

# Unit 3, Assignment 1

Good Information

George Hotten

January 17, 2023

## Characteristics of Good Information

### *and how businesses can improve their information*

#### Valid, Reliable and Accurate

##### *and levels of detail*

Information should be relevant to the topic at hand and it should reflect its reality accurately. This means ensuring the information does not contain any false data or biases and ensuring that it is based on data from a reliable source. Having information from a reliable source makes it consistent and dependable, producing the same information if researched multiple times and allowing it to be free of any errors or inaccuracies.

The information should be detailed enough to include plenty of relevant and useful information, however, it should not be too over-detailed to the point where it becomes confusing and overwhelming.

For a business such as Amazon, it is vital their information is valid, reliable and accurate as they must include information within their product descriptions to ensure the user has all the information needed to make a well-informed decision on buying a product. They must also ensure information such as pricing and stock is accurate. In the past, Amazon made an error in their pricing for Air Fryers - £3.99 instead of £39.99 - forcing them to honour the wrong price causing them to lose money on the sales. To ensure this doesn't happen to your business, it is vital that all information is fact-checked and taken from reliable sources so that there is no risk of liability for providing incorrect information.

#### Timely

Timely information should be up-to-date and relevant to the present day. This should ensure that all information is accurate and based on the newest information available at the time. For example, traffic updates are only useful when they are representing current and in-the-moment data, if updates from an hour ago are being displayed it would not be useful to drivers.

For businesses such as the Post Office that provide exchange services for foreign currency, it is important their information is as up-to-date as possible to avoid losing money. For example, if the Post Office is using an older exchange rate between the pound and the dollar, the end-user may be spending less for a higher value of dollars, causing the Post Office to lose money on the exchange. To prevent this, businesses should ensure their information is actively updated as often as possible with the newest data available.

## Fit for Purpose and Relevant

Fit for Purpose information should be suitable for its intended use, purpose and audience. This means the data within is tailored and formatted to the target audience's standard. It should also contain relevant information about its purpose. For example, a traffic report should contain which roads are blocked, how long it may take to travel through them and alternative routes.

For businesses such as TK Maxx E-commerce, it is important that they provide relevant and fit-for-purpose information about their products. This information could include product material—such as leather or cashmere—, size charts and measurements for each size and estimated delivery timeframes. This ensures the customer knows what they're buying and can be confident it is what they're after. This saves the company from losing money with returns and paying for customer returns via post.

## Accessible

Accessible information should be easy to find, access and use. This means that the information should be created and stored in an accessible format that makes it easy for people to read and understand and it should be easily available to the people who need it.

For all businesses, it is important that any information intended for the public to be easily accessible and stored in a readable format. This can help reduce costs from customers contacting support teams trying to find information held by the organization.

## Cost-Effective

Cost-effective information should not break the bank and the information should value the amount being spent on its research and development. The information should be obtained at the lowest cost possible.

For all businesses, especially small businesses, it is important that information is within budget and the research covers everything the business needs. This reduces the risk of going back and forth and spending more money on revisions of the resulting information to get all the data required.

## How Organizations Use Information

Information is vital to organizations, used in most of the business's functions such as communicating needs with third parties, negotiating contracts and informing colleagues with relevant information needed to do their job. Within an organization, there are many different ways to describe information, such as its type, its purpose and what sources are used.

### Types of Information

#### Primary

Primary information is created from original materials that are unedited and haven't been filtered through someone else's evaluation or interpretation. Primary information is often used as part of someone else's research and is usually the first printed or electronic appearance of the information's subject.

#### Secondary

Secondary information is data that has been compiled from primary information and is based on evaluations and interpretations of said primary information. Secondary sources are not seen as evidence, but rather complimentary to any evidence being presented which helps the discussion of the evidence.

#### Quantitative

Quantitative information is created from data that can be quantified, such as numbers. Quantitative data can be measured, counted and given a numeral value, just to name a few. This data can answer questions such as "how many?", "how much?", "how often", etc.

#### Qualitative

Qualitative information is created from data that cannot be represented with a numerical value. This is done by using words and labels to describe an item's traits and characteristics. This data can answer questions such as "why?" and "how?".

## Purposes of Information

### Decision Making

Information is often used to make operational and strategic business decisions. For example, a business might use sales data to see what products users are buying the most, allowing them to further improve and build upon their successful products. The same data could also be used to identify products that aren't performing as expected, allowing the business to save costs and discontinue the product.

### Monitoring

Information can be vital to monitoring the performance of an organization. This monitoring can include sales data, how many views on their webpage and customer feedback. For example, monitoring the views on their webpage could be an indication of how well advertising is working and showing if any changes are needed. This is similar to customer feedback, the organization can update and change areas where customers are not satisfied.

### Planning

Information can also be important in planning for the future. For example, organizations could use financial data to forecast next year's sales or to create a budget.

## Sources of Information

### Internal Data

This source is data that is collected and generated by the organization itself. A few examples of this type of data are sales data, employee information, customer information, accounting and stock levels.

### External Data

This source of data is collected and generated by external organizations. A few examples of this type of data are market research, public data, government statistics and competitor information.

# Unit 3, Assignment 1

## Good Information

George Hotten

January 18, 2023

# Features and Functions of Information Systems

## The Features

# The Features

## Data

- ▶ Data should be stored logically.
- ▶ Data should be as accurate as possible.
- ▶ Data must be summarized to ensure it meets the standards of the system.

## People

- ▶ People are needed to capture data to create information.
- ▶ People can however exploit the information.
- ▶ Motivating the people who capture data, explaining how important that data is and how it helps the businesses, can help prevent this.



# The Features

## Hardware

- ▶ In smaller businesses, an information system could be running on the administrator's PC.
- ▶ Meanwhile in larger businesses the system could be running on a dedicated server.

## Software

- ▶ Simple information systems don't require complex software.
- ▶ However for larger businesses a more complex Management Information System (MIS) may be required.

# The Features

## Software (*cont.*)

- ▶ A MIS is setup by the developer to the businesses' standard, providing them with further configuration if needed.
- ▶ It is more expensive to maintain a MIS, with costs rising further for more features.

## Telecommunications

- ▶ Using a MIS requires data to be transmitted over the internet which can raise security concerns about privacy.
- ▶ To resolve this, intranets can be used or a VPN into the businesses' network to prevent any data snooping.

# Features and Functions of Information Systems

## The Functions

# The Functions

## Input

- ▶ Data should be stored in a format that is ready to be processed for output.
- ▶ Provide formatting details so the system knows how the output should look.

## Storage

- ▶ Data stored should be as detailed as possible.
- ▶ Frequent backups should be taken depending on their importance.
- ▶ A summary of the data should also be stored for quick access and understanding.

# The Functions

## Processing

- ▶ Turning data into information
- ▶ Simple example includes calculating stock levels by subtracting sold units from the total units produced.
- ▶ Complex example includes analysing trends to aid business decisions.

## Output

- ▶ Output of data can be graphical or textual.
- ▶ A textual output is preferred for having a more detailed understanding of the information.
- ▶ A graphical output is preferred for an overview of the data and for seeing the bigger picture.

# The Functions

## Control and Feedback Loops

- ▶ The system takes the output from processing and actions an automated task.
- ▶ For example, ordering more stock when levels get too low.

## Open and Closed Systems

- ▶ Open systems allow for flexibility with the output of data, however this usually required training to get the most out of the system.
- ▶ Closed systems limit the user on what can be reported and outputted, typically restricted to a few predefined formats.

# Types of Information Systems

## within Solihull College

# Management Information Systems

Within Solihull College, ProSuite by Advanced is used to manage student information. Data contained by a MIS can include:

- ▶ Personal details (i.e. address, full name, contact information)
- ▶ Qualifications on entry.
- ▶ Current and predicted grades.
- ▶ Behaviour and attendance records.

Data from a MIS is often readily accessible by just entering a few queries and selecting the students. The data is exported into graphs, tables or other easily readable formats. These exports are also easy to import into other software such as the Microsoft Office suite.



# Marketing Information Systems

Marketing Information Systems play an important role within businesses. They contain data such as sales, marketing research and intelligence. Depending on the type of MkIS—for example, a shop loyalty card—, data such as transaction details, store and the date/time may be collected.

A few other examples include:

- ▶ Start a promotion in one store to analyse the results before rolling it out to others.
- ▶ Identify trends in the ups and downs of sales.
- ▶ An airline might monitor what foods and drinks were most sold on flights to increase the stock of similar items.

# Financial Information Systems

Financial Information Systems at a simple level are used to manage and monitor income and spending (i.e. payroll). At a more complex level, FIS systems can focus more on costs and expenditures to help keep the business's processes cost-effective.

FIS systems can also help identify trends and patterns within the business's finances and show the impact of the business's spending and investments.

# Human Resources Information Systems

Human Resource Information Systems are important to maintain and store employee information and data. HRIS systems provide resources to assist in staff scheduling, training and calculating staff turnover.

HRIS systems can also be used to perform analysis on staff to identify their skills and aid in decisions on promotions and development opportunities.

# Business Functional Areas

# Business Functional Areas

- Sales** Responsible for selling products or services, attempting to increase profits and building relationships with customers.
- Purchasing** Responsible for the sourcing and buying of materials and goods used to manufacture products.
- Marketing** Responsible for promoting the business' brand, products and service. Also responsible for identifying trends in consumer demand.
- Finance** Responsible for keeping accounting records and suggesting budgets for projects.
- Personnel** Responsible for managing the workforce, including hiring, training and supporting new employees. Personnel are also responsible for investigating any employee concerns about other staff.

# Business Functional Areas

**Manufacturing** Responsible for overseeing the operations of the manufacturing process, including ensuring the machines are using the correct settings and performing quality assurance checks.

**Administration** Responsible for all administrative tasks, such as receptionists taking calls and IT personnel managing the network.

# Information Flows

