

43. Information Systems and Management

"In the digital economy, the firm as we know it will be transformed. Just as the organisation is changing, so are the job and the nature of work itself. As the world of work shifts from the hierarchical corporation to the new extended structures, there is a shift in the potential for work location. The office is no longer a place, it is a system. The roles of individuals within that system are no longer just jobs but fundamentally new working relationships".

Don Tapscott, *The Digital Economy*, McGraw Hill, 1995

Management Information System, commonly referred to as **MIS**, can be defined as a system that provides information to management. The main role of MIS is to report on business operations with the purpose of supporting decision making. This is to ensure that the organization is managed in a better and more efficient way so that it can be able to achieve full potential thus gain competitive advantage.



https://en.wikipedia.org/wiki/Management_information_system

computer literacy
an intranet
an on-site worker
office-bound computers
a routine job
to overcome a restraint
automation

compétence (en) informatique
un intranet
un employé sur site
ordinateurs sur site
travail routinier
dépasser une contrainte
automatisation

a high-speed network
high speed mobile data access
to have ready access to sthg
a remote service center
a nomadic worker

réseau haut débit
accès haut débit aux données mobiles
avoir un accès
centre de service à distance
employé nomade

to benefit from new technologies
disruptive technologies
to improve logistics
to streamline operations

profiter des nouvelles technologies
technologies de rupture
améliorer la logistique
rationaliser les opérations

to be tailored to one's needs
to provide sb with information
to make timely decisions
a decision-maker
the decision-making process

être adapté aux besoins/ fait sur mesure
fournir des informations à qqn
prendre des décisions opportunes
décideur
processus de prise de décision

The development of MIS calls for a change in management style since the workers will be generally more informed due to the ability to produce and consume more information about the business, giving rise to what's now known as the **knowledge worker**. Knowledge workers are more empowered and hence more productive naturally.

This means that the command-and-control method of management will no longer be the most effective management style for this worker. As a result, **employee autonomy** is gradually becoming more and more inevitable.

Drucker once observed that societal transformation can happen in a matter of decades. Now 50 years after Drucker initially constructed the idea of a knowledge worker, the system is changing again. Today, we can instantly learn anything, anywhere. And the knowledge worker of the past is becoming the **learning worker** of today. Forbes recently noted, "how we value workers is changing, and the emphasis now is on an employee's ability to learn and adapt, rather than their readiness to come into a job with the skills required to do everything."

to collect information
to process information
to retrieve information
to keep track of performance
to record progress

collecter l'information
traiter l'information
retrouver l'information
suivre les résultats
enregistrer les progrès

to flatten hierarchies
to broaden the distribution of information
to empower employees
a self-managing worker
resistance to change
to be reluctant to (doing) sthg

aplanir les hiérarchies
élargir la distribution de l'information
autonomiser les employés
employé autonome
résistance au changement
être réticent à (faire) qqch

Although there is no universally accepted definition of **telework** - the available definitions cover a wide range of homeworking, alternating telework, multi-site telework, freelance telework, mobile teleworking, and telework from relocated back offices – it may be understood as work carried out by the use of computers and telecommunications, in order to overcome restraints in place or time of work. In the USA, it is called **Telecommuting**.

freelance work
a freelancer/ freelance worker
a call center
flexibility
job security
traffic congestion
environmental impact

travail indépendant/ libéral
travailleur indépendant/ libéral
centre d'appel
flexibilité
sécurité de l'emploi
congestion de la circulation
impact environnemental

employee rights
training rights
trade union rights
a lack of sthg
contractual status
equality of treatment
health and safety
legal frameworks

droits des employés
droits à la formation
droits syndicaux
manque de qqdc
statut contractuel
égalité de traitement
hygiène et sécurité
cadres légaux/ législatifs

Telework demands both **hard and soft skills**:

- the hard skills of **computer literacy** which are increasingly taught in schools, and updating is normally provided either by manufacturers and suppliers themselves, or by consultants;
- the soft skills associated with telework may cover areas like personal effectiveness, autonomy, flexibility, interpersonal skills, creativity, organization, management, teamwork and leadership.

work-life balance
time-management
data protection
privacy
work efficiency
social isolation
low wages
childcare facilities

équilibre travail/ famille
gestion du temps
protection des données
vie privée
efficacité au travail
isolement social
bas salaires
crèche

VOCABULARY EXERCISES

EXERCISE 1: Find the English translation for the following French words. Mind your spelling.

ressources logicielles

initier une action

des éléments interdépendants

l'automatisation

des périphériques

EXERCISE 2: Word derivation: prefixes and suffixes

1. Make adjectives from the following verbs (and translate the adjectives into French).

to rely

to value

to avoid

to use

to accept

to sustain

2. What do you notice?

3. Using the same rule, could you translate the following adjectives into English?

(Beware, there are traps)

remplaçable

responsable

discutable

négligeable

4. Now, use the right prefix to build the antonyms of all the previous adjectives.

CORRECTION of the VOCABULARY EXERCISES

EXERCISE 1: Find the English translation for the following French words. Mind your spelling.

ressources logicielles: software **resources**

initier une action: to **initiate** action

des éléments interdépendants: **interdependent** elements

l'automatisation: **automation**

des périphériques: **peripherals**

EXERCISE 2

1. Make adjectives from the following verbs (and translate the adjectives into French).

1. reliable: **fiable**

3. acceptable:

5. usable: **utilisable**

2. avoidable: **évitable**

acceptable

6. sustainable: **durable**

4. valuable: **précieux**

2. What do you notice?

Verb + suffix -able = adjective

NB: pronunciation: əb(ə)l and not eɪb(ə)l + rule concerning spelling (when "e"?)

-able (meaning of the suffix):

- able to be: calculable.
- subject to: taxable.
- to be: payable.
- relevant to or in accordance with: fashionable.
- having the quality to: suitable ; comfortable.

3. Using the same rule, could you translate the following adjectives into English?

remplaçable

responsable

discutable

négligeable

replaceable

responsible

debatable

negligible

4. Now, use the right prefix to build the antonyms of all the previous adjectives.

unreliable

unavoidable

unacceptable

unusable

unsustainable

irreplaceable

irresponsible

undebatable

The antonyms for:

valuable: unimportant, insignificant, inexpensive

negligible: significant

WRITING

EXERCISE 1: Answer the following questions

1. List and explain the classification of information system.
2. What distinction do you make between data and information?
3. Illustrate the use of MIS in monitoring the performance of the HR department.

CORRECTION of the WRITING EXERCISE

EXERCISE 1: Answer the following questions

1. List the classification of information systems.

MIS is a concept, which is a matter of degree rather than an absolute one. The classification of information systems is as follows:

Transaction processing system.

Executive support system.

Management information system.

Office automation system.

Decision support system.

Business expert system.

2. What distinction do you make between data and information?

Data may be defined as raw facts, figures, objects, etc. Information is used to make decisions. To transform data into information, processing is needed and it must be done while considering the context of a decision. We are often awash in data but lacking good information. However, the success achieved in supplying information to decision makers is highly variable.

Management information systems attempt to convert data into information for the decision maker. Every aspect of management in the modern age relies heavily on information to thrive. Nothing moves without information and it is generally believed that information is power and that he who has it has power.

3. Illustrate the use of MIS in monitoring the performance of the HR department.

An organization's output performance is directly related to the motivation and performance of its human resources. A high staff turnover rate which is monitored by the management information system and identified as occurring in a particular department or in a particular category of staff can indicate poor performance on the part of the employer. Also, a high turnover rate of clerical staff may indicate that management practices do not assist in providing for career progression, personal development or training opportunities. Through the identification of poor human resource management, corrective measures may be taken which will in turn improve the organization's output performance.

For more on the topic, check out the following document:

http://www.vra.com/kmportal/online_resources/mis/The%20importance%20of%20MIS.pdf

UNDERSTANDING

EXERCISE 1:

Answer the following questions by summarizing the information given in the article:

1. What made flexible working not only possible but preferable?
2. What are the advantages of flexible working? For employees? For businesses?
3. What are the main hurdles to generalizing flexible working?

Want to join the flexible-working revolution? Here's how.

Working nine till five is no longer the only way to make a living. More small and medium enterprises (SMEs) than ever are allowing staff to do their jobs at times and in locations that fit around our lives. The trend looks set to continue as the demands of the changing workforce coupled with the possibilities offered by technology mean that companies must seriously consider allowing staff to cut back travel time and log on remotely.

Proponents argue that giving people more flexibility is proven to boost health and well-being, and will also benefit the bottom line if implemented properly.

Firms seem to agree – flexible working is expected to be the *modus operandi* for 70 per cent of UK companies by 2020, a study from Lancaster University found. [...] It should also boost employee retention as staff prioritise flexibility over pay – with reed.co.uk revealing that workers perceive work-life balance and flexible hours in the top three components of the perfect job – while a bonus scheme was deemed only the sixth most important factor.

The advantages for small and medium enterprises are considerable, too: minimising the need for office space, cutting overheads and generally improving corporate social responsibility by reducing the carbon emissions, which also holds for reducing commuting.

“If you drill down on every measure, flexible working is good for business,” says Karen Mattison MBE, joint chief executive of Timewise, a recruitment agency that specialises in flexible jobs. “But the workforce has changed and the workplace has to catch up. Our latest research shows that 87 per cent of full-time employees either work flexibly already or say that they want to.” Mattison also points out that while flexible working has historically been seen as a childcare issue, the benefits should apply to all. And the government agrees. In 2014 all employees were given the legal right to request the opportunity to do their job remotely. [...]

Digital innovations, such as cloud technology and video calls are vital for SMEs and enhance our ability to work anywhere, but finding compatible hardware and software which make financial sense is difficult.

Cybersecurity also needs serious consideration. Outside the confines of an office, intellectual property and data can be at greater risk of hacking, which can prove crippling to business operations and reputation. Preventative measures include good-quality firewalls, anti-virus software and training staff to minimise digital risk-taking.

Monica Parker, founder of Hatch Analytics, which specialises in workplace strategy, believes seizing the opportunity of flexible working is down to a mindset of measuring success not by the clock but by the work delivered by a motivated workforce.

Nearly three-quarters of employers acknowledge the positive impact that this sort of flexibility has on staff motivation, reports the Chartered Institute of Personnel and Development.

“People want to do it, we have brilliant technology to facilitate it – the missing piece is that more organisations need to allow that autonomy,” Parker says.

Emma Broomfield, *The Times*, December 08 2017

CORRECTION of the UNDERSTANDING EXERCISE

Answer the following questions by summarizing the information given in the article:

1. What made flexible working not only possible but preferable?

More and more employees want to do their jobs at times and in locations that fit their lifestyles. The demands of the changing workforce along with the possibilities offered by technology mean that companies seriously consider allowing staff not to commute by logging in remotely.

2. What are the advantages of flexible working? For employees? For businesses?

For businesses:

- it benefits the bottom line if implemented properly.
- it should also reduce staff turnover as employees prioritize flexibility over pay
- it minimizes the need for office space, cutting overheads
- it makes for better corporate social responsibility by curbing the carbon emissions.

For employees:

- giving them more flexibility is proven to boost health and well-being
- better work-life balance

3. What are the main hurdles to generalizing flexible working?

It may be difficult to finding compatible hardware and software which make financial sense.

Cybersecurity also needs to be addressed: intellectual property and data can be at greater risk of hacking.

For more information and tips on teleworking log onto:

Implementing and managing a Telework program

https://www.govexec.com/pdfs/viack_teleworking_mgnt_60.pdf