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Multi-Objective Optimization with Real Coded Genetic Algorithm for Enhancing Performance of Tea Industry

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Abstract

Real Coded Genetic Algorithm handles the alleles by areal number in comparison to Canonical Genetic Algorithm which handles them by binary numbers. RCGA (Real Coded Genetic Algorithm) is closer to real world problems. In this paper, RCGA has been implemented in MATLAB. The data for a Terai Tea Estate is collected from Tea Board. Two ratio functions have identified to characterize the problems of Tea Estates. The coefficients of the model have been derived by Regression Analysis on historical data using R programming. Improvement of these functions will inherently improve the performance of the organization. The principles of Multi-Objective Optimizations have been used to optimize the twoobjective functions. The most generic way in MOOP is Genetic Algorithm. Here RCGA is used to optimize the bi-objective function. The results are also presented with intermediate steps.

Keywords: MOOP, Genetic Algorithm, Regression, Tea, Evolutionary

Innate Skills, Social Skills, Employee Behaviour and the probable outcome

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Abstract

Organizations endeavour to foster work environments where positivity dominates and disruptive factors are negated leading to higher productivity and focused service orientation. Ensuring positivity essentially boils down to a choice of hiring personnel skilled in comprehending and controlling personal emotions; recognizing and appreciating those of associates and, through this expertise, ensuring an environment where the system functions better by nurturing success of all those who are part of it. The present study, based on an emerging country namely India, deviates from traditional approaches by focusing on non-cognitive rather than cognitive skills to explain and predict performances and accomplishment. It finds people efficient in selective intrinsic non-cognitive skills like trustworthiness, conscientiousness, adaptability, initiative and commitment to have better chance to emerge as effective leaders with enhanced service-orientation, empathy and skills of managing conflicts; outcomes desired by any organization striving for efficiency. Further, females, service-holders, high-income earners, people in their middle ages and degree holders in technical field have better probabilities to excel. However, while such imponderable, innate skills matter, discernable social skills cannot give proxy for them. Hence, effective hiring strategies must focus on behavioural competence along with cognitive skills. Staff development programmes offering opportunities to enhance such skills might improve workplace environment further.

Keywords: Non-cognitive skills, Social skills, Workplace success, Bivariate Probit, Marginal effects

Actionable Intelligence in the Pendency of Legal Cases in India - A Quantitative Assessment of Juridical Potential

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Abstract

This Research paper addresses the nature of Actionable Intelligence in the pendency of contractual law cases involving industry as mediated by Courts of law in India. Wickelgren (2016) argued that the nature of the firm's contract determines the choice between arbitration mediated “Actionable Intelligence” and juridical mediated “Actionable Intelligence” in choosing the method of solving contractual disagreements. Our paper shows that the enforcement of contracts depends on the incentive constraints imposed in the original contract and the role of actionable intelligence is limited to designing at this stage of the structure like the literature on Mechanism Design but uses no incentive compatibility constraint in individual strategies.

Keywords: Actionable Intelligence, Jurisprudence, Arbitration, pendency, professionalism, coherence, Game theory

Actionable Intelligence in Campus to make it Greener Based on Analysis of Selected Cases of Retrofitted Buildings

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Abstract

Energy positions at the leading condition of the all challenges facing India today. India is the second most populous country in the world and has a population of 1.3 billion people (May, 2016). To maintain the huge growth rate, a rapid growth in the Energy Sector is also needed. For this growth to be sustainable, - policies, strategies and actions must be guided by an approach that aims at positive social, environmental and overall economic impacts. The Sustainable Development implies fulfilling the needs of the present without negotiating the ability of the future needs (Misra, 2012). As on 31.03.2016, out of total 302 GW of electricity generated, approx 211 GW (Giga Watt) electricity is generated from Thermal Power Plant, 5.8 GW from Nuclear Power Plant, 43 GW of electricity from Hydro Power Plant and remaining 43 GW by Renewable Energy Sources (i.e. only 14% of total installed capacity of power in India) (C.E.A.,2016). By 2016-2017, total domestic energy production in India is of 670 Million Tons of Oil Equivalent (MTOE), which meets only 71% of the expected demand and would further increase to 844 MTOE by 2021-2022. Fossil-based fuels (coal, oil and natural gas) currently offer about 85% of all the energy use worldwide (Rozenblat, 2016). These resources are constantly being exhausted and after production of energy, the discharges from fossil-based

fuels, distress our environment. In contrast, Renewable Energy resources are constantly stocked up naturally and will never be worn out. Now, India is ready to utilize its' Renewable Energy resources. By appropriate forecasting, Capital Expenses in Coal Plant in India rises by about 2.86% per year from INR56.6 million in 2015 to INR 68.9 million in 2022 and the Imported Coal Price in India shows a steady increase of 2.12% each year i.e. from INR 6650/- per ton in 2015 to INR 7730/- per ton in 2022 (Shrimali, Srinivasan, Goel, Trivedi, Nelson, 2015). Whereas, the cost of setting up a Solar Plant in India will decrease by approximately 1.83% each year, i.e. by forecast, the Capital Cost is expected to decrease from INR 71.25 million/MW in 2015 to INR 62.6 million/MW in 2022, due to increased efficiency by experience gained over time and strong global learning effects (Shrimali, 2015). In the National Budget (2015), it was declared that approx five-time increase of Renewable Energy (RE) would be targeted to 175 GW by 2022 from 43 GW at 2016 (Tyagi, 2016). The breakup would be 100 GW solar, 60 GW wind, 10 GW biomass and 5 GW small hydro power capacities by a sustainable financial share (Iyer, 2016). According to the goal set by Prime Minister Narendra Modi, India is setting up to generate 100 GW (1, 00,000 MW) of solar power by 2020, out of which 40,000 MW should be procured through rooftop Solar Photo Voltaic (SPV) (INDOSOLAR, 2016). Research organizations like Solar Energy Centre, Centre of Wind Energy Technology (C-WET), Alternative Hydro Energy Centre (AHEC), Indian Renewable Energy Development Agency (IREDA), Solar Energy Corporation of India (SECI), National Centre for Photovoltaic Research & Education (NCPRE) – IIT Bombay, and Renewable Energy Centre in various IIT and NIT are continuously working on new researches to improve the solar technologies, in order to reduce the initial high renewable energy installation expenditure. Modern computational facility has made actionable intelligence as the necessary alternative for an existing campus, which would be smarter, i.e. greener, cleaner and sustainable for our future generations.

Business Strategies and Competitive Intelligence – An Analysis

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Abstract

In the global economy, the industries have shifted strategic and tactical foreign policy priorities from traditional superpower and client concerns to those reflecting national economic competitiveness, especially commercial and technology-related information. Corporate efforts to protect proprietary information have tended to follow the classified-protection model developed to thwart clandestine or illegal intelligence operations, leaving firms unprepared to defend against an organised ‘Competitive Intelligence’ collection effort that analyzes information routinely gathered in course of target company’s daily business activities. The importance and the need for the introduction of comprehensive competitive intelligence is penetrating into the foregrounds on the basis of most important proven benefits to the enterprise, such as, improved quality information, faster decision making, systematic improvement of organizational process, improved efficiency, cost reduction and quicker identification of threat and opportunities. The main aim of this article is to assess the importance of competitive intelligence based on various surveys and especially to assess its complex integration throughout the entire enterprise.

Keywords: Competitive Intelligence, Competitor Analysis, Key Performance Factor

Causatum and Facets of Foreign Portfolio Speculation in India

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Abstract

The pecuniary headway of a country entails deployment of its assets for augmenting the high yielding dexterity of the country. But in maximal thriving countries such manoeuvring of possessions is rather arduous due to the dearth of domicile riches and hence there is an entail to entice the foreign capital. Given the onus of overseas capital and technology as a propulsion to profitable evolution, debrief emerges as to which is the nonpareil resources of importing assets from the evolved provinces. Non-native speculation is one of the primordial and conceded channels for importing capital and technology from the flourished countries into the evolving countries. Foreign outlay substantially through transnational corporate has been a content of exuberant discourse both in the native and the host nations. Foreign is an obscure apprehension. In wider sentiency it depicts unsubtle aspect of global clientele concord, but in kernel it presupposes conflate of capital, technology, competencies and ventures from one realm to another. Such fluxes, despite novel manifestations, have conjectured substantial in the kindle of the requisites and impulses of coeval progressing nations to elevate their emergence rate. In India, like any other emerging countries, the role of extraneous speculation is wrangled vehemently. Today when all endeavours are being made to surface the providence, the government and the people surmise the overseas ventures to frolic a more efficacious purpose in the economic development of India.

Keywords: Portfolio, Foreign Capital, Technology, Resources, Economic Development

**An empirical study on worklife balance of women employees with special reference to BPO
sector in Bangalore city**

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Abstract

In the modern era, women occupy a central position in all the fields, like Banking, Medical, Corporate, Government etc. Women prove their excellence in all the fields compared to Men. The situation prevails in the current scenario that both men and women have to go for work to lead a normal life. Hence women are having lot of responsibilities to be carried out. Each and every organization will be practicing different norms, rules and regulations, strategies, methodologies to maintain discipline among the employees. Work life balance is a phrase used to describe an individual's feelings of satisfaction with the participation in job related activities and his or her personal life. This state is achieved when an individual feels the amount of time spent in making money to provide for one's household and advancing career goals is adequately balanced with the amount of time spent in independent and personal pursuits. Today's career women are continuously challenged by the demands of full time work and when the day is done at the office, they carry more of the responsibilities and commitments. Today there is a general perception that working in an IT industry plays a dominant role and that will be very prestigious job which increases an individual reputation. BPO sector is emerging in Bangalore City in current days. The main criteria of choosing BPO sector for work life balance of women as research area is that more number of Women employees will be working and are given preference in BPO sector than Male employees. Research has been taken into consideration to identify the challenges of women employees work life balance especially in BPO industry and to study the impact of various organizational schemes on women employees work life balance.

Hence my research will be focusing on organizational practices which affect the personal and professional activities over women work life balance and Employers can facilitate Work Life Balance with many schemes that can attract women employees and satisfy their needs. Thereby work life balance can be achieved. Relevant statistical tools and techniques have been used and thereby analysis has been made. Chi-square Test has been used to test the goodness of fit and to find out the relationship between dependent and independent variables. Regression Analysis has also been used. Commitment, Coordination and Communication is very important to create equilibrium, tackle the problems and achieve work life balance. It can be concluded that professional life and personal life are the two sides of the same coin. Professionals have to take tough decisions even when their professional life and personal life is not close to equilibrium. Achieving work life balance is not an easy task for working women. The research paper describes the current scenario of BPO sector in the Bangalore City and explores the challenges faced by the women employees in achieving their work life balances in the modern competitive business world.

Keywords: Work Life Balance, Women, Employees, BPO Sector, Bangalore City.

Need for Human Resource Development Climate in Banking Industry of Bangladesh: A Key for Organizational Excellence

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Abstract

Rapid changes in technology and global structure have made business and financial environment most competitive across the world. To cope with these changes, banking industries require the development of their human resources as one of the most human resource strategies. The purpose of the research is to analyze the current HRD practices and processes in banking industry of Bangladesh and how should these banking industries go out transforming their HR systems and mechanisms to meet the quickly changing environmental demands. Data was collected from 328 bank employees are working in both state-owned and private sector including foreign banks in different locations of Bangladesh. Data analysis was performed using IBM SPSS 20 version and study found that there are significant correlations among general climate, OCTAPAC culture, HRD mechanisms and organizational excellence. It is revealed that HRDC significantly affects organizational excellence. The findings of study provide a clear guidance to the practitioners/policy makers of banking industry to take further steps in achieving the organizational excellence through the human resource development.

Keywords: HRD Climate, General Climate, OCTAPAC, HRD Mechanism, Organizational Excellence

A study on consumer's adoption intention of digital wallets in Kolkata

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Abstract

Smartphones have gradually become an integral part of our daily life. Smartphones are now not being used as mere communication devices but have become an appliance that can be used as a device for socialization, entertainment, information and even payment. Mobile phones are currently being used to make monetary transactions through applications installed in the phone. Since they function similar to leather wallets, they are aptly named as “Digital Wallet” or more popularly as “Mobile Wallet”. People are gradually becoming aware about the huge economic benefits that mobile payments provide to the society, since; it has significant lower costs compared to cash-based services and existing card payments. The recent demonetisation movement by the Government of India has acted as a trigger in making people more familiar about the benefits of e-money. Globally, mobile wallets are encouraging economies to develop into a cashless society. However, Mobile wallet is a pretty young concept in the country and research into Digital Wallets in India is still very few; hence, there is a requirement for better understanding of the underlying variables that affect the adoption of mobile payments. The purpose of this research study is to develop and test a model that provides a better understanding of the factors that are most important in predicting consumers' behavioural intention to adopt Digital Wallets in India. Before delving into the process of investigating these questions, a thorough study of critically acclaimed theories and models of traditional Information Technology Adoption research have been conducted and combined with findings from different research papers related to mobile service adoption. Drawing from the DIFFUSION of INNOVATIONS THEORY, THEORY OF REASONED ACTION (TRA), TECHNOLOGY ACCEPTANCE MODEL (TAM), THEORY OF PLANNED BEHAVIOUR (TPB) and UNIFIED THEORY OF

ACCEPTANCE AND USE OF TECHNOLOGY (UTAUT) as theoretical foundation and the successional literatures on mobile technology acceptance, a modified version of the UTAUT is constructed with certain additional variables. The research proposes this model as an integrated framework for digital wallet adoption. An empirical survey of adopters of digital wallet services was conducted. The findings suggest that the model serves as a good predictor of consumers' adoption intentions. The stepwise linear regression model shows a substantial amount of variance explained for Adoption Intention ($R^2 = .60$). Cluster Analysis also revealed three distinct segments of consumers – the Utilitarian Segment, the Critical Segment and the Analytical Segment with their unique criteria for adoption of e- wallets. Future researchers can refine the model and add more variants to further explain consumers' acceptance of Internet-based applications. The research will help Digital Wallet Companies to have a better and clear understanding of factors that influence the adoption decision of Indian Consumers concentrating particularly on the different parameters for different customer segments that influence end-users to adopt their services.

HR Analytics - The Data driven Human Resource Management: Applications and Challenges

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Abstract

Human Resource Management has transformed itself from being a simple administrative function (Personnel Management) to becoming a Strategic Partner of Business (SHRM). HRM has always grappled with the challenge of justifying its existence and the investments made in people. One of the answers to this challenge has been the emergence of Human Resource Analytics which attempts to make HR accountable by quantifying not only what it does using operational measures but also uses sophisticated statistical tools to assess the impact of its people decisions. The focus has now shifted from simply collating employee data to transform that information into meaningful intelligence. Quantification of HR Data means processing of the data using several analytical tools derived from the field of statistics and econometrics. The responsibility of the HR personnel is to educate themselves in the application of the numerical tools so that they can make progress from simple capturing of data using HR metrics to analyzing the data for improved decision making. The paper attempts to trace the origin of HR Analytics, discuss some of the successful examples of applications of data analytics in HR, elucidate some of the most important techniques that may be used for making HR Decisions and deliberate on some of the challenges that are present in the domain of HR Analytics. The paper

begins with the understanding and establishing the relevance of analytics in the field of HR, goes on to demonstrate how some of the most successful companies are making productive use of HR analytics to gain competitive. An attempt is also made to understand the pitfalls in the application of analytics and the caveats for HR professionals. An overview of the different kinds of analytical applications useful in the field of HR is also being given. This is a concept paper visualizing the future of ADA techniques and its business application in the field of Human Resource Management. The ADA techniques discussed in this paper primarily have been derived from the field of Statistics and Econometrics.

Post-Traumatic Stress Disorder and their Coping Styles In Doctors: With Special Reference to Hospitals in Kolkata

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Abstract

Post-Traumatic Stress Disorder is a psychological disorder that is being faced by the persons from the ancient times. The doctors cope with this kind of stress every day which is mainly caused by the suffering and death of patients. During past few years many researchers have concluded that doctors working in these critical care departments are more exposed to PTSD than general public. Doctors who are part of these department find patients in malformed, mutilated with bandages, swelling and exposed organs which sometimes lead to the development of fear or helplessness. This study is undertaken to identify the major reasons that led to PTSD in doctors when they are present in Intensive care unit, the impact of PTSD on the physical and mental wellbeing of the 57 doctors and the coping techniques by implementing which doctors can be recovered quickly. A questionnaire survey is being done among the physicians working in Intensive Care Units in different hospitals in Kolkata. Then a Reliability check, Correlation, Factor Analysis of the major stress leading factors followed by regression is conducted on the data. Clusters on the basis of gender were done and two major clusters can be made. Analysis proved that the factors that mainly led to PTSD and the stress did not have much impact on the physical wellbeing of the physicians. But the factors that effect the physician and their satisfaction level effect the stress level of the doctors working in critical unit.

Keywords: Psychological, Malformed, Mutilated, Swelling, Exposed Organs, Questionnaire Survey

HR Analytics: Is it myth or reality in an Organization?

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Abstract

Today's globalized world is making the organizations to face the huge problem of SUSS (Susceptibility, uncertainty, sophistication and sustainability) in the business environment. This proactive business environment is stimulating the business leaders to design certain levers and models to cope with the uncertainty in business. To enhance business performance and to gain competitive advantage designing an effective Talent Pool is of utmost important. Thus HR Analytics is the only tool which can help companies to recruit the right talent, organize them correctly and retaining the high performers. Masese Omete Fred, Dr. Uttam. M.Kinange (2015) defined HR Analytics as a data-driven framework for solving workforce problems using existing information to drive new insights. It helps in decision making process with a combination of software and methodology that uses statistical models to employee related data, allowing enterprise leaders to optimize human resource management .The basic purpose of this paper is to study whether HR Analytics is a myth or reality in an organization. To support the purpose a model "BLEND" has been designed to evaluate five perspectives of HR Analytics i.e. Business

objectives, Leadership initiatives, Establishment technically upgrading , Negotiating with HR metrics, Data Analysis and Integration. The Model is validated by a survey of a sample of 22 respondents consisting of 5 HR executives and HR managers of logistic companies and 17 HR executives and HR managers of manufacturing companies in West Bengal. A Questionnaire based on Renesis Likert 5-point Scale is designed on the basis of five perspectives of Model “BLEND” of HR Analytics in Sales and Marketing Division in the above companies. The value of Cronbach’s alpha of the questionnaire is 0.9501 and validity of the questionnaire is tested through content validity. The data is analysed by Kruskal – Wallis (or H test) a non-parametric test which is analogous to the one-way analysis of variance which revealed that there exists a significant difference of HR analytics perspectives between manufacturing and logistics companies. The percentage analysis of data revealed that HR analytics of manufacturing companies is ahead of Logistic companies as per the model “BLEND”.

Keywords: HR Analytics, Susceptibility, Sustainability, HR metrics, Kruskal – Wallis, BLEND