

**Controlled Free Choice Method:
A Proposal for a New Undergraduate Major Selection Policy
at
King Fahd University of Petroleum & Minerals (KFUPM)**

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Abstract

The prevalent undergraduate major selection at KFUPM mostly depends on the student's choice regardless of academic abilities and qualifications. Due to the adoption of this Free Choice Method (FCM), the number of students will continue to grow and external pressures at the national level may force the university to expand the admission intake every year, making it very difficult to expand and cut back programs as before. The accumulated effects threaten inefficiencies such as underutilization of some departments and majors. To address the immediate and subsequent negative impacts of FCM this research proposes a Controlled Free Choice Method (CFCM) to ensure proper utilization of existing resources, reflect national needs in determining departmental capacities and stimulate student performance. The CFCM is based on both student performance and preferences plus a cutoff GPA obtained in the orientation level in specific courses or all courses for each department. Under this procedure, departmental capacity will be determined prior to intake thus maintaining the proactive nature of this approach. Finally, the CFCM is evaluated with respect to the limited scale responses of individual departments and colleges.

Key Words: Curriculum Management. Student Choice; Controlled Free Choice Method; Undergraduate Education. Saudi Arabia.

Customer Satisfaction Measurement of the University Library Users: King Fahd University of Petroleum & Minerals Case Study

Dr. Adel Al-Dosary & Mohammed Ayub

ABSTRACT

Academic libraries have been described as the heart of the University as they support the institution's activities to foster excellence throughout all academic programs. Library system's strength and vigor feed the many divergent fields of learning and provide numerous services to students. The library service is an integral part of the academic activities of both the faculty members and students. A library is good or great, not because of the volumes it has, but because it is used by people who derive personal benefit from its use and who produce something as a result of its use that will benefit civilization. The main aim of this study is to know the user satisfaction of library facilities and services with Students/Visitor/others, of the King Fahd University of Petroleum and Minerals (KFUPM). The study uses a fill in questionnaire survey distributed in the library. The results should help in planning for improvements.

KEY WORDS: KFUPM LIBRARY, SURVEY, PLANNING, USER SATISFACTION.

The Labor Market Impact on the Students Selection of College Majors

BY

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ABSTRACT

It is widely believed that jobs, employment opportunities and salary brackets after graduation are the most influencing factors, among others, in the selection of college majors by newly admitted students. This selection has a major impact on the individual, his family, and the country at large. This study was conducted on 412 newly admitted students at King Fahd University of Petroleum and Minerals, and on 35 students who selected a major in the College of Environmental Design. The study revealed that the most important factors on the whole, were job availability, prospective salary, social status and prestige of the major in that order. It also revealed that peer and family pressure has little influence on the students in selecting their majors. However, there seem to be some evidence to support the hypothesis that once a college major has been declared, the reasons for its selection are different than those outlined earlier. These were found to be, interest in the major as the most outstanding factor, with personal ability, job availability, salary and prestige of the profession coming later in that order. Universities having low enrollment in certain programs could focus in their advertising to prospective students, on these factors to make such programs more appealing. These findings were found to be statistically significant at high levels of sensitivity, using three different statistical tests, two non parametric and one parametric.

Assessment of the Existing Free Choice Undergraduate Major Selection Scheme and a Proposed Controlled Free Choice Scheme at KFUPM

**Dr. Adel S. Al-Dosary
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Abstract

The existing undergraduate major selection scheme at King Fahd University of Petroleum & Minerals (KFUPM) produces inefficiencies in terms of departmental resources. The paper reports the results of a survey of 447 students to analyze the existing Free Choice (FC) scheme and provide suggestions for Proposed Controlled Free Choice (CFC) scheme. The CFC scheme will enable KFUPM to optimize its intake and utilize the existing resources more efficiently and fairly. But the implementation of CFC scheme will be resisted because it is a major shift from a scheme that is ingrained in the history and culture of this institution.

Overview of GIS Implementation by Public Institutions in Saudi Arabia

Abstract

The write-up presents a commentary on the status of GIS Use in Saudi Arabia through an overview of GIS implementation by public institutions. The paper is the product of a survey of GIS implementation carried out as part of a broader study of GIS use in Saudi Arabia. The overview examines organizations implementing GIS, their types of uses, the GIS systems they use and the implementation issues they had to contend with. Based on the overview the paper concludes on the trend of GIS Use in Saudi Arabia.

The Development of Internet GIS as a Facilities Management Tool

From the current practices, it has been recognized that Internet GIS is one of the latest trends in internet. The integration of GIS with the Internet is an inevitable, rapidly growing trend into the future. The tremendous growth in Internet use has resulted in an increased demand for the delivery of geographic data, maps, and other related applications over the Internet. In addition, the Internet's ability to reach a wider audience has important impacts on GIS users, developers, and institutions. The research will try to analyze the usefulness of internet GIS for accessing distributed spatial data and conducting GIS processing and spatial modeling. It will try to see the benefits of internet GIS in removing geographical and physical constraints encountered by the different organizations and professionals. This study also gives us a research insight into the applicability of Web-based GIS in developing open spatial decision supporting systems as a tool for decision-making process in solving spatial problems.

Key Words: Internet GIS, GIS, Web Based GIS, GIS and Facilities Management

Principles for the Rejuvenation of an Islamic City in the Modern Context – *The Case of Medina of Tunis*

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Abstract

The project aims to look at some of the contemporary issues facing the 'Islamic city', and in this context, the study ponders on the historical transformations of Islamic cities with focus on the time phase from where the decline started. The attempt is to ascertain the causes and factors responsible for this rapid and unprecedented change, as also the patterns of change over a period of time. Consequently, the study has tried to identify some of the negative aspects of transformations incurred during this period, as it is the negative patterns, which are of concern to us. This was mainly done through study of a carefully selected case study of the 'Medina of Tunis'.

Finally, the study has recommended a set of abstract principles to guide future growth with emphasis on control and checking of negative transformations and attempt is to look for solutions for balancing the situation in a way, to retain and rejuvenate the essence of Islamic city in the contemporary context.

Effectiveness of the Organization Structure of Construction Firms in Saudi Arabia

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Abstract

The objectives of this study are first to identify the organization structure types most commonly used by Saudi construction contractors, second to evaluate the implemented structure types that work with or against effectiveness factors and, third to recommend the structure that is fitting contractors' business size challenging the environmental influence, considering employees motivation, team cohesiveness, enhancing communications with properly setting means of control. The data were collected through a structured questionnaire from 43 responses as sample size out of 150 as sample population of Saudi based construction contractors. The contractors were divided into two sizes, medium and large based on their manpower strength. The data were analyzed using SAS software, and the agreement index values were calculated and presented in tabulated format. The study revealed that functional structure is appropriate for small business size contractors, project structure is appropriate for medium business size contractors, and matrix structure is appropriate for large business size contractors. The study of all participating construction contractors also suggests that the structure design is probably contributing to serious problems to some of the effectiveness factors. The functional structure users should therefore make it easy to get the skills needed to progress, to give employees flexibility over the pace of their work, to be flexible to adapt to most changes, and to share information openly. Furthermore the study recommends to the project structure users to redesign their structure to eliminate boundaries between departments, for matrix structure users to give employees flexibility over the pace of their work.

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*Web Survey Instrument Design for the measurement of Satisfaction of the
Faculties and Staffs in the housing compound of KFUPM campus*

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Abstract

The concept of Private Housing Compound in the Kingdom of Saudi Arabia didn't get initiated long time ago. Same thing happened to the research on the satisfaction level of the residents of the private housing compound especially in a multicultural university campus. This project comes forward to take care of this issue by developing a questionnaire for web-survey. It is designed in such a way that it can find out the satisfaction level and the key factors of it. By conducting complete survey the concerned authority will be able to take care of overall satisfaction level of the residents. For the sake of testing this web-survey a pilot study was conducted. But unfortunately, it failed to produce any significant outcomes because of the insufficient responses. However, the experience of the preparation of this survey along with the literature review helped to modify the questionnaire after the pilot study and to formulate recommendations for the same sort of studies.

Higher Education System Output Quality Assessment: a case study of Alumni Evaluation of Academic Programs in Saudi Arabia

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Abstract

The College of Environmental Design (CED) at King Fahd University of Petroleum & Minerals (KFUPM) held an open meeting with its Alumni, and a survey was conducted among these Alumni to solicit their assessment of the college programs. 97 Survey forms were distributed to registered Alumni who attended the event, and 45 forms were received back from them (46.4% response rate). This research paper reports on the analysis of this survey. The results show that Saudi Arabia is accelerating its development procedures in all levels with the priority towards the human resources development. On account of which, the government of Saudi Arabia established schools, universities, and training centers in every city around the kingdom. The augmented reliance on the rising foreign workforce is creating unemployment among the Saudi labor. The emphasis of this research is to explore the reasons behind the employer demands for foreign labors, and demand for skilled labors. This is concluded by making a few recommendations aimed at protecting the local workforce from unemployment.

Determining Affordable Housing Stocks in Administrative Areas, Saudi Arabia

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ABSTRACT

This project determines the affordable housing units for the projected population of Saudi Arabia by administrative regions (i.e., 13 regions) for a period of 20 years (i.e. 2005-2025). This study reviewed the available models in the literature to forecast the affordable housing needs in general and to find out their potential use in forecasting the affordable housing needs in the kingdom specifically. Lastly, The Housing/Land Needs Model developed by the Oregon Housing and Community Services Department, was customized for the kingdom of Saudi Arabia. The main data source for the study was Census publications provided by the Central Department of Statistics (CDS) and Final Report on Estimation of Numbers, Areas, and Types of Houses in the Kingdom of Saudi Arabia for the Next Twenty Years by Dr. Fahad Nwassar Al-Hargi, Dr. Adnan Abdullah Al-Sheha and Dr. Jamaluddeen Yousef Salaghor; Project number AD-20-19, King Abdulaziz City for Science and Technology (KACST). Different scenarios were run on the model to test the various assumptions about the study area and its future economic development and/or demographic composition. For each scenario, the model and its underlying methodology generate a series of tables and graphs that represent the model's outputs.

Finally the model was run for the available census data for all the thirteen administrative regions. The customized model is expected to help the local governing authorities to plan for future affordable housing needs. Geographic Information System (GIS) has been used in this project to provide a better understanding of the study area, which also provides an interactive and easy method for viewing statistical data and results.

