

ABSTRACT

In order to rise nations, the community expectations from the system of higher education must fulfil regarding to the quality of the universities' graduates depending on market needs. A good funding methods should be adopted in order to enhancement of the performance-based management practices. Decisive actions need to be taken towards the realisation of national goals and the improvement of institutional responsiveness and system cost-effectiveness.

This research began with the critical review of all relevant literature that emphasizes the interplayed factors influencing the quality of education in universities and used modelling techniques for quality management in the educational sector. Universities' managerialization significantly influence the education's quality, which interested with the preface of significant amendments in the processes of decision-making administrating the institutions' academic, and the use of new information systems in alignment with new administrative methods to streamline the tactical organizational connections with its stakeholders.

The provision of facilities acts as the essential element in selecting to apply to a specific university in students' perspective. Hence, Egyptian's Universities facilities were formed to create the measuring criteria for the influence of Egyptian Higher Education institutions resources' regarding to education system context through enhancement the experience of student. A primary research was conducted by devising a questionnaire to evaluate the prominence of universities' facilities in accordance to the value that the universities consumed in the allocated financial budget. It was sent to the departments' heads of logistics and finance in Egyptian universities which divided into forty three universities, twenty of them are public and twenty-three are private, for the purpose of the criteria recognition of the most prevailing university's facilities that promote or create a value-add to the quality of education.

System Dynamics was selected as the appropriate modelling simulating tool for this exploratory study into better allocation of resources in facilities management. System Dynamics approach has been utilized in attaining excellent interpretation of the complex dynamic behaviour of education for achieving higher education systems improvements because of its ability to catch the influence of long-term management policies. Based upon the regression analysis produced from the pilot questionnaire, a System Dynamics Model was constructed that includes the main facilities which most of the decision makers agreed on their significance.

The generic proposed model was evaluated by means of its public application's and another non public (private) university in Egyptian as a case study and ultimately it can be adopted on the sector of education for the reason of enhancing the education's perceived quality. After model assessment process, the best practice combination of budget used up by the facilities could be accomplished will resulting in increase of the quality of the service provided by means of comparing the effects of different budget assignments on the estimated quality. Thus, better strategies for facilities management are recognised through the thorough insight into the components' of facilities service that considered be most prioritised in importance considering its long-term impact on the perceived quality of the education system and its improvement in Egyptian universities. A set of recommendations are produced for the policy makers in Egyptian universities for better allocation of facilities with limited resources.