IMPLEMENTATION OF ENTERPRISE RESOURCE PLANNING PROJECTS AND THEIR RANKING

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Abstract

The implementation of Enterprise Resource Planning (ERP) projects is in need of large investment. Reports are indicative of the fact that the execution of a considerable number of such projects has failed. Studies show that the aim of rapid implementation in such projects has not been achieved and, naturally, the failure of fundamental goals in these projects has imposed huge costs upon the investors. On the other hand, these failures have been the cause of elimination of the markets for such products, as well as skepticism among managers and investors about their advantages. This has recently led to researchers carrying out some studies on the identification of the critical success factors in implementing such projects. Although each of the conducted researches has placed emphasis on some particular axes, there is no summing–up regarding these factors, in the form of a guidebook, to be used by the project managers. This paper seeks to compare and evaluate various models of studying the critical success factors in the implementation of ERP projects. The comparison of such models has resulted in presenting the common and basic criteria, which have been emphasized in all the related approaches, as a guidebook. Statistical experiments performed on the data, which are acquired by questionnaires and interviews with Information and Communication Technology experts, approve the effect of the factors introduced by the literature models. However, considering the circumstances of the country and expected differences in ranking and importance of the factors, a customized model for critical success factors in ERP projects is presented.

Regarding the recent presence of such systems in Iran's market, it is of great importance that the investors and project managers pay attention to the provided critical success factors.

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A DELIBERATION ON ECONOMIC GLOBALIZATION

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Abstract

It is more than two decades now that economic globalization has been purporting to bring about economic development, creating jobs and higher standards of living. Opponents of globalization, on the other hand, are claiming that it increases inequality, threatens employment and living standards. After two decades or so, the process of economic globalization and the consequences it has produced are placed under scrutiny. It is derived that the world's income distribution has become more unequal, the number of people in absolute poverty has increased, and many jobs have been lost.

significant elements in explaining the behavior of the informal economy.

THE EFFECTIVE DETERMINTANTS FOR ENCOURAGING FOREIGN DIRECT INVESTMENT: LESSONS FOR THE ECONOMY OF IRAN

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Abstract

Today, foreign direct investment is known as one of the best methods for the financing of investment projects. Using FDI also has other objectives such as technological, managerial and educational capibilities promotion, developing of exports markets, improving the standard of domestic productions, and moving toward the market economy. In this regard, it is the function of goverments to help the dynamic of domestic industries and entrepreneurs for attracting the participation of foreign investors and technology suppliers.

This paper has a look on the performance of FDI in the world economy and recognizes the prerequisites for attracting FDI. The results from the estimation of different models for explaining the FDI inflow to developing countries indicate the possitive effects of economic growth and economic freedom and the negative effects of high wages and high financial, political and economic risks. Human capital is not significant alone, but it could be determinant in interaction with FDI inward stock. This important fact illustrates that human capital in host developing countries, with desirable investment conditions, prepares a basis for attracting FDI. Based on the results, some recommendations are presented for development of the national FDI policies in the economy of Iran.

DESIGNING A PRODUCTION DECISION SUPPORT SYSTEM (DSS) AS A USEFUL TOOL IN MANAGEMENT OF PRODUCTION COMPANIES

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Abstract

A Decision Support System (DSS) can help the manager to make more accurate and quick decisions in solving semi-structured and non-structured problems. This facilitates simulating a physical system by using a conceptual system, on the basis of physical data collecting, which are related to the system. The application of groupware makes some suggestions to the managers to make the best decision. Important parts of each company are the production and sales departments and the most important activity of the top managers is the programming for appropriate production in an appropriate time. Considering the complexity of decision making concerning the time and amount of orders and purchasing, this software can help managers to make better decisions in this matter.

DETERMINING THE SIGNIFICANT FACTORS AFFECTING THE QUALITY CHARACTERISTICS OF WATER REGULATORS USING DESIGN OF EXPERIMENTS

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Abstract

In water regulator manufacturing companies, the forge die, in one hand, is one of the most important factor affecting the quality of the produced items. On the other hand, the design and production of these dies is very time consuming and requires an expensive process. In this paper, the factors that affect die performance, in term of the number of good water regulators produced, are recognized and the factor levels are determined such that the die life is maximized. The experiments were performed through an un-replicated 2^4 factorial design.

THE STUDY OF THE CRITICAL SUCCESS FACTORS IN THE

EWMA residuals chart is the best and for positive auto-correlation it is best to choose the EWMA chart of the modified residuals. Finally, an algorithm was proposed to control AR(1) and AR(2) data. This algorithm was implemented to a real-world problem and the results were reported.

A NEW MATHEMATICAL MODEL FOR MANPOWER SCHEDULING SOLVED BY GENETIC ALGORITHMS

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Abstract
Scheduling is vital and significant for any event and operation in any system. Thus, there is a need to use all resources efficiently and effectively. In this paper, a new mathematical model of a manpower scheduling problem is presented, which is a class of production planning, in such a way that costs are minimized and resource utilization is maximized. In this proposed model, three main elements are taken into consideration, as follows: personnel, work shift and the associated costs. In this manpower scheduling problem, a number of parameter settings and different variables are defined in order to solve the problem. Due to its NP-hard problem, it is difficult to solve such a problem by traditional optimization tools and available computer packages in reasonabe computational time. Thus, in this paper, a meta-heuristic method, based on genetic algorithms, is proposed. To evaluate the efficiency of the proposed method, a number of test problems are carried out and the associated results are reported.

ORGANIZATIONAL ASSESSMENT THOUGH METAPHORS

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Abstract
There are many different theories which help us gain knowledge about organizations and their management states. Each of them help us see a particular organization from a different point of view. So, one can say that each theory has a metaphor as its building block.

This article is focused on developing a method to quantify "reading" organizations through metaphors.

Metaphors have been discussed much in management literature, but there are only a few studies available trying to gratify metaphors in order to measure the degree of its accordance with an organization. In order to deepen knowledge about organizations through metaphors, several stages have to be passed; first an initial reading of the organization under study is needed. The organization is analyzed through each metaphor, then, the main metaphor, which best describes the nature of the organization, is selected. Some auxiliary metaphors are also needed to help one get a full understanding, from different points of view, of the organization under study. A storyline is made, based on these metaphors. This storyline shows the best position of the organization and the way to achieve it. This article is mainly focused on developing a checklist for each metaphor to assess the organization through it. These checklists have been developed for three metaphors: "machine", "organization" and "brain" and have been tested on two IT-based organizations.

INFORMAL ECONOMY: CAUSES, IMPACTS ON THE FORMAL SECTOR AND METHODS OF ESTIMATION

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Abstract
In this paper, in the first part, we have reviewed the literature on the informal economy form the point of veiw of the causes, impacts on the formal sector and methods of estimation. In the second part, by using a cross - country econometric model, consisted of 63 countries, we have worked on the determinats of the size informal economy. The results indicate that, the tax burden, regulation intensity, government intervention, corruption and rent-seeking are

ABSTRACTS OF PAPERS IN ENGLISH

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DESIGNING A RECIPROCATING WATER WELL PUMP POWERED BY WIND ENERGY

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Abstract

There exist various ways to extract water from a well and transfer it to farmland. This work attempts to design a reciprocating pump, which utilizes wind energy to extract and transfer water. Due to its efficiency, in terms of low operating costs, this method, once operational, would be capable of transferring water from a well to the point of consumption on farmland. A complete description of the design features, along with all the relevant documents, will be presented in this article.

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STATISTICAL PROCESS CONTROL FOR CORRELATED DATA: A CASE STUDY

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Abstract

In statistical process control, traditionally, the assumption is made that successive observations of a quality characteristic are independently distributed. However, in practice, the observations are often serially correlated. This point has received considerable attention in the literature in the last decade and the modified Shewhart and the residuals charts have been proposed to deal with this situation. In this paper, it is investigated how well these control charts are able to detect a shift in the mean of AR(1) and AR(2) data. It is shown that for negative auto-conrrelation, the residuals chart is the better of these two and, for positive auto-correlation, it is better to choose the modified shewhart chart. Then, a modification of the residuals chart was made that outperforms both charts in the case of positive auto-correlation. Moreover, in order to improve the performance of the existing control charts, three kinds of control charts namely modified EWMA, EWMA residuals and EWMA of modified residuals were developed, . Through a simulation study, it is shown that, in terms of negative auto -correlation, the