

# Measuring return on investment (roi)

[Finance](#), [Investment](#)



Before starting to compare and measure the return of investment for an information system, it is better to define terms such as Information Technology and Return of Investment or ROI. Information technology is a field concerned with the production, manipulation, sharing and transfer of information through the use of electronically-based equipments to satisfy man's needs (Albacea p. 4).

Thus, in this definition we are not just referring to information itself but also for the communication aspects of the information system which is of wide use today. The Return of Investment, on the other hand, includes the costs and benefits in putting up a firm. Mainly, it is more focused on maximizing the benefits of the firm. In dealing with information systems, the definition of the return of investment is better to be extended so as to include not only the tangible but also the intangible benefits a firm or an office can derive in establishing their own information system (Grimes).

To make a clear measurement of the ROI, let us have only two groups of consideration. Since most of the websites on the internet are focused only on either commercial or information sake, then we shall consider the firms that invest in utilizing information systems for commercial purposes and the other ones are those that utilize the information system for information sake such as the government.

In the first category, measuring the cost of building an information-related investment such as websites for selling or doing e-commerce can be clearly seen. E-commerce is an innovation in the information technology where consumers can transact with sellers using only information system (Albacea p. 256). Since the cost for hiring a programmer, for example, in creating a

<https://assignbuster.com/measuring-return-on-investment-roi/>

website for a commercial firm, the hardware and other features such as searching or blog which can be brought through licensing are known, then the total cost of establishing this set up can be computed and is just can be known by making a total of all of the expenses and efforts.

The other part, which is computing the benefits, is rather the difficult part of it. This may be the reason why business owners and IT leaders are not interested in knowing or having a precise or definite benefit evaluation or effectiveness after they had made a website or an e-commerce page. According to Mary K. Pratt of the Computerworld of US in one of her features, the ROI for a website must be necessarily measured.

She justified the ROI is truly measurable, and that those companies that are not measuring it doesn't really concern of what their money's worth. She takes, for example, Kia Motors. Kia Motors has for their websites visitor and mostly, what their basis of ranking is on the probability or likelihood of the customer to purchase a motor. They said that those that are downloading their white page are more likely to purchase a motor than those that only browse through their homepage.

They can also measure the benefits on how advertisements on the Internet have changed their production and gross profit. If they see that they had made an advertisement on the Internet but has no increase on the sales, assuming all other factors are held constant, then the information-based technique they use is ineffective.

Since ROI's concern is in costs and benefits, we should also take the advantages of having information related systems than not having any. For

example, we can measure how we can save money by replacing the paper ads or printed documents by the electronic version.

About 18%, according to the analysts, of the printed document of a business firm becomes expired or not updated after just seven days or a week-long of time. Thus, after this period, they must be replaced by the updated ones. On the other hand, updating publications on the web will cost less than updating the printed ones (McGrath). Hence, this is one way of showing how information systems can cause a movement of the computation of the ROI.

For the firms that utilizes the information system for commercial purposes, ROI can be measured in this way – the cost or the expenses can be easily calculated by just summing up the expenses made in putting up or establishing an electronic-based project, and the benefits, though not clearly seen, can be calculated by taking into consideration its effect on the business and how it can cut costs for the establishment.

Now, let us look at the second category which is the firms or offices that utilizes information system for information-sake. The most common example for this category is the government. Usually, included in their budget is the allocation for having information systems that are helpful for public. If the benefits in the commercial-related are not clearly seen, here in the second category, the benefits are even more difficult to measure.

Take United States for example. According to Center for Technology of Government at the University of Albany, even after some years of having information system exclusive for government information, the return of

investment for this particular project is uncertain and is very hard to put in numbers (ctg. albany. edu...PrintVersion= 1). Why is this so?

Similar to the first category, the input resources for putting up or for the establishment of the information system to be used by the government can be readily computed for this is only the sum of all the expenses needed in the establishment. This will surely includes the wages or salaries of the personnel involved, the purchases made, and other licensing expenses.

Government usually has its websites for its departments to ensure that the public will be well informed of national issues and information that are of public concern or the public can have great use of them. Again, return of investment is concern with the cost and the benefits. Now, how can we measure the benefits? If the members of the first categories' benefits can be measured by seeing the effect of the system to their business, government's measurement of the benefits is a lot more different.

Remember that the benefits as defined earlier simultaneously with the Return of Investment don't only include the tangible benefits but also the non-tangible ones. Thus, looking at the example earlier, the government has its own way of measuring the benefits. They had a standard assessment technique that gives results whether their investments or efforts in putting up the information system dedicated to serve the public has a significant effect or just a waste of time, effort and money (Grimes).

This assessment technique needs some adjustments as justified by the Center of Technology for Government. This leads them to propose the Public Value Framework (Cresswell). The Public Value Framework emphasizes the

role and importance of the public in assessing the performance of the information system used by the government. Unlike the previous system where only the government are responsible for the evaluation done, the second system or the Public Value Framework will give power for the public in assessments.

Therefore, for the firms or offices that utilize information system for information sake, like the first one, they had a clear computation for cost but a rather difficult computation for benefits. The ROI can be computed by computing the cost through obtaining the summation of all the expenses and the benefits can be seen on the effects or how their objectives of putting up the system are fulfilled. That is, if the public has more satisfaction in using the system established by the government, then the government's return of investment is indeed higher.

In general, measuring the return of investment for an information system is not an easy task because of the complexity on the non-tangible benefits it has to offer, even if the cost of establishing the information system is clearly and be easily computed. In the end, the basis of the measurement of the return of investment is still in how it would affect the entities it is intended to be useful for or how the goals or objectives of a firm who puts up the system is attained or become more possible. It is recommended that more studies be made to make a standard basis for computation of the return of investment even if it has to involve many factors that are hard to put in numbers.

## References

<https://assignbuster.com/measuring-return-on-investment-roi/>

Pratt, Mary K.( May 28, 2007) “ Measuring Your Website’s Return of Investment.” Business TechnologyLeadership. 6 July 2007. .

Cresswell, Anthony M, et al. (September 2006). Advancing Return of Investment Analysis for Government IT. 6 July 2007

Grimes, Brad and Joab Jackson. (September 2006). What’s you IT investment worth –really? 6 July 2007

Center for Technology in Government. 6 July 2007

McGrath, George and Anthony Schneider. Measuring Intranet Return On Investment. 6 July 2007.

Albacea, Eliezer A. Information Technology Literacy I. UPLB, Philippines: UPLB Foundation, Inc. 2005.