Thomas Robinson

Unit 3, Assignment 1

Good Information

Solihull College
January 2023

Task One P2

Characteristics of Good Information

Good quality, effective information is essential to making an informed decision. Good information should possess several attributes:

Valid & Accurate

Information should represent what it claims to be, with correct data that is free from errors, and not be misleading. As an example, a study on the effectiveness of a new drug should be based on valid scientific methods and provide valid results. A mathematics textbook should contain accurate formulas and methods.

Reliable

Sources should be trustworthy and reliable, and any tests carried out should be repeatable and produce the same data each time. One should make sure equipment used is dependable—such as a thermometer measuring water temperature consistently—and primary sources used are verifiable.

Timely

Good information is available when it is required. As an example, there is no point in a weather forecast designed to help people prepare for a storm being presented after the storm has passed.

Fit for Purpose & Relevant

When creating new information, it should be appropriate for the task being carried out or decision being made; a recipe for a cake would not be useful to make a salad. Superfluous, irrelevant data can make information difficult to interpret; a recipe book would not be useful if the decision is regarding heavy machinery.

Accessible & Understandable

Information should be accessible to intended audience. This means it should be available in a format that is appropriate and legible. Additionally, information should not be overcomplicated and should be tailored to what is required. A website targeted at a general audience

should be easy to navigate, with simple vocabulary to target the broadest demographic possible.

Cost & Time Effective

In the case of a business, it is often inadvisable to spend more creating information than the value it provides. Information should be created and used in the most efficient manner.

Task Two & Three D1., P1

How to Improve the Quality of Business Information

High-quality information is essential to making informed decisions and running an effective business. It is important to ensure that the information you are using and creating is of the best possible quality.

Types of Information

It is important to consider the types of information you are creating:

Quantitative Information

Quantitative information is information that can be expressed using numbers. This can include everything from sales figures and market share data to measurements and statistics. This information can be used within a business to perform day-to-day tasks as well as instructing third parties, for example providing requirements and specifications.

Qualitative Information

Qualitative Information is non-numerical information, primarily opinion. Examples of this type of information is customer feedback and analysis.

Purposes of Information

Data is transformed into information by a business through processes of analysis and interpretation, allowing the business to use information in a variety of ways.

Decision Making

Businesses use information to make informed choices and decisions regarding business operations. You may use information regarding customer preferences to decide what products to develop or information about market trends to decide which investments to make.

Operational decisions are those done in higher volumes during day-to-day business. For example, selling a product or placing a stock order.

Tactical decisions are made with the goal of ensuring a company is profitable and successful.

Strategic decisions pertain to the organisation of the business itself, such as reallocating resources and managing projects and strategy.

Planning

Information can be used for setting goals and developing strategies within a business. For example, past sales trends could be analysed to guide future operations.

This evaluation can allow a business to gain a competitive advantage. Analysing information and using it effectively allows businesses to develop strategies to help increase market share and dominance within a sector.

Evaluation & Insights

Gaining insights into organisational operations and performance is another example of an information purpose. This could include finding trends or patterns in data and could be used to address employee performance, customer engagement and identify areas for improvement.

Sources of Information

Primary

A primary source is a first-hand account or an original material. It has not been filtered through a biased lens or interpreted or evaluated. This may be the first appearance of information and is the base that other research uses. Examples of primary sources include patents, trademarks, filings, periodicals, and research reports.

Secondary

A secondary source is based on interpretation of primary sources. It may have some level of bias or spin but is based on data and information collected in the past. The new information provided is opinion and commentary on primary sources. They are useful when researching a new or exploring a new business area, where one may not have relevant industry experience. Examples of secondary sources include books & newspapers, journals & aggregates, websites and videos & shows.

Within a Business

Internal Sources consist of information and data created inside of a business. For example, purchasing records, sales information, and HR/finance details.

External Sources come from outside of a company. This could be a marketing database, government or from research. For example, a new

law pertaining to a business sector would be a piece of external information.

Businesses also collect information from **human sources**. This consists of information from people such as customers, employees, and stakeholders. For example, input from customers collected via social media. Depending on the origin of the information, it may be **internal** or **external**.

By understanding the different types, purposes, and sources of information, you can make the best use of business information and ensure that it is of high quality. This can help you make better decisions, develop plans, and monitor performance more effectively.

Information Systems

Unit 3, Assignment 1, Task 4

Thomas Robinson—Solihull College

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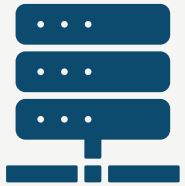
Features & Functions

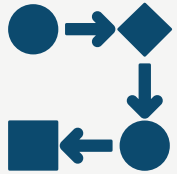
P4

What are Information Systems?

A combination of hardware, software, and processes



Used to collect, store, process and distribute data & information



Makes use of algorithms and control/feedback loops

Stages of an Information System

- The **input** is the data requiring analysis. This could be from users, sensors, devices or collected from external sources. It should be verified and of good quality, and be as exhaustive, as necessary.
- An information system **processes** data by manipulating it with algorithms and processes in order to transform it into usable information. This can include something as simple as sorting and filtering, all the way up to complex calculation and analysis.
- **Output** is the final form of information, produced for another system or for a user. This could take the form of a report or visualisation or could influence another system, for example issuing an email notification.

Components of Information Systems

- **Hardware** is the physical device(s) that the system is running on, for example a server or workstation. This includes **storage** where data is kept.
- **Software** is the algorithms and processes that take input and produce an output. This runs on the hardware and can take many forms
  - Depending on the complexity of the data, analysis required and any bespoke needs, this software could be an off-the-shelf solution or a custom development
- The **Communications** component of an information system refers to how data is transferred within the system, as well as in and out of it. For example, a system may take in data from an internet resource and output it via a display
- **Feedback loops** are used to perform actions on the output of a system. This allows a system to adapt by adjusting its processes. An **open system** does not make use of feedback or control loops, while a **closed system** does.
- **People** also play a key role in an information system; they may be part of the data gathering process and may act upon the output of the system

Types of Information Systems at Solihull College

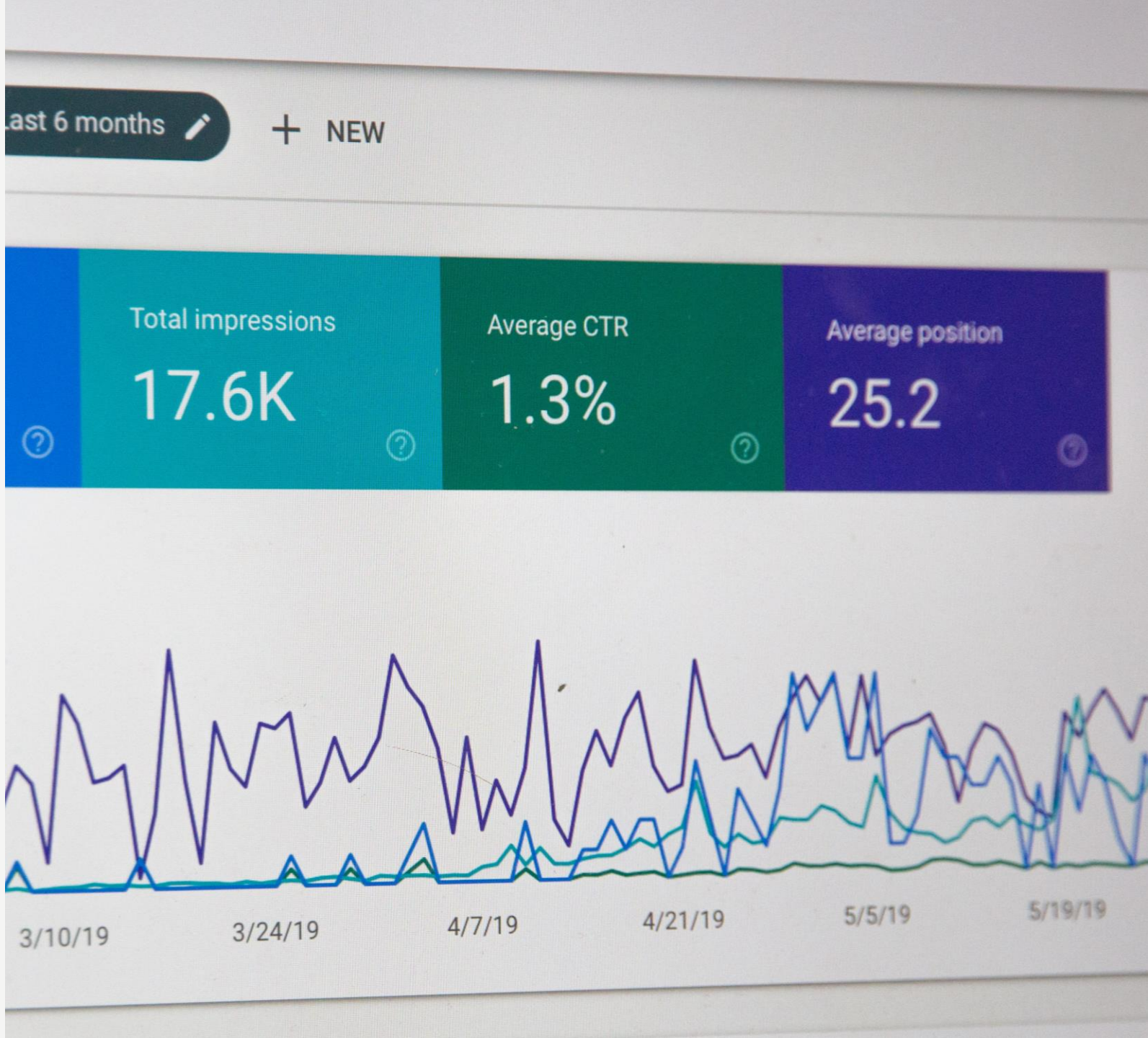
P5

Management

- Management Information Systems (MIS) are used to inform decisions and provide general information.
- Within the college, an example of a MIS would be the Advanced ProSuite. This stores information about students, such as personal details, gradebooks and attendance.
- Information such as gradebooks, attendance, personal details
- This information could be analysed by the system to produce reports, for example a single student's grade history or the performance of n entire faculty
- Can be used to identify demand for certain courses

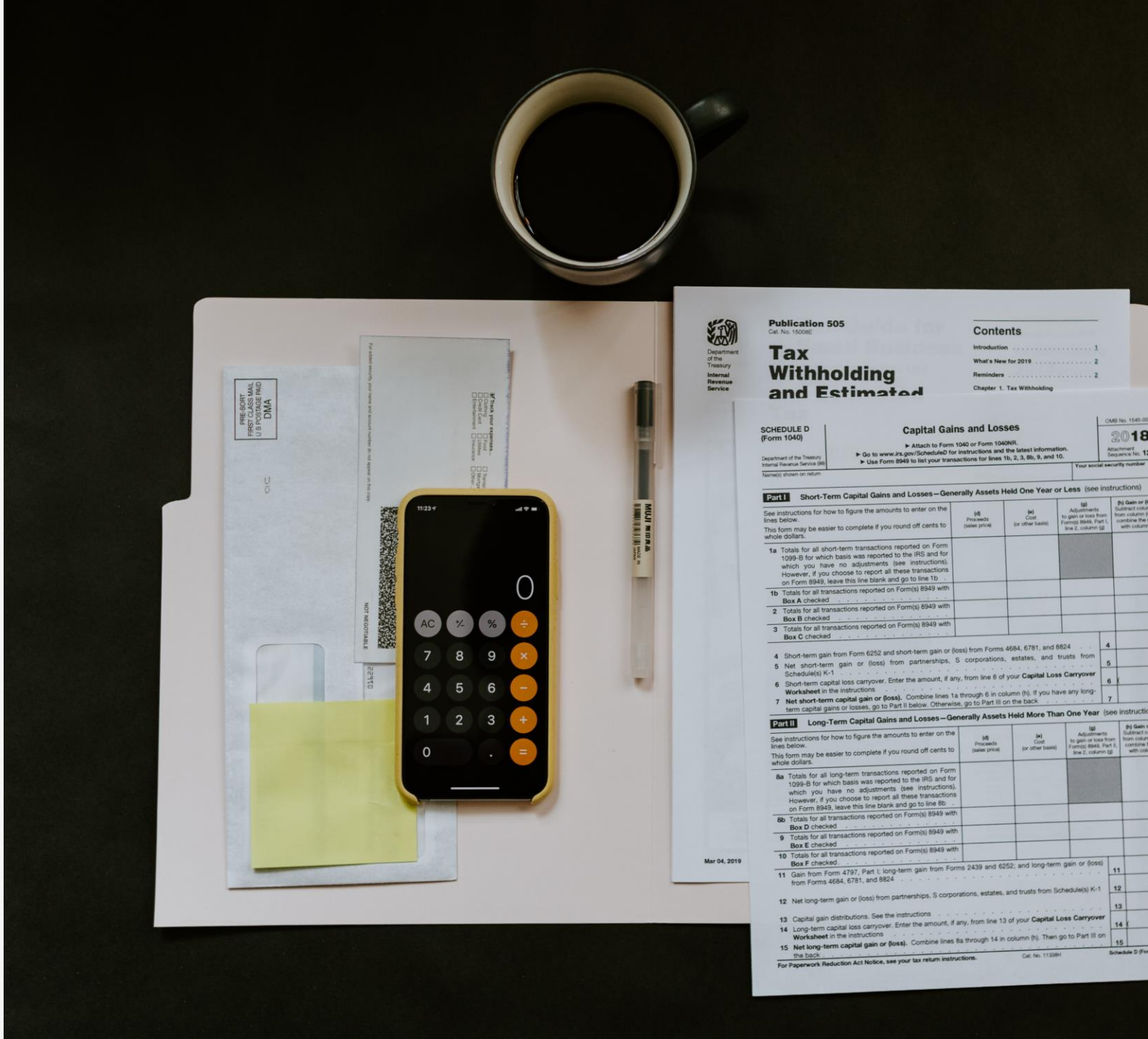
Marketing

- Used to view and analyse marketing efforts
- For example, reporting on the effectiveness of different campaigns advertising courses
- Assists the college with targeting its advertising and tailoring it to the intended demographic of students
- Other implementations of marketing systems include store loyalty cards and purchase tracking. These can be used to serve target advertising or suggest products.



Financial

- Finance Information Systems are used to assist with the management of finances, such as budgeting and accounting
- Can help with forecasting and making future projections, for example discovering trends in payment amounts or calculating affordability
- May automate certain aspects of payroll, such as taking appropriate deductions from payslips
- Can analyse financial data, for example seeing which courses or resources are most costly to run



Human Resources

- HR systems assist with the overseeing of the employees and staff of an organisation
- Used to identify performance and turnover to make decisions, such as providing training, making promotions and creating redundancies.
- Specifically in terms of the college, a HR system may be able to flag staff who need retraining in certain areas or which areas of the college need more staff, for example a faculty being short of tutors.

Business Functional Areas & Information Flows

M1

Business Functional Areas & Information Flows

- Businesses are made up of several ‘functional areas’ that each communicate with other areas of the business during day-to-day operation
- In this example, we take a manufacturing company producing end products from raw resources
- Information flows refers to the movement of information within a company’s business sectors and with external resources

Sales

The sales department is responsible for marketing the company’s products to customers.

Purchasing

The role of the purchasing area within our example company is to purchase raw materials to be turned into an end product.

Manufacturing

The manufacturing sector of the company encompasses those facilitating the creation of the product from raw materials. This can include those in factories physically crafting the product, and those creating digital designs and ideas.

Finance

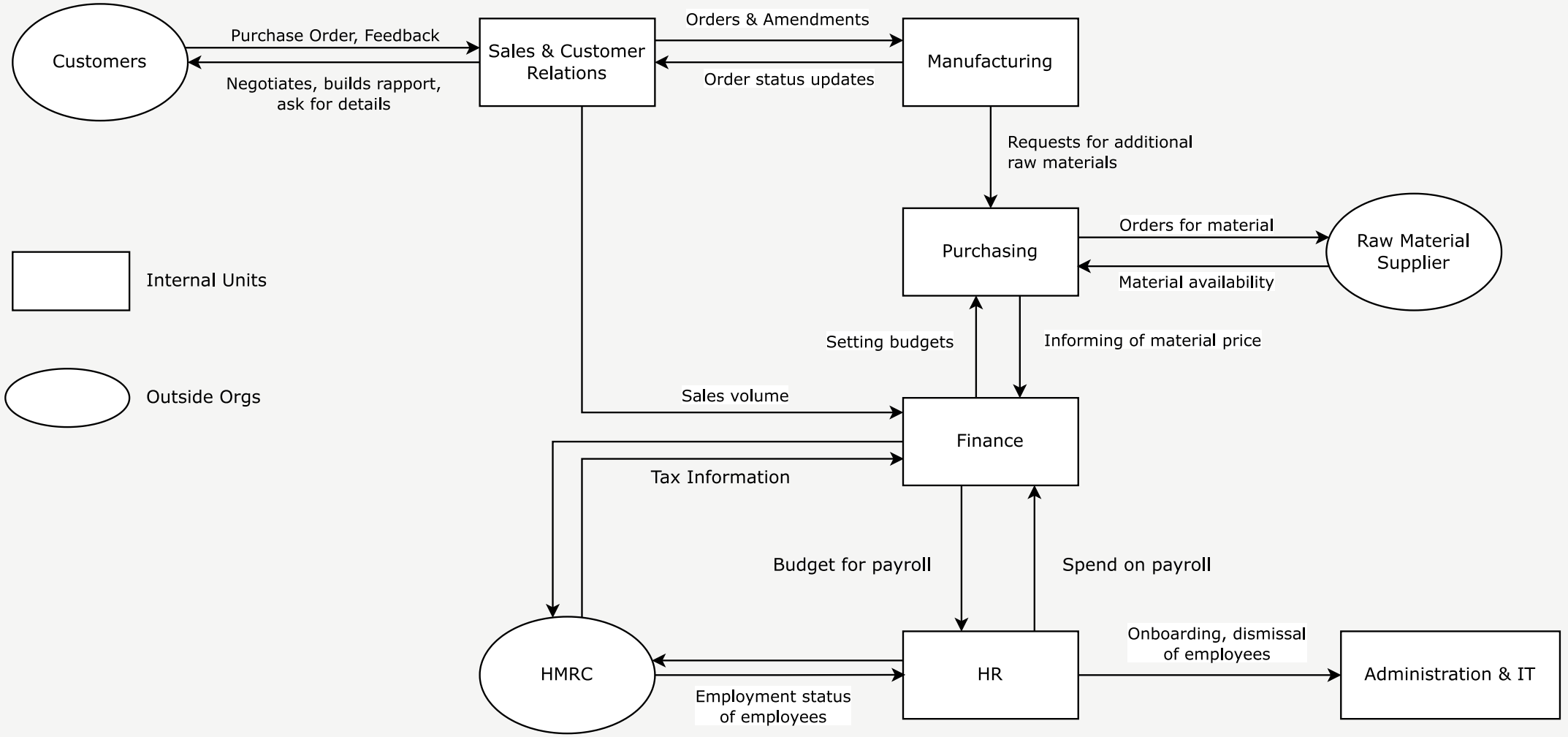
Those in the finance business sector are responsible for the company’s finances and ensuring the company is staying within an appropriate budget.

HR

The Human Resources sector oversees managing the staff, including training, onboarding and performance.

Administration

Administration covers all other administrative roles within the company, including IT.



Information Flow Diagram