

ABSTRACT

The Picture Archival Communication System (PACS) is a very useful system that can replace the conventional X-ray system. It is the high technological combination of computers and electronics, particularly with the concept of making filmless diagnostic images, or softcopy. While images can be archived as medical records and used for communicating among people involved. The PACS can not only make tremendous cost saving compared with the existing system, but also efficiently and effectively enhance diagnosis imaging.

The feasibility study of the PACS application in Thailand was conducted through cooperation with many people involved with the PACS project in hospitals. The results of the analysis were obtained through the gathering of pertinent information and the adoption of suitable solutions to find out whether or not it is worth the investment and, the study of how it can be efficiently and effectively used.

The cost analysis in engineering economy is used to analyze feasibility of the investment on the PACS, and analysis results show that PACS is a worthy investment. Hospitals will gain a lot of benefits from PACS compared with that of the existing system. However, there are some barriers of having PACS in Thailand, such as lack of budgets for the investment, lack of expertise in this field, resistance from people using the existing system, etc. The PACS in Thailand should be implemented under the cooperation from many hospitals and organizations involved to make it become synergy.