

Information Technology Framework for Higher Educational Institutions



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ABSTRACT: *In this work, we have prepared a framework and design for developing an information system that will work in higher educational institutions. We have identified a particular institution for case study. The lessons learned from our study will be very significant as it leads not only to digitize the particular institution, but can help to generalize and expand to other institutions.*

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1. Introduction

There are several goals which aim to achieve in this paper, we consider that some of the main goals are to provide a good basis to meet the theoretical knowledge on the use of computing systems and their impact on decision making.

To determine the level of fulfilling needs of managers with information processed by the computing system should:

1. Knowing the process of six stages of decision making,
2. Identifying the types of decisions,
3. Difference of qualitative and quantitative factors of decision making, and
4. Identifying potential problems of decision.

Century XX, especially the last two decades recorded an exponential growth in the use of information technology and information systems.

Information systems are tools without which there can be thought of the business of enterprises. This technology is being applied in the field of education and making decisions today can't be assumed and is not successful without the support of information systems.

Use of information systems in order to support the process of making management decisions will be our main objective, we focus particularly on Higher Education with special emphasis on the University of Pristina.

In the first part of the paper an introduction to paper is provided and research goals and hypotheses are presented. Also, access is provided within the methodology used in preparing this paper.

In the second part of paper we will discussed about using information system and its importance. It provides basic notions about computing system, the concept of computing system, computing system components, types of computing systems and it will present the role and importance of information system as a processor of information.

2. Problem

2.1 Advantages of using Computing System in Higher Education and the University of Pristine

This section specifies the main features that higher education system should have in order to realize the vision and mission and to meet the challenges presented in introduction.

Are defined six key aspects which will be subject to transformation, reform and development, and six main objectives?

It is believed that transformation, reform and development provided in these areas will bring a more quality, more efficient and that will be comparable and harmonized with European standards.

The issue of quality assurance and its monitoring has become an important element in higher education policy at the present time.

Quality issue in higher education is dictated by national needs and the trend to internationalization of higher education.

This interest and concern about quality assurance stems from a broader context of social, political, economic.

2.2 Higher Education Institutions are Responsible before to Society and must Demonstrate that they are making Possible Efforts to Better use Resources Effectively Entrusted

In this context quality is foreseen as one of the key principles that will support the development of higher education in Kosovo in the next decade.

The ultimate goal of the proposed measures for this area is to achieve a quality comparable with European standards.

Investments in physical and academic infrastructure by international donors and financial means in the postwar period resulted primarily offer enriching academic programs in quantitative terms, but not in increasing the quality of work in higher education institutions.

Considered that such a disagreement between the investments made and results achieved is largely caused by the evident weaknesses in the management of higher education institutions and of the higher education system.

Nowadays, the operation of a changing environment and requirements, in terms of competition at national and regional level, it is necessary that higher education to have an entrepreneurial and market oriented approach.

Without an effective coordination and management, the development of a higher education system that functions to increase the welfare of society can't be imagine.

Implementation of an Integrated Management Information System on the campuses of universities and higher education has become very important in the XXI century, for contributing to sustainable development and affects the institution to increase

the quality levels of all campuses the university.

Integrated Management Information System not only affects the constant improvement of the institution, but also increases public awareness about the new management system which would be a good model to use effective rules and efficient management.

So, Integrated Management Information System is a management system which integrates all the institution's systems and processes them into a comprehensive institution giving such an opportunity to work as a cohesive unit objectives.

2.3 The Integrated System makes a Completely unified Organization, with each Function listed after a Single Goal, thus improving the Presentation of the Whole Organization

Integrated Management Information System is designed in a way which provides a clear overall picture, of all aspects of the university, as these aspects affect each other and their associated risks.

Integrated Management for University Computing System is designed in order to bring solutions and measurable results by developing appropriate and state of the art applications in flexible collaborative approach to students, teaching staff, and workers in general and all persons involved in the university.

Integrated Management Information System as the university has developed into a way to integrate a suite of applications and databases that allow the university to perform administrative and educational duties in a very effective, efficient and very organized way.

Integrated Management Information System can modernize the university system, may enable to reduce the burdens of daily day to improve the quality of services for students, to bring new digital services that are relevant to the university, and last but great importance brings a full integration with all applicable systems.

Integrated Management Information System also offers data and systems with very fast connection possibilities, also has an automation of the administrative work of students, academic and administrative things, simplifying the form of parameters and finally the system provides support to technical things.

The Campus management system is considered to be the perfect solution for creating an administrative system management platform for students and academics to communicate and express their thoughts.

The Campus management system is designed in such a way that the university provide solutions portfolio also provides a system which integrates all the functions and activities of a university in a single platform.

3. Results

3.1 The Current Situation of using Computing System at the University of Prishtina

The Office of Information Technology at the University of Prishtina has key role to set standards and to provide electronic services, arranges and coordinates the process of regeneration and investment in information technology in all academic units and administration central.

However, the use of computing systems at the University of Prishtina was accompanied by several problems and difficulties which are usually present in the initial stages of information system development.

Not forgetting the previous period in which we have been in the past we can't say that these obstacles were overcome after each period has its own challenges.

Especially, we should mention that in the field of Information Technology there are problems inherited from previous periods.

3.2 Empiric Research Results on the Impact of Information Technology in the Decision making Process in Higher Education, with Particular emphasis at the University of Prishtina

In order to research the impact of Managing Information System in Higher Education with special emphasis on the University of Pristina for the purpose of this paper is a survey conducted by different respondents of different levels at the University of Pristina. Of the total 10 respondents interviewed all respondents answered positively.

1. When asked, the users of computing system in work processes in the University of Pristina, the 10 questionnaires that were made with 70% of respondents have answered yes, while 30% have answered NO.
2. When asked, do you know about the impact of information processed by the computing system in making decisions and how you use them at the University of Pristina, 90% of respondents answered regarding the importance of using the information processed by the computing system the decision making process, while a small percentage (10%) resulted to have had no knowledge regarding the impact of information processed by the Managing Information System in making decisions.
3. On the question, What is the nature of the works in which the use computing system, provided these answers: 50% of respondents answered that the computing system technology used in daily activities, 20% of them said they used the routine work, 30% of respondents answered that the computing system used in finance and accounting, and 10% in decision making.
4. When asked, What are your acquaintances on the application of information technology in University of Pristina, 80% of respondents answered that possess good knowledge in terms of technology use informatics while 20% of them responded well know that on average use of this technology, since there has been no response to their acquaintances are weak.
5. When asked, By what year you started to use computer system at the University of Pristina?
Research shows that: 20% of respondent's answer that the use of Information Systems in University of Pristina has begun since 2006, and 80% of respondents answered that the use of Information System at the University of Pristina began in 2010.
6. The question, Do you think that the computing system allows performing more effectively and making quality decisions, the respondents ranked this way: 90% of respondents think that the computing system enables the effective execution of the works, while 10% of respondents answered no, not sure about this attitude of the respondents.
7. On the question, What use management structure computing system at the University Pristina, 10% of respondents answered senior management, 40% of them responded middle management. And 50% consider how low management use this system shows that the use of computing at the University of Pristina little used by senior management while the other two management levels such as middle management 50% and low 40% use more of this technology.

4. Conclusion

This paper is based on scientific and professional literature in the field of Management Information System and decision making are also used methods of analysis.

In the first, paper provides an introduction of the treated problem, purpose of research and methodology used.

Based on interviews and survey results we can conclude that the practice of using computing system at the University of Pristina in terms of 10 years has begun a major application of information system. While the level of computing system development in recent time steps begin development soon.

In general browsing interviews conducted in the relevant respondent have observed that the University of Pristina after the application of computing systems have been:

- a. Management easier.
- b. Facilitation of work and
- c. Internal organization of work.

University funding should be clear, consistent and transparent.

Universities should be informed of their budget at least eight months before to create certainty and to enable forward

planning.

It is not possible to increase the number of students without expanding the human and physical capacities of institutions of higher education. While some sources may be raised by student contributions, additional resources must come from the other state higher education system will be seriously threatened.

Universities should be encouraged to develop alternative sources of funding and should have full autonomy in the use of these funds. Faculties should have autonomy in the use of funds that they generate.

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