INVESTMENT IN INFORMATION TECHNOLOGY

What is investment?
Investment can be defined as putting in money, effort, time, etc. into something to make a profit out of it or to get some advantage.

What is Technology?
Technology can be defined as the study and knowledge of the practical, especially industrial use of scientific discoveries or advancement.

Information Technology (IT)
Out of different kind of technologies, the Information Technology (IT) is the most important one, which is being widely used in different fields of industries. This is also the fastest changing and growing technology of the day. The IT which is latest and most relevant to-day, will become altogether obsolete and irrelevant tomorrow, as soon as a more advanced version of the same comes to the market.

Investing in IT
As we have seen that IT is a fast changing technology, it becomes a very difficult task for the policy makers of an organization to decide about the investment in IT. There can be two possibilities:

(i) Before investing in IT, wait for the new advance version to be launched in the market, that too at much cheaper price than the present one. By the time a decision is reached regarding investment in IT a further advanced version of IT starts knocking at the door. Thus another postponement is taken regarding the investment. This process goes on and on and ultimately investment in IT never materializes.

(ii) In the second scenario, the policy makers having decided to implement IT in the organization instantly invest on whatever version of IT available in the market at the huge prevailing cost. But soon they realize that whatever they have bought has become obsolete and has become a liability.

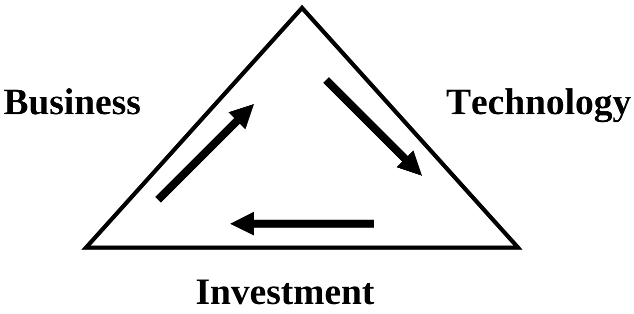
Thus we see that while investing in IT a very balanced and judicious decision is required to be taken by the competent policy makers, who are also essentially required to be IT enabled persons.

Relation ship among Technology, Investment & Business.

In today's global market no industry or business can survive without having latest technology. Technology is the tool through which a business is going to grow Investment is required to buy the technology. Thus we find that there is direct relation among the three:

(i) Technology
(ii) Investment
(iii) Business.

Technology is the major driving force behind the globalization of production and changes in the patterns of business and investment. Investment is seen as a vector of production, technology and business expertise. Business, on the other hand, is seen both as a cause and consequence of increased investment and technological development.



Environmental Shifts & Technological Discontinuity

History tells us out of 500 companies which were there in 1918 only10% of them survived for more than 50 years. Statistics show that 50% of all the new organizations, which are born, go out of business within five years.

Reason:

When we analyze the reasons for these failures, we find that it is the inability to adapt to a rapidly changing environment and the lack of resources. New technologies, new products, and changing public tastes and values put strains on any organization's culture, policies and people working there in.

Technology is a major environmental factor that continuously threatens the existing arrangements. At times, technological changes occur so radically as to constitute a "technological discontinuity", a sharp break in industrial practice that either enhances or destroys the competence of firms in an industry.

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Why should one invest in technology?

(i) Information systems can provide competitive advantage to the firm.
(ii) A consistently strong IT based infrastructure can, over the longer term, play an important strategic roll in the life of the firm.
(iii) Information systems are essential for very existence of the firm.
(iv) Survival of the firm even at a mediocre level demands investment in IT.
(v) Government regulations may require these survival investments.

Importance of IT Investment Portfolio

For the U.S. economy as a whole, the IT investment represents about 25% of all capital investment. Having invested such a huge amount in IT, it becomes obvious to analyze the out come of the same. The foremost question comes to one's mind, is to see whether the firm is receiving a good return on its investment (ROI) in IT or not.

The good R.O.I. can be reflected through various factors, such as:

(i) **Cost saving:** The foremost impact will be felt through the cost reduction of the products of the firm. This is a clear indication of good return on investment.
(ii) **Improved productivity:** The productivity of the employees will increase dramatically and enhance their efficiency. This results into better employer and employee relations.
(iii) **Improved Quality:** There will be appreciable improvement is the quality of the products, thus the products will have decisive edge over other such products available in the market. Due to this factor more and more customers will be attracted towards the products of this firm, which has invested in technology.
(iv) **Able to provide better customer services:** Presently having been equipped with better technology than earlier, the firm is in a position to render much better services to the customers. This will help in creating good will of the firm in the market.

Investment v/s Return:

Now the key question is , the benefits due to the implementation of IT are achieved at what cost ? Has the firm spent too much or too little as compared to other competitors in the field? This is very essential information to know, because this will decide the viability of the firm.

The nature of the benefits may be short-term financial returns, or term strategic positioning, or market share.

A second and altogether different challenge understands precisely how the firm's strategic position is affected by the IT investment.

Many firms recognize that it may be necessary to accept a low financial return on investment for initial few years in order to establish a market dominating strategic position.

The Right Choice:

The key issue, that decides the success of investment in IT, lies on the fact, whether the firm has made the right choice regarding purchase of processor hardware, software, telecommunication and last but not the least the human resources from the various supply markets. Another point is, does the firm have the capability to achieve the business's strategic objectives?

It is obvious that if poor choices are made, there will be very low return on the IT portfolio.

Right choices generally mean being reliable, cost efficient, extendable, and supportable. But right choices also suggest that the infrastructure must support the strategic business interests of the firm. The challenge in addressing these issues is that there are no simple quantitative measures of right choices.

The Evaluation:
The evaluation of the firm investing in IT can be done broadly on the basis of following two types of benefits: (a) Tangible Benefits (b) Intangible Benefit

(a) Tangible Benefits: Tangible benefits are those benefits which can be seen clearly and physically felt, such as:

1) Cost Savings
2) Increased Productivity
3) Low operational costs
4) Reduction in work force
5) Lower computer expenses
6) Lower out side vendor cost
7) Lower Electrical and professional costs
8) Reduction in expenses
9) Reduction in facility costs.

(b) Intangible Benefits: Intangible benefits are those benefits which cannot be seen and have no physical existence but the effects of these benefits can be realized qualitatively, such as:

1) Improved resource control & utilization
2) Improved planning
3) Increased flexibility
4) Timely information
5) More information
6) Increased learning
7) Less legal requirements
8) Enhanced good will of the firm
9) Increased job satisfaction
10) Improved employer – employee relation
11) Improved decision making
12) Improved operations
13) Higher client satisfaction
14) Better corporate image

Conclusion
Thus we see that investment by a firm in technology is a must and need of the hour to survive in today’s highly competitive global market. One can not go on postponing the implementation of technology for a very long time in the hope of getting an advanced one, this will ultimately result in non implementation of the same. It is always better to invest in a judicious way, without waiting a long and go on upgrade the technology as and when required to keep pace with the changing world.

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1. Laudan, Kenneth C. and Laudan, Jane P.; Management Information Systems; Prentice-Hall of India Private Limited; 1998; p 422.
2. Ibid.