

UBT

جامعة الأعمال والتكنولوجيا
UNIVERSITY OF BUSINESS AND TECHNOLOGY

DSR

Deanship Of
Scientific Research
عمادة البحث العلمي

رؤية VISION



المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

BOOK OF ABSTRACT

3rd Research Symposium

19th of April, 2018

Discover, Transfer, Impact



TABLE OF CONTENT

Poster# A-UBT- College of Business Administration (CBA)

#

PA-1	Study of Trends in Jordan Tourism Literature: A Systematic Review of Tourism Published Research	1
PA-2	Environment and Organization Learning: Qualitative Evidence from Saudi SMEs	
PA-3	IOT implications on Society and Relationship	
PA-4	Awareness and Use Perception of Consumers towards Complementary and Alternative Medicines (CAM) in Saudi Arabia	2
PA-5	Critical success factors for successful ERP implementation in Saudi Arabia	3
PA-6	The study to investigate recycling behaviour characteristics of residents of Jeddah	
PA-7	Strategic Human Resource Management: At SOCAR Company	4
PA-8	The role of Hay Group system for determining Total Rewards	
PA-9	Impact of Social Media and its Influence on Purchasing Behavior of Saudi Consumers: An Empirical Study	5

B-UBT- College of Engineering (CE)

PB-1	Towards The Red Sea Eco-tourism Future-KSA	7
PB-2	Black Hole Attach in Wireless Mobile Adhoc Network(MANET)	
PB-3	Judisious operation of different types of induction motors fed by PVPS	8
PB-4	Quality Cost in Saudi Arabia Plastic and Glass Industry	
PB-5	Organizational Culture: A case study Measuring the Importance and Presence of Organization Values at a Higher Education Organization in Saudi Arabia	9
PB-6	Comparing various middle machines with Time Synchronization using video steaming protocols	

TABLE OF CONTENT

Poster# B-UBT- College of Engineering (CE)

Poster#		#
PB-7	Third generation Solar cell Multilayer	10
PB-8	Electrophotonic Improvement of Polymer Solar Cells Using Graphene and Plasmonic Nanoparticles	11
PB-9	Enhancing the microstructure and tensile creep resistance of Sn-3.0Ag-0.5Cu solder alloy by reinforcing nano-sized ZnO particles	12
PB-10	The Application of Design of Experiments to Improve the Quality of High Density Polyethylene Pipes	13
PB-11	The impact of Mathematics on meteorology and weather prediction	14
PB-12	Enhance Heat Transfer Efficiency Using Nanofluids & Surface Modification	15
PB-13	Fabrication of Microelectrode Arrays on Thin Film Electrodes	16
PB-14	Optimising concrete materials and study of concrete pathologies (Aging of concrete)	17
PB-15	Outdoor Parking Control System Using Image Processing & Li-Fi Communication Technology	18

C-UBT- Jeddah College of Advertising (JCA)

PC-1	Creative Strategizing in Advertising: A Saudi Arabian Exploratory Study	16
PC-2	The Representation Of Women Driving In Visual Advertisements In Saudi Arabia	17
PC-3	Colouring of the Surfaces of Three-dimensional Polytopes (The Four-Colour Theorem)	18
PC-4	Correlating twitter's mood with advertising campaign	19

E-UBT- English Language Academy (ELA)

PE-1	Interactive Speaking Activities for EFL Classrooms	19
PE-2	Teaching Vocabulary Through Drawings and Storytelling	20

INTRODUCTION



The University of Business and Technology, under the Deanship of Scientific Research has the honor to presents the 3rd Research Symposium- Poster Session, 2018.

This Book of Abstract includes abstracts of research conducted by participant researchers, faculty, practitioners, and students who are enthusiast to share their ideas and showcase ongoing research in the pursuit of developing farther significant studies and collaborations.

We hope that you find your inspiration in this Book, looking forward to showcase your next big idea on the next years' Research Symposium.

POSTER ABSTRACTS

CBA

College Of
Business Administration
كلية إدارة الأعمال

STUDY OF TRENDS IN JORDAN TOURISM LITERATURE: A SYSTEMATIC REVIEW OF TOURISM PUBLISHED RESEARCH

PA-1

F. ALHAMMAD

For decades, the phenomenon of tourism in Jordan has garnered global attention from researchers. This article fulfills the deficiency of a systematic review of this body of research because of the gap which presently resides in the tourism literature. This article determines the present-day makeup of Jordan tourism literature, including state, gaps, trends, and coherence. -38tourism-related research articles of 28 various journals from a plethora of online databases are cited in this review. Using a comprehensive classification framework which centers on thematic, theoretical, and methodological aspects, three major points were uncovered: (a) tourist surveys are the primary source of Jordan tourism research; (b) the formerly atheoretical field of tourism research is slowly transitioning to theory-based research; and (c) cross-sectional research design is among the most highly used parts of tourism research in Jordan. The study uses this information to formulate a research agenda that would be largely beneficial to Jordan tourism literature.

PA-2

ENVIRONMENT AND ORGANIZATION LEARNING: QUALITATIVE EVIDENCE FROM SAUDI SMES

F. ALHAMMAD, A. ALJARODI, M. HURIYB

The focal focus of this research is to provide deep understanding of entrepreneurship practices in the Kingdom of Saudi Arabia (KSA). It aims to explore SMEs learning process in order to explain how SMEs build their capacity and adapt to their environment. Qualitative methodology was employed for this research. In-depth interviews were conducted with 9 entrepreneurs. interviews were transcribed and analyzed using content and textual analysis. In the light of analysis, a model of SMEs learning process emerged. The study is meant to provide better insights of the way Entrepreneurs manage their SMEs and the main challenges facing them in Jeddah city. The study will provide suggestions for the Saudi government to help in better implementation of 2030 Vision in order to empower local Entrepreneurs and help them to tackle Challenges.

M.MINHAJUDDIN

Though Internet of Things' (IoT) development ease many aspects of everyday life, unfortunately it comes with set of problems. This paper analyzes the influence of the IoT on society and relationships, specially interspousal relationship. In many countries, divorce rate Skyrocketing, the percentage of legally married couples are declining. Whereas Internet connections(IoT) and internet users are increasing exponentially, Internet connection costs continue to fall rapidly. This paper study the correlation of the IoT and relationships an overlooked area of the IoT. Vulnerability of IoT have been neglected as an area of research, so identifying the different types of IoT implications on society and relationship will assist in the development of an integrated approach to the IoT that will help

PA-4

**AWARENESS AND USE PERCEPTION OF CONSUMERS TOWARDS
COMPLEMENTARY AND ALTERNATIVE MEDICINES (CAM) IN SAUDI ARABIA**

M.ZULFEEQUAR ALAM, M. HURIEB,H. GARAMOUN

Complementary and Alternative medicines are becoming very popular methods of treatment among the users in the world. As it's have high acceptance to treat many types of ailments which cannot be cured by the modern medicines. In the Kingdom of Saudi Arabia (KSA), this path is also prevailing in the society but due to the lack of awareness, unavailability of professional practitioners and some other factors it is not adopted properly. In the region, very little studies have been carried out to understand the awareness level, its uses and perception towards CAM among the users. The objectives of the study were to provide an in-depth understanding about females' perceptions towards awareness and uses of CAM in the region. For the purpose a survey sample of 120 respondents in Jeddah city at convenience bases were taken during the month of September to November 2016. Data collection with using a structured and close ended questionnaire was carried out. The received data were coded and analysed with appropriate statistical tools. It was investigated that the majority of the respondents were aware about the CAM. Its uses and benefits in certain ailments were highly noticed by them. Moreover they were also positive about the benefits of CAM treatment system.

M. ALI, A. MAJEED, R. ASSAF

Enterprise Resource Planning (ERP systems) are designed to facilitate the flow of information in organisations by integrating data processing and information management activities in the main areas of business.

ERP system are known for their complex implementation and high failure rate. There is increased in number of implementation developing countries, including Middle East region.

However, there is a limited research available in the area of ERP system implementation in Middle Eastern countries including Saudi Arabia. This study examine a critical success factors for successful implementation of ERP systems in Saudi Arabia.

M. ALI, L. MILLER

The growing economies in developing countries and increase in consumer spending has direct impact on the waste generated. As the income increases, the consumption pattern of the people changes (Medina, 1997). This is more reflected in emerging economies which has seen consumer spending increasing manifold, resulting in increase in household waste increase. This is coupled with the rise in consumers awareness to saving environment and going green by minimizing waste disposal and adopting recycling practices.

M. AMINU, A. SHAFI, A. ALHARBI

This study examined whether SHRM is applied, and to investigate this study qualitative method of data collection was used to generate the data required to achieve the objectives of the study. Inter-views were conducted with Heads of resourcing, Training & Development, Employee Relations at two oil companies. The findings show that SHRM is applied at these companies. Foreign-based company, is more experienced in SHRM. However, SOCAR considers the importance of SHRM and differentiates it from administrative HRM or Personnel Management. For this purpose, new policies and systems are being created for the application of more strategic HRM. HR is involved in strategic and business planning at both companies. The study also reveals that HR strategy is part of business planning and strategy and that these activities are always coordinated to make a contribution to the overall organizational goals.

A. ALHARBI

This paper aims to show what total reward models were brought on the market in the recent years and what they require. What we expect and what do we get? This it is a good question for employees nowadays. Companies can use a salary package with standard wages and compulsory benefits required by law, or may grant other benefits and rewards for its employees to get the highest quality, to maintain the workforce and to gain employee's loyalty. However, the success of a total reward approach relies upon, both the organisation clearly communicating what it is trying to achieve, and the ability to actively engage and motivate their teams. Granting rewards and benefits for employees in a company it is limited by the paying budget. The budget is decided by top management. Therefore, the needs of employees must be related to the company's financial resources. During the past few years there have been created rewarding models that illustrate how rewards are granted to the employees. These models may be general or more specific for the companies for which they were designed. This paper aims to analyze what appeared in the literature in terms of reward models, showing the influence of the total reward strategy in companies and inducing steps to follow for implementing a total rewards model in companies.

M. ZULFEEQUAR ALAM

Social networks have inspired millions of users around the world. Besides, this new means of communication win consumers' trust by communicating with them at a deeper level. In addition, as local and international marketing companies have recognized social networking as a potential marketing platform and have used innovations to drive advertising campaigns and marketing approaches through social networks. One cannot stand on the lack of social media channel now that their counterparts have waves of products and services on the market. Despite the proliferation of social networks and the widespread dissemination of different communication tools, very few studies in the Arab region describe the objectives of the current study. The rationale for this article is to explore the mechanism and determinants of these media and factors that affect the purchasing behavior of the Saudi consumer. Throughout Sample of 226 via Google forms and monkey survey (online) using close-ended questionnaire with handling particular attention to reducing non-response error was given in the study. For descriptive analysis (frequency distribution statistics), the hypothesis test Chi-square goodness of fitness test at P. Value 0.05 was applied, and the results were interpreted accordingly in the study. It is found that there is variance among the respondents in time duration spent on social media and purchasing preferences within the social media platform.

POSTER ABSTRACTS

CE

College Of
Engineering
كلية الهندسة

A. OMAR, N.OMAR

The Red Sea Project is a part of Crown Prince Muhammad Bin Salman's Vision 2030, will be a luxury resort destination situated across the islands of a lagoon and steeped in nature and culture. It will set new standards for sustainable development and bring about the next generation of luxury travel to put Saudi Arabia on the international Eco-tourism map.



S.MUQTAR

Abstract- Wireless networks are gaining popularity to its peak today as the users want wireless connectivity irrespective of their geographic position. Wireless network is less secure than wired network as there is no physical setup of topology between the nodes. Day by day threads of attacks are also growing substantially in Wireless Mobile Adhoc network (MANET). Our work mainly focuses on analyzing black hole problem on the context of very popular Adhoc on Demand Distance Vector (AODV) protocol by systematically evaluating its performance before & after black hole attack by using various performance metrics. Also we are planning to develop a new mechanism which will detect black hole problem & mitigate its effect on AODV protocol by overcoming limitations of existing mechanism.

E. A. EL-SAYED

The photovoltaic power system (PVPS), today, has a wide range of applications. One of the most important applications is the operation of electric motors fed by PVPS. In this paper we are going to design a suitable PVPS to supply an induction motor (IM). Different types of PV solar cells have been selected in the design. Moreover, the application has been carried out for five different types of -1phase and -3phase IM. The design procedure takes into account the nature of the PVPS output voltage as well as the requirements of the IM at different operating conditions such as starting, loading ratio and normal operation. The energy cost figure (ECF) (the price per produced kWh) has been calculated for such cases taking into consideration the different solar cell types as well as the different IM types. A deep comparative study has been carried out to determine the most suitable and economic solar cell type.

H. REDA, M. KANAN

Quality costs are those resulting from producing, identifying, repairing, and avoiding defective products. Quality costs consist of the following four categories Internal costs, failure costs, external failure costs, and appraisal costs. A survey of several plastic and glass industries in Saudi Arabia is conducted. The survey includes a cross representation of manufacturing activities existing in the region. The survey is intended to assess the level of awareness and quantitative estimates of quality costs as related to the plastic and glass industries. The survey design and findings are presented along with analysis. Specific conclusions are drawn regarding quality costs studies and reduction/improvements programs as related to the surveyed industry category.

H. REDA

This paper presents the findings of a study that was conducted to investigate the levels of organizational culture values that are present in students and instructors in a higher education organization in Saudi Arabia. A Survey was prepared and conducted to obtain primary data from students and instructors perception of thirty two basic and common values that are relevant to the study of organizational culture. The study findings gives valuable insights into how students and instructors see the importance and presence of organizational values and beliefs in the organization. Moreover, the enthusiasm of instructors and students gave a clear indication of how significantly important the surveys were to them. Higher education organizations may look at this paper's findings and may choose to apply its methodology to their organization and utilize its outcomes to better understand and then improve their organizational culture. Finally, this study provide a thorough investigating of a higher education organization culture by ranking the thirty two common values and measures their presence in the students and instructors community. The study will hopefully open an area of interest that could provide considerable insight for researchers interested in this topic.

M. SHAJAHAN H, R. NAHAS

approaches have been proposed to stream protocol with time synchronization, best-effort networks. In this research work, we propose a distributed multimedia streaming and simulated ADHOC network environment. The main of the research is to reduce traffic via network.

Index Terms:

Distributed streaming, RTT Timing Calculation, Forward Error Correction

M.ALKHATAB, E.TRAVERSA, J-P VILCOT, L. BRICK, U. BUTTNER, B.ELZEIN

In the domain of photovoltaics, this project identifies optical light confinement as a key point to increase module efficiency. Objective of the project is to push the implementation of optical layers as part of adapted thin film silicon solar cells into large scale production facilities.

ELECTROPHOTONIC IMPROVEMENT OF POLYMER SOLAR CELLS USING GRAPHENE AND PLASMONIC NANOPARTICLES

A. ELRASHIDI

In this paper, an efficient light trapping polymer solar cell using plasmonic nanoparticles and antireflection transparent graphene layer is introduced. The shape of the periodic nanostructure of nano-crystalline zinc oxide grown on its flat surface, and the thickness of graphene layer are optimized. In addition, electrical and optical models are developed to calculate the short circuit current density, fill factor and overall efficiency of the designed polymer solar cell structure. The distributed gold nanoparticles (Au-NPs) inside the active layer with 33 Au-NPs per unit cell produced the maximum efficiency and short circuit current density, %8.93 and 17.32 mA/cm² respectively, and gives a very high light absorption near-infrared region. Finally, energy band diagram for all used materials and electric field distribution inside the solar cell structure are also illustrated in this work.

ENHANCING THE MICROSTRUCTURE AND TENSILE CREEP RESISTANCE OF SN3.0-AG0.5-CU SOLDER ALLOY BY REINFORCING NANO-SIZED ZNO PARTICLES

PB-9

A. HAMMADA, A. IBRAHIEMA

Sn-Ag-Cu lead-free solders are regarded as a potential substitute for Pb-Sn solder alloys. In the current study, the non-reacting, non-coarsening ZnO nano-particles (ZnO NPs) were successfully incorporated into Sn-3.0Ag-0.5Cu (SAC305) lead-free solder by mechanical mixing of ZnO powders and melting at 900 °C for 2 h. Tensile creep testing was performed for plain SAC305 solder and SAC0.7-305wt% ZnO NPs composite solders and a Garofalo hyperbolic sine power-law relationship was created from the experimental data to predict the creep mechanism as a function of tensile stress and temperature. The creep resistance of SAC305 solder alloy was improved considerably with ZnO NPs addition, although the creep lifetime was increased. From microstructure observation, reinforcing ZnO NPs into SAC305 solder substantially suppressed the enlargement of Ag₃Sn and Cu₆Sn₅ intermetallic compound (IMC) particles and decreased the spacing of the inter-particles between them, reduced the grain size of β -Sn and increased the eutectic area in the alloy matrix. The modification of microstructure, which led to a strong adsorption effect and high surface-free energy of ZnO NPs, could result in hindering the dislocation slipping, and thus provides standard dispersion strengthening mechanism.

PB-10

THE APPLICATION OF DESIGN OF EXPERIMENTS TO IMPROVE THE QUALITY OF HIGH DENSITY POLYETHYLENE PIPES

T. HADDAD, R. ASSAF, M. KANAN

Extrusion is one of the fundamental shaping processes of metal and ceramics as well as polymers. One important extruded plastic material is High-density polyethylene pipe (HDPE) which can be used to carry water, wastewater, slurries, chemicals, hazardous wastes, and compressed gases safely. In the extrusion process of Polyethylene Pipes one critical issue is the pipe thickness, pipes that are too thin will fail, and are considered of low quality. On the other hand, extra thick pipes are considered a waste of raw material and processing time that the customer is not going to pay for.

Z.JASTANEYAH, H.GARALLEH , A. DERMOUNE

Mathematics has been responsible for so much in terms of our understanding and prediction of weather and climate. This contribution is perhaps most obvious in the context of the technology behind the observations and the simulations. In weather prediction, the Mathematical equation are non linear, which make the calculation more problematic. The typical way to analyze and simulate weather is numerical methods.

A. AJI WIJAYA, B. EL ZEIN, S. HARMAND

Heat transfer efficiency is one of the key roles in energy saving as well as to meet the demand of the advancement of technology. Boiling has been proved as the efficient heat transfer mechanism than single-phase heat transport. This study investigates the effect of using different type of nanofluids and heater surface modification on boiling heat transfer. Nanofluids, nanoparticle dispersed in base fluid, have attracted enormous attention from the scientists due to their highly thermal conductivity. The main objective of this research is to develop advance cooling system to improve the heat transfer efficiency and to be applied in commercial use. It combines the high thermal conductivity of nanofluids with the tunable surface characteristic of nanostructure.

A. BARHAM, M. ALKATAB, B. EL ZEIN

This poster explores the degradation of poly benzene-1,3-diol films in caustic solutions. A polymer film was deposited on Micrux® thin film gold electrodes ($A=0.080 \text{ cm}^2$). The electrochemical behaviour of the material was studied by cyclic voltammetry. The final morphology was investigated by scanning electron microscopy (SEM). This study allows the production of such microelectrode ensembles in a cost-effective manner and a platform for a wide range of applications such as sensor technology.

S. ALNAHDI, B. EL ZEIN, N. GEORGES, C. MARQUIE

This research proposal aims to determine such the extension of operation of the Nuclear Power Plants up to 60 years (in France) or even to 90 years (for some other countries) which must be taken into account so as to deal with the containment building aging has to be addressed being faced by the structure sector. In doing so, the paper will carry out the review of different research studies which have identified the pathologies that affected the reinforced concrete of the containment building. Thus, this research paper will study different parameters effects on concrete aging and how that will implement in such a country like Saudi Arabia with different weather conditions.

M. ZULFEEQUAR ALAM

Social networks have inspired millions of users around the world. Besides, this new means of communication win consumers' trust by communicating with them at a deeper level. In addition, as local and international marketing companies have recognized social networking as a potential marketing platform and have used innovations to drive advertising campaigns and marketing approaches through social networks. One cannot stand on the lack of social media channel now that their counterparts have waves of products and services on the market. Despite the proliferation of social networks and the widespread dissemination of different communication tools, very few studies in the Arab region describe the objectives of the current study. The rationale for this article is to explore the mechanism and determinants of these media and factors that affect the purchasing behavior of the Saudi consumer. Throughout Sample of 226 via Google forms and monkey survey (online) using close-ended questionnaire with handling particular attention to reducing non-response error was given in the study. For descriptive analysis (frequency distribution statistics), the hypothesis test Chi-square goodness of fitness test at P. Value 0.05 was applied, and the results were interpreted accordingly in the study. It is found that there is variance among the respondents in time duration spent on social media and purchasing preferences within the social media platform.



JCA

Jeddah
College Of Advertising
كلية الإعلان بجدة

POSTER ABSTRACTS



ABSTRACTS
POSTER

HANEEN. SHOAIB

The adoption of a strategy-as-practice approach changes the focus from just strategies to strategists and what they do and say; exploring how their micro-activities are explained on an organisational level (Whittington, 2006). This shifts the predominate focus from organisations to individuals, especially in relation to the creation and development of strategy (Rengér, 2003). To this end, it becomes important to focus on strategists' activities and how they enable the creation of a specific strategy (Whittington, 1996, Jarzabkowski et al., 2007). The focus of this study will be on the strategists themselves (Paroutis and Pettigrew, 2007), and how they come up their creative strategies in relation to the context. This is different from mainstream strategy research in that here, strategy is seen as something people do rather than something that organisations have (Whittington, 2004; Jarzabkowski, 2004; Johnson et al., 2007; Whittington and Cailluet, 2008).

C. GRECO, E. KURDI, L. ROMEI

Goal

The research aims to understand in which way the topic of Saudi women driving is represented and tackled in visual advertising in Saudi Arabia. In particular the research focuses on different sources in traditional and digital media: magazine, billboards, posters, social media posts. Qualitative research tools (like focus groups) in addition to semiotic analysis will be used to investigate a large number of texts focusing on the different elements of the advertisements in order to identify the different strategies and embedded principles founding the communication.

Hypothesis

Our hypothesis is that different sources of advertising, even if with a common "positive" background, will differ in the symbolic interpretation of the new phenomenon and that this different interpretations reflect the complexity of the socio-cultural background of Saudi society.

COLOURING OF THE SURFACES OF THREE-DIMENSIONAL POLYTOPES (THE FOUR-COLOUR THEOREM)

PC-3

K. BATARFI, S. WESTLAND, V. CHEUNG

The four colour map theorem states that, given any separation of a plane into contiguous regions, producing a figure called a map, no more than four colours are required to colour the regions of the map so that no two adjacent regions have the same colour. Two regions are considered to be adjacent if they share a common boundary that is not a corner (a point shared by three or more regions).

The theorem was first proposed in the 1850s and attracted considerable attention until it became the first such theorem to be proved by computational methods in the 1970s.

This poster will describe the four colour theorem and explore how the theorem could be extended to three-dimensions and how such an extension could apply to the field of design.

We restrict our study to the colouring of the surfaces of three-dimensional polytopes or polyhedra, specifically those that are convex.

Visual examples will be provided for regular polyhedral of increasing number of polygonal faces.

PC-4

CORRELATING TWITTER'S MOOD WITH ADVERTISING CAMPAIGN

S. AL-TAKROURI

Given the rise of the usage of social media in the recent years and how it impact politics, decision making, marketing and advertising in the Middle East, in addition to the recent upheavals of the advancement of computational intelligence makes social media a gold mine for analyzing people opinions, behaviors and correlating them with ground truth in real world.

POSTER ABSTRACTS



H. SIBIH, D. JAMJOM

This research discusses how to develop speaking English properly in an EFL classroom by using a number of methods to further enhance the students' dialogue. These methods vary from triggering spontaneous responses to thoughtful conversations. They will also equip the speaker with proper ways to make him/her prepare to start a conversation anywhere, anytime. Therefore, applying those methods will result in enriching students' learning experience.

A. HAKAMI, D. JAMJOM

It has long been claimed that stories and art are influential tools for language learning. This research presents the results of a study using drawings and storytelling to teach vocabulary. It was executed by having students listen to a story, match the vocabulary words to the appropriate image, and draw up their own storylines. The results found that students were able to remember the vocabulary words better; as well as benefit on an overall level.

