Information Systems

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Accounting Information Systems

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Accounting

Examine the typical computer based information system used in your chosen area, how they support that business area and the benefits they bring both to that business area and the organisation as a whole.

1. Examine The Typical Computer Based Information System Used In Your Chosen Area

1.1. Introduction to Accounting informational Systems

There are four different types of organisational levels. Operational is at the bottom of the triangle where it has the most sectors compared to Strategic, Management and Knowledge. Accounting, falls under the Operational level system. These are TPS's or Transaction Processing Systems. A TPS is a "computerised system that performs and records the daily, routine transactions necessary to conduct the business" *Kenneth C Laudon and Jane P Laudon. (1998). Transaction Processing Systems. In: Managment informaiton systems. 6th ed. p40.*

Some examples of information systems used specifically in accounting are;

- Microsoft Dynamics GP
- Epicor

- Sage Mas 90/200
- Net suite
- Intacct
- SYSPRO

Although these are specific names of information systems, I shall be looking into the typical information system in accounting instead of one specific software.

1.2. What is the purpose?

The purpose of specifically an accounting information system is to process updates and new transactions which change the forecasts of cash flow and possible future transactions. It is crucial to note that an accounting system is in no way exclusive information for accountants but it flows through the company right to the different sectors. The information gained from the Operational level in accounting could find its way up to strategic level for them to make decisions based on the data.

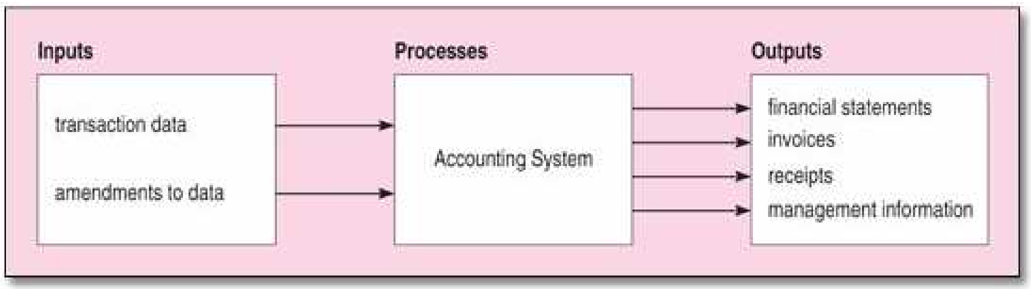
It also can go out to stakeholders. These can be internal such as the previously mentioned decision makers or perhaps external like shareholders.

Muhammed, Z, (2009), Accounting Information Systems and Knowledge Management, Function of AIS, Issue 4, P38

1.3. What does it do?

An accounting information system has financial transactions entered into it and must be regularly updated to make sure it is accurate and factual. It passes on valuable data and information onto the other sections, for example Managerial. By letting the different sections of the Organisation triangle communicate each other's information (in this case through the medium of accounting information systems) it allows fluidity and synergy within the company in tasks such as decision making.

1.4. How does it do it?



http://openlearn.open.ac.uk/mod/resource/view.php?id=366057

We can see from the diagram that it can be divided up into three parts. The first part is the record stage where there would be a previous database full of information. In this stage, someone would either change the information for example if a sale is made, stock is lost and revenue is made. This would be typed in.

The processes stage would be the actual accounting system. Where raw data is inputted, it is converted into the next stage into forms such as income statements, balance sheets etc. These are then given to the appropriate people who would then go on to run the business with the new information.

2. How It Supports That Business Area

2.1. Porter's 5 Forces

Porter's five forces are a series of factors that determine the attractiveness of a market or industry. Each of the five forces reduces the appeal of an industry the more they 'increase'. In order to see how important information systems are in influencing these, they must first be defined. The five forces are as follows:

I. Rivalry

This dictates how much of a company's work or output is being competed against. Companies in an industry follow each others objectives closely. This means that the more rivalry or competition will make it harder for a company to be sustainable and therefore the more rivalry, the less attractive and industry.

II. New Arrivals into the sector

The amount of profit made by a company is largely conducted by its competitors. If there are less companies to compete with, the likelihood is more profit can be made and vice versa. Economically speaking, a profit of over 0 in an industry will attract new companies. More companies entering will make the market less attractive. A company that is already established would stop making so much of a profit.

III. Threat of Substitute products

Every industry is constantly updating products. Sometimes this means replacing old ones. If we look at the example of a basic timeline of the storage industry, the floppy disk was (in it's time) the data storage device. This was soon replaced by CD's which is now replaced by memory sticks. With each new invention being superior to the previous, it is easily to see why the memory stick industry is currently much more attractive to a new company than say the floppy disk one.

IV. The Power of the Buyers

This can also be seen as the elasticity of demand. If the buyer shows no interest in buying from the company, it cannot survive. The simply might not be willing to buy from a customer due to factors such as loyalty. An example of this is with cola drinks. Many people have a loyalty to the brand name Coca-Cola instead of any other. A sector which already has established customers such as the cola drinks sector would be unattractive to enter.

V. The power of the supplier

Where the suppliers have much power such as a monopoly or an oligopoly situation, it can be very hard to compete. An example can be in the oil sector where OPEC chooses oil prices and its buyers are forced to pay whatever they choose. Another company trying to compete with something as powerful with OPEC would prove very challenging. This would make the sector unappealing.

Karagiannopoulos, G.D (2005), Fathoming Porter's five forces model in the internet era, Force 1-5, Volume 7, p 66-76

The use of information systems can help with so many sectors to try and reduce the effects of Porter's forces. They can make the company more competitive by driving out these forces and dominating competition. An information system can hold data about competitors and transactions to set the price for a good to see what sells best at what price.

With a company's information systems helping to forcing out these factors, the company, they not only support the company but help it grow and suppress other potential competition.

2.2. Porter's Value Chain

The value chain model suggests that when a product is passed through 'chain', it comes out more valuable. Information systems can not only help the product increase in value but can put it ahead of rivalling company's merchandise.

The five stages of it are; Inbound Logistics, Operations, Outbound, Marketing and Logistics Sales and Service *Porter, Michael E., "Competitive Advantage". 1985, Ch. 1, pp 11-15.* Like the five forces, they must be defined before we look at the relation with information systems.

- Inbound Logistics are where the goods are received.
- Operations would be the information systems such as accounting ones which indicates new stock is in.
- Outbound is the part that's required to dispense the products.
- Marketing and Logistics Sales is like advertising. Brands such as Coca-Cola rely heavily on this to promote their product.
- Service is what is needed to maintain the function of the service or good.

When a good starts off in a chain, it is not as valuable as it is once it passes through. Information systems help in the operations system part of it. Without the information system, it would be impossible to know what stock we have and if we can even supply our product.

2.3. Advantages of using Information systems

To imagine the effects of not having accounting information systems, we can look at smaller systems to see how we would do without them. Simple things such as phones rely on information systems such as contact addresses. A business is the same. It relies on its information systems even if we don't notice it as much as maybe the advertising sector. It eliminates the problem of human error and unreliable calculations which would give false numbers for stock, the wrong amount for revenue and change the forecasts made in the future.

3. What Are The Benefits That They Bring To That Business Area And To The Organisation As A Whole

The advantages to a business area are that the accountants are less likely to make a mistake. It massively saves time for them so they can spend time doing other things rather than exhaust so much of their limited time on data processing.

The benefits to an organisation as a whole are that they make it much cheaper. Due to time saved for the accountant, they can pay them less and they can get more done. Less people have to be employed to process data. This brings down the companies costs. Due to the specialisation of the machines, economies of scale can be obtained and further reduce costs. An information system would be able to detect any values that are deviate from the norm and reduce the chance of mistakes in the system.

4. Conclusion

In conclusion, not only does information system help the people using them, but the company as a whole. It eliminates the problem of time wasting, mistakes and boost efficiency. Information systems push out Porter's five forces which makes their business more successful in the unattractive market. Their contributions in the value chain make their product more valuable and hence the company becomes increasingly economical.

In the business world, it is crucial to have information systems as they are one of the fundamental building blocks on not only the running and maintenance of a firm, but its success too.

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