

Principles of Business Information Systems

Hands-on activities – Chapter 1

1. Information System Concepts

An information system is a set of interrelated elements or components that collect, manipulate, store and disseminate data and information and provide feedback to meet an objective. You want to create an information system for a petrol station. The information system must consist of input, output, processing and feedback. The input into the system will be type of fuel that a person selects (Diesel, Regular Unleaded, Premium Unleaded), number of gallons and total merchandise. If the person orders over €10 worth of merchandise from the gas station store, they will receive a 10% discount on the total gas purchase. The output from the information system will be the total cost to the customer.

1. Create the chart below using your word processor's table feature. Use the chart to list the type of processing needed to produce the output.
2. What feedback would be helpful to the petrol station owner?
3. What feedback could the petrol station owner use for forecasting?

| Input | Processing | Output |
|---|------------|------------|
| Cost per gallon Number of gallons Merchandise Total | | Total Cost |

2. Global Challenges in Information Systems

Changes in society as a result of increased international trade and cultural exchange, has always had a big impact on organizations and their information systems. You are the owner of a home-based business that makes baby clothes and you are considering selling your baby clothes overseas. To assist you in making your decision, you decided to create the chart below to list challenges and you might have dealing with another country. Use the middle column to list either Yes or No, to determine if the issue will be a challenge. If the issue is a challenge, use the third column to list reason(s) why each issue would be a challenge. You may have to research some of the issues on the Internet to determine if they will be a challenge. You can use the table feature in your word processor to create the chart.

| Issue | Is this a challenge? (yes or no) | Why or why not? |
|-----------------------------------|----------------------------------|-----------------|
| Cultural challenges | | |
| Language challenges | | |
| Time and distance challenges | | |
| Infrastructure challenges | | |
| Currency challenges | | |
| Product and service challenges | | |
| Technology transfer issues | | |
| State, regional and national laws | | |
| Trade agreements | | |