (goods, services, etc.).
- ⇨ The planning, direction & control of vital operations that link the business with the needs/wants of customers.

Operations: some history

The industrial revolution – some features of the new firms:

- ⇨ The introduction of machines to mass produce items.
- ⇨ Effective means of warehousing stocks (raw, WIP, finished products).
- ⇨ Effective distribution of finished products.

100 years ago – Taylorism & scientific methods: studies showed that the productivity of organisations depended both on the technology available & how this technology was managed.

Study tip

See card 51, make notes on 'Taylorism' & how it relates to operations management.

Operations management in overview

Some models

Henry Mintzberg identified five basic parts of the organisation with operations representing a core as follows:

- ⇨ The operating core: those who perform the work of producing products.
- ⇨ Strategic apex: formulate & implement strategy.
- ⇨ Middle line: first-line supervisors linking the strategic apex to the operating core.
- ⇨ Technostructure: co-coordinate work by standardising work processes, outputs, skills (e.g. work-study engineers, HR managers, etc.).
- ⇨ Support: assistance outside operating work flow (e.g. catering services, legal advice, press relations, etc.).

Michael Porter's view of organisation as a value chain: a sequence of value-creating activities. Here, 'line' departments are linked horizontally in a chain of sequentially interdependent activities.

Primary activities:

- ⇨ Inbound logistics (receipt, storage, distribution, material handling, stock control).
- ⇨ Operations (convert inputs into products).
- ⇨ Outbound (distribution to consumers).
- ⇨ Marketing & sales (the customer is made aware of the product).
- ⇨ Service (including installation, training, spares).

Support activities:

- ⇨ Procurement processes.
- ⇨ Technology development & 'know how'.
- ⇨ Human resource management.
- ⇨ Infrastructure (systems, structures, routines).

Purchasing & supply

The purchasing department is responsible for a major part of the company's expenditure. Centralisation of purchasing has produced savings from scale economies.

Purchasing departments will:

- ⇨ Discuss prices, discounts, delivery lead times & specifications with suppliers.
- ⇨ Chase late deliveries.
- ⇨ Sanction payments.
- ⇨ Monitor quality, seek out competitive sources & maximise quantity discount opportunities.

Tasks:

- ⇨ Invite tenders or quotes.
- ⇨ Examine tenders/quotations.
- ⇨ Plan purchase orders, match purchase orders with goods inwards documentation.
- ⇨ Progress orders to ensure goods delivery.
- ⇨ Checking suppliers' invoices to quotations.
- ⇨ Controlling returned goods & obtaining credit notes.

Definition:

Just-in-time (JIT) purchasing: 'matching the receipt of material closely with usage so that raw material inventory is reduced to near-zero levels'.

Purchasing & supply

Managing supply

- ⇨ Purchasing deals with day-to-day buying of goods & services, ensuring conformance to desired quality, appropriate pricing & delivery to suitable time scale.
- ⇨ Supply deals with broader considerations including planning & implementing a strategy & managing the overall supply process.

Supply considers strategic issues, e.g.

- ⇨ The suitability, feasibility & acceptability of outsourcing activities.
- ⇨ Strategic partnerships that should be established.
- ⇨ The number of suppliers it should use.

Reck & Long's strategic positioning tool

Shows stage of an organisation in terms of purchasing:

- ⇨ Passive: acts on requests from other departments.
- ⇨ Independent: enhanced IT & communication. More professional.
- ⇨ Supportive: provides timely information about price & availability. Recognised as essential.
- ⇨ Integrative: purchasing is integral to competitive strategies. Management involved in strategy development.

Purchasing & supply

Cousins' strategic supply wheel

Corporate supply strategy involving all 'spokes' in the wheel:

- ⇨ Organisational structure.
- ⇨ Relationship portfolio.
- ⇨ Cost/benefit analysis.
- ⇨ Skills & competencies.
- ⇨ Performance measures.

Cohesion between each is needed. Each should be mutually supportive.

Strategic issues to be addressed in operations strategy:

- ⇨ The capability required by the organisation.
- ⇨ The range & location of operations.
- ⇨ Investment in technology (product & process).
- ⇨ Strategic buyer – supplier relationships.
- ⇨ New products or services.
- ⇨ Organisational operations structure.

Sourcing strategies:

How an organisation organises its supply process.
Options:

- ⇨ Single: one source of supply.
- ⇨ Multiple: several sources of supply.
- ⇨ Delegated: one (first tier) supplier responsible for delivery of one complete aspect.
- ⇨ Parallel: mixing other approaches to maximise benefits of each.

Purchasing & supply

Porter's value chain depicts a series of contributions each of which add value to a product as it passes through various stages of manufacture. It is likely that most manufacturing organisations will obtain supplies of raw materials/part finished items & perform some activity on them before selling them to another organisation.

The value chain shows the position of the firm relative to others 'upstream' & 'downstream' of it.

Relationships between firms in the value system matter. A firm might:

- ⇨ Maximise returns by striking deals with suppliers (low prices) & customers (high prices) to take as much of the available 'value' (difference between the revenue received & costs) for itself.
- ⇨ Collaborate with others to increase total value by working together to reduce the total costs in the value system.

Critical issues arising:

- ⇨ The role of the supply chain & supply networks in gaining competitive advantage.
- ⇨ Supply chain management as a strategic process.
- ⇨ Developing/maintaining supplier relationships.

The supply chain – traditional view:

- ⇨ Serial & linear.
- ⇨ Raw materials moving through manufacturing production & onward via the distribution system to retailers & end-consumers.

The supply chain – contemporary view:

- ⇨ Opportunities for supply networks & alliances.
- ⇨ It has a way of cutting inventory & lead times.

Long-term supply chain alliances reflect:

- ⇨ Redefinition of boundaries of an organisation.
- ⇨ Rethinking of what is researched, designed, made or assembled under direct control.

Purchasing & supply

Value chain & the wider value system implications for organisations:

- ⇨ Business process re-engineering (BPR) activities are reconfigured to bring about a dramatic improvement in performance (see card 90).
- ⇨ Supply chain partnerships. Competitive advantage possible through linkages between the organisation & its value system components. Methods include examining supplier specifications, common merchandising, applying TQM principles or forming of strategic alliances/joint ventures, etc.

Study tip

Reference has been drawn so far to three models, one by Mintzberg & two by Porter. Reinforce your understanding of these models by referring to Chapter 5 & drawing them for yourself.

Managing inventory

Inventory exists as: raw materials, work in progress & finished goods.

Stock holding costs may ultimately contribute to an organisation becoming uncompetitive.

Operational decisions imply approaches, e.g.:

- ‘make-to-order’: inventory only taken & assembled on receipt of an order.
- ‘make-to-stock’: finished items held in anticipation of an order.

Reasons for holding inventory:

- Protecting against quality problems.
- Ensure reliability for the customer.
- Protect against supply interruptions.
- Smoothing production flows when demand varies.
- Meeting unexpected demand.
- Improving delivery speed.
- Reducing costs through bulk order discounts.

Managing inventory methods:

- Continuous inventory systems: levels continually monitored, when below a predetermined level a fixed amount is ordered or an economic order quantity system, (EOQ), which takes into account variable costs associated with ordering the item & holding the item.
- Periodic inventory (or bin) systems: a check of stock levels after a specific time & variable ordering of new stock.
- ABC system: A items: high value therefore close monitoring including managing the supplier – buyer relationship. B items: medium items same issues less tightly managed. C items: low value requiring little management.

Operations flows: some systems

Definition

Manufacturing Resource Planning (MRP)

Mass production, a push-based system, pushing work through the system. Computer system MRP II is a form of inventory control matching supply & demand.

Benefits:

- ⇨ Reduced stock holding & stock turnover.
- ⇨ Fewer delays through materials shortage.
- ⇨ Swift, reliable quotations of delivery times.
- ⇨ Improved facilities utilisation.
- ⇨ Less time spent on hurrying emergency orders.
- ⇨ Enables better relationships with suppliers through clear lead times.

Enterprise Resource Planning (ERP)

A management system that integrates internal processes like MRP II with external processes. Covers planning, manufacturing & sales. Adds cohesion but cost & time involved.

Optimised Production Technologies (OPT)

Production improvement method based on bottleneck improvements.

Operations flows: some systems

JIT methods of production

Definition:

'A production system which is driven by demand for finished products whereby each component on a production line is produced only when needed for the next stage'.

- ⇨ A pull-based system of planning & control.
- ⇨ Goods are produced only when they are needed eliminating large stocks of materials & parts.
- ⇨ Often undertaken in parallel with TQM because JIT is not feasible with high reject rates & wastage.

Study tip

For more on TQM refer to card 98 & make notes.

Managing capacity

A balancing of demand & supply.

Strategies:

- Level capacity: building inventory levels & excess stores deal with increases in demand beyond capacity.
- Chase: constantly adjusting their activity levels to shadow fluctuations in demand.
- Demand: attempts to influence demand to smooth variations above or below capacity.
  Includes yield management involves varying pricing to encourage demand, e.g. price incentives for off-peak demand.

Manufacturing

Measurements include:

- Time to acknowledge an order to the customer.
- Time to process orders into a form acceptable to the factory.
- Speed of shipment to the customer.
- Level & value of finished stocks.

Maintenance

Total productive maintenance (TPM):

- Involves identifying all equipment then planning & implementing a maintenance programme.
- Objective is to prevent quality failures caused by equipment failure or degradation, enhance equipment capability & improve safety & environmental factors.

Quality

Quality can be described in terms of fitness for purpose, or the totality of features of a product or service that meets the stated or implied needs of the customer. Notably, the need to satisfy the customer's needs is critical to most definitions of quality. It is vital that organisations are able to identify & deliver the needs of its customers.

Definition

'The totality of features & characteristics of a product or service that bears on its ability to meet a stated or implied need' (ISO 9000).

Quality

Quality requirements:

- ⇨ Commitment to quality from the top.
- ⇨ Competence: quality through competence in the job/activity undertaken.
- ⇨ Communication throughout all organisational levels.
- ⇨ Continuous improvement (Kaizen).

Quality features:

- ⇨ Cross-functional teamwork involves active project-based communication & problem solving. Often organisational restructuring & different specialists working together in the same physical location on common problems (the use of quality circles) (see card 104).
- ⇨ Flexible manufacturing: 'economies of scope' make it economical to produce small batches of a variety of products with the same machines.
- ⇨ Integration of operations functions, e.g. with design & marketing.

Quality

Lean production

A consolidation of improvement systems into a single coherent process for continuous improvement. Involves removal of all forms of waste from the system (parts, people or processes).

Main characteristics:

- ⇨ Flexible workforce practices (giving workforce more than one task, cross-functional management & employee involvement).
- ⇨ High-commitment HR policies.
- ⇨ Commitment to continuous improvement (including use of quality circles).

Downsides:

- ⇨ Lack of relationship to corporate planning.
- ⇨ The seniority of operations staff.
- ⇨ Potential alliances ignored.
- ⇨ May not empower employees.
- ⇨ Top down approach.

World class manufacturing

Aim: achieving significant improvements in quality, lead times, flexibility & customer satisfaction to be globally competitive.

Features:

- ⇨ Customer focus: ensuring that requirements are understood & satisfied with short lead times.
- ⇨ Flexibility: responding to changing customer requirements.

Japanese practices that *few* Western organisations have attempted to replicate:

- ⇨ Lifetime employment: employees work for large organisations all of their working life. Employees have security & a feeling of belonging. Promotion is through merit & seniority.
- ⇨ Decision-making: all levels of staff are responsible for generating new ideas/ suggesting improved working practices. Decision-making is by consensus.

Quality

Total quality management (TQM)

Continuous improvement is a philosophy to continually improve the quality of an organisation's goods & services. TQM builds on the Kaizen concept.

Definition:

An all-encompassing organisational philosophy that encourages & fosters continuous improvement throughout the whole organisation.

Features of TQM:

- ⇨ Prevention of errors/defects before they occur.
- ⇨ Importance of total quality in design of products/services/systems.

Principles of TQM:

- ⇨ Recognition of the importance of the customer.
- ⇨ Need to involve everyone in quality improvement.
- ⇨ The concept of viewing every business activity as a process that can be improved.
- ⇨ The goal of continuous improvement.

Quality & service organisations

Distinguishing features:

- ⇨ Intangible services more difficult to measure quality.
- ⇨ Services are consumed immediately.
- ⇨ Customers participate in the delivery process.
- ⇨ Quality of service includes social skills of those providing the service.
- ⇨ Service organisations are labour intensive.

Trends & approaches:

- ⇨ Adopt quality approaches.
- ⇨ Motivate employees to work harder & more skillfully.
- ⇨ Automate aspects of the service provision.
- ⇨ Find new services &/or ways of delivery.

Quality

Study tip

Now refer back to 'Services Marketing' study card 42 to reinforce your understanding.

Ouchi's Theory Z

Involves the selection & application of certain aspects of Japanese practices & highlights an emphasis on:

- ⇨ Interpersonal skills needed for group interaction.
- ⇨ Informal & democratic relationships.
- ⇨ A participative management style.

Quality

Quality gurus

- W. Edward Deming: 'continuous improvement'. Unlike the scientific management approach, which involves managers setting work standards & methods, Deming stressed the need to train workers in methods of statistical process control & work analysis. This enables the workers to identify what needs changing & how.
- Joseph M. Juran: 85% quality problems are the result of the systems *not* employees. Identify all the main quality problems, highlight the key ones which if solved will produce the most benefits & set up projects to deal with them.
- Philip P. Crosby: for 'zero defects' conformance to requirements is key.

Quality control:

An approach to managing quality closely allied to the 'cybernetic control model' involving:

- Establishing quality standards for service or product.
- Designing a process to deliver service or product to the required quality.
- Measuring the quality of the service or product.
- Comparing actual quality with planned quality.
- Taking remedial action where standard is not met.
- Reviewing the standard & adjusting if necessary.

Quality

The process:

- ⇨ Obtaining commitment of senior management & ensuring it is communicated.
- ⇨ Reviewing the current quality of product/service/processes & use as a base for improvement.
- ⇨ Communicating the importance of quality using face-to-face methods where possible.
- ⇨ Setting targets for improvement & identifying methods.
- ⇨ Implementing improvement strategies.
- ⇨ Monitoring achievements of targets.

Quality

Quality assurance (QA) systems

Attempts to create quality, rather than control it, aspects:

- ⇨ Design of products & services.
- ⇨ Materials of a consistently appropriate standard.
- ⇨ Reliable, consistent supply of materials.
- ⇨ Reliable plant & machinery.
- ⇨ Benefits from training development.
- ⇨ Effective operations procedures.

Quality accreditation

ISO 9000:2000 series. Documentation required.

A process-based approach (about what is done).

- ⇨ Provide a clear system of quality management which includes establishing processes, their interactions, the resources required & how to manage & improve the processes.
- ⇨ Gain total company involvement & commitment.
- ⇨ Obtain a nationally accepted standard of quality.
- ⇨ Ensure commitment to quality & customer requirements of quality.

ISO 14001 Environmental Management Systems: process for controlling & improving a company's environmental performance:

- ⇨ Environmental policy.
- ⇨ Planning.
- ⇨ Implementation & operation.
- ⇨ Checking & corrective action.
- ⇨ Management review.

Criticisms of accreditation:

- ⇨ Expensive, bureaucratic procedures.
- ⇨ Registration under the standards does not guarantee quality products & services – only consistency of output.

Quality

Quality: self-assessment

e.g. European Quality Foundation: a structured methodology to measure performance in areas that are critical to businesses, namely:

- ⇨ Enablers (leadership, policy & strategy, people, partnerships & resources, processes).
- ⇨ Results (customer results, people results, society results, key performance results).

The costs of quality management

- ⇨ Prevention costs: costs of activities undertaken to prevent defects occurring in the design & development phase of a product or service.
- ⇨ Appraisal costs: costs incurred while conducting quality tests & inspections in order to determine whether products or services conform to quality requirements.
- ⇨ Internal failure costs: costs associated with detection & rectification of items that do not conform to quality requirements, but have not yet been passed to the customer.
- ⇨ External failure costs: costs associated with the detection & rectification of items that do not conform to quality requirements & have been passed to the customer.

Quality: the tools of quality management

Quality circles (QCs)

Small groups of staff which meet on a regular basis to identify quality issues & attempt to formulate solutions.

- ⇨ Interdisciplinary teams help staff gain a better perspective of the whole organisation.
- ⇨ Helps strengthen linkages between functional areas.
- ⇨ Devolves authority/responsibility for quality to the operational level.
- ⇨ Fosters commitment to TQM in particular.

Kaizen

Japanese concept involves continuous improvement by small incremental steps. Some tools – Plan, Do, Check, Act (PDCA), Ishikawa (Fishbone) diagram, 80/20 Pareto rule, 5 WHY process.

5-S practice

Structurise Systematise Sanitise Standardise
Self-discipline: a technique to improve the physical & thinking environment of the organisation.

Six Sigma

Data driven approach for eliminating defects (aiming towards six standard deviations between the mean & the nearest specification limit) in any process.

Innovation & improvement

Business process reengineering (BPR)

Reconfiguring organisational processes & structures to bring about radical process. Themes:

- ⇨ Process reorientation, a focus on jobs, tasks, constraints, resources, etc.
- ⇨ Creative use of IT.
- ⇨ Ambition.
- ⇨ Rule breaking.

Phases:

Planning, internal learning, external learning, redesign & implementation.

Benchmarking

Definition:

A process of systematic comparison of a service, practice or process against one or more similar activities.

Aim: continuous improvement in the levels of service delivery or performance.

Types of comparison:

- ⇨ Internal: with the best found in the organisation.
- ⇨ Competitor: with the best in the industry.
- ⇨ Best practice: with the practices of an organisation known to excel in that area.
- ⇨ Strategic: competitor benchmarking with the deliberate attempt to drive organisational change.

Innovation & improvement

Benchmarking benefits:

- ⇨ Concentrates on performance & value-adding processes.
- ⇨ Improves management's understanding of the value-adding processes.
- ⇨ Overcomes complacency & drives change.
- ⇨ Advance warning of deteriorating performance.
- ⇨ Learning from others.

Since benchmarking requires co-operation & sharing of sensitive & confidential information, the exercise is frequently carried out through the medium of a benchmarking club/forum.

Innovation & improvement

IT, IS & innovation

Innovation involves deliberate attempts to bring about benefits from new changes: these include increases in productivity & improvements in the design & quality of products. Innovations may include technological changes such as new products, new production processes, the introduction of advanced manufacturing technology or the introduction of new computer support services.

The use of IT & IS has implications for operations management. Examples include:

- ⇨ Computer aided design (CAD) & computer aided (or automated) manufacturing (CAM) is an integrated solution whereby product design & control of machinery is computer assisted.
- ⇨ Economic machine loading & provision of customer & stockists' requirements.

Innovation & improvement

Performance measurement & improvement

Involves measuring the inputs & outputs to an operation. Examples:

- ⇨ Financial performance.
- ⇨ Value for money (VFM): economy, efficiency & effectiveness. Calculating & evaluating VFM for the activity/system. Used in the public sector.
- ⇨ The balanced scorecard, a strategic approach to performance measurement incorporating finance, customer, internal & business, innovation & learning.
- ⇨ Continuous improvement measures (e.g. benchmarking).

Systems should be:

- ⇨ Relevant.
- ⇨ Integrated.
- ⇨ Balanced.
- ⇨ Strategic.
- ⇨ Improvement-orientated.
- ⇨ Dynamic.

Change Management

Key Learning System Questions

Question 4 chapter end
C3
C6
C11

Topics

- Change triggers
- Change approaches & organisational development
- Ways of categorising change
- Attitudes to change
- Approaches to change
- Critical periods of organisational change

Change triggers

External change triggers

Environments of an organisation:

(a) General

(b) Task

⇨ Both need monitoring & responding to.

⇨ Factors imply a threat or opportunity.

(a) 'General' environment

Described by PESTLE (see card 46).

Beyond influence of the organisation.

Therefore anticipate & respond.

(b) 'Task' (near) environment

Includes stakeholders who can influence & be influenced (e.g. power of buyers, suppliers, substitute products, barriers to entering market, inter-firm rivalry, etc.).

'Task' environment maybe influenced by the organisation.

Internal change triggers

May arise from:

⇨ Continuing search for efficiency (e.g. through TQM, see card 98).

⇨ Benchmarking exercises (see cards 105, 106).

⇨ Staff conflict & tension.

⇨ Poor employee – management relationships etc.

Change might lead to adjusting one (or more) key internal subsystems:

⇨ Tasks.

⇨ Technology.

⇨ People.

⇨ Structure.

⇨ Management.

(Their connections are also important).

Change approaches & organisational development

Hard issues approach:

- ⇨ Strategy, structures, systems, productivity, performance, etc.
- ⇨ Technical change.
- ⇨ Timescale clear.

Soft issues approach:

- ⇨ Culture, leadership, style, competencies, attitudes, etc.
- ⇨ People change.
- ⇨ Timescale unclear.

Organisational development (OD)

(An example of a soft issues approach).

Covers many activities into organisational social processes.

- ⇨ 'Interventionist': involves independent change facilitator.
- ⇨ Focus: developing individuals & groups.
- ⇨ Aim: improved organisational performance.

Objectives of OD:

- ⇨ Increasing trust.
- ⇨ Confronting & solving problems by those involved.
- ⇨ Enhancing open communication.
- ⇨ Increasing responsibility for improvement.

Topics associated with OD:

Organisational culture, employee commitment, conflict resolution, management development, etc.

Change approaches & organisational development

Change agents

- ⇨ External agent (new executive or a consultant) or
- ⇨ Internal agent (current member of staff).

OD consultant – skills & qualities:

- ⇨ Sympathy with OD approach & values.
- ⇨ Behavioural theories & practices knowledge.
- ⇨ Data collection & analysis.
- ⇨ Ability to guide & facilitate.
- ⇨ Team development skills. OD consulant might be viewed as a change agent.

Competences of a change agent:

Goals: Sensitivity to changes,
Clarity in specifying goals,
Flexibility in responding to changes.

Roles: Team building,
Networking,
Tolerance of ambiguity.

Communication: To transmit need for change,
Interpersonal skills,
Personal enthusiasm,
Stimulating motivation.

Negotiation: Selling ideas,
Negotiating with key players.

Managing up: Political awareness,
Influencing skills,
Helicopter perspective (stand back & take a broader view of priorities).

(*Buchanan & Boddy*)

Change approaches & organisational development

The context & style of change.

Parameters for successful change

Key parameters to be observed:

- ⇨ Ideas not seriously considered unless there is a perceived need for change.
- ⇨ Adoption when decision-makers choose to go ahead with a proposed idea.
- ⇨ Adequate resources to support.
- ⇨ Implementation only when plans made to use idea, technique, system.

(Daft, 1998)

Personal styles

- ⇨ Participative: extensive delegation to teams (requires time, trust & support).
- ⇨ Interventionist: limited delegation of some aspects whilst retaining overall direction.
- ⇨ Autocratic: no delegation. Centrally driven.
- ⇨ Educational: facts presented & a rationale made for change.

Study tip

Make notes by thinking of an instance of organisational change you have experienced. How far does it comply with thinking on this card? What worked well? Not so well? Why?

Ways of categorising change

Planned

Moving from one fixed state to another by a series of pre-planned steps.

- ⇨ Assumes stable/predictable environments.
- ⇨ Pre-planned, rational, systematic, centrally driven.
- ⇨ Criticisms: uncertainty over employee commitment, rigidity.

Emergent

Change is continuous, unpredictable, open ended & a constant adjustment to the environment.

- ⇨ Bottom-up where managers facilitate.
- ⇨ Needs consultation, communication & co-operation.
- ⇨ Loss of managerial power, trust in the individual.

Incremental

Smaller regular adjustments in response to trends.

Matching performance with external trends & resultant performance 'gap' corrected.

Step

External factor stops being gradual & a significant & unexpected change occurs (e.g. the effects of 'September 11' on air travel).

Transformational

Radical change when the organisation chooses to act in a way outside its existing paradigm (way of thinking). Involves a huge cultural shift (maybe in the face of a crisis).

Attitudes to change

Types of experience

- Imposition by others (senior or external).
- Adaptation: changes in attitude/behaviour through the influence of another.
- Growth responses to opportunities with good results.
- Creativity: individual instigates & is in control.

Range of reactions to change

- Enthusiastic co-operation & support.
- Passive resignation: apathy, minimal contribution.
- Passive resistance: mildly obstructive behaviour.
- Active resistance: protests, working to rule, minimal work, etc.
- Personal withdrawal, sabotage.

Overcoming resistance to change

- Education & communication.
- Participation & involvement.
- Facilitation & support.
- Negotiation & agreement.
- Manipulation & co-optation.
- Explicit & implicit coercion.

(Kotter & Schlesinger, 1979).

Managers can also create barriers to beneficial change through:

- Excessive focus on costs.
- Failure to highlight benefits.
- Lack of co-ordination & co-operation.
- Uncertainty avoidance (individually managers fear the uncertainty associated with change).
- Fear of loss.

Approaches to change

Lewin's three-stage planned model:

- ⇨ Unfreezing: involves finding ways of making the need for change so obvious that most people can readily understand & accept it.
- ⇨ Changing (behaviour): so that new attitudes, values, etc. become part of new ways of thinking.
- ⇨ Refreezing: supporting mechanisms to ensure that the new behaviours are maintained.

Force field analysis

(Lewin again). There are forces pushing for change & restraining forces resisting. Force field analysis depicts this with a series of arrows pointing for or against the change line. With this understanding appropriate action might help bring about change.

Study tip

Refer to the Force Field Analysis model in the Learning system to reinforce this understanding.

Note that

Lewin's thinking is very much of a 'planned' variety (see card 114).

Approaches to change

Alternative change ideas

Constant change

Peters: continuous external change is the only constant. Managers need to constantly bring about change & thrive on the chaos it causes.

Entrepreneurship

Moss Kanter: change through encouraging organisational creativity:

- ⇨ Develop an acceptance of change.
- ⇨ Encourage new ideas at all levels of the organisation.
- ⇨ Permit more interaction between individuals & groups.
- ⇨ Tolerate failure, as experimentation requires trying out new ideas, not all of which will work.
- ⇨ Offer recognition & rewards for creative behaviour.

Organisational learning

Senge: a learning organisation learns from its environment & adapts. Change therefore becomes natural & constant.

Core competencies involved:

- ⇨ Building a shared vision.
- ⇨ Personal mastery of learning by individuals.
- ⇨ Working with mental models.
- ⇨ Team learning.
- ⇨ Systems thinking.

Study tip

Now refer to Operations Management cards, in particular, card 106. Make notes on the relationships with Senge's ideas.

Critical periods of organisational change

External growth, acquisitions or mergers

Reasons:

- ⇨ A swift means of expansion.
- ⇨ Minimising risk of aggressive takeover.
- ⇨ Getting a more balanced product portfolio.
- ⇨ Opportunities for 'asset stripping'.

Often disappointing results follow, e.g. reduced profitability. Guidelines for success (Drucker):

- ⇨ Contribution: must identify exact contribution it can make to the acquired company.
- ⇨ Common core: both companies should have some unifying aspect (market, production, operations or technology).
- ⇨ Value: of the products, services & customers acquired.
- ⇨ Management cover: in case key senior managers leave.
- ⇨ Linkage: full integration of company within a year.

Note: post acquisition rationalisation is called 'rightsizing'.

Internal (organic) growth

Greiner (1972) identified a stage model of growth. Organisations naturally experience periods of both evolution & revolution:

Phase	*Growth by*	*Crisis*
1	creativity	leadership
2	direction	autonomy
3	delegation	control
4	co-ordination	red tape
5	collaboration	?

Critical periods of organisational change

Implications:

- ⇨ Change is unavoidable, even predictable.
- ⇨ Today's solutions become problems in the future.

Alternatives to growth

- ⇨ Maintain a status quo. Ignore growth potential.
- ⇨ Specialisation based on distinct organisational competencies.
- ⇨ Innovation of products & markets.
- ⇨ Divestment strategies: parts of the business closed or sold.
- ⇨ Reduction in geographical scope/product range ('downsizing').

Managing decline

Contributors to organisational decline

- ⇨ Inadequate financial control.
- ⇨ Poor management.
- ⇨ Competitive weaknesses.
- ⇨ High cost structures.
- ⇨ Changes in market demand.
- ⇨ Adverse movements in commodity prices.
- ⇨ Lack of marketing effort.
- ⇨ Too many big projects involving major capital expenditure.
- ⇨ Unwise acquisitions.
- ⇨ Poor financial policies.
- ⇨ Overtrading, so that sales grow at a faster rate than the organisation is able to finance from its cash flow & borrowings.

(Slatter, 1984)

Critical periods of organisational change

Strategic change alternatives when in decline:

- ⇨ Retrenchment, doing the same as before but cutting costs drastically.
- ⇨ Turnaround, whereby the organisation will attempt to reposition itself for competitive advantage.
- ⇨ Divestment: external sale of part of the organisation or closure of units ('unbundling').
- ⇨ Liquidation of the business by selling it to one or more buyers.

For full reference of quoted sources refer to the CIMA P4 OMIS study system from which these cards are derived

This page intentionally left blank