Trap No. 6

Some people may think that information systems are expensive to develop. Thus, they may develop a smaller and simpler system and move into planning a project farther down the road. By the time they have gained the experience and a sufficient size system, managers will have realized that they only succeeded in solving a subset of the original problem.

Trap No. 7

Managers often purchase applications and special local add-on packages for which there is no local dealer. The manager may believe that the dealer will provide technical support and training, which may be helpful. This is true. However, the package itself may have been developed by persons with little, if any, programming experience. Also, the technical support and training are often minimal. Thus, the only way the manager can expect to get any support is if he is technical. If the manager is not technical, he will probably not get any support.

Trap No. 8

A computer system cannot take the place of effective management. Plan ahead and manage before you buy a computer system. You'll need your computer to manage it.

Trap No. 9

Software and hardware are components that must work together. Software is the most important component of the system and the one you purchase first. Software is the brain of the system that makes the computer do what you want it to do. You should not choose hardware first. If a computer system looks advantageous, it is important to consider the software first. There are over 5,000 entrepreneurs developing software in the agricultural software industry. Some of these are going to be good and some are not. It is important to do your research and determine which companies are responsible for making the whole system work.

Trap No. 10

Management must start thinking of the computer in terms of its ease-of-use qualities. Be sure a novice can learn the system and that a novice can use it comfortably. This is important since you do not want the computer to become another point of failure in your operations. The last thing you need is computer failure.

Trap No. 11

The computer becomes a useless machine once you have installed it. Get the computer in your operations—do not let the system dominate your business—let the business dominate the system. Design the computer to work with your business operations. One of the biggest reasons why the computer justifies itself is that it is a tool. You buy a computer system because you need a tool. Once the computer system is installed, many managers feel that the computer system is the tool. This is a dangerous if these tasks are the primary responsibility of the computer.

Trap No. 12

The computer should be justified and approved by the manager. It is a sound management decision to start with the computer system and to let the computer—that not the other way around.

Equipment and supplies from local dealers may be expensive. Making sure that you have to go to the central dealer. This makes one dealer responsible for making the whole system work. It is important to select the hardware and software carefully. Significant errors that are made at this stage can be very costly.

Trap No. 13

Managers must think carefully before they decide to buy a computer system. Most computer systems require special training. The training is often provided by the vendor at the time of the sale. However, the training may not be adequate. It is important to determine how qualified the training is and to determine the necessary qualifications for the training.

Trap No. 14

It is a sound management decision to get at least a short reading list on page 6 to get you started. You can get more information from the book that you purchase first. It is important to determine which book you will purchase first. You may want to get more information from the book that you purchase first.

Trap No. 15

The computer system is designed and developed by the people who are responsible for making the computer system work. It is important to determine who the people are who are responsible for making the computer system work. It is important to determine the qualifications of the people who are responsible for making the computer system work. It is important to determine the qualifications of the people who are responsible for making the computer system work.

Trap No. 16

Buy reliable software. Make sure the software selection dictates choosing the best software for the job. It is important to determine which software is the best software for the job. It is important to determine which software is the best software for the job.

Trap No. 17

Managers must think carefully before they decide to buy a computer system. Most computer systems require special training. The training is often provided by the vendor at the time of the sale. However, the training may not be adequate. It is important to determine how qualified the training is and to determine the necessary qualifications for the training.
Information needs and computer capabilities

The three less obvious reasons why businesses have become interested in computers relate to the availability of information, to the speed and ease with which it can be manipulated, and to the ways in which it can be stored and retrieved. The availability of information is limited by what is in the company's files, and by what can be generated or measured internally. In most businesses, the computer is the major source of information, and the computer system is used to fulfill these information needs.

For example, a fertilizer co-op may want to know how profits have varied from one year to the next, so that it can make decisions on how to increase profits. Alternatively, the co-op may want to know what factors are causing demand to vary. And the co-op may want to know how prices are affected by changes in production or demand.

Benefits and costs of a microcomputing system

A microcomputer system is useful for a variety of tasks in most businesses, even though it may not be immediately obvious. The benefits of a computer system generally fall into six components: ownership, operation and maintenance, personnel, data storage and retrieval, programming, and decision support.

Ownership

The costs of the computer system may be divided into six components: ownership, operation and maintenance, personnel, data storage and retrieval, programming, and decision support. The computer system may be owned by the company or rented from a leasing company. The costs are fairly straightforward. The actual costs are

Table 1.—Expected costs of computer system

<table>
<thead>
<tr>
<th>Cost</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware</td>
<td>$1,600</td>
<td>$5,000</td>
</tr>
<tr>
<td>Software</td>
<td>$1,000</td>
<td>$3,500</td>
</tr>
<tr>
<td>Personnel</td>
<td>$100</td>
<td>$500</td>
</tr>
<tr>
<td>Total</td>
<td>$2,700</td>
<td>$9,500</td>
</tr>
</tbody>
</table>

Other costs

There are two other costs which are associated with the computer system:


Programming involves the development of the programs or the writing of the instructions to tell the computer what to do. Programming is necessary for the computer to carry out any manipulation or analysis. For example, if you want the computer to calculate the total of a set of numbers, you must write the computer program which tells the computer how to add the numbers. Programming is usually done by programmers or software engineers. Programming is a complex process, and it may require a significant amount of time.

D. Decision support.

Decision support involves the use of the computer to help you make decisions. The decisions may include opportunities for improvement. For example, the computer may help you decide which alternative is the best. The computer may also help you decide which alternative is the best by comparing the outcomes of the different alternatives. The computer may also help you decide which alternative is the best by comparing the outcomes of the different alternatives. The computer may also help you decide which alternative is the best by comparing the outcomes of the different alternatives.

E. Net present value

Net present value is the difference between the present value of the costs and the present value of the benefits. For example, if you invest $1,000 today and receive $1,500 in one year, the net present value is $500. The net present value is a measure of the benefit of the investment.

Table 3.—Range of useful discount factors.

<table>
<thead>
<tr>
<th>Discount factor</th>
<th>0%</th>
<th>5%</th>
<th>10%</th>
<th>15%</th>
<th>20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present value</td>
<td>1</td>
<td>.909</td>
<td>.826</td>
<td>.751</td>
<td>.681</td>
</tr>
<tr>
<td>Value of money</td>
<td>1</td>
<td>.942</td>
<td>.872</td>
<td>.806</td>
<td>.741</td>
</tr>
<tr>
<td>Value of money</td>
<td>1</td>
<td>.978</td>
<td>.914</td>
<td>.861</td>
<td>.816</td>
</tr>
<tr>
<td>Value of money</td>
<td>1</td>
<td>.985</td>
<td>.934</td>
<td>.893</td>
<td>.853</td>
</tr>
</tbody>
</table>

This particular benefit may extend above and beyond those decisions directly supported by the computer and decisions that you made as a result of your computer system. For example, you may be able to make a decision that you would not have been able to make without the computer system. Similarly, you may be able to make a decision that you would not have been able to make without the computer system.

Finally, computerized communication helps you deal with the uncertainty in the business world. The uncertainty in the business world is often due to the fact that the future is uncertain. The uncertainty in the business world is often due to the fact that the future is uncertain. The uncertainty in the business world is often due to the fact that the future is uncertain. The uncertainty in the business world is often due to the fact that the future is uncertain.

Economic analysis

Economic analysis is a tool used to evaluate the computer system in terms of its costs and benefits. The costs and benefits are evaluated in terms of the expected net present value, and the expected net present value is calculated using the discount factors listed in Table 3.

Table 2.—Present value factors useful in making a benefit-cost analysis

<table>
<thead>
<tr>
<th>Step</th>
<th>Discount factor (%)</th>
<th>Factor</th>
<th>Step</th>
<th>Discount factor (%)</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>0%</td>
<td>1</td>
<td>3.</td>
<td>20%</td>
<td>.800</td>
</tr>
<tr>
<td>2.</td>
<td>5%</td>
<td>.952</td>
<td>4.</td>
<td>25%</td>
<td>.762</td>
</tr>
<tr>
<td>3.</td>
<td>10%</td>
<td>.881</td>
<td>5.</td>
<td>30%</td>
<td>.735</td>
</tr>
<tr>
<td>4.</td>
<td>15%</td>
<td>.800</td>
<td>6.</td>
<td>35%</td>
<td>.691</td>
</tr>
<tr>
<td>5.</td>
<td>20%</td>
<td>.711</td>
<td>7.</td>
<td>40%</td>
<td>.650</td>
</tr>
<tr>
<td>6.</td>
<td>25%</td>
<td>.625</td>
<td>8.</td>
<td>45%</td>
<td>.610</td>
</tr>
</tbody>
</table>

These costs are greater than zero. The expected net present value is the sum of the present values of the benefits and the present values of the costs.

Economic analysis is a tool used to evaluate the computer system in terms of its costs and benefits. The costs and benefits are evaluated in terms of the expected net present value, and the expected net present value is calculated using the discount factors listed in Table 3.
Planning a successful purchase

How sophisticated a system?

The term "computer system" means any system that uses software to assist management. You don’t need to purchase the most sophisticated system available. It’s important to start with a relatively simple system and operate with the basic equipment. Only after you have confidence in the system should you add to it. Practical experience shows that most managers are unable to use complex systems. Experience often shows that managers may recognize inexperience at first.

Time is required

The software takes time (1 to 2 years) to develop the goodwill needed to sell it. Furthermore, the customer must have a reasonable time frame, and may require considerable time to develop a data base that may not exist or will require considerable time to develop. Remember that the computer system is a tool that makes the machines work. The computer cannot do the job itself, but it can be dangerous if these tasks are the primary reason why the manager justified the system. However, it is the software that makes the machines work. The computer installations get out of control, but it will not run the programs manager. In turn, they can become dependent on the computer and not as an aid. In turn, they can become dependent on the computer and not as an aid.

Consider the software

In agricultural computing, farmers often purchase systems that may not last for production systems. There are many reasons why these systems may not last, but the main reason is that it is software that makes the machines work. The computer cannot do the job itself, but it can be dangerous if these tasks are the primary reason why the manager justified the system. However, it is the software that makes the machines work. The computer installations get out of control, but it will not run the programs manager. In turn, they can become dependent on the computer and not as an aid.

Avoiding the common traps

Finally, we have outlined 12 "common traps" that you should avoid in your purchase. However, before you make the purchase, try to obtain information about how to plan for the purchase. We outline 12 "common traps" that you should avoid in your purchase. However, before you make the purchase, try to obtain information about how to plan for the purchase. We outline 12 "common traps" that you should avoid in your purchase. However, before you make the purchase, try to obtain information about how to plan for the purchase. We outline 12 "common traps" that you should avoid in your purchase. However, before you make the purchase, try to obtain information about how to plan for the purchase.