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Understanding the relationship between culture and sensory marketing in developing strategies and opportunities in emerging economies: A cross-cultural study

Abdulelah Althagafi
Mahmood Ali
University of Business and Technology, Saudi Arabia
a.althagafi@ubt.edu.sa

RCC
Research & Consultation Center
مركز الأبحاث و الاستشارات

ABSTRACT

Sensory marketing strategy plays a critical role in understanding the culture and formulating a successful strategy. Sensory marketing is the process that affects customers' senses, perceptions, judgment, and behaviour. It is critical for policymakers to understand the impact of sensory marketing on consumer buying practices across cultures, including emerging economies. This study serves as a backdrop of strategic development in emerging economies with a focus on the visual and tactile factors of the sensory marketing. Adopting Hofstede's (2001) cultural framework, this chapter has three major objectives. Based on literature review, firstly, it presents a cross-cultural analysis of the consumer sensory processing between the developed economies and emerging economy, Saudi Arabia. Secondly, it aims to evaluate the culture impacts on consumer behaviour's purchase intentions in relation to the sensory factor such as touch and vision. Thirdly, it attempts to identify the role of consumer sensory factors in buying decision across the culture. According to the findings, the literature supports the universality of behaviour patterns of multisensory interaction between touch and vision. This universality applies at both theoretical and operational levels.

The Interaction Effect Across Cultures (Vision and Touch)

Literature support the proposition that multisensory interaction effects are not significantly different across cultures as suggested by sensory ethnographic research, ***for example***:

(1) Valtonen, Markuksela and Moisander (2010) develop a framework to study the behavioural patterns in a certain sport (fishing in this study) and conclude that culture dwells not in "mind", but in "practices". The outcome of the study suggests that fishermen across the globe perform similar patterns of multisensory usage and practices.

(2) Balaji et al., (2011) examine the sensory interaction effect between vision and touch in India and find no significant cultural concerns. The cross-cultural research on the sense of vision has mainly focused on the CVPA conceptual proposition and its measurement scale (Bloch et al., 2003). The studies did not suggest any cultural modification or cultural inapplicability of the CVPA as individual differences in the CVPA is significantly similar in different cultures.

(3) The outcome of Vieira's (2012) study indicates the universality of the Need-For-Touch conceptual definitions and the "nomological, convergent, and discriminant" validity of its measurement scale "bidimensional construct" (Vieira, 2012, p. 57).

HOFSTEDE'S (2001) CULTURAL FRAMEWORK

Dimension	Explanation	Scores of Saudi
Individualism/ collectivism	Individualistic cultures look after themselves and their families only while collectivistic societies fit in groups that watch over in order to exchange dependency	Collectivist society
Uncertainty avoidance	"The extent to which people feels threatened by uncertainty and ambiguity and try to avoid these situations" (Hofstede, 1991, p.113).	High uncertainty avoidance/ favour to avoid uncertainty
Power distance	Power distance refers to the risk of obtaining power and authority unequally in one culture. It affects the hierarchy relationship in the house and at work.	High power distance/ individuals agree to a hierarchical order
Masculinity–femininity	Dominant values in masculine countries are achievement and success and in feminine countries are caring for others and quality of life. Main values in masculine cultures are accomplishments and triumph whereby in feminine cultures looking after others and life's quality.	Masculine society
Long-term orientation	"Stands for the fostering of virtues oriented towards future rewards, in particular perseverance and thrift" (Hofstede, 2001, p. 359)	No scores available

Findings

The findings of the study suggest that there is no significant difference between the cultures when it comes to the role of sensory information in making a buying decision. Similarly, the review suggests that there are significant similarities between Saudi culture (or countries that are similar to Saudi Arabia in culture) and Western consumers. Among the major reasons for this transformation is the globalisation and biculturalism which have facilitated the formation of standardised and universal buying tendencies.

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The use of crowdsourcing to create innovative supply chain: a conceptual model

Mahmood Ali , Ying Xie*

College of Business Administration, UBT; * East Anglia Ruskin University, UK

Email: m.ali@ubt.edu.sa

Introduction

Supply chain management is under increasing pressure to improve and innovate in the face of increased competition.

Several organisations have implemented online crowdsourcing systems that gather ideas of new products or services from the group of people.

Seltzer and Mahmoudi (2012) find that actual applications and assessments of crowdsourcing in public planning activities are still hard to find. Drawn from the lack of research in this area, this research proposes a conceptual model of implementing crowdsourcing in supply chain since crowdsourcing can also been seen as integral player in development of new business models.

Jeff Howe (2006), refers to using collective wisdom of a large group of people to help solve problems.

Aitamurto, Leiponen and Tee (2011) explain crowdsourcing as an open innovation mechanism which is best used when innovation are based on past advances.

Supply Chain Crowdsourcing Components

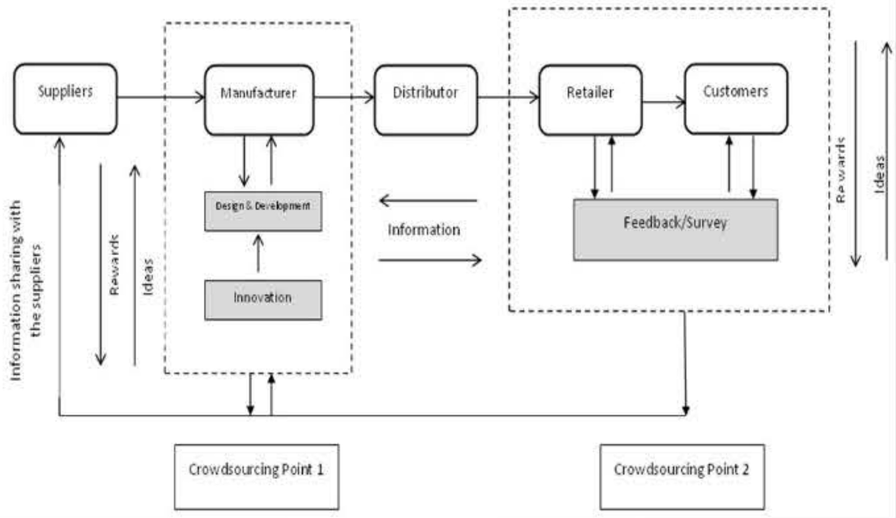
Manufacturing:

The information gathered through crowdsourcing can be used to generate risk alerts during manufacturing or production in regards to quality of the product. By incorporating crowdsourcing in the manufacturing stage, participants can be involved in the pilot testing of the product and this information could be applied in the improving the product design and development.

Retailors and Customers:

Johnson (2010) supports the idea of involving crowd since good ideas come not from "sitting around in isolation", but from bringing more idea into the mix through establishing networks. The information collected through crowdsourcing in the retailors and customers stage is analysed and findings could be shared across the members of the supply chain, in particular with the manufacturer and suppliers.

Proposed model



Conclusion

The contribution of crowdsourcing in supply chain is still in infancy.

Crowdsourcing provides an opportunity for improved communication and also could facilitate trust building among participants. The model posits establishing two crowdsourcing points in the supply chain to collect the information which could further be used to enhance the operations and supply chain.

In the proposed model, the effective successful crowdsourcing depends upon ability to gather and motivate the crowd, collect information and encourage the crowd for continued participation.

References:

Seltzer, E., & Mahmoudi, D. (2013). Citizen participation, open innovation, and crowdsourcing: Challenges and opportunities for planning. *CPL bibliography*, *28*(1), 3-18.

Howe, J. (2006). The rise of crowdsourcing. *Wired magazine*, *14*(6), 1-4.

Aitamurto, T., Leiponen, A., & Tee, R. (2011). The promise of idea crowdsourcing–benefits, contexts, limitations. *Nokia Ideasproject White Paper*, *1*, 1-30.

Role of operations strategy and big data: less than truck (LTL) load carrier

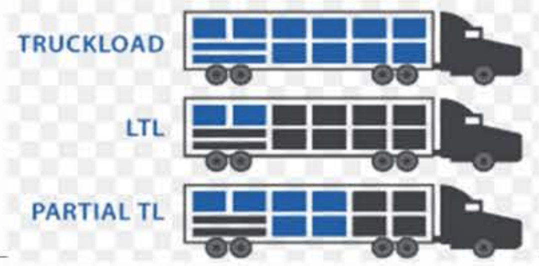
Mahmood Ali, Arvind Upadhyay*

College of Business Administration, UBT; *University of Brighton, UK

Introduction

Transportation systems play critical role in promoting economic activity. They bridge the gap between the supply and the demand and ensure the on time availability of goods. In order to achieve the optimum level of performance, transportation firms strive to make their operations more productive and efficient. It involves adapting different business strategies and models, and more importantly increased application of information technology (IT) in their operations.

The advancement in IT based electronics business is positively contributing to the transformation in the Less than truck load (LTL), which generally work on little margins, are easily impacted by factors such as empty trips, idled capacity on the lots, and rising energy cost (Hernandez et al. 2011).



OPERATION STRATEGY ISSUES IN LTL

Strategic Issues: This problem consists of determining the number of consolidation terminals (hubs), their locations and the assignment of the spokes to the hubs, aiming to minimize the total cost, which is composed of fixed and variable cost.

Integration: Due to their nature of operation, LTL face significant issues in integration operations while dealing with diverse shippers.

Practicalities: This includes operational issues.

Table 1: Typical planning problem at different levels (Source: Roy, 2001)

Planning level	Pick-up and Delivery	Terminal activities	Long Distance
Strategic	• Outsourcing • Fleet selection	• Terminal location • Terminal Design	• Fleet mix • Outsourcing
Tactical	• P&D Zone design • Door assignment	• Load Planning • Work scheduling	• Seasonal • transportation plan
Operational	• Delivery routes • Truck Loading	• Daily adjustments to plan and schedule	• Vehicle routing • Week-end dispatch
Real-time	• Pick-up assignment • Door assignments	• Hourly adjustments to plan and schedule	• Real time dispatch

LTL & BIG DATA

According to McKinsey, big data refers to dataset whose size are beyond the ability of typical database software tools to capture, store, manage and analyse. According to IDC report, the data is growing at 50 percent a year, or more than doubling every two years.

Using the data, LTL can improve driver safety, increases assets utilisation and lower cost of operations. According to Szakonyi (2014) analysis of big data could suggest several strategies for efficient drayage operation since this could be the most volatile link in the supply chain.

Some other benefits which could be derived from big data analysis include:

Diver identification: Identifying individual driver which capturing real service time and generating driver's activity report.

Driver safety monitoring: Monitoring driving habits of driver which on the road and also identifying unsafe driving habits.

Fuel consumption: Monitoring and collect the fuel usage data. This could be used to identify and minimise unproductive idle time.

Diagnostics: Vehicle diagnostics and performance monitoring.

Issues

Issue 1: The LTL which are not data driven and more reply on subjective intuition most likely will stay away from big data. This specific mind-set could become a barrier to entry or to appropriate implementation.

Issue 2: The LTL's lack of expertise with big data collection and analysis could require them to either hire services of external consultants or acquire new in-house expertise and training.

Issue 3: Big data raises the concerns about the privacy issue since the information could be shared.

Issue 4: Analysing the big data and generating conclusion could be complicated process.

Issue 5: Time required to collect and analyse data could be a cumbersome process.

Issue 6: Data grouping could be another issue in the light of current trends of data aggregation.

Conclusion

There are several enefits due to availability of big data, e.g. driver identification, driver safety monitoring, monitoring fuel consumption and vehicle performance monitoring. However all the benefits of big data are possible only when the LTL industry has proper big data driven mind-set and adequate infrastructure. As analysing big data is also a challenging issue for small LTL carriers hence they have limited benefits from big data. In future, big data is going to play a vital role in LTL industry due to the advancement in technology and Information Technology (IT).

References:

Hernández, S., Peeta, S., & Kalafatas, G. (2011). A less-than-truckload carrier collaboration planning problem under dynamic capacities. *Transportation Research Part E: Logistics and Transportation Review, 47*(6), 933-946.

Roy, J. (2001). Recent Trends in Logistics and the need for real-time Decision Tools in the Trucking Industry. *Proceedings of the 34th Hawaii International Conference on System Sciences.*

McKinsey report. (2011). *Big data: The next frontier for innovation, competition, and productivity.* Retrieved November 5, 2015, from http://www.mckinsey.com/insights/business technology/big data the next frontier for innovation

Szakonyi, M. (2014). Big data to rescue. *The Journal of Commerce*, 64-65

The study to investigate recycling behaviour characteristics of residents of jeddah

Mahmood Ali , Lloyd Miller*
College of Business Administration, UBT; *Cage University, Turkey
Email: m.ali@ubt.edu.sa

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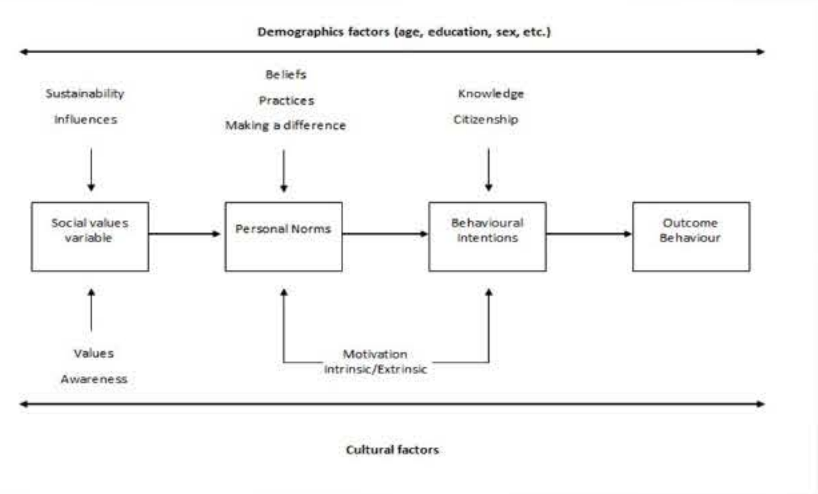
Research & Consultation Center
مـركـز الأبـحـاث و الاسـتـشـارات

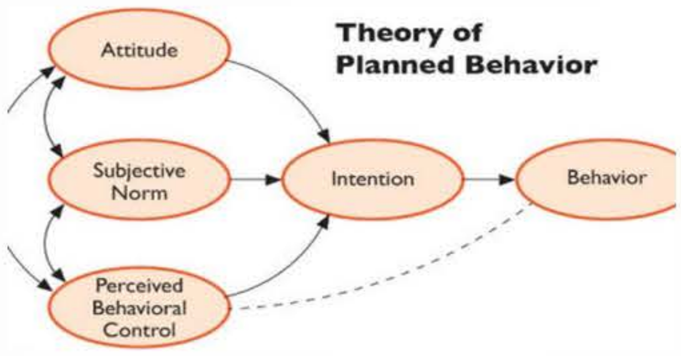
Introduction

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.

Proposed Conceptual Framework



THE Theory of Planned Behaviour



The theory of planned behaviour (TPB; Ajzen, 1991) provides a framework for systematically investigating the factors which influence human behavioural choices.

Conclusion

The ability of the TPB to understand human behaviour makes it useful to analyse, predict and changes to pro-environmental behaviour and to design programmes to promote pro-environmental activities. Applying TPB, this study aims to evaluate the state of recycling in Jeddah, which would enable to establish strategies to citizens awareness and increase their participation in the recycling programs.

References:

Medina, M. (1997). Informal recycling and collection of solid wastes in developing countries: Issues and opportunities. In *UNU/IAS working paper* (Vol. 24). UNU/IAS.

Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, *50*(2), 179-211.

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The impact of accounting information reliability and compatibility on users decisions

Majed Al Sharayri
Accounting Department/College of Business Administration, University of Business and Technology/ Jeddah/Saudi arabia

ABSTRACT

This study aims to identify accounting information reliance and compatibility and their effects in decision making in Jordanian construction companies. A Questionnaire is designed and 49 surveys were distributed on the most related category, which consisted of accountants and executive managers working in shareholding construction companies in Jordan, only 45 questionnaires were returned taking into consideration that the total of construction shareholding companies in Jordan is 49 companies. The SPSS program is used through descriptive analysis statistics to analyze data and test the study's hypothesis. The repetitive distributions and the individual opinion percentages were identified studying each sample separately. The probable average was also identified depending on the 5 points Likert standard. The normative deviation was used to measure and identify the dispersion of responses for each question in the survey and comparing them with the rest. The study resulted in coming up with essential findings that accounting systems play an important role in supporting the construction companies' activities in decision making.

Keywords: Reliability, compatibility, construction, decision making, information system

The methodology of study

The researcher will use in this study a descriptive analytical method in analyzing the study data, which will be used theoretical aspect of the study and use the analytical method in covering the practical side of this study
We will rely on two types of sources to collect data that are:
Secondary Sources: Books and studies concerned with the issue of accounting information systems and their effectiveness in construction companies in the decision making process.
Primary Sources: Information and data that is provided by the questionnaire designed to demonstrate the effectiveness of using accounting information systems in construction companies in decision-making.

Population and Study Sample

The study population consisted of all public shareholding construction companies in Jordan, consists of 49 companies, a random sample of 49 accountants and executive director of construction workers in the public shareholding companies in Jordan have been selected. The Used Statistical Methods We will use the following statistical methods:
Using a descriptive and analytical statistics by using statistical analysis program (SPSS) to extract data redundancy, standard deviations and arithmetic mean and test hypotheses curve analysis (T).
Determine the weighted average with weights that have been identified for the adoption of a five-point Likert scale, according to this scale, if the arithmetic mean value 3< , it means that the factor is important, and if the 3> , it means that the factor is not important.

Construction and Real Estate in Jordan

Jordan has witnessed through the last 5 years a large constructional development that leads to increase in real estate (lands and houses) transactions and spending money on lands and houses.

This unprecedented movement in real estate (lands and houses) transactions is more active among other economic sectors, which lead many Jordanian and Arab investors to invest in this sector and increase the interest in it.

Generally; Jordan-especially Amman- has witnessed unprecedented prosperity in real estate transactions, where the amount of investment in real estate through the last 5 years was (10) billions Jordanian Dinar, which has a great impact to push the process of economic development and reinforce sustainable development in the kingdom. Real estate market distinguished by its direct impact on boosting and developing other Jordanian economic sectors especially real estate sector that provides labor working opportunities, and creates remarkable activity for all supporting services such as: Iron, Cement, Wood, Glass, Aluminum markets, Sanitary ware and others, in addition to developing infrastructure sectors and different investment and housing projects.

Despite of this notable activity for real estate market in Jordan, but it faces many obstacles that hinder its development in the required manner such as:

☐ Increase in the prices of basic material of construction (Iron, Cement and labor wages) and others. ☐ Not granting working licenses for foreign labors in construction sector, which lead to increase in labor wages. ☐ Jordanian labor disinclined working in construction sector, especially general or technical work.

It is worth mentioning that the Department of Land and Survey is considered the official party that supervises the processes of buying, selling and conveyancing, where the Department registers these transactions to insure the legitimacy and equity of the real estate that is approved by the in force regulations, in addition to its duty in collecting treasury equity of taxes and fines resulted from these transactions.

The most important reasons that contributed in developing Jordanian real estate's market:
Many Jordanian and Arab experts in economic and investors relate the increase in real estate market to many reasons such as:

☐ The events of September 11, 2001 in the USA, that made many Arab and Jordanian expatriates search for a secure place for their investments. ☐ The continuous increase in oil prices, which lead to the provision of liquidity in Arab Gulf countries. ☐ Instability of the political conditions in the area, specifically (Palestine and Iraq), in addition to the continuous threats to Syria and Iran, which lead the people of these countries search for a secure place for their investments. ☐ Many large Arab and local real estates' companies oriented to invest in this sector. ☐ The existence of a safe investment environment and distinguished infrastructure in Jordan, which lead many Arab and Jordanian expatriates to invest their money in Jordan especially in the real estate market because it is one of the most safe and profitable sector. ☐ The immigrations of thousands of Iraqi families especially the wealthy ones that took Jordan as its investment and commercial activities. ☐ The amendments that emerged on landlords and tenants ordinance about not allowing the tenants to stay in the real estate after the determination of a lease, which makes this subject more appealing for those in lease market. ☐ A relatively decrease in interests' prices on residential loans, and the increase in expatriates' transfers in addition to the
increase in the residential apartments lease rates [12]

Statistical Analysis

IN THIS PART WE WILL ACHIEVE THE PRACTICAL OBJECTIVE OF THE STUDY, IN ORDER TO KNOW THE EFFECTIVENESS OF USING ACCOUNTING INFORMATION SYSTEMS FOR DECISION MAKING IN REAL ESTATES, THROUGH DISTRIBUTING A QUESTIONNAIRE TO ACCOUNTANTS AND EXECUTIVE MANAGERS WORKING IN CONSTRUCTION COMPANIES IN JORDAN, WHERE THE NUMBER OF THESE COMPANIES WAS 49. THE QUESTIONNAIRES WERE DISTRIBUTED AND 45 WERE RETRIEVED, IN ADDITION 3 QUESTIONNAIRES WERE EXCLUDED BECAUSE OF NOT ANSWERING ALL QUESTIONS, THE NUMBER OF QUESTIONNAIRES USED IN THE ANALYSIS IS 42 AS A PERCENTAGE OF 84%.
☐ USED STATISTICAL METHODS O STATISTICAL ANALYSIS PROGRAM (SPSS) WAS USED IN EXTRACTING DATA SUCH AS: REPETITION VALUES, STANDARD DEVIATIONS, AND ARITHMETIC MEANS AND TEST THE STUDY HYPOTHESIS.
☐ CRONBACH'S ALPHA TEST FOR CREDIBILITY (RELIABILITY) CRONBACH'S ALPHA TEST AIMS TO ACHIEVE THE INTERNAL CONSISTENCY OF THE MEASURING TOOL AS ONE OF THE INDICATORS OF ITS CONSISTENCY, WHERE THE MEASURE DEPENDS ON THE EXTENT OF INTERNAL CONSISTENCY AND THE DEGREE OF RELIABILITY OF THE QUESTIONS OF THE QUESTIONNAIRE, TABLE NO. (1) SHOWS CRONBACH'S ALPHA TEST VALUES AND THEIR SIGNIFICANT:

Results

☐The study has shown that there is a statistical relation between using accounting information system and decision making in construction companies.

☐ The study has shown the importance of using accounting information in construction companies.

☐ The study has shown the importance of the compatibility of accounting information in construction companies.

Recommendation

It is necessary for the accountant to have an adequate practical and professional experience that qualified him to provide an optimal evaluation for accounting information systems through a training process.

☐ It is necessary for the accounting information to have a high compatibility and reliability because this affects

the ability of the company in decision making. ☐ It is necessary for accounting reports to have a high accur

acy for company's ability to put future plans. ☐ The necessary to provide accounting information to the higher departments periodically in order to benefit from in decision making.

☐ The necessary to prepare accounting information according to accounting criteria, rules and basics.

A study of supply chain management practices of toyota motors

DR. MAQSOOD HUSSAIN . JUNAIDI.

Department of college requirement , College of business administration, UBT .

MAQSOOD@UBT.EDU.SA

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INTRODUCTION

The effect of the global economic meltdown increased the pressure on automotive executives to make right decisions about their supply chain for better performance. In a highly challenging and competitive environment, where supply chain is a popular tool for improving the organizational competitiveness, an efficient and effective supply chain strategy is a must for automotive manufacturers and their component manufacturers so as to meet changing consumer demands.

Supply Chain Management is typically viewed to lie between fully vertically integrated firms, where the entire material flow is owned by a single firm and those where each channel member operates independently. Therefore coordination between the various players in the chain is key in its effective management. According to Christopher (1992), leading-edge companies have realized the real competition is not company against company, but rather supply chain against supply chain. Cooper, Lambert, and Pagh argue that organizational relationships tie the firms to each other and may tie their success to the supply chain as a whole. In this context, a supply chain as a whole may have its own identity and function like an independent firm. However, to accomplish this ultimate supply chain, all companies' in the supply chain must have a supply chain orientation and the result is a fully managed supply chain.

LITERATURE REVIEW

Jaunaidi, M.H.(2017) conducted a study on Supply Chain Management Practices of Toyota Motors in Saudi Arabia and found that the customer having Toyota Motors are more satisfied supply chain management practices on the dimension of time taken for delivery, promised time delivery, accessories and spare parts, after sales services, and grievances handling mechanism. He also found that young generations are more satisfied with Toyota motors. Junaidi suggested that the grievance handling system of Toyota has to integrate dealers' manufacturers, employees and customers to improve the performance of supply chain in resolving customer grievances/ complaints on product performance, product quality and after sales service etc. The company were advised to standardize a complain management system, which increase responsiveness of supply chain and also to provide direct product feedback that companies can use to improve their products and services.

Jamehshooran (2015) found that in recent years, supply chain performance measurement has received much attention from researchers and practitioners. Effective supply chain performance through supply chain antecedents such as business analytics has become a potentially valuable way of securing competitive advantage and improving supply chain performance.

Liker (2005) lists following components of Toyota Supplier Partnering Hierarchy: mutual understanding and trust, interlocking structures, control systems, compatible capabilities, information sharing, joint improvement activities, and Kaizen and learning. "JIT system – a system that organizes the resources information flows and decision rules that enable a firm to realize the benefits of JIT principles".

OBJECTIVE AND METHODOLOGY

Objective of the study

- To study the Supply Chain Management practices adopted by Toyota Motors.

- To study the role and importance of recent trends in automobile industry with special reference to Supply Chain Management practices, in, an overall manner.

Methodology

The study was conducted using secondary data analysis and available researches in to the field.

CONCLUSION AND FUTURE PERSPECTIVES

The important techniques and opinion by Toyota Motors are Just in Time was an assortment of tools such as KANBAM (information card), and on (display board), and POKA YOKE (error prevention) that required delivering the right material at the right time in the right quantity.

Toyota launched its new cost-cutting programme called Construction of Cost Competitiveness for the 21st Century (CCC21) that was aimed at reducing costs of 170 auto components (making up 90% of Toyota's purchasing costs) by 30%.

Toyota's purchasing had three main priorities – "(1) Reducing total costs to achieve strategic targets, (2) Implementing and promoting the best new key technologies in the auto industry and (3) Reducing lead times for development, production preparation and production, and launching new vehicles around the world simultaneously".

Toyota has developed a standardized system of global distribution system and is supporting the operation of the system at each production base.

Toyota launched its IMV project, a global network designed to supply pickup, trucks, multipurpose vehicles and passenger vehicles to south east Asia, Europe, Africa, Oceana, central and south America and middle east from Production bases in Thailand, Indonesia, South Africa and Argentina.

Toyota Motors has a wide distribution network spread over 143 countries. It covers a maximum number of countries Europe, South America Continents with 30 countries each, Africa with 26 and Middle East 18 countries occupied 3rd and 4th places.

Six Sigma employed various techniques and tools to eliminate defect in processes. Six Sigma process could produce no more than 3.4 defects per million opportunities as claimed by Toyota.

REFERENCES

Jamehshooran, B G Awaluddin M Shaharoun, Habibah Norehan Haron (2015): "Assessing Supply Chain Performance through Applying the SCOR Model". International Journal of Supply Chain Management. ISSN: 2050-7399, Vol. 4 (1), pp 1-11

Junaidi, M.H. (2017): " Customer Satisfaction on Supply Chain Management Practices: A Study of Toyota and Tata Motors in Kingdom of Saudi Arabia". European Journal of Business and Management, Vol.9, No.2, 73-81.

Liker, JK, (2005): "The Toyota Way and Supply Chain Management", Presentation for OESA Lean to Survive Program, The University of Michigan

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The influence of personal contact networks (pcns) on marketing capabilities in small and medium enterprises (smes) in saudi arabia.

Mr.Mohammad Ali Hurieb*
m.Hurieb@ubt.edu.sa
Dr. Hatem Garamoun**
hatem@ubt.edu.sa
Department of Marketing, college of business administration, UBT .

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Introduction

Personal Contact Networks (PCNs) are informal and formal linkages that small and medium enterprises (SMEs) use for business development, to conduct business activities and make decisions (Birley, 1985). Much of the recent background literature on PCNs suggests that the related cluster of concepts of personal networking, social networking, relationship building and partnership formation are viewed as contributing to the success of local and global businesses (McGrath & O'Toole, 2014; Klyver, Hindle & Meyer, 2008; Fletcher & Fang, 2006; Fletcher, 2004; Grath & O'Toole, 2014; Klyver, Hindle & Meyer, 2008; Fletcher & Fang, 2006; McGrath & O'Toole, 2014; Luczak, 2009; Fletcher, 2004). Gilbert and Tsao (2000) suggest that in Western marketing literature, management of networks is viewed as a key factor in strategic behaviour and the networking paradigm is seen as a means of understanding the totality of relationships amongst firms engaged in production, distribution, and the use of goods and services. Institutional theorist, Gao (2008) explored how networks influence institutions, suggesting that institutional theory deals with choices made in response to, or in compliance with, an organisation's institutional environment (McGrath & O'Toole 2013). This is relevant for international business interactions not just because of economic interests (Loewe et. al., 2007), but because of the way business relationships in the form of PCNs affect operations. This research is critical to positioning my country to attract foreign direct investment by providing a roadmap to describe SME behaviour to external stakeholders.

LITERATURE REVIEW

Generally, a PCN is defined as an alliance between individuals across a range of formality and informality for a specific purpose (Hill and Scott, 2004). Two positions emerge in the literature in relation to categorisation and classification of PCNs, one focused on relational behaviour and the other focused on formality. Gender Roles, Stability, and Diversity are the influential attributes (Tonge, 2010).

Culture can be defined as a system of values and norms shared by a society, or subsystem of a society, within a national environment. McGrath & O'Toole (2014) explored exactly this issue recently, when they examined entrepreneurial firms' network capability development across different cultures. The study considered, in the entrepreneurial context, the relationship between national culture and network capability development. The authors carried out in-depth interviews in the Belgian and Irish micro-brewing industries, and analysed the findings related to network development in light of Hofstede's five cultural dimensions. According to the analysis, the impact of culture on entrepreneurial networking varies according to the five dimensions. While Luczak (2009) argues that an entrepreneur's cultural roots shapes his/her perspective of the market and influences the possible benefits of personal networking

Small to Medium Enterprises (SME) definitions varies from country to another based on different factors, for the purpose of this paper, European definition is followed which states "The European definition of SME follows: "The category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding 43 million euro." The former definition is close the one of OCED "Small and medium-sized enterprises (SMEs) are non-subsidiary, independent firms which employ fewer than a given number of employees. This number varies across countries. The most frequent upper limit designating an SME is 250 employees, as in the European Union. However, some countries set the limit at 200 employees, while the United States considers SMEs to include firms with fewer than 500 employees.
Small firms are generally those with fewer than 50 employees, while micro-enterprises have at most 10, or in some cases 5, workers", as both take number of emlyees as core factor for defining and segmenting SME's.

OBJECTIVE AND METHODOLOGY

Objective of the study

Objectives

The overarching goal of the research is to understand and critically evaluate the effect of PCNs on SMEs in the Kingdom of Saudi Arabia. To achieve the study objectives, the research aims guiding the project are as follows:

To examine and assess the literature on PCNs and SMEs to ascertain concepts and approaches relevant to identifying, describing and explaining the factors that determine the development of PCNs in SMEs

To identify the factors that either support or function as barriers to the development of PCNs in SMEs in Saudi Arabia.

To empirically explore marketing decision making in a sample of Saudi SME's to understand how managers develop and use PCNs in Saudi Arabia.

Methodology

The research project relies on a qualitative methodology, with the aim of understanding the perspective of the main actors - managers, both men and women, working for SMEs in Saudi Arabia, of which most are manager-owners. The academic motivation underlying this research objective is to systematically explore personal contact network development as a means of supporting the SME sector in Saudi Arabia. This research study sought an understanding of how the use of personal contact network (PCN) and cultural behaviour influence SME marketing in the Saudi Arabian context. Based on the specific aims of this research, in-depth interviewing was deemed most appropriate tool to gather the relevant data for analysis. The research is subjective, as the researcher believes that each participant has a different understanding of what we know.

Conclusion and Future Perspectives

Conclusion and Importance of the research Framework

The current study has facilitated the understanding of the importance of entrepreneurship and networking capabilities of marketing management, and the relevant significance of cultural aspects, with respect to the development of PCNs in SMEs. It has been established that the organisational settings have extensively adopted the development and advanced trends of technology deployment, rather than sticking to the traditional modes of marketing and communication. Little evidence exists about the process of SME networking through personal contact network (PCNs) and how it affects the marketing orientation of SMEs. PCN therefore provide a good avenue through which SMEs can market themselves to their target clients and build strong brand positions for themselves and their products/services.. This study's proposed theoretical framework argues that SMEs need to build a set of capabilities to use their network effectively.Moreover, Strategic management is vital in marketing and networking for SMEs because of the emphasis on the acquisition and mobilization of resources with opportunities. Most importantly, the cultural aspects have been observed to acquire enhanced significance, while the ever-increasing concern of gender-discrimination or male dominance has also decreased. Therefore, the study results are going to facilitate the SMEs in deploying the technological measures for sustained competitiveness, along with making the associated decisions adequately. Moreover, the research is also going to serve as a direction for further studies in future.

References

Abdulzaher, M. (2013). Saudi Arabia sees potential in SME growth. Thomson Reuters Zawya. In *https://www.zawya.com/story/Saudi_Arabia_sees_potential_in_SME_growth-ZAWYA20140223050551/*.

Ali, A. J. (2009). *Business and management environment in Saudi Arabia: challenges and opportunities for multinational corporations*. London: Routledge.

Al-Saleh, A., & Alsaleh, A. (2012). Exploring Strategies for Small and Medium Enterprises in Saudi Arabia. In Paper submitted to the 15th Research Institute for Business and Management Doctoral Symposium, Manchester Municipal University, Manchester, England.

Álvarez, I., Marin, R., & Fonfria, A. (2009). The role of networking in the competitiveness of firms. *Technological Forecasting and Social Change*, *76*(3), 410-421.

Anderson, K and McAdam, R (2005). «An empirical analysis of lead benchmarking and performance measurement: Guidance for qualitative research». *The International Journal of Quality & Reliability Management*. *22*(4/5); pg. 354, 22 pgs.

Andersson, S. (2002). A network approach to marketing management. *Journal of Enterprising Culture*, *10*(03), 209-223.

Baghdadi, W I. (2013). The Role of Cross-cultural B2B Relationship Marketing: an investigation of the Saudi Telecom Company (STC). PhD thesis. UNIVERSITY OF BEDFORDSHIRE.

Barreto, I. (2010). Dynamic Capabilities: A Review of Past Research and an Agenda for the Future. *Journal of Management*, *36*(1), 256-280.

Batonda, G., & Perry, C. (2003). Influence of culture on relationship development processes in overseas Chinese/Australian networks. *European Journal of Marketing*, *37*(11/12), 1548-1574.

Becker, H S (1970). *Sociological work*. Chicago, IL: Aldine.

Ben Aissa, H (2001). Quelle méthodologie de recherche appropriée pour une construction de la recherche en gestion?. Xième Conférence de l'Association Internationale de Management Stratégique 13-14-15 juin 2001. Faculté des Sciences de l'administration, Université Laval, Québec.

Berthon, P., Pitt, L., Berthon, J. P., Campbell, C., & Thwaites, D. (2008). E-relationships for e-readiness: Culture and corruption in international e-B2B. *Industrial Marketing Management*, *37*(1), 83-91.

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PA7

To what extent do students view tv predominantly in english, the ones that are better in listening comprehension in class.

Mr. Arif Mohamed

Department of GEENRAL REQUIREMENTS , college of business administration, ubt .

Arif @ubt.edu.sa

Introduction

Listening comprehension is an undeniable factor in the acquisition of a second language. As Newman and Koskinen remarks,

"Students might establish the relationship between words and meanings through TV's combination of pictures and sounds. TV's entertaining qualities make it an easier medium to access than text and it also minimizes fear of failure in learning. Students can engage in making meaningful predictions of new vocabulary and content as they watch TV for entertainment. Therefore, viewing TV can be a cognitively active experience, when appropriate content is used." (1992, pp. 95-106)

It therefore amplifies the need for investigation in the field of the relevant techniques and strategies required for successful SLA. So the question of comprehensible input mirrored in Krashen's(1985) theory on intake of a second language by L2 learners assumes a pertinent relevance to this discussion of paramount importance among the 46 theories of SLA(Long, 1993).Stephen Krashen posited that L1 are learned while L2 are acquired so by extension, the L2 students need motivation to progress in SLA. In providing that forward movement for L2, a certain amount of comprehensible input that is slightly above their present net language level, ought to be provided in the form of immersion through a medium that is comfortable and interesting. The acquisition process will then commence and progress (Krashen, 1985). This theory lays the basis for the internal validity of this research. So does the focus on the Berlitz (1895) theory of total immersion into the second language as the ultimate answer to the learners' approach, in presenting a compelling and relevant argument towards this area of study.

What are the influencing mechanisms and overarching guidelines that aid a desired outcome for learners of English as a second language? This is the aim of this humble research. It presents a question to be explored in a way that opens much discussion to a wider range of educational strategies being tested in the halls of institutions of second language learning. It is no secret that viewing TV predominantly in the English language serves as a vehicle for improvement of students' listening comprehension. Bean and Wilson (1992) notes that viewing CCTV, has positive effects on the communicative skills of the listeners. As a matter of consequence,

"It turns TV into a moving story book, a steady stream of reading material, which allows students to read spoken language and have vocabulary augmented by video content."

And,

"The almost addictive style of these audiovisual materials with the added reinforcement of captions helps them comprehend realistic English conversation more easily" (Bean; Wilson, 1992, pp. 27-37).

LITERATURE REVIEW

2.1: The Critical role of Listening Comprehension in Second Language Acquisition

There is near unanimity on the role of listening as a critical skill for second language acquisition among the experts in this field. In area of the achievement of that skill in the second language among L2 learners, there is a wide array in means utilized towards that end. Quite a lot of research has been dedicated to the field of captioning/subtitling (Baltova, I. (1999); Markham, P. (1999); Lin (2006);Sydorenko (2010); Karakas and Saricoban (2012). That technique is widely explored as a medium for the strengthening of L2 listening comprehension. The CALL system, by which education technology is factored in for successful outcomes in SLA, has become popular as well, as a listening comprehension tool (Liou, H.C. (1997); Kon, C. K. (2002); Hubbard, P. (2004). Older methods that first made their appearance on the second language stage in the form of audio-lingual tools are still used in third world countries. Many BBC historical and fictional productions are still present today that some in their forties, fifties and sixties remember with nostalgia. It is found in some Berlitz English language training centers where the audio quality has significantly improved over the years. The introduction of CDs and now mp3s and 4s, did much to aid the listening comprehension of the learners at those institutions. Listening comprehension sessions have been a staple in the thrust towards a successful program of L2 learning. In sum, educators view listening comprehension as vital to the process of effective second language acquisition by L2 learners.

OBJECTIVE AND METHODOLOGY

3.1: Subjects

The subjects of this research were taken from two ESL institutions in Jeddah, K.S.A. The first was Yusr International School, a Content and Language Integrated Language (CLIL) high school while the other was a Technical and Vocational college that would be regarded as a teaching center of English as a second language for graduates of secondary schools. It would be also be classified as an institution of higher learning where potential undergraduates attend to develop their skills for vocational purposes. This college, the Nescot Consortium, is a Girls only educational one. The participants from the former, was selected from the Boys section of the school thereby creating a balance in the gender population of the research.

A total of 32 students took part in the quantitative section of the questionnaire. This consisted of 40 % male students and 60 % of females who took part in the quantitative aspect of the questionnaire. The pool was also of a preponderance of Saudi intermediate ESL students as the study was designed specifically to improve to overall thrust L2 learning in the Kingdom of Saudi Arabia. In terms of percentage, it was 99.97 % of Saudis and 0.03 % of other nationalities. In addition, a mix of students, teachers, administrators and educators numbering 11 answered the other section of the questionnaire, the qualitative aspect. Here, the respondents were more diverse in nationalities with a strong bias on native speakers.

Hence, the questionnaire had a combined total of 43 respondents. With this blend, a credible research could be produced and could represent a relative cross section of views of the two institutions in Jeddah, K.S.A. This would hopefully provide substance for the claims of more research in this field and further movement towards change in the delivery of SLA education in this part of the world.

Conclusion and Future Perspectives

This concludes the research effort undertaken with the objective of investigating whether a link can be drawn between increased TV viewing in English and better listening comprehension by ESL learners in class. It is by no means exhaustive on the subject. It asks that this perceived link be delved even deeper. This would allow the stakeholders in the ESL field to enhance their performance and increase their productivity in their respective domains. It lends itself to the view that the researchers on the side of the spectrum that embrace the idea that TV viewing could be a useful tool in ESL delivery by teachers. It lays out some guidelines on the usage of TV, however. This medium has to be monitored in terms of its value of the topic to the lesson, investigated for the optimum benefit it could offer and utilized selectively in respect of the myriad of its content. These standards could be improved upon. However, they serve as a starting point on which other checks could be developed. There will obviously be priorities in SLA so it will have to be tailored to achieve those objectives. This is to assuage the teaching pedagogy that it is not a time wasting exercise and promote their usage of the audiovisual means of administering English lessons.

The teaching fraternity is a generally traditional and changes in stages. It is of importance to engage in training and retraining of this component of the SLA endeavor. This is no easy task and will require patience in the administrative sector of ESL stakeholders to fashion these necessary adjustments. The thought of fixing these problems in a swift manner is simplistic. This is a complicated issue that involves reorientation of attitudes and that will demand time and perseverance.

References

- Baltova, I. (1999) 'Multisensory language teaching in a multidimensional curriculum: The use of authentic bimodal video in core French.' The Canadian Modern Language Review 56(1), 32-48.
- Bean, R. and Wilson, R. (1989) 'Using Closed Captioned Television to Teach Reading to Adults.' Reading Research and Instruction, 28:4, pp. 27-37.
- Bickerton, D., Stenton, T. & Temmermann, M. (2001) 'Criteria for the Evaluation of Authoring Tools in Language Education.' In A. Chambers & G. Davies (eds), ICT and Language Learning: a European Perspective, 53-66. Lisse: Swets & Zeitlinger.
- Birds, S. A., & J. N. Williams. (2002) 'The effect of bimodal input on implicit and explicit memory: An investigation into the benefits of within language subtitling.' Applied Psycholinguistics.'http://www.cus.cam.ac.uk/~jnw12/subtitling.pdf
- Blaxter, L., Hughes, C. and Tight, M. (2010) How to Research 4th Ed.Berkshire. Open University Press.
- Burger, G. (1989) 'Are TV programs with video subtitles suitable for teaching listening comprehension?' Zielsprache Deutsch, 20(4): 10-13.

Hotels distribution : makkah region

Mr. Ahmed Abdulrahman; Dr. Fawwaz Alhammad; Dr. Mohammed T. Hejazi; Mr. Rami Nahas; Mr. Mohammed Minhajuddin

Faculty members university of business and technology.

a.abdulrahman@ubt.edu.sa ; fawwaz@ubt.edu.sa ; m.hejazi@ubt.edu.sa ; r.nahas@ubt.edu.sa ; minhajuddin@ubt.edu.sa

RCC
Research & Consultation Center
مـركـز الأبـحـاث و الاسـتـشـارات

Abstract

Hospitality sector has gained importance in GCC countries. Tourism and specifically religious tourism in Saudi Arabia is a primary driver for the hospitality sector. The Saudi hotel market has demonstrated continuous growth over the past years, due to the extensive request during the period of Oumrah and HAJ Pilgrimage. The research is about gathering and analyzing data from various sources, through interviews with the hotels executive, questionnaires to be distributed to visitors, and by undertaking an extensive literature search. And provide recommendation and advices that contribute to the economic development of KSA (from Different Perspectives: Distribution, number of rooms, ranking, branded residence , elasticity of price…

Main Goals

- Conduct an intensive **literature review**
- Collect and **analyze data on hotels** (geographical distribution, number of rooms, ranking, services, customer type, …)
- Provide strategic recommendations for achieving **vision 2030** goals like: increase HOTELS capacity to welcome more and more Oumrah/HAJ visitors.
  - how hotles can contribute To increase **household spending** on cultural and entertainment activities inside the Kingdom.
  - To have three Saudi cities be recognized in the **top-ranked 100 cities** in the world
  - To move from our (KSA) current position as the 19th **largest economy** in the world into the top 15

Expected outputs

- Analyzed reports on the current status of hospitality market in Makkah region -KSA
- Proposed projects and recommendation in hotel industry, construction, tourism, services …

Added Value of this research / Benefits

- This research will highlight the importance of Hotels distribution in Makkah region of Saudi Arabia.
- It will contribute to the economic development of the kingdom by proposing innovative solutions in construction, tourism, economics, etc.

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E-learning utilization in a gender segregated university – a case study in saudi arabia

Halah Nasseif
Paper Required for PhD at Lancaster University –Module 5
UBT-MIS Department
halah@ubt.edu.sa

RCC
Research & Consultation Center
مركز الأبحاث و الاستشارات

ABSTRACT

In Saudi Arabia's higher education, opportunities of technology enhanced learning (TEL) are provided in a gender segregated educational system. Technology usage in gender segregated university campuses may involve differentiation or inequality in issues related to usage such as support and training. This paper conduct a case study in a private university in Jeddah, Saudi Arabia. It examines Moodle utilization among the female and male campuses. It also examines the adoption of (new software) Pearson MyLab. Surveys were collected and usage statistics were examined to determine the differences. The findings indicated major differences in the utilization of Moodle tools and resources, where the female campus has an 80% higher number of total Moodle activities than the male campus. Both campuses though showed no significant differences in adopting and using MyLab software. But, a major gender priority issue arose when the male campus was given the opportunity for an earlier training and support for adopting the new software. Examining the differences between the male and female campus in applying and utilizing technology can help to provide the guidelines for gender segregated campuses to overcome challenges that may arise and guarantee smooth application of technology at their campuses

RESEARCH QUESTIONS

Objective of the Research

Learning and using technology in higher education help to empower both male and female students. Exceling in learning technology will give graduates an edge and a power tool. The paper will highlight the differences between the male and female campuses in the usage of e-learning, and the acceptance and adaptability of new software introduced. The paper will examine Moodle and the newly adopted Pearson MyLab in UBT. The paper will examine both the students and the faculties. The study results will help to identify obstacles, if exist, and provide equal opportunities of learning for both male and female students. The study can help also in highlighting challenges that may arise in coping with technology in a gender segregated environment.

Research Questions

RQ1: What are the differences in Moodle usage pattern between male and female campuses at UBT?

RQ2: What are the differences in accepting new technology between male and female campuses at UBT?

METHODOLOGY

The quantitative data

Report 1: Moodle statistics

This report extract total of activities of all users (faculties and students) in the period of (Sept-Nov 2016). The Moodle Administrate statistics report tool was used. The data collected are the count of activities (login, posts, and views) conducted in each course. The post and views activities conducted include: login, setup assignment, download assignments, add a new resource, update grades and others, download a resource, submit assignments, or add a discussion posts and more.

Report 2: Moodle course overview

This report extracts the top 20 active courses (weighted) from each campus. The Moodle administrative course overview report is used. The results are exported into MS Excel.

Report 3: MyLab Statistics usage report

An excel table recorded the number of enrolled students in each of the assigned 5 courses using Mylab from each campus. The table also recorded the number of students using assignments, tests and quizzes.

Report 4: Survey Likert scale questions

Questions of usage of each Moodle tool was exported from the survey to an excel file to summarize the end results. For example, one question summarized the percentage usage of the Moodle message tool. Check Figure 10 and Figure 11 in appendix.

The qualitative data

Surveys using Google Forms were sent through emails to the participants' faculties (20 males, 17 females). Faculties sent the surveys to their own students in their enrolled courses. The qualitative data are collected from the answers of the open-ended questions distributed through surveys aimed for faculties and students from both campuses. After the survey was closed, the participants' data was examined and screened manually for common keywords in each answered

DISCUSSION &FINDINGS

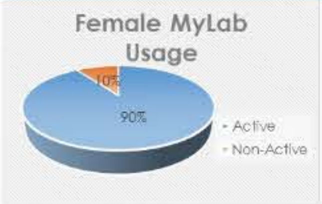
Moodle Utilization

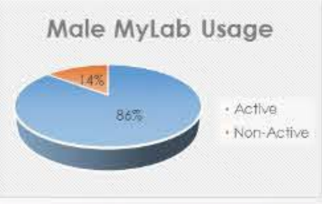
The female students had a 79.9% higher number of activities than the male students. Their high usage is contributed to their teachers' encouragements and their keen to get course materials and updates. Despite the large male campus with a total of 137 instructors and 2772 students, Survey's feedback indicate the female faculties encourage students to use Moodle more by utilizing the communication tools and uploading continuously resources for learning and also demand the submission of assignments through the Moodle platform. No email submissions are accepted. Faculties in Both campuses share similarities in the most used Moodle tools: uploading files and setting up assignments. The other tools are not used as much. Both male and female faculties do not make use of Moodle messages. This is due to the use of external emails, SMS, and WhatsApp application. A key difference is that 46% of male faculties use Turnitin compared to 27% of female faculties. Also, communication with the students is used more in the female campus as 90% of female faculties use Moodle announcements compared to the 69% male faculties. Also, 95% of female students log in frequently to Moodle, compared to the 66% male students. 80% of female students download Moodle course materials, compared to the 62% male students.

Adopting & Accepting New Technology

Both campuses applied MyLab in the same 5 courses. Not all students bought the access code and enrolled in MyLab .Once enrolled, usage of Mylab different activities was examined. Both campuses made use of the Assignments activities. The level of usage is close, but female campus earned %90 active participants and male campus earned 86% of active participants. This may contribute to the instructor's role in encouraging all students to do the assignments. There is a difference though in the use of the other MyLab activities as quizzes and tests. The female campus did not make use of quizzes neither Tests. Whereas the male campus made use of them. 24% of male faculties did use quizzes, and 19% of male faculties used Tests. The non-usage of this data in the female campus also is due to the delay in training and launching of the tool in campus.

MOODLE LOG FILE & MYLAB USAGE





CONCLUSION

The application of TEL in the UBT case is not affected by the segregation. There are no significant differences among the two gender campuses in adopting a new technology. Moreover, the significant differences that showed up in Moodle utilization is not contributed to gender in-equality. Equal opportunity is given to both male and female campuses. Each campus has a dedicated Moodle server. Each campus is assigned 5 courses to use and apply the new software MyLab. Training and support is provided to each campus. The differences arise are mainly TEL related issues as the availability of e-learning support by admin and the faculties. The students share the same concerns of needing better communication, and more mobility. Faculties share the same concerns of needing more training and support for existing and new technology platforms. There was though a slight gender prioritization issue. At time of conflict of interest in applying the new software, the male campus was given the priority of an early training and support. This caused a delay in the start of the new software in the female campus. To ensure the success of TEL in Saudi higher education system, proper planning and equal attention must be given to each campus involved with no differentiation among male and female students and faculties.

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The role of whatsapp in promoting cop in saudi arabian universities- A literature review

Halah Nasseif
Paper Required for PhD at Lancaster University –Module 2

UBT-MIS Department
halah@ubt.edu.sa

Abstract

Communities of Practice (CoP) supports learning trends that highly promotes collaboration and students' engagement. With the emergence of new technologies and new social applications, the learning environment inside the classroom is also evolving. This research focuses on exploring social applications' role in promoting CoP specifically the "WhatsApp" application. The research analyses literature studies that investigates social applications and CoP in Saudi Arabian universities. The outcome of the research analysis indicates that Social apps have positive impact on Students' learning and students' satisfaction. The analysis also indicates that WhatsApp leads a positive impact on students' learning and satisfaction as well as for teachers and academics. Finally, the analysis provides recommendations and guidelines on how WhatsApp can promote CoP. These guidelines include managed course designed, team forming and grading and encouraging students' motivation. The research analysis also explores limitations found in the studies as Saudi students' accessibility to internet and personal phones, cultural acceptance issues and lack of engagements in WhatsApp posts. Future studies can focus on examining these limitations.

Mobile Social Applications' Impact

To shift the focus to exploring the impact of Social Application in learning in Saudi Arabian higher education, there were several studies conducted. Most studies focused on Mobile learning and the readiness of Saudi universities for use of Mobile in the classroom. The study by Alfarani (2014), researched the factors affecting the adoption of m-learning among female teachers within King Abdulaziz University (KAU) in Jeddah, Saudi Arabia. These factors were resistance to change and perceived social culture. Universities policies restrict usage of mobiles by female students inside campus. (Alfarani, 2014). Reasons include avoiding use of cameras and taking pictures of female staff and students. With such cultural acceptance issues, students may not benefit fully from m-learning. It can also cause delays in adopting new technology trends in education. For this, future researches are encouraged to cover this gap and examine its implications. In a contrast study, Saudi students proved to be ready to embrace m-learning. In the International Conference on interactive mobile communication technologies and learning (IMCL) of 2014, a paper by Almutairy, et al. (2014) was presented to examine the readiness of applying m-learning in Saudi Arabian higher education. The study surveyed 131 Saudi students at UK universities. The study argued that students who are confident using mobile devices in their daily lives, would welcome more opportunities for mobile learning. The study indicated that 80% of students embraced the importance of m-learning. Not only this, it considered it as an opportunity for female students to be empowered and overcome the social and cultural obstacles (Almutairy, et al., 2014). Despite the contrast between Almutairy, et al. (2014) and Alfarani (2014) studies, both studies shared neglecting to address the limitations of students accessing internet and owning their own mobiles. A negative impact though, that was noticed in Al-Ibrahim and Al-Khalifa (2014) study, was the lack of engagement in discussions. Most students' replies were short and not engaging as: "Wow, great Job" and with no other further elaborations added. (Al-Ibrahim & Al-Khalifa, 2014). Lack of engagements may be a result of lack of proper teacher's management or follow-up. This can be investigated further. This lack of students' engagements may have implications that will limit the learning opportunity and students may lose interest and lose enthusiasm to participate in the learning community. Saudi higher education can make use of the studies' findings that are listed in this section to ensure capturing the social application impacts of students' leaning. Limitations as lack of internet access, cultural acceptance to m-learning and students' engagement are all important key

WhatsApp Promoting Communities of Practice

In the study of Kapucu, (2012), the author explored the classroom as a CoP and examined the role classroom activities have on collaborative learning. There were 2 surveys conducted in a class of 29 students in the university of central Florida. The first survey aimed to capture the structure of a friendship network within the classroom conducted twice in the term. The second survey conducted once at end of term, it aimed to test the perceived effectiveness of learning, tools, and activities in the learning environment (Kapucu, 2012). The study highlighted the needed guidelines to promote CoP. It indicated that class environment should be designed in a way that promote learning through social interaction. WhatsApp can ensure this social interaction. Course design should reflect both theoretical and practical aspects of the course taught. WhatsApp in Saudi universities can build CoP upon the reflections of the practical World. Interaction with real-world practitioners and first-hand expertise promote interest and provides sources of knowledge and information. (Kapucu, 2012). Similarly, Palloff & Pratt (2007) presented also guidelines on how to promote collaborative learning. The guidelines included formulating a shared goal for learning, negotiating guidelines, forming teams and posting guidelines for their performance. (Palloff & Pratt, 2007). Saudi faculty members can start to apply the guidelines in WhatsApp communication to promote CoP in their campuses.

Research context

A growing number of people and organization are increasingly focusing on communities of practice as a key to improve performance (Wenger, 2015). It makes use of collaborative learning that can be applied in various organizations. Many Saudi universities attempt to enhance traditional learning by incorporating collaborative tools where students not only rely on the instructors, but they interact with other students and peers to further learn (Alkhalaf, et al., 2011). This is done through adopting different collaborative learning tools such as discussion forums, wikis, and blogs. However, these tools are not fully utilized in the Saudi classroom and they do not acquire the same level of popularity or same level of usage as WhatsApp (one of the most widely used communication tools among the Saudi Arabian students (Alsaleem, 2013). As a lecturer myself in a local university in Jeddah, Saudi Arabia, I witness the effect of collaboration tools on my own students' learning and motivation. Researching mobile social applications, WhatsApp and CoP in Saudi higher education may help to enhance the education experience for the students and promote learning for all. Facilitating a learning community in Saudi campuses is the objective of this research study.

Research Questions
RQ 1: How do social applications impact learning in Saudi Universities?
RQ 2: How could WhatsApp potentially benefit learning in Saudi Universities?
RQ 3: How does WhatsApp promote CoP in Saudi universities?

WhatsApp Potential Benefits

There were several studies examining WhatsApp's potential benefits on learning. Two of these studies found, focused on conducting experimental and controlled groups. Both studies were conducted in Taiba University in Al-Madina, Saudi Arabia. The study of Amry (2014) and Barhoumi (2015) both addressed the impact of WhatsApp mobile learning activities on the achievements and attitudes of online students using mobile devices. In both studies, the experimental group (used WhatsApp) achieved higher exam averages than the controlled group (No WhatsApp usage). The studies emphasized the importance and benefits of WhatsApp instant messaging as learning becoming more personal and becoming increasingly based on social interaction and collaboration. The attitudes of students in the experimental group toward WhatsApp showed a positive experience to the learning process and the ability to solve difficulties, construct and share knowledge, and support research. In both studies of Barhomi and Amry, WhatsApp proved to be beneficial and had positive impact on learning. A third study that also examined WhatsApp was presented in the 2015 fifth international conference on e-learning. Al-Omary, et al. (2015) presented the impact of social networks in higher education in Bahrain. The teacher created two WhatsApp groups, one for undergraduate and the other one for graduates. WhatsApp groups used to support the face-to-face learning environment. Feedback was collected using questioners concerning the use of WhatsApp, posting, chatting, and discussions experience. Performance also was monitored and it was improved through the period of using WhatsApp groups. The study indicated positive effect when using WhatsApp in education, but this needed the monitoring and facilitation of the instructor of the class to ensure achievements of the students. the study of Almekhlafy & Alzubi (2016) indicated that students used and practiced the English language learning effectively through the exposure to informal learning through WhatsApp. The majority of the participants had positive attitudes toward technologies and agreed that they can help them in learning English. WhatsApp raised their confidence, reduced anxiety in using English they felt motivated. They also felt improvements in their vocabulary, grammar, comprehension, punctuation and spelling. Students did communicate positively through chatting, sending pictures and videos, and sharing ideas in relation to what they learned inside the classroom. Both studies' findings share positive benefits of WhatsApp's usage in learning. However, the limitation of cultural and ethical issues of use of mobiles were not discussed in both of these studies.

Conclusion

Communities of Practice can have an important role in promoting learning among Saudi Arabian students. WhatsApp as a trendy social app can be used as a tool to enhance CoP. WhatsApp attract students and faculties in Saudi universities to communicate instantly and share information with a touch of a button. The objective of the research was to analyze different literature studies concerning WhatsApp's impact and benefits and its role in promoting CoP in Saudi universities. All reviewed literatures in this research indicated positive responses from educators, students and social media participants. The use of WhatsApp is widely used in Saudi campuses. However, future researches should investigate the limitations discussed in the research. For example, Saudi researches can explore more about students' accessibility to the internet, accessibility to personal phones. The studies can compare female and male campuses and investigates further the cultural acceptance of mobile usage in Saudi campuses. Students' privacy can be examined in future studies. Strategies can be recommended to overcome these limitations. Strategies may include the involvement and support of the Saudi ministry of higher education. Strategies can also include improving universities' policies and conducting CoP awareness plan for both the faculty members and the students.

The role of universities in developing women leaders

DR. LULWA MUTLAQ
UNIVERSITY OF BUSINESS & TECHNOLOGY
LMUTLAQ@UBT.EDU.SA

Research & Consultation Center
مــركـــز الأبــحـــاث و الاســتــشـــارات

ABSTRACT

This purpose of this study is to explore the extent to which universities invest on developing women leadership skills. It also seeks to identify the main challenges facing women on developing these skills and how they acquire them to effectively lead. Moreover it identifies the most important competencies required for women leaders. Both quantitative and qualitative methods were used in data collection where literature review was done and a survey consists of 5 parts and 35 questions was distributed to a sample of women in leadership positions. 53 responses were analyzed.

According to the findings of the study, the majority of women in leadership position are heads of academic departments with various specializations, most of them are holding a Master degree and have experience of less than 5 years and holding the current leadership position for 4 to 6 years. Also the results of the study asserts that women agree that universities contribute to the development of their leadership skills but did not provided with formal professional certification or courses in leadership or opportunities to attend conferences.

The results of the study asserts their individual contribution to the development of their leadership skills but not participate in the book review club. The most challenges identified by women are lack of time, high workload and lack of preparatory programs and training opportunities. Furthermore, the study shows that global understanding and continues improvement are the most required competencies to be developed in women to enable them to take a lead and contribute to 2030 vision.

KEYWORS : Women, development, leadership , leaders competencies

RESEARCH OBJECTIVES

- Provide an understanding of university's role and investment on developing women leadership skills.
- Explore how women leaders develop their own leadership skills
- Identify the challenges facing women on developing her leadership skills and lead effectively.
- Identify the required competencies for women in leadership posts.
- Provide recommendations for Women Leadership Development at university settings.

RESEARCH QUESTIONS

- What is the demographic profile of women leaders at universities?
- To what extent do universities prepare and develop women for leadership posts?
- What challenges do women perceive in developing their leadership skills?
- What competencies required for a woman to be a leader in University setting?

METHODOLOGY

Findings from the literature review which represent the qualitative methods and collecting data using the survey which represent the quantitative method in this study. The design of the sample was probabilistic (judgmental) has been collected from 53 female leadership in three different Private universities .

Data analysis

Part #1 : This part a pilot study has been taken of size 15 to study the validity and reliability if the survey and the results illustrates both .

Part #2 : Descriptive statistics were calculated (frequency , percentages , mean and standard deviation) for each question and the graphs of each question areas.

Part #3 : One sample T- test was used to determine if the mean of participants' responses are greater than 3 (the middle of the scale from strongly disagree 1 to strongly agree 6) at level of significant 0.05.

CONCLUSION

This study provides an understanding of universities investment and role in developing women leadership skills. It indicates that women leaders are in middle age between 30-49 and most holds a Master degree as highest qualifications. This asserts that development of leadership skills on those sector is timely and critical. Also it affirms the needs to invest on providing opportunities to obtain their Ph. D. qualifications while attending training courses, conferences and getting professional certifications to develop leadership skills.

Universities should examines the challenges identified and introduced preparatory programs for woman leaders to qualify them to lead . Moreover, the study concur that individual woman has a primary role in developing her leadership skills while affirm the role of university on such development. Women see that the most important competencies for empowerment to lead is the global understanding and continuous improvement .

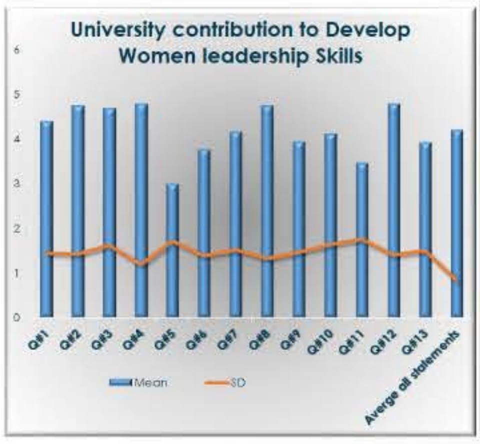
We believe that the study is significant as it pinpoints the demographic of women in leading posts in universities and the importance of investing in human resources development and increase the initiatives that advance the women leaders skills for more empowerment and sustainable growth.

INTRODUCTION

The number of women graduating from universities and entering the labour market has been increased which simultaneously enhances the chances for women development in their career and hence great possibilities to assume management and leadership positions. Kloot (2004) indicated that "As women increasingly gain the necessary qualifications and career experiences we will see more women in leadership role" p.471. Since most of the universities are focusing on providing general subjects and those of areas of specializations, very limited attention is given to equip women with leadership competencies that are needed when assume leadership position. UNESCO 2002 cited in Wallace and Marchant (2009) stated that HRD for women university managers is important for increasing skills and competence.

This research will examine the role of universities in developing women for leadership positions. It will explore the extent on which universities are investing on bringing about the required competencies to gradually and effectively lead.

DATA ANALYSIS



FINDINGS

Women profile:

- The age of the majority of women in leadership position lies in two intervals from 30-39 and 40-40.
- Most women hold Head of academic department position.
- The greatest number of women are holding a master degree .
- The women specialization were vary to a large extent.
- The highest number of years of teaching experience were less than 5 years .
- The majority of women were holding current leadership position from 4-6 years .
- The majority of women previous management leadership experience was less than 1 year.

University Contribution to the Development of Women Leadership skills:

- The study results indicate that women agree that the university has developed their leadership skills to a large extent except for providing professional certification in leadership, Leadership courses and attended conferences.

Individual Contribution to the Development of Leadership Skills:

- The results illustrate that women agree on their contribution to the development of their leadership skills except participating in the university book review club.

Challenges of leadership Development:

- Women see that the challenges of leadership development are lack of time, high workload, lack of preparatory programs and training opportunities that assuming leadership roles and the development of leadership skills.

جامعة الأعمال و التكنولوجيا
UNIVERSITY OF BUSINESS AND TECHNOLOGY

Some models of the muhammadiyah education ways

DR. ILHAM ABDELWHAB MAGHRABY

PHD IN ISLAMIC EDUCATION- UNIVERSITY OF BUSINESS AND TECHNOLOGY - GEDDAH

RCC
Research & Consultation Center
مــركــز الأبـحــاث و الاســتــشــارات

Abstract

It has become important to the educational process is facing some new destinations presents a whole to set up an Islamic student-prepared to perform a full role in the life under Islamic law.

There is no doubt that Islam has the power of a huge impact on these aspects, which enabled Muhammad peace be upon him to bring about educational changes in the Arab individual who converted ary

to this religion's behavior, it behooves us to learn about some of the educational process Muhammadiyah properties and what are the ways used by the blessings and peace in the education of the whole nation and modify their behaviors in front of the theories and experiences of modern process. The approach of systematically Messenger of Allah, peace be upon him,a who fittest nation infidel pagan worthy when applied to set the affairs of Muslims today.

The search Touring a knowledge of educational formats, which are stationed main objective in the Muslim human breeding in accordance with the directives of the Prophet derived their applications through the Sunnah of the Messenger of Allah, peace be upon him actual and anecdotal.

The principle which was followed by the Messenger of Allah, peace be upon him in the educational process fourteen centuries ago is what is going on today and education specialists scientists in teaching methods under the name of multiple terms such as: the plain and then start hard in the educational curriculum. The transition from the simple to the complex. Logical progression of the part to the whole. Taking into account individual differences among learners.

Research Questions

It is worth mentioning that any successful educational process depends on three main aspects: The book, the teacher and the method. How has the educational process at the time of the Messenger of Allah (peace be upon him) and brought about this change, which stunned minds? So it is necessary to answer the following sub-questions:

- What are Muhammadiyah educational process properties?
- What is Muhammadiyah educational method?
- What are steps Mohammadi scientific thinking?
- Are Muslims applied Muhammadiyah educational methods?

Research methodology

Been using the historical approach for tracking Mohammadiyah methods (peace be upon him) in the education process to his followers during their educational period.

Historical approach: it is what can answer questions about the past by major scientific researcher represented his effort in his attempt to infer the relationship between events, and link them, so based on scientific evidence.

References

1. Mohammed Khair Arksosa and Others: Learning psychologically and educationally.
2. Hassan Mohamed Cherkaoui: Toward a Psychology of Islam.
3. Abdul Rahman Ades: Educational Psychology look contemporary.
4. Abu Abdullah Muhammad Al-Bukhari, Fath Al-Bari explained Sahih Bukhari.
5. Abdul Hamid al-Zanaty: the foundations of Islamic education in the Sunnah, Dar Al Arabia, Libya, Tunisia.
6. Mohamed Mahmoud Ahmed Student: Media method in the Koran, Press author, Jeddah.
7. Rahman Nahlawi, the assets of Islamic education and methods.
8. Abed Rabbo al-Qurashi, scientific thinking of the mind of the primary stage and its applications in the light of education, the development of methods of Mecca, Umm Al Qura University, Master Thesis unpublished.
9. Taher Ben Achour: interpretation of liberation and enlightenment 15/101, Dar Sahnoun Publishing and Distribution - Tunisia - 1997, parts / 30.

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USING PROJECTS EDUCATION STRATEGY IN TEACHING ISLAMIC CULTURE COURSE,

JOB ETHICS CHAPTER CASE:

UNIVERSITY OF BUSINESS & TECHNOLOGY

DR. SAMIRA A. SHATA
S.Shata@ubt.edu.sa

Research & Consultation Center
مركز الأبحاث و الاستشارات

INTRODUCTION

Recent studies finds that depending on the lectures only as a method of teaching results that students feel bored and forget the information fast. This paper investigates the effective education strategies that helps students to interact. As the effects of teaching will remain longer and students will transfer this to real life situations. The education strategy:

Learning through projects have been chosen as helping strategy to the main education strategies for the course of Islamic Culture.

This paper is an answer to main question:

What is the effect of using the project strategy to teach the course of Islamic Culture and specially the chapter of Job Ethics.

IMPORTANCE

The previous studies found that using education strategies help to:

Improve problem solving skills.

Improve academic performance and organizing skills.

Improve the level of thinking.

Increase student's self-confidence and team working skills.

Increase the motivation and independency.

METHODOLOGY

The study use the instructor evaluation for the projects ,and the students evaluation form to the course by the end of the semester.

Limitation of the study:

Only students taking Islamic Culture course (301), (Job Ethics) at University of Business & Technology (UBT), spring semester 2016, section (3), includes (35)students.

The students divided to groups, each group did the projects through choosing one ethic and introduce it in a project.

Choose the appropriate method to present the project.

Work as a team and assign specific tasks to each group member.

Apply the ethic to their majors (Finance, Account, HR, Marketing).

RESULTS

Most of the groups improve their team work skills and were collaborating together.

The presentations according to the students' majors were very good and linked the education with life.

They discussed recent problems and news in the society with documents and suggest solutions and was better than classroom lectures.

The learning environment was full of energy and activities, meetings and discussions between group members and with instructors when needed.

Increased the active learning ,students were busy working on their projects and presentations.

مجموعة	خلق مهني عن	طريقة العرض
١	الامانة	عرض مسرحي (مسرحية عن الامانة)
٢	الاتقان	عرض طالبات بوربوينت
٣	تحمل المسؤولية	عرض بوربوينت ، مع اختيار رافعة حادثة الحرم المكي
٤	العدل	عرض بالرسومات المتحركة
٥	الحلم	عرض شخصيات كرتونية بأصوات المجموعة
٦	الرقابة الذاتية	عرض فلم مع شرح وتطبيق للمجموعة

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The relationship between elasticity of money and prices in countries with the largest money stock: an econometric review

FARAH DURANI
FACULTY OF FINANCE, CBA , UBT
F.DURANI@UBT.EDU.SA

ABSTRACT

The main purpose of this paper is to examine the relationship between money expansion and inflation rates and asset price fluctuations across countries charged with highest money creation. The U.S.A, India, China and Japan reported with highest money stock in the world are studied for about 55 years. This research considers the monthly data of M2, the CPI, Stock Index Values and Real Estate values in the stated countries. Johanssen's Integration test indicates that a long term equilibrium relationship is seen between Money supply and inflation rates and Money Supply and Asset Prices in all the four countries except India where Money Supply is not significantly cointegrated with the asset prices. Granger causality test results offer no definite inference, in China and Japan causality is mostly not established between the variables, however in the U.S.A and Indian significant causal relationship is seen.

Key Words: Causality, Co-integration, Money Supply, Inflation, Asset Prices, Stock Indices, Real Estate Indices, Japan, India, China, U.S.

INTRODUCTION

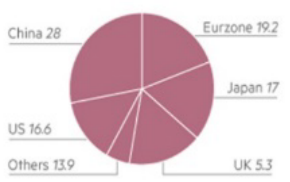
This paper is an attempt to validate quantitatively the theory of instability of elastic money. A stance that elastic nature of fiat money is mainly responsible for inflation and asset price fluctuations is maintained and tested via Granger causality tests and Johansen's co-integration tests. Four countries namely Japan, the U.S.A, India and China, due to their leading money supply figures, have been selected to carry out this analysis. The study period is almost 55 years for all the countries except china. Our stance is to validate the fact that inflation which is said to eat up the value of fiat money, is only and only caused by the increased supply of it. Secondly, the monetary impulses in the form of loose money supply put pressures on asset prices like stock and real estate prices which do not reflect the investor preferences but the easy money that has found its way into such markets. Therefore, the empirical testing section of this research would test the *causality* between money supply growth and inflation and asset prices, like stock index values & real estate prices. This empirical study will embrace the approach of validating the ill effects of fiat money systems in terms of deterioration of people's purchasing power and the creation of asset price bubbles.

DATA AND SAMPLE COUNTRIES:

The causality and long-term relationship in terms of co-integration between money supply and general prices, money supply and asset prices are investigated in the countries charged with highest money stock in the world i.e. the **United States of America**, **Japan, China** and **India.**

World broad money stock

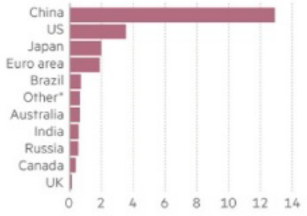
%



Source: Ousmäne Jacques Mandeng

World broad money creation

$tn, change 2007-13



* Argentina, Indonesia, Mexico, Nigeria, Saudi Arabia, South Africa, Turkey

Source: Ousmene Jacques Mandeng

Monthly data of Broad Money Indicator M2 is collected for the United States of America, Japan, China and India. The price is taken as monthly CPI (Consumer Price Index) data for these countries. To test the causality and cointegration between money supply and asset prices i.e. Property Markets and Stock Markets. The stock indices and Real Estate indices are taken as proxies for stock prices and property prices respectively.

METHODOLOGY (MODEL BUILDING)

Augmented Dickey Fuller Test : To test for the stationarity of the data. Spurious or Nonsense Regression which is likely to distort the meaningfulness of results is identified via ADF Test.

$$\Delta yt = \delta Yt{-}1 + \textstyle\sum_i^n \alpha_i \Delta Y_{t-i} + ut$$

$$\Delta Yt = \beta 1 + \delta Yt{-}1 + \textstyle\sum_i^n \alpha_i \Delta Y_{t-i} + ut$$

$$\Delta Yt = \beta 1 + \beta 2t + \delta Yt{-}1 + \textstyle\sum_i^n \alpha_i \Delta Y_{t-i} + ut$$

$$\ln MSt = \alpha o + \sum_i^n \alpha i\, \ln MSt - i \quad + \sum_i^n \beta i\, \ln CPIt - i \quad + \varepsilon t\text{-}$$

$$\ln MSt = \alpha o + \sum_i^n \alpha i\, \ln MSt - i \quad + \sum_i^n \beta i\, \ln SPt - i \quad + \varepsilon t\text{-}$$

$$\ln MSt = \alpha o + \sum_i^n \alpha i\, \ln MSt - i \quad + \sum_i^n \beta i\, \ln REPt - i \quad + \varepsilon t\text{-}$$

Granger Causality Test: To investigate the direction of causality. This type of test typically shows whether the direction of causality runs from MS to CPI (SP & REP) or the other way round called the Feedback.

Johanssen's Co-integration Test : To test for the long-term equilibrium relationship between the Variables. According to Johansen (1988), a *p*-dimensional vector auto-regression (VAR) of order *k* [VAR (*k*)] can be specified as given

$$Z_t = d + \Pi_1 Z_{t-1} + \ldots \Pi_k Z_{t-k} + \omega_t (t = 1 \ldots.. T)$$

$$\Delta Z_t = d + \Pi_k Z_{t-k} + \textstyle\sum_{i-1}^{k-1} (\theta \Delta Z_{t-i}) + \omega_t$$

RESULTS & ANALYSIS

Pairwise Granger Causality Test Summary Results for all the sample countries
Table 8.32: All Countries Summary

Null Hypothesis	Obs	F-statistics	Probability	Reject/ Do not Reject
Japan				
Money Supply does not Granger Cause CPI	712	0.46905	0.8956	Do not Reject
CPI does not Granger Cause Money Supply	712	1.01924	0.4227	Do not Reject
Money Supply does not Granger Cause NIKKEI 225	717	3.09132	0.0007	Reject
NIKKEI 225 does not Granger Cause Money Supply	717	3.65836	9.E-05	Reject
Money Supply does not Granger Cause Property Index	231	0.53324	0.5874	Do not Reject
Property Index does not Granger Cause Money Supply	231	0.54084	0.5830	Do not Reject
The U.S.A				
Money Supply does not Granger Cause CPI	673	2.06533	0.0252	Reject
CPI does not Granger Cause Money Supply	673	7.14182	1.E-10	Reject
Money Supply does not Granger Cause DJII	673	4.22307	1.E-05	Reject
DJII does not Granger Cause Money Supply	673	5.31898	1.E-07	Reject
Money Supply does not Granger Cause S&P Home	336	1.42191	0.1692	Do not Reject
S&P Home does not Granger Cause Money Supply	336	2.10498	0.0238	Reject
India				
Money Supply does not Granger Cause CPI	672	6.75567	5.E-10	Reject
CPI does not Granger Cause Money Supply	672	6.32566	3.E-09	Reject
Money Supply does not Granger Cause Sensex	410	1.01739	0.4069	Do not Reject
Sensex does not Granger Cause Money Supply	410	0.85368	0.5124	Do not Reject
Money Supply does not Granger Cause Property Values	49	3.94843	0.0265	Reject
Property Values does not Granger Cause Money Supply	49	1.15322	0.3250	Do not Reject
China				
Money Supply does not Granger Cause CPI	185	0.21831	0.9943	Do not Reject
CPI does not Granger Cause Money Supply	185	0.85732	0.5745	Do not Reject
Money Supply does not Granger Cause Shanghai Comp	192	0.85383	0.5777	Do not Reject
Shanghai Comp does not Granger Cause Money Supply	192	1.82105	0.0602	Do not Reject
Money Supply does not Granger Cause Property Returns Index	106	1.07676	0.3881	Do not Reject
Property Returns Index does not Granger Cause Money Supply	106	0.37080	0.9461	Do not Reject

This multi-country analysis of the influence of elastic Money Supply on CPI and Asset Prices yields varied yet interesting results. The Johansen's Cointegration test results in Japan show that there is significant long-term relationship between Money Supply – CPI and Money Supply –Property Returns Index, however no Granger Causality is seen running between these variables. Interestingly Money Supply and Nikkei Stock Index are not cointegrated significantly, yet show significant bivariate Granger Causality. In the U.S.A Money Supply is strongly cointegrated with CPI, Stock Index and Property Index Values, showing a strong long term association between these variables. Money Supply in the U.S.A seems to be influencing heavily the inflation rates and Asset Prices. The Granger causality results also validate a causality running from Money Supply to CPI and to Dow Jones Industrial Index with the feedback. Money Supply in the U.S.A is not Granger Causing the S&P home Price Index returns; however the reverse causality is significantly established. The empirical analysis in case of India shows strong cointegration between Money Supply and CPI, but does not validate the same between Money Supply and Sensex and Money Supply and Property Returns. The Money Supply in India is Granger Causing the CPI with the feedback. No causality is seen between Money Supply and Sensex; however significant causality is inferred from Money Supply to Property Returns without the feedback. Money Supply in India seems to be significantly causing the inflation rates and Property returns, but not the Stock Index Returns. For China cointegration tests show that Money Supply is strongly cointegrated with all the three variables. Therefore long term strong relationship can be assumed between Money Supply and CPI and Money Supply and Asset Prices in China. The Granger causality results in China show no causality what so ever running from Money Supply to CPI and Asset Prices

Conclusion: The empirical results though varied, validate the theory of instability of fiat money. Money supply and CPI and Money Supply and Asset Prices are seen to have long term equilibrium relationship in all the four countries i.e. Japan, U.S.A, India and China. The short term causality and the direction of causality varies though across the countries.

References

- Dave, M. B., & Rami, G. D. (2008). A study of causality between money supply and price level in india (monthly data): 1953 to 2005. *Internaltional Conference on Applied Economics*, *1*, 245–254.
- Emerson, J. (2006). The Quantity Theory of Money : Evidence from the United States. *Economics Bulletin*, *5*(2).
- Granger C W J (1969), *'Investing causal relations by econometric models and cross-spectral methods'*, Econometrica, Vol. 37, No 3, July, pp. 424-438
- Gujarati: Basic Econometrics, Fourth Edition III. Topics in Econometrics 17. Dynamic Econometric Models: Autoregressive and Distributed–Lag Models © The McGraw–Hill Companies, 2004 pp 700
- Ma, Y., & Sun, H. (2004). Money and price relationship in China. *Journal of Chinese Economic and Business Studies*, *12*, 225–247.

An empirical comparison in saudi arabia: understanding the persistence of stock performance CAPM; fama-french three factor model v/s four factor model

HUDA ATASSI
UNIVERSITY OF BUSINESS AND TECHNOLOGY
H.ATASSI@UBT.EDU.SA

Research & Consultation Center
مـركـز الأبـحـاث و الاسـتـشـارات

KEYWORDS CAPM, asset pricing, expected rate of return, stock valuation, three factor model, four factor model, risk premium, regression analysis, momentum

ABSTRACT

The performance of stock prices depends on multi-variate factors which are explored with the help of CAPM and Fama-French three factor models. Understanding and explaining the relationship between risk and return was the initial step. these methods are capital asset model (CAPM), Fama-French three-factor model and four-factor pricing model. In CAPM model, we only use a single variable to explain the risk return. In Fama-French, it requires more than one add-on variables (market premium, size, book-to-market), adding one extra variable when applying the four-factor model which is momentum. the paper shows positive performance for the four factor model which gives support to the use of the model in the Saudi Arabia capital market.

THE ASSET PRICING EQUATIONS

$$R_I = R_F + B\,(R_M - R_F) + A$$

THE FAMA-FRENCH **THREE FACTOR EQUATION:**

$$R_I = R_F + B1\,(R_M - R_F) + B2\,(SMB) + B3\,(HML) + A$$

THE **FOUR-FACTOR** PRICING MODEL EQUATION:

$$R_I = R_F + B1\,(R_M - R_F) + B2\,(SMB) + B3\,(HML) + B4\,(UMD) + A$$

LITERATURE REVIEW

CAPM was developed by the first economist Jack Treynor (1961) without fully testing the theory due to the lack of samples and adequate quality, the testing part took place in (1970).

Rosenberg, Reid and Lanstein have created another problem against the CAPM (1985), mentioning that stocks with high ratios of book-to-market equity have higher returns than stocks with low book-to-market equity ratios.

Bhandari (1988) showed another evidence against the CAPM by finding out that firms with high leverage offers higher returns than firms with low leverage even though firms with high debts must have high beta, he proved that firms can still offer high returns even after adjusting the beta.

Fama and French combined all researches conducted in the last 30 years and came up with one formula called Fama-French three factor model (1992).

Carhart extended the Fama-French by adding a fourth factor (1997) which is the UMD factor (up minus down) or WML (winners minus losers). This factor is calculated by finding the spread between returns on one year winners and one year losers (difference between stocks with highest returns and stocks with lowest returns for the previous 12-months).

METHODOLOGY AND DATA ANALYSIS

The literature review is developed further with the empirical research conducted with a sample of 20 companies from 8 different sectors of Saudi Arabia. Tadawul was used as the only stock exchange representation in the research which attempts to provide analysis for 9 hypotheses. The monthly data for 2015 and 2016 is used to compute the market return, SMB, book-to-market ratio, HML and UMD analysis. This data then stems out to perform regression analysis to understand the relationship between the variables.

Data analysis

Part 1: the calculations of all the variables of the models are explained with the actual stock prices i.e. Market return; SMB, book-to-market ratio, HML and UMD.

Part2: all these calculations are then used to conduct a regression analysis for the three models.

Part 3: the hypothesis for CAPM is rejected and only the relationship between the variable HML and UMD with expected rate of return has been established.

INTRODUCTION

The valuation of stock prices is one of the most complex exercises. Its accuracy determines the quality and effectiveness of any finance related decision. The risk and return relationship of stocks are studied in order to understand the returns' prospects with respect to dividends' stability; portfolio management and capital budgeting. Stock valuation can be carried out using a number of models namely: CAPM; Fama-French three factor model and four factor model. The CAPM includes only market risk rate premium as a risk factor while Fama French three factor model adds the size premium and book-to-market premium to value stock prices. The four factor model improves the valuation with the employment of momentum. This research aims to apply these three models in order to evaluate the stock prices of the Saudi stock market (Tadawul) and understand the propensity of each of the four factors with respect to the Saudi stock market.

This research seeks to establish a more reliable model and method to calculate the market risk premium in Saudi stock market. This undertaking entails a thorough literature review which leads to a methodology of comparison of the models which then allows an intelligent discussion over the effectiveness and provides a conclusive recommendation over the stock valuation model within the Saudi specific market.

THE ASSET PRICING GRAPHS

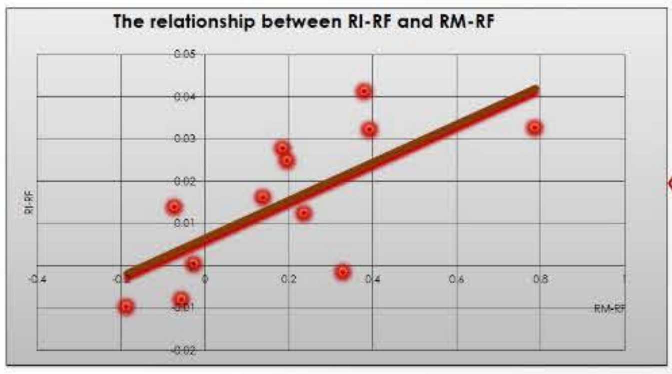


Figure one :
The scatter plot shows the relation ship between stock excess return and market excess return.

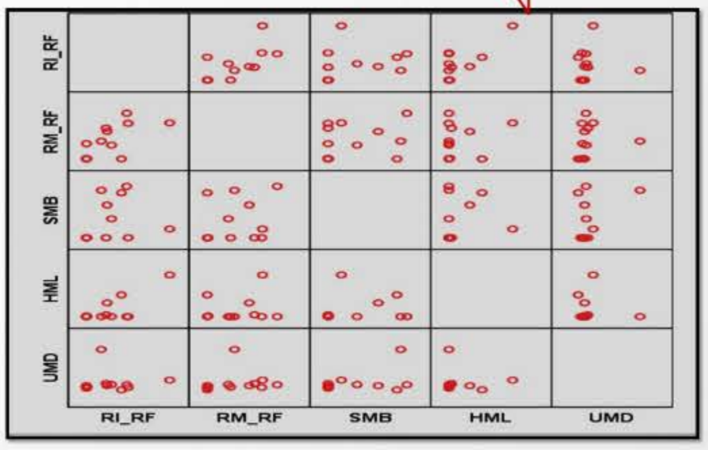


Figure two :
The plot graphs stock excess returns vs. market excess return vs. HML vs. SMB vs. UMD

CONCLUSION

CAPM has one variable, Fama-French has two more factors size and value premiums, whereas four-factor model has an additional factor than the Fama-French the momentum factor.

From the obtained results, we can tell that in terms of the significance F, Fama-French model will make a better choice since it has the lowest significance F= 0.004876184 which is also less tha n 0.05. On the other hand, four-factor model is more reliable since it takes into consideration the highest number of independent factors. Adding the momentum effect makes it stronger. While, the CAPM has only one factor to determine its level of performance, it has its own simple significance.

To conclude this, I will say that the four-factor model will be the most reliable and consistent theory to follow.

RECOMMENDATION

Based on the research applied, its recommended to apply the theories on a wider range of companies to cover a bigger portion of the market. For instance, adding 80 companies or more to make the testing process more trustworthy. Also, extend the time range from three to five years to make the observation more credible and to check what and how would be the effect on a longer-term return. Adding more independent variables would also make a better understanding and explanation that will surely assist our evaluation and testing of future assets.

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SME
Learning from failure that will lead to future success

Lobna S. Sourour

University of business and technology

RCC
Research & Consultation Center
مـركـز الأبـحـاث و الاسـتـشـارات

ABSTRACT

Business failure of new startup small and medium business enterprises (SMEs) had been shown as an important motive of future business success and growth. This had been proved in modern business learning theories. Reasons of business failure might vary from developed to developing countries and by that business attitude towards future success might differ accordingly.

Thus, Saudi Arabia had been chosen as a semi-developed country to test the reasons of business failure that might be a motive for future business success. KSA 2030 vision emphasizes on the importance of SMEs to the betterment of the Saudi emerging economy.

The current research aims at identifying reasons of business failure in Saudi Arabia as well as measuring the impact of different business failure reasons on future business success. Multiple regression analysis had been used to identify the impact of different business reasons failure. Also, hierarchical regression analysis had been used to evaluate and measure the impact of each reason of failure on future business success.

INTRODUCTION

Success of SMEs had been shown important for countries growth. One of the main motives for SMEs future success is to learn from their experience of previous failures. Thus, reasons of business failure become important to be identified and turned to be positive motive rather than having continuous failure of businesses, as a result of failing to learn from previous mistakes.

Business failure in this context refers to a situation where the firms cease to exist due to the inability to identify and respond to changes in their environment. Business failure may be due to several reasons, like; poor business decisions, lack of skilled personnel to foresee strategic implementation, mismanagement, faulty routines and processes, and poor attitude to work. Thus, this research comes to identify such reasons, as well as evaluating the impact of such reasons on the future business success.

According to Yamakawa et al (2010), future business success had been related to be number of entrepreneurs' previous failure(s), Entrepreneurs' internal (as opposed to external) attribution of blame for their pervious entrepreneurial failure, and Entrepreneurs' intrinsic (as opposed to extrinsic) motivation to start up another business upon pervious entrepreneurial failure. On the other hand, future business success had been related to prior start-up experience, experience of critical setbacks in the new venture creation process, business closure experience, and kinds of business closure experience according to the model of Politis and Gabrielsson (2009).

Therefore, this research comes to evaluate the impact of both mentioned models on future business success and identify the model which best fit the business failure environment in Saudi Arabia. Also, the current study will recommend dimensions or factors affecting the case of future business success in Saudi Arabia and fitting a new model according to the significant tools of learning that will be identified through testing both models.

METHODOLOGY

A questionnaire survey merging the two studies of both; Yamakawa &al (2010) in USA and Politis and Gabrielsson (2009) in Sweden had been merged and introduced to managers of startup enterprises which faced at least one time of failure before. Tools of learning through failure had been identified as independent variable(s) and Future business success, as a dependent variable. All variables had been measured using a 7-point Likert scale

The research hypotheses are stated as follows:

H_1: There is a significant impact of learning through failure on future business success.

H_2: There is a significant impact of learning through failure on future business success.

H_3: There is a significant difference between learning through failure impact of model 1 and that of model 2 on future business success.

Also, research questions are stated as:

1. What are the significant variables affecting future business success?

2. Which model is better explaining future business success through learning by failure?

All dimensions had been tested for convergent and discriminant validity, as well as reliability. A multiple regression model had been fitted for each model under study to determine the relative importance of different learning tools on future business success. After that, the hierarchical regression analysis had been used to evaluate the degree of impact of each measure of learning by failure in each model. Finally, the significant tools of learning from both models had been merged and tested using structural equation modeling (SEM) to obtain a new model which is best fitting the Saudi Arabian area as a case of semi-developed country.

CONCLUSION & REFERENCES

Results showed a significant impact of both models on future business success. Comparing the percentage of explained variation, it was found that the first model is still able to explain higher percentage of variation in future business success, which means that the first model is better applied to SMEs in Saudi Arabia. Merging significant dimensions together is still showing relatively low percentage of explained variation despite the fact that it becomes higher than testing each model separately. This means that there are still some dimensions that are affecting the future business failure and they are not tested in the current research. Such variables might be country rules and regulations, political status, economic status and some demographics of leaders, like gender, age and background.

Limitations of the study include sample size as it was difficult to identify enterprises which had been exposed to previous failure. Also, geographical regions had been considered as another limitation as it was hard for researcher to reach all regions of Saudi Arabia. Rather, the researcher collected data from enterprises located in Jeddah and Mekka.

References:

Anna S. Jenkins, Johan Wiklund, Ethel Brundin. 2014. Individual responses to firm failure: Appraisals, grief, and the influence of prior failure experience. *Journal of Business Venturing* ***29:1, 17-33.***

Bae, Young Im. 2014. Performance Drivers of Entrepreneurial Restarts. *Asia-Pacific Journal of Business Venturing and Entrepreneurship* **9:3, 13-22.**

Dee Gray Katherine Fiona Jones , (2016)," Using organisational development and learning methods to develop resilience for sustainable futures with SMEs and micro businesses The case of the "business alliance" ", Journal of Small Business and Enterprise Development, Vol. 23 Iss 2 pp. 474 – 494

Diamanto Politis Jonas Gabrielsson, (2009),"Entrepreneurs' attitudes towards failureAn experiential learning approach", International Journal of Entrepreneurial Behavior & Research, Vol. 15 Iss 4 pp. 364 – 383

Harry Matlay and David RaeThomas Wing Yan ManNottingham University Business School China,

University of Nottingham Ningbo China, Ningbo, China. 2012. Developing a Behaviour-centred model of entrepreneurial learning. *Journal of Small Business and Enterprise Development* ***19:3, 549-566.***

Joseph Amankwah-Amoah , (2014)," A unified framework of explanations for strategic persistence in the wake of others' failures ", Journal of Strategy and Management, Vol. 7 Iss 4 pp. 422 – 444

Susan M. Jensen, Srivatsa Seshadri, Larry G. Carstenson. 2013. Note to Instructors, Barista's Battle Scars. *Entrepreneurship Theory and Practice* ***37:1, 142-146***

Yasuhiro Yamakawa, Mike W. Peng and David L. Deeds (2010). REVITALIZING AND LEARNING FROM FAILURE FOR FUTURE ENTREPRENEURIAL GROWTH. Frontiers of Entrepreneurship Research. Volume 30 | Issue 6

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Graduates' employability: the case of the college of business administration

Yussra Jamjoom

College of business administration/University of business and technology

Yussra@ubt.edu.sa

Abstract

Qualified and skilled employees are crucial in today's dynamic business environment and competitive economy. The Saudi government has put significant responsibility on higher education institutions to produce skilled graduates who can lead the advancement of the Kingdom's economy. Since its inception, as a small institute, the University of Business and Technology has prioritised the employment of its graduates, as reflected in its slogan, 'Education for Job Opportunities'. That said, it is essential to assess the extent to which its graduates have been workplace-ready. This study employs a quantitative research methodology in which employers, graduates and faculty members will be surveyed to identify key skills deemed to be important in the workplace and to investigate the extent to which graduates of the College of Business Administration (CBA) possess those skills. Based on the overall results of the study, recommendations will be made regarding the development of employability skills in CBA graduates.

Research Questions and Methodology

The aim of the study is to explore the employability skills employers, graduates and faculty members deem to be important in the workplace. The study will also investigate whether there is a skills gap in the graduates of the College of Business Administration (CBA) as well as the efforts CBA faculty members are making to impart those skills to the graduates.

The study will employ a quantitative research approach. Three representative samples will be selected for the study, one for each group (employers, faculty members and graduates). The samples will include participants from both CBA campuses. A self-administered survey will be designed for each group. Data from surveys will be gathered and analysed using SPSS.

The questionnaires will be designed to address the following research questions:

-What skills are important in the workplace?

-To what extent do CBA graduates possess those skills?

-To what extent did the CBA curriculum contribute to the development of employability skills in its graduates?

Literature review

In this study, graduates' employability focuses on their 'work-readiness' (Mason et al., 2003). The most common definition of graduates' employability is that of Yorke (2006):

A set of achievements, skills, knowledge and personal attributes that make the individual more likely to secure and be successful in their chosen occupation(s), for the benefits of themselves, the workforce, the community and the economy. (p. 6)

Yorke (2006) emphasises that employment should not be confused with employability, as the first is about obtaining a job. A number of authors, such as Hillage and Pollard (1998) and Knight and Yorke (2002), agree that graduates' employability is based on multiple factors. Hillage and Pollard have suggested that graduates' employability depends on three factors: (1) assets, which encompass the individual's skills, knowledge and attitudes; (2) the utilisation and deployment of those assets; and (3) the presentation of those assets. Knight and Yorke agree to some extent with Hillage and Pollard's components of employability, defining employability as a 'synergic combination of personal qualities, skills of various kinds and subject understanding' (p. 273).

Scholars such as Yorke and Knight (2002) have discussed models for higher education institutions that enhance graduates' employability. The model of Brennan et al. (1996), for example, includes five elements: (1) disciplinary content knowledge, (2) disciplinary skills, (3) workplace awareness, (4) workplace experience and (5) generic skills. Disciplinary content knowledge is gained through courses provided within an institution's curriculum. Some studies have explored the importance of field of study to graduates' initial employment (Walter, 2004). Academic knowledge and discipline-related skills, however, are not sufficient for graduates' employability (Little, 2001; Knight & Yorke, 2002). Literature on graduates' employability has emphasised employability skills and 'generic skills', also referred to as 'transferable skills' or 'key skills' (Harvey et al., 1997). Bennett et al. (1999, p. 76) define generic skills as 'skills which can support study in any discipline, which can be potentially transferred to a range of contexts in higher education or the workplace'. These include the skills of basic competence, communication, adaptability (i.e. problem-solving), creativity, personal development, effectiveness and influencing (Bennett et al., 1999).

According to a study conducted by Jamjoom (2012), private higher education institutions in Saudi Arabia are putting forth efforts to enhance their relationships with the labour market. The study proved that the private sector of higher education is in a better position than the public sector in regards to preparing graduates for the job market (through offering market-oriented programs in English, field work experience and career services). However, this present study focuses on identifying the employability skills other than discipline knowledge that are essential to the workplace in Saudi Arabia and the extent to which CBA graduates possess those skills.

Conclusion and Future Perspective

Graduates' employability is a concern of the CBA. The proposed study will be executed to identify employability skills deemed important in the workplace. The skills gap in CBA graduates, if any, will be ascertained, and recommendations will be passed to CBA management to enhance graduates' employability and to ensure that the CBA addresses any skills gaps through its curriculum.

References

Bennett, N., Dunne, E. J. and Carré, C. (1999). ' Patterns of core and generic skill provision in higher education'. Higher Education, 37, 71-93.

Brennan, J., Kogan, M. and Teichler, U. (1996). Higher education and work. London: Jessica Kingsley.

Harvey, L., Moon, S., Greal, V. and Bower, R. (1997). Graduates' work: Organisational change and students' attributes. Birmingham: Center for Research into Quality.

Hillage, J. and Pollard, E. (1998). Employability: Developing a framework for Policy Analysis London: Department for Education and Employment.

Jamjoom,Y(2012), Understanding private higher education in Saudi Arabia: Emergance, development, and perception,Institute of Education, University of London, Unpublished PhD thesis.

Knight, P. and Yorke, M. (2002). 'Employability through the curriculum'. Tertiary education and management, 8 (4), 261-276.

Little, B. (2001). 'Reading between the lines of graduate employment'. Quality in Higher Education, 7 (2), 121-129.

Mason, G., Williams, G., Cranmer, S. and Guile, D. (2003). 'How much does higher education enhance the employability of graduates '. [Online]. Higher Education Funding Councel of England (HEFCE). Available at: http://www.hefce.ac.uk/pubs/rdreports/2003/rd13_03/. [Last accessed 10-4-2017].

Yorke, M. (2006). Employability in higher education : what it is, what it is not. York: Higher Education Academy.

The impact of internship on youth employment: case university of business and technology, saudi arabia

Farrash .Rabab; Shata Sameera

UBT , ECDIE 2017 conference ,Turkey

Rabab.farrash@outlook.com

Research & Consultation Center
مـركـز الأبـحـاث و الاسـتـشـارات

Abstract

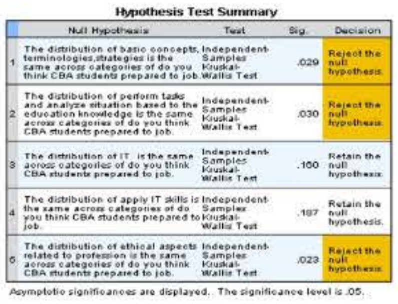
This paper study the effect of internship program on female Youth employment, by analyzing the employers evaluation forms, for undergraduate students from University of business and technology in Saudi Arabia, Jeddah .While most previous studies examined the relation between internship and College performance and the impact of internships from students perspective to see how satisfied they are with their knowledge and skills in the real work environment, and if it improves their GPA level. This study investigate the impact of internship on intern's employment by find out the most important non-academic skills from employer's perspective.

Methodology

The subject in this study consisted of 120 evaluation forms for Female students from the University of Business and Technology in Saudi Arabia .The evaluation contains assessment concentrated on The: **Knowledge, performance** and **professional skills** communication, ethical responsibility, problem solving, creativity, English language…and a question to employers: Do they think UBT students (interns) ready to work in different area related to their major?

Analyzing the evaluation the answer to this question used as a measure to indicate the employers satisfaction which may lead to a first job opportunity. T- test applied using SPSS statistic data program , This results compatible with previous studies which considered the communication skill and problem solving among the most important non-academic skills required in the job market.

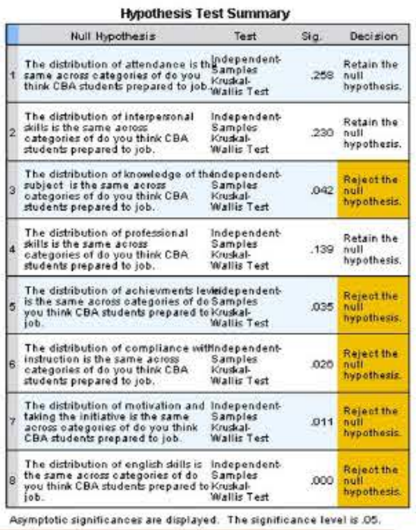
Conclusion



Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of basic concepts, terminologies,strategies is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.029	Reject the null hypothesis.
2	The distribution of perform tasks and analyze situation based to the education knowledge is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.030	Reject the null hypothesis.
3	The distribution of IT is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.160	Retain the null hypothesis.
4	The distribution of apply IT skills is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.187	Retain the null hypothesis.
5	The distribution of ethical aspects related to profession is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.023	Reject the null hypothesis.

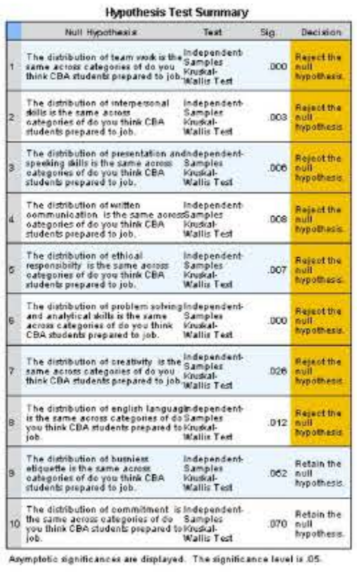
Asymptotic significances are displayed. The significance level is .05.



Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of attendance is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.258	Retain the null hypothesis.
2	The distribution of interpersonal skills is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.230	Retain the null hypothesis.
3	The distribution of knowledge of the subject is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.042	Reject the null hypothesis.
4	The distribution of professional skills is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.139	Retain the null hypothesis.
5	The distribution of achievments level is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.035	Reject the null hypothesis.
6	The distribution of compliance with instruction is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.026	Reject the null hypothesis.
7	The distribution of motivation and taking the initiative is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.011	Reject the null hypothesis.
8	The distribution of english skills is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.000	Reject the null hypothesis.

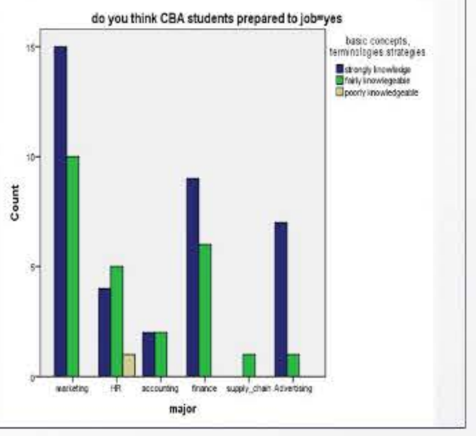
Asymptotic significances are displayed. The significance level is .05.



Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of team work is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.000	Reject the null hypothesis.
2	The distribution of interpersonal skills is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.003	Reject the null hypothesis.
3	The distribution of presentation and speeking skills is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.006	Reject the null hypothesis.
4	The distribution of written communication is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.008	Reject the null hypothesis.
5	The distribution of ethical responsibilty is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.007	Reject the null hypothesis.
6	The distribution of problem solving and analytical skills is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.000	Reject the null hypothesis.
7	The distribution of creativity is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.026	Reject the null hypothesis.
8	The distribution of english language is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.012	Reject the null hypothesis.
9	The distribution of busniess etiquette is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.062	Retain the null hypothesis.
10	The distribution of commitment is the same across categories of do you think CBA students prepared to job.	Independent-Samples Kruskal-Wallis Test	.070	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.



References

1-Alzu'be, Ahmad Needs of Saudi Labor Market." *Update* 2, no. 9 (2012).

2-Baqadir, Abdullah, Fiona Patrick, and George Burns. " Addrng the skills gap in Saudi Arabia: does vocational education address the needs of private sector employers?." *Journal of Vocational Education & Training* 63, no. 4 (2011): 551-561

3-Bayerlein, Leopold. "Curriculum innovation in undergraduate accounting degree programmes through "virtual internships"." *Education+ Training* 57, no. 6 (2015): 673-684.

4-Coco, Malcolm. "Internships: A try before you buy arrangement." *SAM Advanced Management Journal* 65, no. 2 (2000): 41.

5-Ebied, Hussein. "An Empirical Investigation of the Impact of the Student Accounting Internships on Subsequent Academic Performance: The Case of UAE University." *Journal of Economic and Administrative Sciences* 20, no. 2 (2004): 33-44.

6-Gault, Jack, Evan Leach, and Marc Duey. "Effects of business internships on job marketability: the employers' perspective." *Education+ Training* 52, no. 1 (2010): 76-88.

7-Hanson, Jarice. "Internships and the individual: Suggestions for implementing (or improving) an internship program." *Communication Education* 33, no. 1 (1984): 53-61.

8-Hergert, Michael. "Student perceptions of the value of internships in business education." *American Journal of Business Education (AJBE)* 2, no. 8 (2011): 9-14.

9-Jackling, Beverley, and Riccardo Natoli. "Employability skills of international accounting graduates: Internship providers' perspectives." *Education+ Training* 57, no. 7 (2015): 757-773.

10- Knouse, Stephen B., John R. Tanner, and Elizabeth W. Harris. "The relation of college internships, college performance, and subsequent job opportunity." *Journal of employment Counseling* 36, no. 1 (1999): 35-43.

11-Lerman, Robert I. "Are employability skills learned in US youth education and training programs?." *IZA Journal of Labor Policy* 2, no. 1 (2013): 6.

12-Maelah, Ruhanita, ZakiahMuhammaddun Mohamed, RosiatiRamli, and AiniAman. "Internship for accounting undergraduates: comparative insights from stakeholders." *Education+ Training* 56, no. 6 (2014): 482-502.

13-McKenzie, David, Nabila Assaf, and Ana Paula Cusolito. "The demand for, and impact of, youth internships: evidence from a randomized experiment in Yemen." *IZA Journal of Labor & Development* 5, no. 1 (2016): 1.

14-Mihail, Dimitrios M. "Internships at Greek universities: an exploratory study." *Journal of Workplace Learning* 18, no. 1 (2006): 28-41.

15-Rigsby, John T., Noel Addy, Clyde Herring, and Donna Polledo. "An examination of internships and job opportunities." *Journal of Applied Business Research* 29, no. 4 (2013): 1131.

16-Rogers, Sean Edmund. "Pay status, work design, job satisfaction, and career development: an analysis of paid and volunteer interns." PhD diss., Rutgers University-Graduate School-New Brunswick, 2013.

17-Shelley.Martin. "Sweeting opportunities for today's youth".

Canadian HR Reporter; Mar 21, 2016; 29, 5; ABI/INFORM Global

18- Saudi Arabia General Authourity of statics. , (Unemployment as a percentage of population)
https://www.stats.gov.sa/en/818-021-

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The impact of job performance enablers on job performance capability: an empirical study on saudi universities

Miss.Doaa Mirah

Department of Management, Business School- Manchester Metropolitan University, All Saints Campus, Oxford Road, Manchester M15 6BH- Telephone: 01612471022,
University Of Business and Technology- Deanship O f scientific Research
Doaa.mirah15@gmail.com

Research & Consultation Center
مركز الأبحاث و الاستشارات

POSTER ABSTRACT

Design/methodology/approach

This research adopts quantitative research as it is seen that quantitative research allows the use of statistical methods to arrive at critical observations about the research variables (Curwin and Slater, 2008). By design, this research attempts to study the relationship between different variables representing the issues faced by KSA universities.

REFERENCES

Aydin, A., Sarier,Y., and Uysal, S. (2013). "The Effect of School Principals' Leadership Styles on Teachers' Organizational Commitment and Job Satisfaction", Educational Sciences: Theory & Practice, 13 (2), pp. 806-811.

Bo, Y. (2013). "The Influence Study of Transformational Leadership in University on Teachers' Organizational Commitment: The Construction and Verification of a Theoretical Model", Canadian Social Science, 9 (4), pp. 126-137.

Collings, D., and Mellahi, K. (2009). "Strategic Talent Management: A Review and Research Agenda", Human Resource Management Review, 19, pp. 304-313.

Collings, D., Scullion, H., and Vaiman, V. (2011). "European Perspectives on Talent Management", European Journal of International Management, 5, pp. 453-462.

Cherabin, M., Ggobadipour, M., Azimi, H., Qadimi, A., Shalmani,R., Ashouridavaji, M., and Cherabin, M. (2013). "Relationship between Organizational Commitment and Job Satisfaction among Faculty Members of Secondary Level Teacher Training Programme in India (Mysore) and Iran (Tehran) - A Comparative Study. Indian Streams Research Journal, 3 (5), pp. 1-6.

Crossman, A., and Bassem, A. (2003). "Job Satisfaction and Employee Performance of Lebanese Banking Staff", Journal of Managerial Psychology, 18(4), pp. 368-376.

Erdem, M., and Ucar, Y.(2013). "Learning Organization Perceptions in Elementary Education in terms of Teachers and the Effect of Learning Organization on Organizational Commitment", Educational Sciences: Theory & Practice, 13 (3), pp. 1527-1534.

Fu,Y. (2013). "High-Performance Human Resource Practices Moderate Flight Attendants' Organizational Commitment and Organizational Citizenship Behavior", Social Behavior and Personality, 41 (7), pp. 1195-1208.

Jamaludin, Z. (2009). "Perceived Organizational Justice and its Impact to The Development of Commitments: A Regression Analysis", International Review of Business Research Papers, 5 (4), pp. 478-490.

Mosadeghrad, A., and Ferdosi, M. (2013). "Leadership, Job Satisfaction and Organizational Commitment in Healthcare Sector: Proposing and Testing a Model", Mater Sociomed, 25 (2), pp. 121-126.

Sani, A. (2013). "Role of Procedural Justice, Organizational Commitment and Job Satisfaction on job Performance: The Mediating Effects of Organizational Citizenship Behavior", International Journal of Business and Management, 8 (15), pp. 57-67.

Thunnissen, M., Boselie, P., and Fruytier, B. (2013). "A Review of Talent Management: 'Infancy or Adolescence?' ", The International Journal of Human Resource Management, 24 (9), pp. 1744-1761.

Zeinabadi, H., and Salehi, K. (2011). "Role of Procedural Justice, Trust, Job Satisfaction, and Organizational Commitment in Organizational Citizenship Behavior (OCB) of Teachers: Proposing a Modified Social Exchange Model", Procedia-Social and Behavioral Sciences, 29, pp. 1472-1481.

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Purpose

The purpose of this research to study the antecedent factors that impact job performance at universities in Saudi Arabia. These include talent management, organisational commitment, and job satisfaction. Indeed, several researchers (e.g. Lee, 2000; Jamaludin, 2009; Aydin, et al., 2011; Bo, 2013; Cherabin, et al., 2013; Erdem and Ucar, 2013; Fu, 2013; Mosadeghrad and Ferdosi, 2013; 2013; Sani, 2013) studied and called for further research on job performance and its causes in terms of talent management practices, organisational commitment, and job satisfaction.

Discussion

First of all, this study contributes to the literature by filling the gap that exists in the literature where there is a lack of studies investigating the impact of job performance enablers on job performance capability in the KSA. The quantitative analysis performed in this study has led to some important findings. The foremost finding made is that talent management and job satisfaction are not significant issues in achieving high job performance among lectures at universities in Saudi Arabia located in Jeddah. However, it is found that attaining organisational commitment amongst lecturers is important factor that influence job performance. In addition, the current study found that no significant difference in the impact of job performance enablers on job performance due to gender, age, and academic ranking; whereas a significant difference in the impact of job performance enablers on job performance in related to experience occurred.

It has been found in previous studies that organisational commitment impacted job performance (e.g. Collings and Mellahi, 2009; Collings et al. 2011; Zeinabadi and Salehi, 2011; Thunnissen et al. 2013). Thus, it is inferred that what have been found in this study are consistent with the literature. In other words, organisational commitment impacted empirically job performance capability. Thus, practitioners and decision makers need to recognize the mechanisms in which they may well attain organisational commitment.

However, an interesting finding in this research was that talent management and job satisfaction did not have statistically significant impacts on job performance. These lacks of evidence for the relationship between talent management and job satisfaction on the dependent variable of job performance were unexpected, as the findings of previous studies provided support for such associations. For instance, Crossman and Bassem (2003), Collings and Mellahi (2009), Collings et al. (2011), and Mosadeghrad and Ferdosi (2013) confirmed that there was a significant positive relationship between talent management and job performance in the one hand; and between job satisfaction and job performance on the other hand. Nevertheless, the lack of the significant relations could be due to the lecturers' responses who did not believe in these associations. Consequently, further research is needed to clarify and explain the lack of support for these relationships, bearing in mind that the research field is based on the country of KSA, and thus a cultural context could be occurring. Further, as shown in Table (3), the value of R2 was 23.9%, thus further research is needed to test the applicability and impact of job performance enablers used in this study on another industry to assess and improve the generalizability of the findings. In other words, future studies might add other enablers and test their effect over job performance. Also, increasing the respondent rate is needed to validate the research findings further.

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College of Engineering

Book of POSTER

Table of Content

Effect of awj cutting conditions on vertical force

A. I. HASSAN

INDUSTRIAL ENGINEERING DEPARTMENT, UNIVERSITY OF BUSINESS AND TECHNOLOGY, JEDDAH, KSA

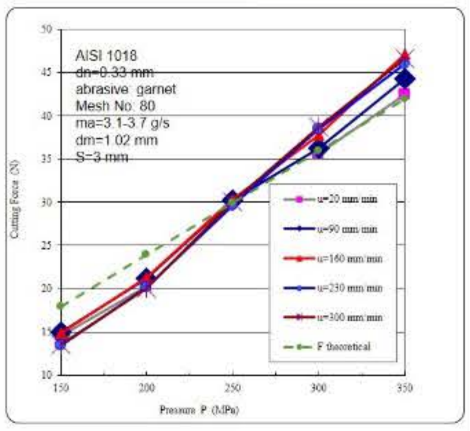
A.HASSAN@UBT.EDU.SA

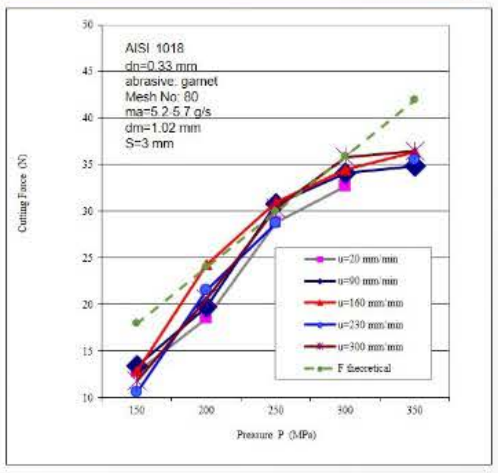
RCC
Research & Consultation Center
مـركـز الأبـحـاث و الاسـتـشـارات

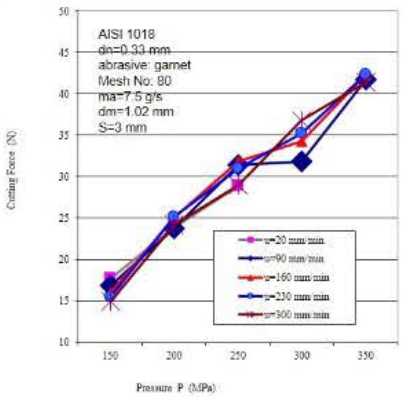
ABSTRACT

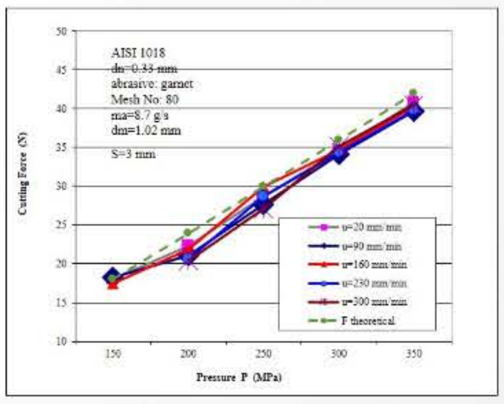
IN ABRASIVE WATERJET (AWJ) CUTTING, THE VERTICAL CUTTING FORCE IS MUCH LOWER COMPARED TO OTHER CONVENTIONAL MACHINING PROCESSES. THE PRESENT PAPER DESCRIBES A MODEL THAT PREDICTS THE VERTICAL CUTTING FORCE IN AWJ USING WATERJET PRESSURE. THE EXPERIMENTAL RESULTS WERE FOUND IN GOOD AGREEMENT WITH THE THEORETICAL VERTICAL CUTTING FORCE TO A REASONABLE DEGREE OF ACCURACY. THE RESULTS SHOW THAT AS PRESSURE INCREASES, THE VERTICAL CUTTING FORCE INCREASES WHILE BOTH THE TRAVERSE RATE AND THE ABRASIVE FLOW RATE HAVE A SLIGHT EFFECT ON THE VERTICAL FORCE OVER A WIDE RANGE OF EXPERIMENTAL VALUES.

RESULTS

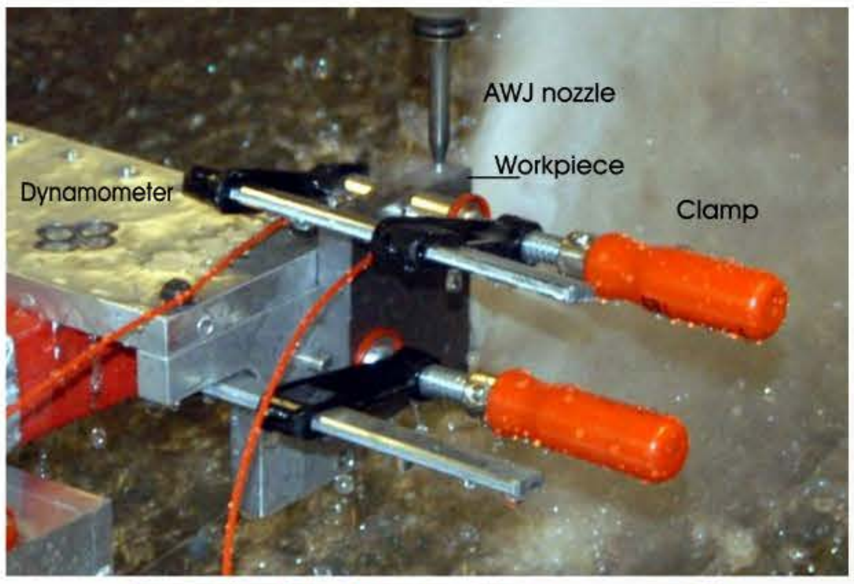








EXPERIMENTAL WORK



CONCLUSIONS

1. THE MOST IMPORTANT PARAMETER IN AFFECTING THE VERTICAL CUTTING FORCE IS WATERJET PRESSURE. AS WATERJET PRESSURE INCREASES, THE VERTICAL CUTTING FORCE SHARPLY INCREASES. THIS TREND IS THE SAME FOR TRAVERSE RATE, FROM 20 MM/MIN TO 300 MM/MIN AND FOR ABRASIVE FLOW RATE FROM 3.1 G/S TO 8.7 G/S. IT WAS FOUND OUT THAT THE TRAVERSE RATE AND ABRASIVE FLOW RATE HAVE A SLIGHT EFFECT ON THE VERTICAL CUTTING FORCE.
2. THE VERTICAL FORCE IS PREDICTED TO A REASONABLE DEGREE OF ACCURACY AT LOW ABRASIVE FLOW RATE AND TO A HIGHER DEGREE OF ACCURACY AT HIGH ABRASIVE FLOW RATE.
3. THE VERTICAL CUTTING FORCE IS SLIGHTLY HIGHER IN THE CASE OF PURE WATERJET COMPARED WITH ABRASIVE WATERJET.

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DESIGN OF WIRELESS digital STETHOSCOPE for heart rate monitoring UTILIZING GSM TECHNIQUE

Basem Abu Zneid[1] , ABDUREZAK TAHIR HUSEN[2]

Basem Abu Zneid , Electrical and computer engineering department, Ubt university

Basem Abu Zneid[1] - basem782001@gmail.com

Abstract

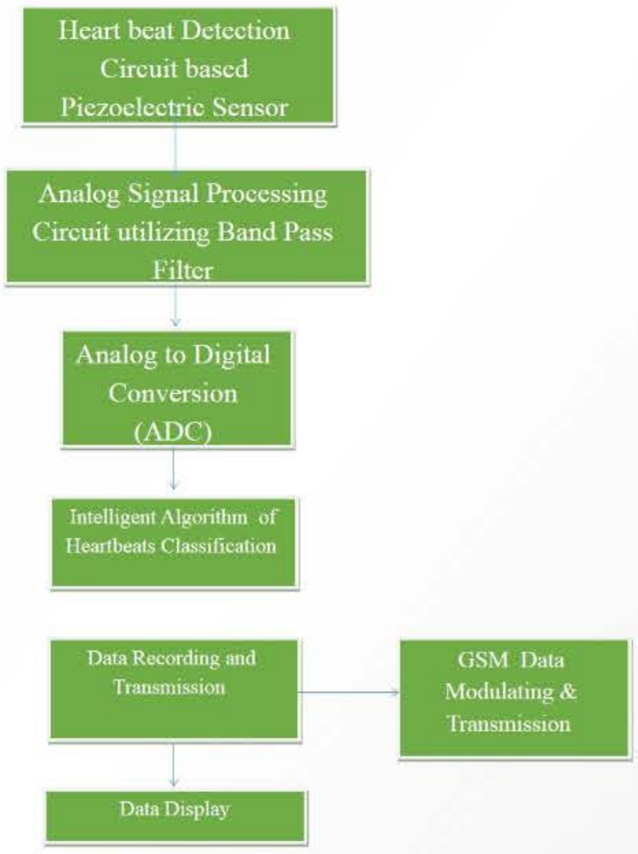
The main aim of this project is to improve and develop a low cost electronic stethoscope with wireless transmission remote monitoring system which is more affordable and friendly. In addition, this project utilized Global system for mobile communication (GSM) to send patient's heart beat details via wireless network. Furthermore,Intelligent Algorithm of Heartbeats upnormalities Classification have been designed and implemented using microcontroller.

Introduction

In clinical application, stethoscope is very effective device to monitor heart and respiratory sounds. Physicians have been used stethoscope nearly two centuries for listening patient's internal organs. Since the cardiovascular diagnostic rapidly increased year by year. Consequently, development of wireless technology based on heart beat sound detection and classification becomes one new approach to diagnose cardiovascular diseases.

Methodology

Block Diagram of the Developed Technique



Heart beat Detection Circuit based Piezoelectric Sensor

Analog Signal Processing Circuit utilizing Band Pass Filter

Analog to Digital Conversion (ADC)

Intelligent Algorithm of Heartbeats Classification

Data Recording and Transmission

GSM Data Modulating & Transmission

Data Display

Conclusion

Demonstrated goals and objectives of this project have been achieved and result has been verified. However, the designed digital stethoscope based pies electronics sensor were able to detect heart sound with high precession, the analogy signal of the heart sound interfaced with microcontroller and with help of developed algorithm . The heart beat upnormalities have been calcified and the results send via wireless network to physician to be displayed on smart phone.

A Comprehensive Study on PV/BS/UG Hybrid Energy System: "Case study on Saudi Arabia"

Department of Electrical Engineering, Collage of Engineering and Information Technology,
University of Business and Technology, 110200Jeddah 21361, Saudi Arabia

E. A. El-Sayed*, A. ELrashidi

*elsayed@ubt.edu.sa

ABSTRACT

IN THIS PAPER WE INTRODUCE A FULLY AUTOMATED POWER MANAGEMENT CONTROL SYSTEM FOR HYBRID PV/BATTERY SANK/ UTILITY GRID (PV/B S/UG) SYSTEM. DIFFERENT TILT ANGLES HAVE BEEN TESTED TO SPECIFY THE BEST TILT ANGLE FOR THE SELECTED SITE. THE GENERATED POWER FROM THE PV SYSTEM IS MEASURED AND COMPARED WITH THE CALCULATED ONE. THE DEFICIT AND SURPLUS POWER HAVE BEEN DETERMINED. THE POWER MANAGEMENT TECHNIQUE IS DESIGNED IN DIFFERENT OPERATING MODES AND CONTROLLED USING A PROGRAMMED ARDUINO CONTROLLER. A FULL ALGORITHM AS WELL AS COMPLETE PROGRAM USING C++ HAVE BEEN DESIGNED AND APPLIED TO MANAGE THE POWER FLOW SUPPLIED FROM THE THREE AVAILABLE SOURCES THROUGH THE ARDUINO NANO CONTROLLER. THE INTRODUCED SYSTEM IS TESTED USING A REAL LIGHTING LOAD OF UNIVERSITY OF BUSINESS AND TECHNOLOGY LOCATED IN DHAHBAN-JEDDAH, SAUDI ARABIA. A FUZZY LOGIC DESIGN IS USED TO VERIFY THE PROPOSED POWER MANAGEMENT SYSTEM DURING THE DAY. THIS METHODOLOGY USES THE HOURLY RADIATION, AND HOURLY LOAD POWER MEASURED AT DIFFERENT TITLE ANGLES OF PV SYSTEM.

VERY VALUABLE RESULTS CAN BE EXTRACTED FROM THE PROPOSED TECHNIQUE THAT COULD HELP RESEARCHERS AND DECISION MAKERS. THE RESULTS OBTAINED FROM THE PROPOSED SYSTEM HAVE ESTABLISHED THE ECONOMIC FEASIBILITY OF INSTALLING HYBRID ENERGY SYSTEMS IN MANY SITES OF SAUDI ARABIA.

INTRODUCTION

SOLAR ENERGY IS CONSIDERED AS A MAIN FUTURE SOURCE OF CLEAN AND CHEAP ENERGY BECAUSE; IT IS A CLEAN, UNFAILING AND ENVIRONMENT-FRIENDLY POTENTIAL RESOURCE AMONG ALL RENEWABLE ENERGY OPTIONS [1]. SAUDI ARABIA HAS CONTINUOUS SUPPLY OF SOLAR ENERGY DURING A WHOLE YEAR HOWEVER; DUE TO SEASONAL AND PERIODIC VARIATIONS OF SOLAR ENERGY PHOTOVOLTAIC SYSTEM NEEDS A BATTERY BANK TO STORE THE EXTRA ENERGY [2-5].

PV SYSTEMS HAVE TWO MAJOR PROBLEMS; IT HAS A VERY LOW CONVERSION EFFICIENCY OF ELECTRIC POWER GENERATION ABOUT 10-24% [6], AND IT IS REDUCED UNDER LOW IRRADIATION CONDITIONS. PV PANELS HAVE A NONLINEAR VOLTAGE-CURRENT CHARACTERISTIC [7] DUE TO THE VARIATION OF MAXIMUM POWER POINT (MPP), WHICH DEPENDS ON THE ENVIRONMENTAL FACTORS, SUCH AS IRRADIATION AND TEMPERATURE [8]. TO GENERATE A MAXIMUM POWER FROM PV SOLAR PANELS, WE NEED A SUN TRACKING SYSTEM THAT FOLLOWS THE SUN. AUTOMATIC SOLAR TRACKING SYSTEM USING ARDUINO HARDWARE SYSTEM DESIGN IS USED FOR CONTINUOUSLY TACKING THE SUN TO OBTAIN THE MAXIMUM POWER POINT [9]. ARDUINO IS AN OPEN SOURCE ELECTRONIC PROTOTYPE PLATFORM THAT CONSISTS OF 8-BIT ATMEL AVR MICROCONTROLLER SUCH AS ATMEGA328. IN THIS PAPER, WE OBTAIN THE MAXIMUM POWER POINT USING ARDUINO PROGRAMMING SYSTEM DESIGN.

POWER MANAGEMENT FOR ANY HYBRID SYSTEM IS CONSIDERED AS A KEY ROLE TO MAXIMIZE THE SYSTEM PERFORMANCE [10]. IN THIS PAPER, A POWER MANAGEMENT OF THE PROPOSED HYBRID PV/BB/UG SYSTEM GIVEN IN [11] IS CONTROLLED BY AN ARDUINO SYSTEM.

PROPOSED SYSTEM MODELLING

PV SYSTEM MODEL

THE TILT ANGLE OF THE PV SYSTEM IN ACCORDANCE WITH THE MOVEMENT OF THE SUN DETERMINES THE INTENSITY OF THE SUNLIGHT FALLING ON THE MODULES SURFACE AND, THEREFORE, IT WILL AFFECT THE SYSTEM OUTPUT POWER. DUE TO THE SAUDI ARABIA LOCATION AT NORTH OF THE EQUATOR, THE SOLAR PANEL IS INSTALLED FACING SOUTH. THE PV ARRAY SURFACE SHOULD BE POSITIONED DIRECTLY PERPENDICULAR TO THE SUN'S RAYS. THIS TILT ANGLE OF THE SOLAR PANEL HAS A GREAT EFFECT ON THE AMOUNT OF SOLAR RADIATION WILL CAPTURE AND THEN ON THE AMOUNT OF SUNLIGHT TO BE CONVERTED INTO ELECTRICITY.

THE TILT ANGLE OF THE DESIGNED SYSTEM HAS BEEN CHANGED TO EXAMINE THE BEST TILT ANGLE OF THE SELECTED SITE. THIS CAN BE EASILY ACHIEVED USING A SERVO MOTOR COUPLED ON THE SOLAR PANEL SYSTEM SHAFT AND VARIOUS READINGS HAVE BEEN DONE ON THE OPTIMUM TILT AND ORIENTATION ANGLE FOR FIXED SURFACES.

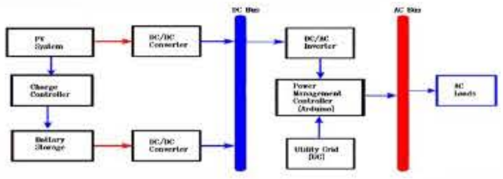


FIGURE 1: BLOCK DIAGRAM OF THE PROPOSED HYBRID SYSTEM.

THEREFORE, THE OPTIMUM TILT ANGLE PROVIDES MAXIMUM POWER OUTPUT FROM THE SYSTEM DURING THE MONTH. THE TILT ANGLE CAN BE FIXED AT A CERTAIN ANGLE ALL YEAR ROUND, SEASONALLY, OR MONTHLY CHANGED. IN THIS PAPER, THE PV ARRAY IS TESTED AT DIFFERENT TILT ANGLE AND THE PV GENERATED POWER IS MEASURE AND THEN THE ACTUAL LOAD SHARING IS CALCULATED AND COMPARED WITH THE THEORETICAL RESULTS OBTAINED BY THE AUTHORS [11].

THEORETICAL CALCULATIONS WERE PERFORMED TO DETERMINE TOTAL GENERATED POWER AT A GIVEN TILT ANGLE.

BATTERY STORAGE MODEL

THE ENERGY BALANCE BETWEEN THE PV ENERGY SYSTEMS AND THE LOAD; THE BATTERY STATE OF CHARGE, SOC, AFTER CERTAIN PERIOD OF TIME, CAN BE CALCULATED FROM THE FOLLOWING EQUATIONS FOR CHARGING AND DISCHARGING CONSEQUENTLY AS ILLUSTRATED IN WQNS. (8,9) [13].

$EB(T+1) = EB(T)(1-\Sigma)$ + SURPLUS POWER* HBC

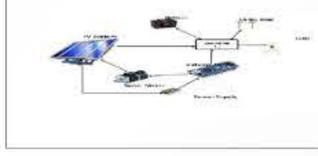
$EB(T+1) = EB(T)(1-\Sigma)$ - DEFICIT POWER/ HBD

WHERE Σ IS THE HOURLY SELF-DISCHARGE RATE; THE MANUFACTURER DOCUMENTATION RECOMMENDED ITS VALUE OF 0.2% PER DAY FOR MOST BATTERIES [13]. (YANG ET AL., 2008). HBC AND HBC ARE THE CHARGING AND DISCHARGING EFFICIENCY OF THE BATTERY AND IT IS CONSIDERED 90% AND 85%, RESPECTIVELY [14].

ARDUINO CONTROLLER MODEL

THE DESIGNED AND EMBEDDED ALGORITHM ON ARDUINO NANO CONTROLLER IS BASED ON THE COMPARISON BETWEEN THE OUTPUT POWER FROM PV MODULE AT THE GIVEN TILT ANGLE AND DECIDE WHICH SWITCHES TO TURN ON AND WHICH TO TURNS OFF BASED ON THE INPUT LOAD DATA. THE FOLLOWING FIGURE 2 ILLUSTRATE THE ARDUINO NANO MECHANISM.

SYSTEM INSTALLATION



RESULTS AND DISCUSSION

IN THIS PAPER, WE DESIGNED AND INSTALLED A HYBRID PV AND BATTERY STORAGE SYSTEM CONNECTED TO THE UTILITY GRID TO FEED A 3 KW LOAD IN CEIT, UBT LAB. THE CONTROL SYSTEM USES AN ARDUINO NANO TO CONTROL THE POWER MANAGEMENT VIA SWITCHING SYSTEM TO SWITCH BETWEEN BS, PV AND UG TO FEED THE LOAD. THE LOAD IS 3 KVA WHICH IS LOCATED IN THE CEIT LAB AND THE LOAD DEMAND IS ILLUSTRATED IN FIGURE 6 AS LOAD POWER STARTING FROM 9:00 AM TO 7:00 PM (WORKING HOURS OF THE UBT) AND REMAINS AT 300 W FROM 7:00 PM TO 9:00 AM (NOT WORKING HOURS).

FIGURE 6: LOAD POWER, GENERATED POWER FROM PV, STORAGE BATTERY BANK POWER, AND UG REQUIRED POWER DURING THE DAY

AS CLEARLY SHOWN FROM FIGURE 6 AND DURING THE NIGHT, FROM 7:00 PM TO 9:00 AM, THE LOAD IS 300 VA WHICH IS COVERED FROM THE UG AND THE BATTERY. PV PANELS HAS NO GENERATION AND THE UG CHARGE THE BATTERY STORAGE AND FEED THE LOAD, WHEN THE BATTERY CAN SUPPLY THE POWER TO THE LOAD, THE UG IS DISCONNECTED AS SHOWN IN RED AND GREEN CURVES IN FIGURE 6. AFTER 10:00 AM, THE BATTERY IS CHARGED AND THE SOLAR PANELS GENERATE A HIGHER POWER THAN DEMAND POWER. ON THE OTHER HAND, WHEN THE PV POWER DECREASED, THE UG WILL FEED THE LOAD BY 7:00 PM AND THE BATTERY WILL FOLLOW THE CYCLE AGAIN.

IN FIGURE 7, THE SHARING RATIO OF EACH POWER SOURCE IS GIVEN. ABOUT 82% OF THE DEMAND POWER IS PRODUCED FROM PV SOLAR PANELS, 12% OF THE NEEDED POWER FEED FROM THE UG POWER SUPPLY, AND THE BATTERY BANK SHARES BY 6% OF THE DEMAND POWER. AS NOTED FROM THIS FIGURE, THE PRACTICAL SHARING RATIO IS VERY CLOSE TO THAT OBTAINED FROM THE THEORETICAL STUDY AS CLEARED IN FIGURE 4.

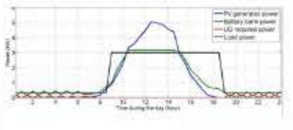


FIGURE 6: LOAD POWER, GENERATED POWER FROM PV, STORAGE BATTERY BANK POWER, AND UG REQUIRED POWER DURING THE DAY

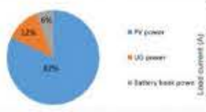


FIGURE 7: ESTIMATED LOAD SHARING DURING A DAY FOR DIFFERENT TILT ANGELS.

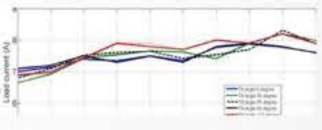


FIGURE 10: LOAD CURRENT DURING A DAY THEORETICAL STUDY

IN THIS WORK WE MEASURE THE SHORT CIRCUIT CURRENT, ISC, LOAD CURRENT, ILOAD, OPEN CIRCUIT VOLTAGE, VOC, LOAD VOLTAGE, V_{LOAD}, AND GENERATED POWER, PG AT DIFFERENT TILT ANGLES, , 450, 650, 900, 1150, AND 1800 FOR A LOAD 3 KW/H.

FIGURE 9 SHOWS THE SHORT CIRCUIT CURRENT FOR DIFFERENT TILT ANGLES. IN THE MORNING, SHORT CIRCUIT CURRENTS FOR ALL TILT ANGLES ARE LOW VALUES THEN GRADUALLY INCREASING FOR A MAXIMUM VALUE BY 12:00 PM AND THEN DECREASES AGAIN WITH TIME. A MAXIMUM VALUE OF THE SHORT CIRCUIT CURRENT IS OBTAINED AT 12:00 PM FOR A TILT ANGLE 450 IS 8.6 A, HOWEVER THE AVERAGE MAXIMUM CURRENT IS OBTAINED AT TILT ANGLE 650 DURING THE DAY. AT THE TILT ANGLE 1800, THE MEASURED SHORT CIRCUIT CURRENT IS THE MINIMUM WHERE THE SUN LIGHT IS REFLECTED FROM THE GROUND IN TO PV PANELS

TABLE1. MAXIMUM VALUES OF SHORT CIRCUIT CURRENTS, LOAD CURRENTS, OPEN CIRCUIT VOLTAGE, LOAD VOLTAGE, AND GENERATED POWER AT TILT ANGELS 0°, 45°, 65°, 115°, AND 180°.

Tilt angle / Maximum Values	0°	45°	65°	90°	115°	180°
Short circuit current (A)	8.3	8.6	8.5	8.3	8.4	8
Load current (A)	7.9	8.2	8.3	7.9	8.2	8.2
Open circuit voltage (V)	420	418	405	422	403	400
Load voltage (V)	414	404	394	413	386	396
Generated power (W)	3040	3090	3020	3005	3000	3180

TABLE2. TIME AT THE MAXIMUM VALUES OF SHORT CIRCUIT CURRENTS, LOAD CURRENTS, OPEN CIRCUIT VOLTAGE, LOAD VOLTAGE, AND GENERATED POWER AT TILT ANGELS 0°, 45°, 65°, 115°, AND 180°

Tilt angle / Time at maximum	0°	45°	65°	90°	115°	180°
Short circuit current	11:00 am	12:00 pm	10:00 am	11:00 am	1:00 pm	12:00 pm
Load current	2:00 pm	3:00 pm	3:00 pm	2:00 pm	2:00 pm	2:00 pm
Open circuit voltage	12:00 pm	12:00 pm	2:00 pm	12:00 pm	10:00 am	12:00 pm
Load voltage	12:00 pm	12:00 pm	2:00 pm	12:00 pm	12:00 pm	1:00 pm
Generated power	2:00 pm	2:00 pm	2:00 pm	2:00 pm	2:00 pm	1:00 pm

CONCLUSION

A HYBRID PV/BS/UG SYSTEM DESIGN AND IMPLEMENTATION HAS BEEN INTRODUCED. THE PERFORMANCE OF THE SYSTEM IS STUDIED FOR A LOAD OF 3 KVA, IN UBT UNIVERSITY IN JEDDAH, KSA. THE IMPLEMENTED SYSTEM IS A FULLY AUTOMATED, WHERE WE USE DIFFERENT TILT ANGLE ALGORITHM DETERMINE THE POWER AND CONSEQUENTLY THE POWER MANAGEMENT TECHNIQUE IS CONTROLLED USING A PROGRAMMED ARDUINO NANO CHIP. WE IMPLEMENT THE SYSTEM ON THE ROOF OF CEIT, UBT AND TEST IT USING A REAL LIGHTING LOAD. FOR DIFFERENT TILT ANGLES, WE MEASURE A SHORT CIRCUIT CURRENT AND OPEN CIRCUIT VOLTAGE OF 12 PV PANELS CONNECTED IN SERIES AT DIFFERENT TILT ANGLES, 0°, 45°, 65°, 90°, 115°, AND 180°. A LOAD VOLTAGE AND CURRENT AT THE SAME TILT ANGLES ARE MEASURED AND HENCE THE GENERATED POWER IS CALCULATED.

ACCORDING TO OUR STUDY, PV SHARE BY 82% OF THE POWER DEMAND, 12% BY THE UTILITY GRID AND 6% SHARE BY BATTERY BANK. THE MAXIMUM SHORT CIRCUIT CURRENT 8.6 A OBTAINED AT TILT ANGLE 45° AND AT 12:00 PM, WHILE THE MAXIMUM LOAD CURRENT IS 8.3 A AT TILT ANGLE 65° AND AT 3:00 PM. A MAXIMUM OPEN CIRCUIT VOLTAGE IS 422 V OBTAINED AT TILT ANGLE 90° AND AT 12:00 PM, WHILE THE MAXIMUM VALUES OF LOAD VOLTAGE IS 414 V AT TILT ANGLE 0° AND AT 12:00 PM. THE MAXIMUM GENERATED POWER IS 3180 W OBTAINED AT 180° TILT ANGLE AND AT 1:00 PM.

ACKNOWLEDGMENT

THIS WORK WAS FUNDED BY THE RESEARCH AND CONSULTATION CENTER (RCC), UNIVERSITY OF BUSINESS AND TECHNOLOGY (UBT), JEDDAH, KSA, UNDER GRANT NO. (103/E/2014).

THEREFORE, THE AUTHORS ACKNOWLEDGE THE COLLEGE OF ENGINEERING RESEARCH CENTER AND COLLEGE DEANSHIP FOR THE FINANCIAL SUPPORT TO CARRY OUT THE RESEARCH WORK REPORTED IN THIS PAPER. ALSO, THE AUTHORS WOULD LIKE THEIR WORM THANKS TO DR. BASMA AL ZEIN, MANAGER OF RESEARCH AND CONSULTANT CENTER (RCC) FOR HER SUPPORT DURING PREPARING THIS PAPER.

Liquid heating using wind energy

ISSAMEDDIN ABDULLAH, MOHAMMAD KANAN, RAMIZ ASSAF

UNIVERSITY OF BUSINESS AND TECHNOLOGY, COLLEGE OF ENGINEERING, DEPARTMENT OF INDUSTRIAL ENGINEERING

ISAM.A@UBT.EDU.SA

ABSTRACT

This work is aiming to utilize wind energy and liquid circulation with throttling applied for liquid heating. A Pilot unit consists of wind turbine, pump, pipes, throttling valve, tank constructed and tested. Wind turbine utilized to drive the hydraulic pump and generate hydraulic energy in form of pressure and flow. Pressurized liquid passes through pipes, fittings and throttling valve lose energy that converts into heat. By continuous circulations, the temperature of the liquid increases and causes a temperature increase in the whole system. Experimental results shows significant temperature increase in short time. Proposed model feasible, economic and environmentally friendly.

INTRODUCTION AND DESIGN

Due to continuous increase in energy cost and negative environmental impact of fossil fuel, it is necessary to use the renewable energy sources including wind energy.

The utilization of wind energy for domestic hot water and industrial liquids heating should be accomplished according to criteria that guarantee a low cost of heating unit, ease of installation, control and maintenance. It should be reliable, durable with high performance and effectiveness.

It is proposed to design and construct a pilot unit for liquids heating utilizing wind energy. A schematic diagram of this arrangement is shown in the Fig.1.

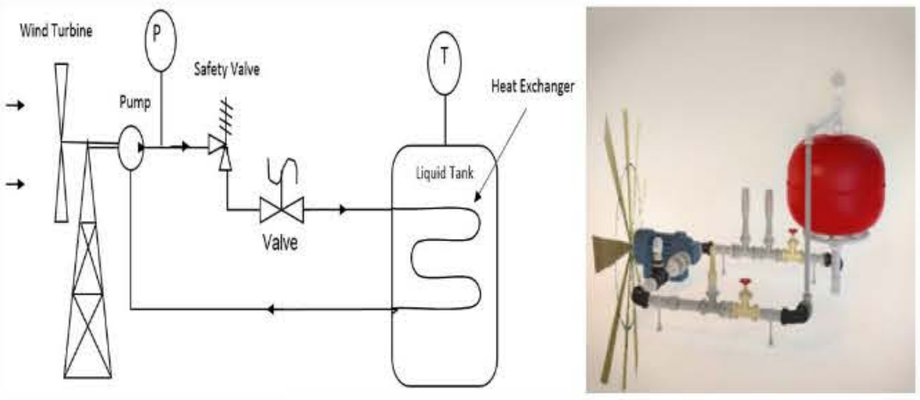


Fig.1. A schematic diagram of proposed arrangement

According to above arrangement, mechanical energy generated by wind turbine to be converted into hydraulic energy by positive displacement oil pump, pressurized hydraulic oil will flow through a throttling device (valve), valving process will convert the hydraulic energy that carried by the oil into heat and the temperature of the oil will increase.

WHEN INCOMPRESSIBLE LIQUID FLOWS THROUGH THROTTLING DEVICE, ITS HYDRAULIC ENERGY DECREASES WHILE ITS INTERNAL ENERGY INCREASES BY THE SAME AMOUNT, BECAUSE THROTTLING PROCESS IS AN ISENTHALPIC ONE.

FOR THIS CLOSED OIL SYSTEMS, HEATING BY VALVING ARRANGED WITH CIRCULATION AND SIGNIFICANT PART OF THE GENERATED HEAT INCREASES THE TEMPERATURE OF THE OIL IN EACH CYCLE. HEATED OIL WILL FLOW THROUGH THE HEAT EXCHANGER TUBES AND WILL TRANSFER HEAT ENERGY TO REQUIRED LIQUID

THEORY

THE POWER IN THE WIND IS GIVEN BY THE RATE OF CHANGE OF ENERGY:

$\dot{W}_W = \frac{DE}{DT} = \frac{1}{2}V^2 \frac{DM}{DT}$

THE POWER CONVERTED FROM THE WIND INTO ROTATIONAL ENERGY IN THE TURBINE USING EQUATION :

$\dot{W}_W \text{ AVAIL} = \frac{1}{2} PAV^3 C_e$

THE THEORETICAL MAXIMUM POWER EFFICIENCY OF WIND TURBINE IS 0.59. THIS IS CALLED THE "POWER COEFFICIENT" AND IS DEFINED AS:

$C_P \text{ MAX} = 0.59$

PART OF GENERATED HEAT INCREASES THE TEMPERATURE OF THE HYDRAULIC LIQUID AND THE SYSTEM ACCORDING TO THE FOLLOWING RELATION

$DQ = I\, DT$

WHERE

$I = C_S M_S + C_H M_H$

THE REMAINING PART OF GENERATED HEAT IS TRANSFERRED TO THE SURROUNDING ACCORDING TO THE FOLLOWING EXPRESSION

$D\Psi = UA\,(T - T_O)\, DT$

APPLYING THE CONSERVATION OF ENERGY PRINCIPAL

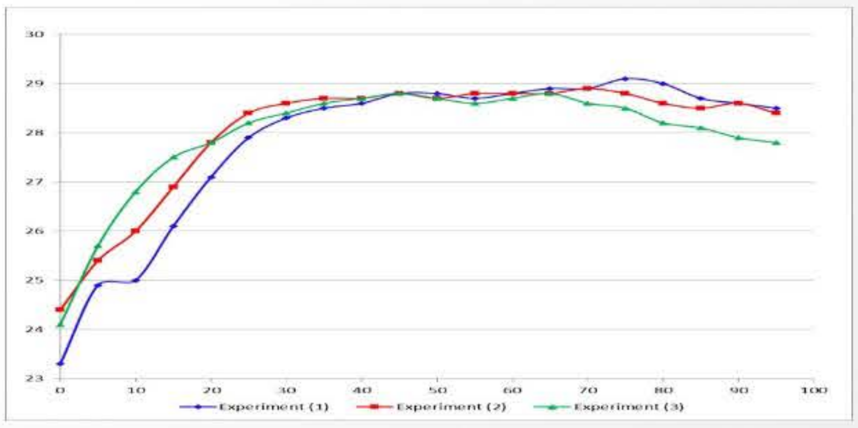
$\dot{W}_L\, DT = I\, DT + D\Psi$

CONSIDERING

$\dot{W}_L \text{ HAT} = (D\,\dot{W}_L / DT)_{T=TO}$

THE FINAL TEMPERATURE LIQUID LIQUID FOR STEADY STATE CAN BE FOUND WHEN T = ∞

$T = T_0 + \dot{W}_L / \dot{W}_L \text{ HAT} - UA$



CONCLUSION

In this project, the liquid temperature has been raised by valving and circulation system powered by wind energy, and a pilot unit was constructed for testing and evaluating the processing unit parameters. The temperature of liquid was studied depending on wind speed as a source of natural energy to rotate windmill fan of the pilot unit.

REFERENCES

-ISAMEDDIN M. ABDULLAH, O.V. LEBEDEV, INCREASE OF WORKING LIQUID TEMPERATURE IN HYDRAULIC SYSTEMS AND CONSIDERATION OF HEAT TRANSFER WITH ENVIRONMENT, PROBLEMS OF MECHANICS, UZBEK JOURNAL, NOS. 5-6, PP. 60-65, 1995, INDEX 75412, TASHKENT, UZBEKISTAN.

-ISSAMEDDIN M. ABDULLAH, NASER M. JUBEH, LIQUIDS HEATING PROCESSES BY PUMPING AND THROTTLING (VALVING) ON LIQUIDS, INTERNATIONAL JOURNAL FOR HEAT AND TECHNOLOGY VOL. 13, 1995.

-ABDULLAH AND O. V. LEBEDEV, UNSTEADY HEAT PROCESSES IN HYDRAULIC SYSTEMS OF MOBILE MACHINES, *D.A.N REP.OF.UZ*. VOL. 10, 1996.

-CLAUS BORGNAKKE, R. SONNTAG AND C. BORGNAKKE, *FUNDAMENTALS OF CLASSICAL THERMODYNAMICS*, JOHN WILEY AND SONS, NEW YORK, 2009.

Using simulation approach to validate the economic impact of utilizing the integrated quality software development model

MOHAMMAD KANAN, RAMIZ ASSAF

UNIVERSITY OF BUSINESS AND TECHNOLOGY, COLLEGE OF ENGINEERING, INDUSTRIAL ENGINEERING DEPARTMENT

M.KANAN@UBT.EDU.SA

ABSTRACT

Software development cost is a crucial issue in software industry in the presence of broad competition. A simulation modeling approach is used to validate the economic impact of utilizing the Integrated Quality Software Development Model (IQSD), Waterfall Model, and The Prototyping Model in software development. Three factors are considered, learning rate and developer's skills, the selected sample proportion, and the expected number of iterations. This research shows that utilizing the IQSD results lower needed efforts for software development and higher level of customer satisfaction once an iteration is software development process is needed.

INTRODUCTION

Software development industry have been very competitive. Which necessities to emphasis on the most important factors oriented by software industry. These factors are cost and reducing the risk of not meeting customer satisfaction (Kanan, 2014). In addition cost of large and complex software project has a lack of accuracy (Carolyn, 2007). In 1998,Ferens and Christensen stated that the cost estimation models accuracy lies between 25% to 50%.

This research present a simulation model validate the cost estimation function of utilizing the Integrated Quality Software Development Model (IQSD).

THE COST ESTIMATION MODEL

This mathematical model is combined of two terms, the first term accounts for the level of Y_1 which concerns of the iterative development of the selected proportion of the application (Prototyping Model), whereas the second term Y_2 accounts for the linear development of the rest of the application (Waterfall Model) as expressed as: $PM = Y_1 + Y_2$ Where $Y_1 = P \cdot Y \cdot X^{1-\alpha}$. Where, Y_1 accounts for needed efforts for the iterative development of the selected proportion P of the software application. This proportion represents the sample of the application under development. The ration of this proportion can be determined based on the ratio of estimated total number of object points of the application. In addition, the learning exponent α is considered to present the gained customer's feedback during the iterations and the developer's accumulative lesson learned.

The number of iterations X can be determined based on the realization factor g. this factor is within [0,1] interval. And X can be approximated by a geometric random variable with an expected value $1/g$. (Gamal, 2004).

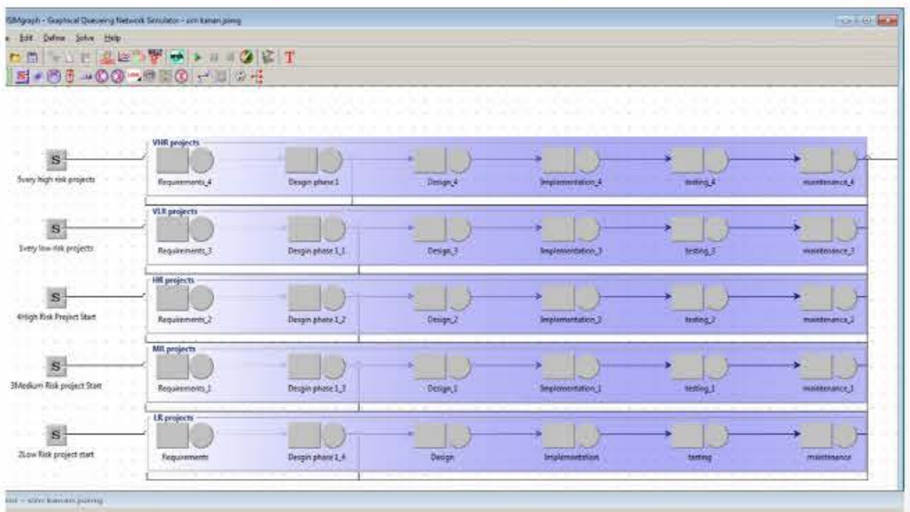
The cost of linear development Y2 can be estimated by the following equation: $PM = (1 - P).Y$

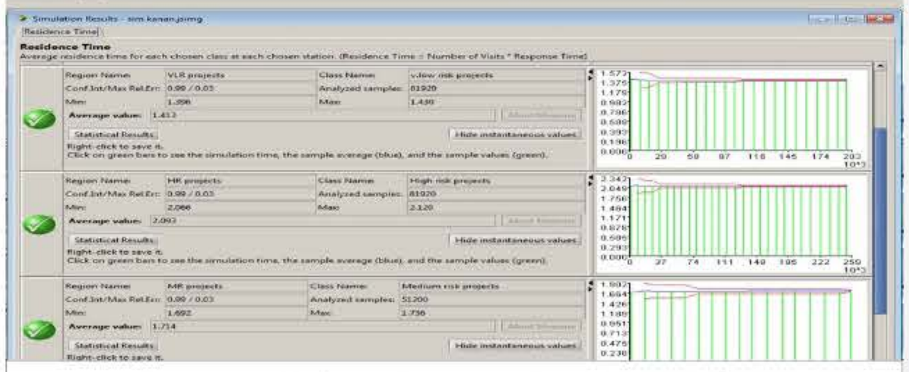
The total cost function in person-month of utilizing the IQSD can be estimated as: $PM = Y.[1 + P(X^{1-\alpha} - 1)]$

SIMULATION MODEL AS A TOOL

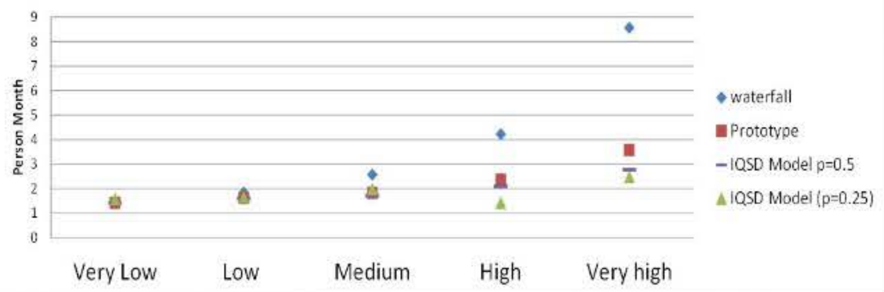
Simulation is used to quantitatively assess performance of a comparative software development models (Raffo, 1996), furthermore, simulation is used to analyze in process or completed projects. (Carolyn, 2007)

In this work the open simulation environment Java Modeling Tools JMT developed by (Bertoli et al 2009) that cab be found at http://jmt.sourceforge.net/ was used to the evaluation of the presented model by Kanan et al 2014.





Comparison of different SDLC project Completion time (base project time = 1 person month)



RESULTS AND CONCLUSION

Results show the IQSD model outperforms both Waterfall and Prototype models when the project's risk is high or very high. However when the project has very low or low risk, the IQSD model give similar results to the two traditional methods. For future works, this research recommends focusing more on a new technique for improving the realization factor α which leads to decrease the number of iterations of development process.

REFERENCES

Kanan, M., Weheba, G., & Jaradat, B. (2014). Development of the Audit-Calc Software System: A Case Study. Journal of Management & Engineering Integration, 7(1), 1.

Mizell, C., & Malone, L. (2007). A project management approach to using simulation for cost estimation on large, complex software development projects. Engineering Management Journal, 19(4), 28-34.

Weheba, G. S (2004). A revised model for the cost of quality. International Journal of Quality & Reliability Management, 21(3), 291-308.

Raffo, D. M. (1996). Modeling software processes quantitatively and assessing the impact of potential process changes on process performance.

Advanced intrusion detection system for wireless mobile ad hoc networks (a-ids-wman)

Syed Muqtar Ahmed & Dr. Sayed A. Elfar
Department of Information technology college of engineering & Information Technology,
university of business & technology, Jeddah, saudi Arabia
syedahmed@ubt.edu.sa, elsayed@ubt.edu.sa

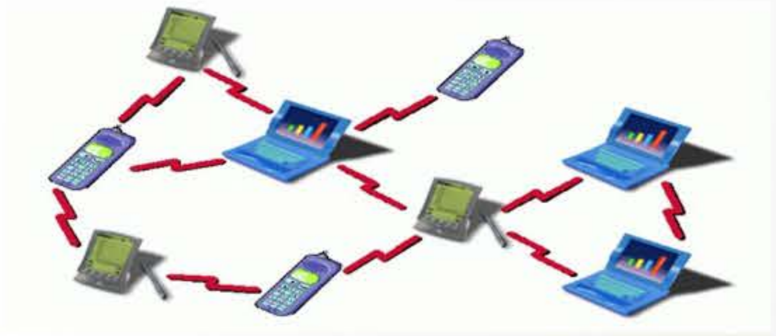
ABSTRACT

Presenting cutting edge research- A mobile Ad hoc network (MANET) is a collection of wireless mobile agents in which nodes communicate each other without using any topology or infrastructure. Almost all networks are protected by using multilayer firewalls and encryption methods, but many of them are not efficient. Intrusion Detection System(IDS) must be supplemented by other Security and protection mechanisms. Therefore we proposed an Advanced Intrusion Detection System architecture and mechanism for Wireless Mobile Ad hoc Network (A-IDS-WMAN) that monitors the wireless network to detects anomalies for multi-hop ad-hoc wireless networks and to protect them from intruder attacks. An A-IDS-WMAN depends upon forwarding packets to neighboring nodes, and it work on Simple rules that have been designed to identify the misbehaving nodes. A special node is selected as a monitoring node that can keep track on misbehaving node.

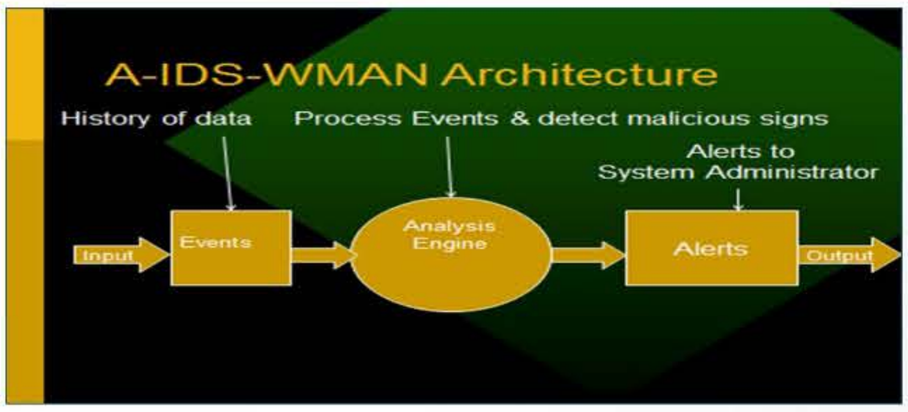
INTRODUCTION

An intrusion may be defined as any action that attempt to compromise the integrity, confidentiality or availability of a resource [1]. Each node is Selfish and independent to make decision in Mobile Ad hoc Network (MANET). Nodes can be added to network or deleted from it at any time. The traditional way of Securing Network with firewalls and encryption methods may not be sufficient. We need to develop new architecture and mechanisms to protect the wire-less networks and mobile computing applications.

Intrusion Detection Systems are broadly classified into two techniques: Signature based IDS & Anomaly based IDS. Signature based IDS uses signatures of attacks to detect the intrusion [3], whereas Anomaly based IDS techniques are a valuable technology to protect target systems and networks against malicious activities. Therefore, in this paper, we discuss how to identify the intrusion after an anomaly is reported.



THE PROPOSED ARCHITECTURE



Functions of A-IDS-WMAN:

1. **EVENTS:** monitor some events and maintain the history of data related to that event.

2. **ANALYSIS Engine:** carry out processes on the collected data to detect malicious signs based on Simple rules of Algorithm.

3. **ALERTS:** one of the specific node would be selected as the Monitoring node that generates response in the form of Alert messages to the administrator.

Conclusion & Future work

our advanced intrusion detection system monitors and detects anomalies for multi-hop ad-hoc wireless networks and depends upon forwarding packets to neighboring nodes. it works on simple rules & algorithm that have been designed to identify the misbehaving nodes. we conclude our paper to enhance the features on IDS with better security.

References:

[1]. Novarun Deb1 , Manali Chakraborty2 , Nabendu Chaki3, THE EVOLUTION OF IDS SOLUTIONS IN WIRELESS AD-HOC NETWORKS TO WIRELESS MESH NETWORKS, International Journal of Network Security & Its Applications (IJNSA), Vol.3, No.6, November 2011.

[2]. S.Madhavi, Dr. Tai Hoon Kim, AN INTRUSION DETECTION SYSTEM IN MOBILE ADHOC NETWORKS, International Journal of Security and Its Applications, Vol. 2, No.3, July, 2008.

[3]. Vetrichelvi, Rajaram, Vanitha, Dr. G. Mohankumar, Feature analysis for Intrusion Detection in Mobile Ad-hoc Networks, Pages 215-219, IJCSNS International Journal Of Computer Science and Network Security, Vol.10, No. 9, September 2010.

[4]. Md. Abdul Hamid, Md. Shariful Islam, and Choong Seon Hong, "Misbehavior [5Detection in Wireless Mesh Networks", ICACT 2008, pp. 1167-1169, 2008.

[5]. P. Sil, R. Chaki, N. Chaki; "HIDS: Honesty-rate based collaborative Intrusion Detection System for Mobile Ad-Hoc Networks", Proc. of 7th IEEE International Conference on Computer Information Systems and Industrial Management Applications (CISIM), 2008.

Enhanced night navigation using a public imagery database

Rami Nahas

Electrical Engineering, University of Business and Technology, Jeddah, Saudi Arabia

R.nahas@ubt.edu.sa

INTRODUCTION

WE INTRODUCED A NEW METHOD FOR ENHANCING NIGHT VISION. OUR METHOD DIFFERS FROM OTHER METHODS IN THE SOURCES THAT ARE USED. IN THE PROPOSED METHOD WE USE TWO SOURCE IMAGES, ONE IMAGE IS TAKEN FROM AN INFRARED CAMERA AND THE OTHER IS RETRIEVED FROM A PUBLIC DATABASE STORED IN A CLOUD THAT ARE FUSED TOGETHER ONTO A DISPLAY. THIS APPROACH USES DATA FROM THE CLOUD WHEN IT IS NOT PRESENT IN AN ACTIVE CAMERA. OUR APPROACH IS ESPECIALLY IMPORTANT FOR APPLICATIONS THAT REQUIRE NAVIGATION AT NIGHT. DAYTIME IMAGES ARE STORED IN THE DATABASE, SO A VEHICLE OPERATOR CAN DRIVE AT NIGHT; HOWEVER, MUCH OF THE SCENE WILL APPEAR AS IF IT IS DAYTIME. IN THIS WORK, WE DEVELOPED A NEW METRIC DESIGNED FOR OUR APPROACH AND COMPARED SEVERAL APPROACHES FOR IMAGE FUSION AND DEVELOPED A METHOD TO FUSE IMAGES. OUR RESULTS SHOWED THAT DRIVING IN DARKNESS CAN BE SIGNIFICANTLY IMPROVED BY USING THIS APPROACH AND CAN INCREASE SAFETY OF NIGHT NAVIGATION FOR AUTOMOTIVE AND OTHER APPLICATIONS.

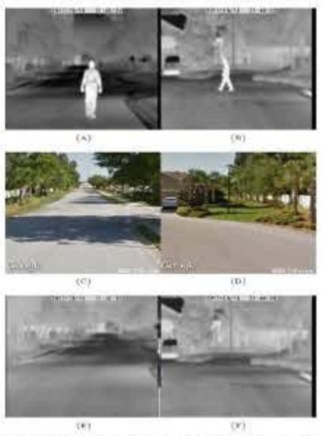


Figure 4.1: Images used in experiments (a) thermal image of Scene 1 with pedestrian (b) thermal image of Scene 2 with pedestrian (c) visible image of Scene 1 from database (d) visible image of Scene 2 from database (e) thermal image of Scene 1 without pedestrian (f) thermal image of Scene 2 without pedestrian

PROCESS

THE PROCESS OF ENHANCING THE IMAGE CONSISTS OF SIX STAGES WHICH ARE:

IMAGE FUSION

THE FUSION BETWEEN THE THERMAL AND THE DATABASE IMAGE. WE USED THE MUTUAL INFORMATION MATRIC TO BE THE QUALITY MATRIC. WE INITIALLY COMPUTED THE MUTUAL INFORMATION (MI) BETWEEN EACH SOURCE IMAGE WHERE MIX AND MIY REFER TO THE MUTUAL INFORMATION OF THE THERMAL AND DATABASE IMAGES, RESPECTIVELY. WE CAN WRITE OUR METRIC AS

$$MI_{TOTAL} = 2(\ MI_X + MI_Y)$$

$$\text{Giving}\ \ MI_X / MI_Y = \beta$$

AS FOR THE FUSION ALGORITHM TWO ALGORITHMS WERE USED. ONE IS A SIMPLE FUSION ALGORITHM WHICH USES PIXEL VALUES FROM EITHER ONE IMAGE OR THE OTHER DEPENDING ON A THRESHOLD T, AND THE FUSED IMAGE WAS REPRESENTED BY F DESCRIBED AS:

$$F = X$$

$$\text{If}\ \ X \geq T \text{ or } F = Y \text{ otherwise}$$

THE OTHER IS SHIFT INVARIANT DISCRETE WAVELET TRANSFORM (SIDWT). SO FOR THE PROCESS WE USED B=1 BECAUSE THAT VALUE WILL GET ENOUGH INFORMATION FROM BOTH THE THERMAL IMAGES AND THE DAYTIME IMAGES.

COLORIZATION OF THE FUSED IMAGE

THE FUSED IMAGE WAS CONVERTED A GRAY IMAGE TO RGB IMAGE BY USING THE COLORS OF THE REFERENCE IMAGE. THE BETTER THE DESTINATION IMAGE MATCH WITH THE SOURCE GRAY IMAGE, THE BETTER THE COLORING WILL BECOME. THIS STEP IS NEEDED FOR THE FOLLOWING STEP, SEGMENTATION.

SEGMENTATION OF THE FUSED IMAGE TO THREE CLUSTERS

IN THIS PROCESS WE WILL USE K-MEANS CLUSTERING ALGORITHM WITH K=3. K-MEANS IS AN ALGORITHM THAT PARTITIONS A DATA SET INTO K SUBSETS. THEN, AN INDEX OF EACH CLUSTER IS RETURNED WHICH HAS EACH OBSERVATION. THE K-MEANS ALGORITHM USES AN ITERATIVE ALGORITHM THAT MINIMIZES THE SUM OF DISTANCES FROM EACH OBJECT TO ITS CLUSTER CENTROID, OVER ALL CLUSTERS. THIS ALGORITHM MOVES OBJECTS BETWEEN CLUSTERS UNTIL THE SUM CANNOT BE DECREASED FURTHER. THE RESULT IS A SET OF CLUSTERS THAT ARE AS COMPACT AND WELL-SEPARATED AS POSSIBLE. THE RESULTANT IMAGES FROM THE COLORIZATION WERE CLUSTERED ACCORDING TO INTENSITY WITH K=3. SO THREE CLUSTERS WERE INTRODUCED CLUSTERS A, B, AND C.

COLORIZATION OF THE MOST IMPORTANT CLUSTER.

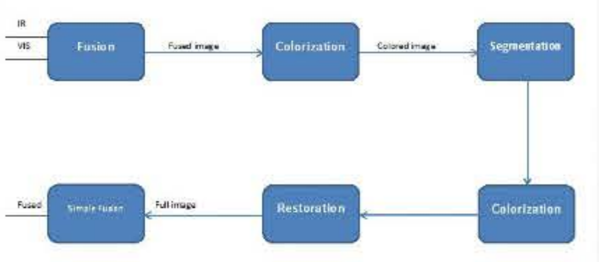
IN THIS SECTION WE USED THE SAME COLORIZATION ALGORITHM THAT WE USED IN STEP TWO. ALSO, FROM STEP THREE WE WILL COLOR CLUSTER C OF EACH IMAGE, BECAUSE CLUSTER C IS THE CLUSTER THAT CONTAINS THE MOST INFORMATION. THIS STEP IS REQUIRED BECAUSE WE NEEDED TO ENHANCE THE CLUSTER FOR THE RESTORATION. THIS STAGE GAVE A SMALL IMPROVEMENT BUT WE USED IT BECAUSE IN THE RESTORATION STEP IT GAVE PIXELS THAT ARE DIFFERENT FROM THE ORIGINAL CLUSTERS.

RESTORATION FROM CLUSTERS.

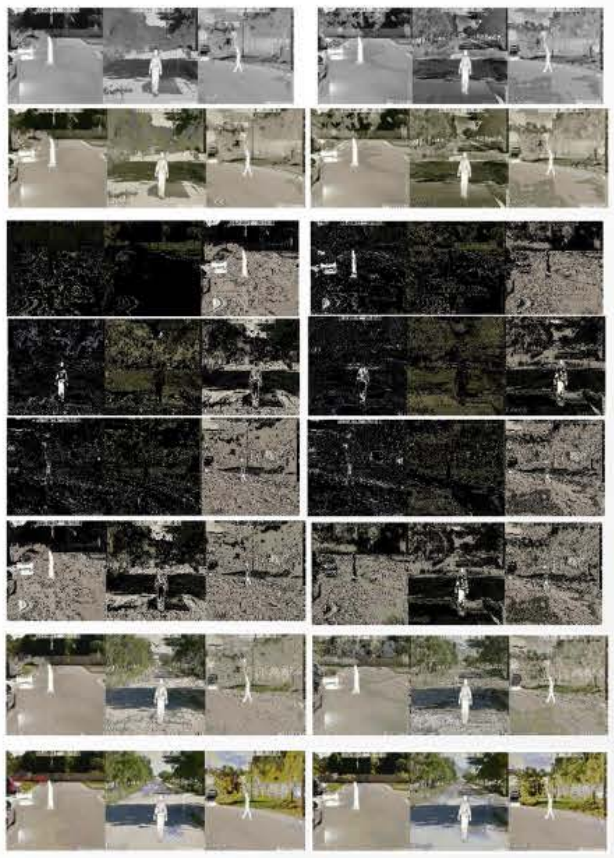
IN THIS SECTION WE RESTORED IMAGES FROM THE CLUSTERS. STEP THREE PRODUCED THREE CLUSTERS: CLUSTER (A), CLUSTER (B) AND CLUSTER (C). THEREFORE, WHEN RESTORING THE IMAGES WE WILL TRY TO RETRIEVE CLUSTER (A) FROM THE SOURCE THERMAL IMAGE, RETRIEVE CLUSTER (B) FROM THE SOURCE DAYTIME AND RETRIEVE CLUSTER (C) FROM THE COLORIZED IMAGE IN STEP FOUR. WE DID THAT BECAUSE:

- LOOKING AT CLUSTER (A) USUALLY IT CONTAINS THE WARM STUFF.
- LOOKING AT CLUSTER (B) USUALLY IT CONTAINS BACKGROUND SUCH AS TREES AND ROADS.
- LOOKING AT CLUSTER (C) USUALLY IT CONTAINS MORE PIXELS THAN THE OTHERS.

IMAGE FUSION BETWEEN THE RESTORED IMAGE AND THE DATABASE IMAGE.



RESULTS



PROCESS — SIMPLE ALGORITHM — SIDWT

IMAGE FUSION

COLORIZATION OF THE FUSED IMAGE

SEGMENTATION OF THE FUSED IMAGE TO THREE CLUSTERS

COLORIZATION OF THE MOST IMPORTANT CLUSTER.

RESTORATION FROM CLUSTERS.

IMAGE FUSION BETWEEN THE RESTORED IMAGE AND THE DATABASE IMAGE. (FINAL IMAGE)

CONCLUSION

WE DEVELOPED AN IMAGE FUSION SYSTEM THAT CAN LEAD TO IMPROVED SAFETY FOR NIGHTTIME VEHICLE OPERATION. THE USE OF A PUBLIC DATABASE GIVES RESULTS NOT POSSIBLE WITH OTHER APPROACHES. WE INTRODUCED A NEW METRIC TO PRIORITIZE IMAGES THAT IS BETTER SUITED TO OUR APPROACH THAN TRADITIONAL METRICS. WE FOUND THAT USING THE MAXIMUM OF THE SUM OF MI VALUES WHILE MAINTAINING A CONSTANT RATIO ALLOWED US TO COMPARE FUSION ALGORITHMS. WE FOUND THAT BY GIVING THE DATABASE IMAGE PRIORITY OVER THE THERMAL IMAGE, THE FUSE IMAGE APPEARED THE MOST DAYTIME-LIKE AND EASILY SHOWED A PEDESTRIAN. AS THE PRIORITY OF THE THERMAL IMAGE INCREASED, THE BACKGROUND OF THE IMAGE WAS FORMED BY BOTH THERMAL AND DATABASE IMAGES. A SIMPLE BACKGROUND REPLACEMENT ALGORITHM GAVE THE BEST RESULTS SUGGESTING THAT ONE OR THE OTHER IMAGE DOMINATED A PARTICULAR REGION.

WE OBTAINED IMPROVED RESULTS BY COLORIZING THE FUSED IMAGE. THE PROCESS CONSISTS OF SIX STAGES WHICH ARE:

- IMAGE FUSION.
- COLORIZATION.
- SEGMENTATION.
- COLORIZATION OF THE MOST IMPORTANT CLUSTER.
- RESTORATION FROM CLUSTERS.
- IMAGE FUSION.

AFTER ADDING THIS IMPROVED PROCESS WE WERE ABLE TO BETTER VISUALIZE THE IMAGES. THEY BECOME MORE REALISTIC BECAUSE SOME VEGETATION WAS INTRODUCED.

THIS WAS SUPPORTED BY AN INCREASE IN THE VALUE OF THE MUTUAL INFORMATION AFTER ADDING THIS PROCESS.

IN THE END WE CAN SAY THAT WE WERE ABLE TO MAKE DRIVING AT NIGHT COMPARABLE TO DRIVING AT DAYTIME.

REFERENCES

C.S. XYDEAS AND V. PETROVIC, \OBJECTIVE IMAGE FUSION PERFORMANCE MEASURE," ELECTRONICS LETTERS, VOL. 36, NO. 4, PP. 308-309, 2000

SALMEN, J; HOUBEN, S.; SCHLIPSING, M, "GOOGLE STREET VIEW IMAGES SUPPORT THE DEVELOPMENT OF VISION-BASED DRIVER ASSISTANCE SYSTEMS," 2012 INTELLIGENT VEHICLES SYMPOSIUM, ALCALA DE HENARES, SPAIN, 891- 895, JUNE 3-7, 2012

Automated Configured Router for Controlled Sharing WiFi for Internet Guests

M. Alidelbi[1], H. Adham[2], S.Alshehri[3], M.Alsokait[3], S.Alfattani[3]

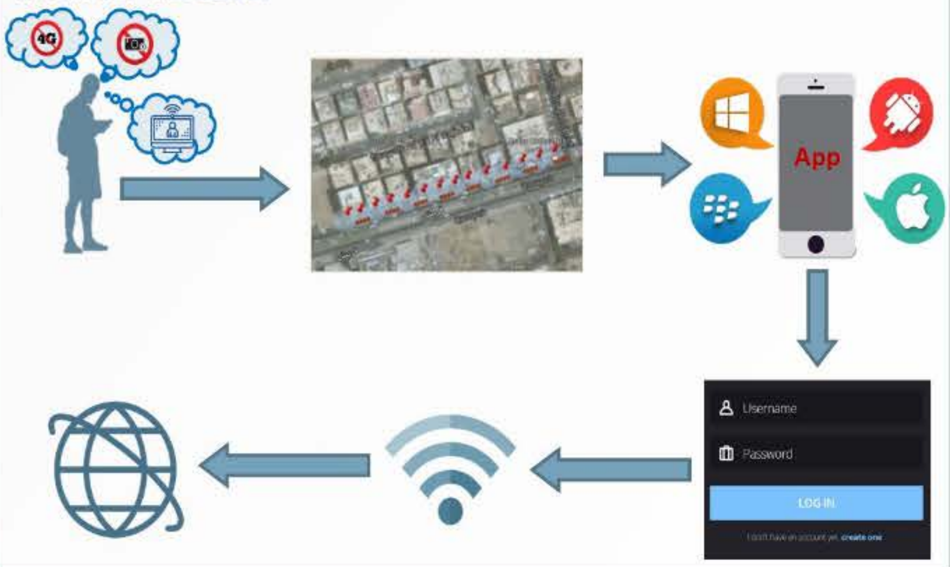
1-Electronics and Communication department, College of Engineering and Information Technology(CEIT), University of Business and Technology (UBT), Jeddah 21361, Saudi Arabia
2-Computer Engineering department, College of Engineering and Information Technology (CEIT), University of Business and Technology (UBT), Jeddah 21361, Saudi Arabia
3-Information Technology department, College of Engineering and Information Technology (CEIT), University of Business and Technology (UBT), Jeddah 21361, Saudi Arabia

s.alfattani@ubt.edu.sa

ABSTRACT

Problem: The need of immediate out-doors internet access for emergency uses, while the 4G is not available for any reason.

Solution: Client-Server app where the server create Framework to configure router in order to provide internet access.



Username
Password

RESULTS

Application can be used to control internet access for users.(Systematically and securely)

User can find outdoors internet access(High speed, Unlimited access and Low-Cost)

REFERENCES

NetMiko: https://pypi.python.org/pypi/netmiko/

Cisco: http://www.cisco.com/

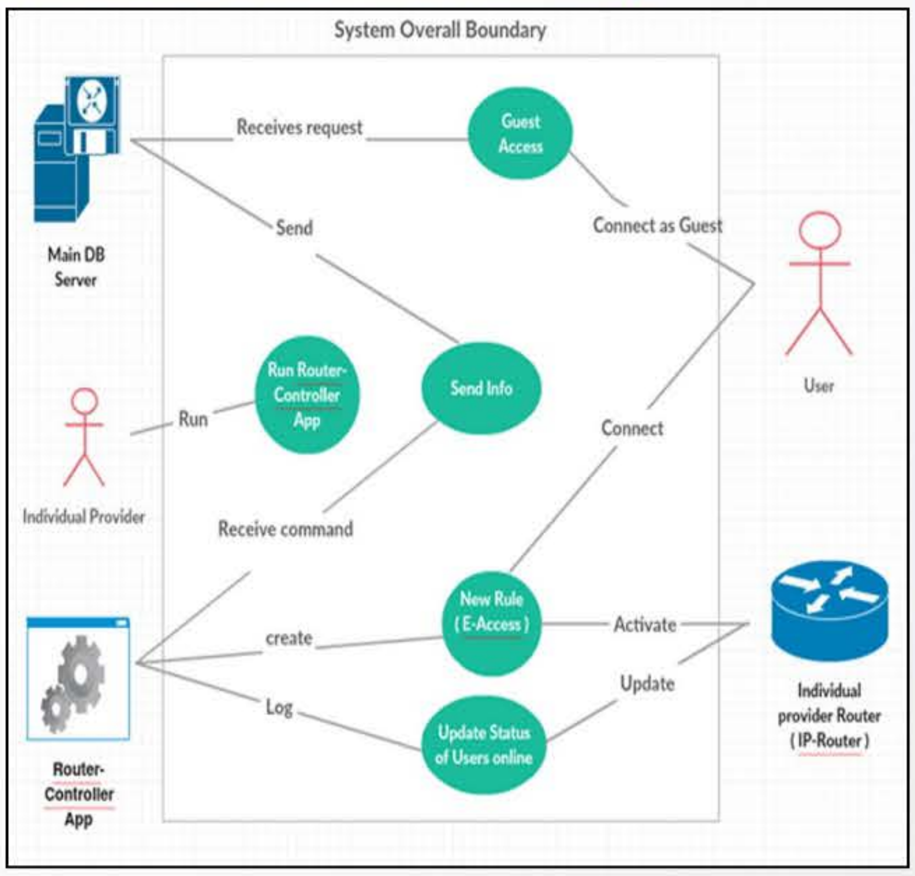
SYSTEM DESIGN

User:- Mobile app (client) connects to the router via server app.

IISP:- Provide internet access based on the user's credit.

Main DB:- Handling and managing internet access validation for users.

Router app:- Administered by IISP and managed internet access for users. Netmiko, a Python API library is used to dominate the router(usage, cost, security).



CONCLUSION

After applying the system on many adjacent IISP's, an infrastructure will be implemented to apply Smart City.

Open Source Framework can be shared for developers to create any Smart City projects.

Improvement of vapor chamber performance using nanofluids

ANDIKA AJI WIJAYA[1], DR. BASMA EL ZEIN[1], AND PROF. DR. SOUAD HARMAND[2]

1. COLLEGE OF ENGINEERING, **UNIVERSITY OF BUSINESS & TECHNOLOGY**, JEDDAH, SAUDI ARABIA
2. MECHANICAL ENGINEERING DEPARTMENT, **UNIVERSITÉ DE VALENCIENNES**, FRANCE

ANDIKA@UBT.EDU.SA ; B.ELZEIN@UBT.EDU.SA ; SOUAD.HARMAND@UNIV-VALENCIENNES.FR

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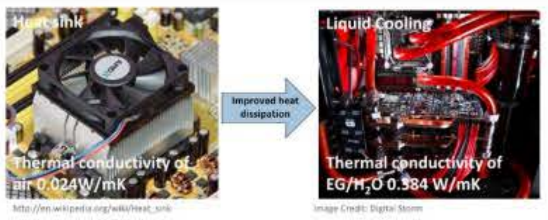
1. INTRODUCTION

RAPID ADVANCES IN NANOTECHNOLOGY HAVE LEAD TO EMERGING OF NEW GENERATION OF COOLANTS CALLED "NANOFLUIDS". NANOFLUIDS ARE DEFINED AS SUSPENSION OF NANOPARTICLES IN A BASEFLUID.

INCREASING HEAT FLUXES AND POWER LOADS REQUIRE EFFICIENT AND RELIABLE HEAT DISSIPATION.



http://en.wikipedia.org/wiki/Heat_sink

Image Credit: Digital Storm

FURTHER IMPROVEMENTS TO LIQUID COOLING COULD BE DONE BY USING ADVANCED COOLANT → **NANOFLUIDS**

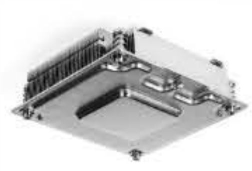
OBJECTIVES OF THE RESEARCH:

1. IMPROVE EFFICIENCY AND RELIABILITY OF HEAT TRANSFER DEVICES
2. INCREASE THE LIFETIME OF ELECTRONIC COMPONENTS
3. REDUCTION IN SIZE AND WEIGHT OF ELECTRONIC DEVICES

RESEARCH CHALLENGES

- Enhance thermal performance
- Low Pumping power
- Long term stability (Agglomeration & Settling)
- Minimal erosion and clogging
- Non-toxic and environmental friendly
- Cost effective

2. VAPOUR CHAMBER USING NANOFLUIDS



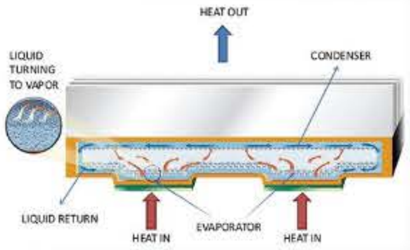
Vapour Chamber

What is *Vapour Chamber*?

It is a passive heat transfer device that is used to dissipate heat away from heat source, i.e. CPU/GPU, by latent heat of evaporation of working fluid.

How It Works?

An exterior heat source is applied at the evaporator section to vaporize the working fluid. The vapor then condenses into liquid by releasing heat to heat sink. The wick structure passively pumps the condensed liquid back to the evaporator.

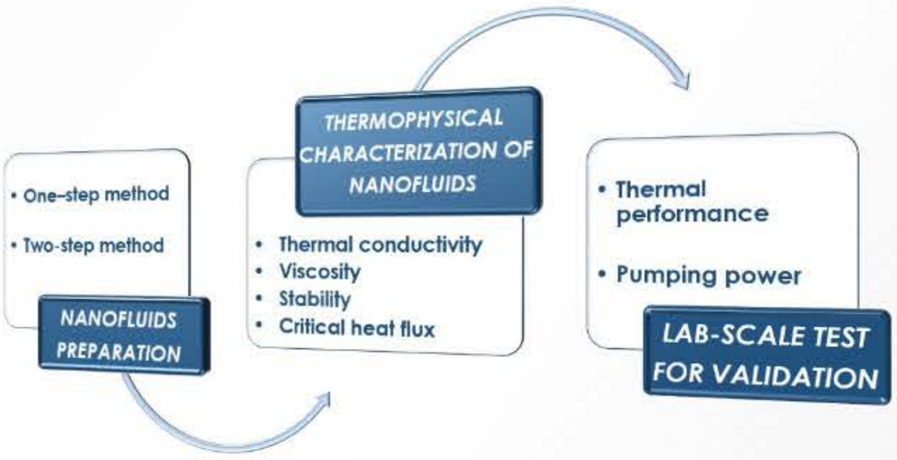


Working Principle of Vapour Chamber

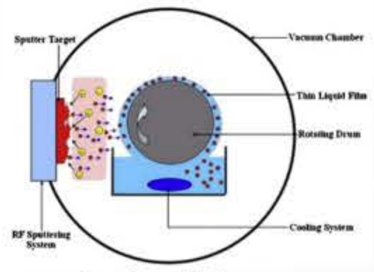
ADVANTAGES OF VAPOR CHAMBER :

- ✓ ISOTHERMAL OPERATION (DOESN'T REQUIRE LARGE TEMPERATURE GRADIENT TO TRANSFER HEAT)
- ✓ NO EXTERNAL POWER REQUIRED
- ✓ FREE VIBRATION THEREFORE QUITE OPERATION (NOT NOISY)

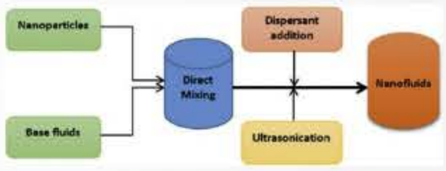
3. RESEARCH APPROACH



NANOFLUIDS PREPARATION

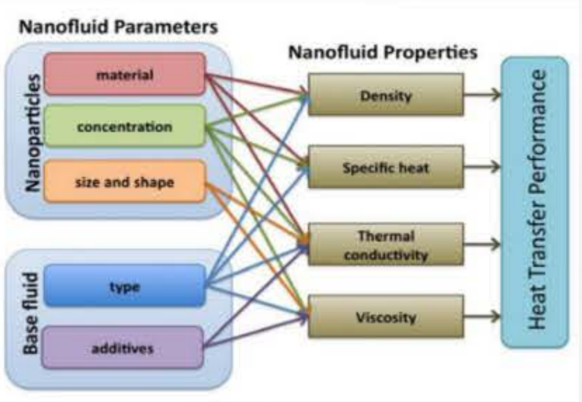


One-step method



Two-step method

NANOFLUIDS CHARACTERIZATION



NO	Nanofluids Property	Characterization Method
1	Thermal conductivity	Transient hot wire
2	Viscosity	Rheometer
3	Microstructure & Morphology	Scanning Electron Microscopy (SEM)
4	Average Size of Nanoparticles	Dynamic Light Scattering (DLS) analysis
5	Stability of Nanofluids	Zeta Potential analysis

REFERENCES

➢ H. HASSAN AND S. HARMAND, "EFFECT OF USING NANOFLUIDS ON THE PERFORMANCE OF ROTATING HEAT PIPE," *APPLIED MATHEMATICAL MODELLING*, VOL. 39, NO. 15, PP. 4445–4462, 2015

➢ H. HASSAN AND S. HARMAND, "3D TRANSIENT MODEL OF VAPOUR CHAMBER: EFFECT OF NANOFLUIDS ON ITS PERFORMANCE," *APPLIED THERMAL ENGINEERING*, VOL. 51, NO. 1, PP. 1191–1201, 2013

➢ K. SOLANGI ET. AL., "A COMPREHENSIVE REVIEW OF THERMO-PHYSICAL PROPERTIES AND CONVECTIVE HEAT TRANSFER TO NANOFLUIDS," *ENERGY*, VOL. 89, PP. 1065–1086, 2015

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Nanomaterials For 3rd Generation Sensitized Solar Cells

M.Alkhatab[1], H.Abuhimid[4], M. Dosari[4] E.Traversa[3], J-P Vilcot[2], B.ElZein[1]

[1]Nanotechnology for energy conservation and storage, College of Engineering and Information Technology (CEIT), University of Business and Technology(UBT), Jeddah, KSA [2]Institut d'Electronique, Microélectronique et Nanotechnologies (IEMN), Villeneuve d'Ascq - Lille, France [3]International Research Center for Renewable Energy (IRCRE), Xi'an Jiaotong University, Xi'an, China [4]Nanotechnology center, King Abdul-Aziz City for Science and Technology (KACST), Riyadh, KSA

m.khatab@ubt.edu.sa

Abstract

Nano-materials play a very important role as building block for many optoelectronic devices. They differ from bulk counterpart in the size, characteristic and their new physical properties and offer new opportunities to be employed in various applications.

Zero dimensional (0D) and one Dimensional (1D) nanostructures have attracted lots of attention in solar energy harvesting, conversion and storage, owing to their unique physical and chemical properties.

Nano-materials offer many advantages in energy conversion specifically in solar cells. These solar cells, depends on the physical interaction between nano-materials or chemical reaction at the surface or interface of the nano-materials. In this presentation, we will discuss the Zero and one dimensional nanostructures and the role they play in increasing the conversion efficiency of solar cells, taking in consideration the materials to be used to meet the main objective of developing an eco-green solar cell with high conversion efficiency.

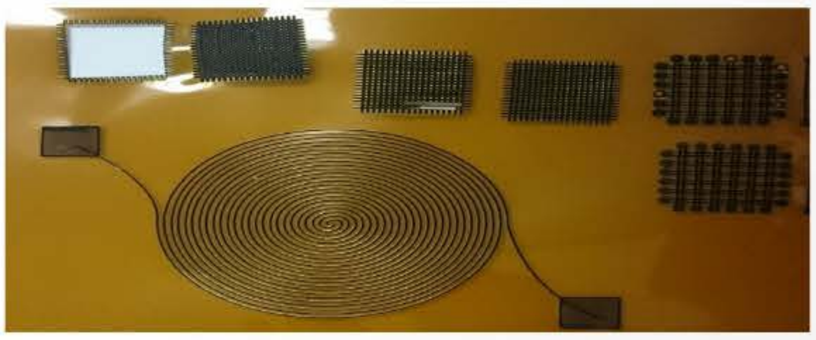
Graphene as Electrodes

ITO and FTO have been widely used as window electrodes in solar cell devices. however, they have many drawbacks such as limited availability of indium on earth, instability in the presence of acid or base, limited transparency in the near-infrared region, Current outflow caused by FTO structure defects.

Due to its properties such as transparent, cheap, sustainable, electrically conductivity that qualify graphene to be used in solar cell as its electrodes.

Graphene sheets enhance the efficiency of the cells by improving electron diffusion length in the photoanode structure. As a general conclusion, our results show that in spite of theoretical prediction of considerable electron transfer rate of graphene sheets, this property is not noticeable in DSSCs. [1]

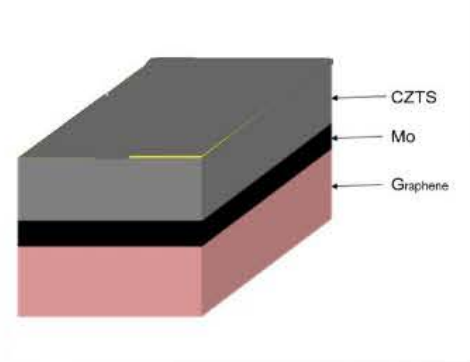
LIG samples:



Active layer

SnO_2-based nanomaterials have become a promising alternative photoanode candidate for TiO_2 in DSSC due to higher electron mobility (100–200 cm^2 ·V^{-1}·S^{-1}, which is 100 times higher than that of TiO_2) and larger band gap (3.6 eV) [2]

CIS and CZTS is regarded as a promising photovoltaic absorber candidate due to earth-abundance, non-toxicity, and high absorption coefficient. However, it is still a great challenge to synthesize $ZnSnN_2$ films with a low electron



Future Work

- Sensitized then Characterization different types of absorbers in the active layer
- Different design and Approach for more efficient active layer

References

1. Pishdar, A. and M. Samadpour, *TiO2/Graphene Nanocomposites for Enhancing the Performance of Dye Sensitized Solar Cells*. Current Nanoscience, 2017. **13**(1): p. 84-91.

2. Z. Salam, E. Vijayakumar, A. Subramania, N. Sivasankar, S. Mallick, " Graphene quantum dots decorated electrospun TiO 2 nanofibers as an effective photoanode for dye sensitized solar cells ", *Sol. Energy Mater. Sol. Cells*, vol. 143, pp. 250-259, 2015.

3.Zhang, Y., et al., *Preparation of SnO2/rGO Photoanode and Its Effect on the Property of Dye-Sensitized Solar Cells*. IEEE Journal of Photovoltaics, 2017. **7**(1): p. 399-403.

4. Qin, R., et al., *Semiconducting ZnSnN2 thin films for Si/ZnSnN2 pn junctions*. Applied Physics Letters, 2016. **108**(14): p. 142104.

Quality In Higher Education: Perceptions Of Top Administrators

Faisal alotaibi', Gamal Weheba', and Serkan Toy

The American Society for Quality
Certified Quality Engineer (CQE)

f.alotaibi@ubt.edu.sa

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Introduction

Quality in higher education is driven by numerous factors. One of these factors is the top administrators' perceptions of quality. In their communication to the public, administrators' state initiatives and stress dimensions that they believe would increase stakeholders' satisfaction and derive institution's reputation.

The intangibility of the outcome, heterogeneity of the process, and inseparability of production and consumption have been cited in support of such a classification. However, some researchers have viewed higher education as an atypical service industry because of the aspects incorporated and the multiplicity of stakeholders. Furthermore, unlike many service sectors, higher learning Institutions have stringent academic and sometimes personal entry requirements that define the population to which the service is rendered; this creates a specific customer base (Rowley,1997).

Literature Review

Garvin (1984) developed eight dimensions which can be used to evaluate quality: performance, features, reliability, conformance, durability, serviceability, aesthetics, and perceived quality. Parasuraman et al. (1985) have provided a list of ten dimensions to be considered in service quality: tangibles, reliability, responsiveness, communication, credibility, assurance, competence, courtesy, understanding/knowing the customer, and access

Parasuraman et al. (1988) reduced the proposed dimensions into five: reliability, responsiveness, tangibles, assurance, and empathy.

Methodology

The research involved content analysis of a sample of letters from presidents of top ranked universities in the U.S. The Computer Aided Text Analysis refers to the use of computer applications to analyze wording used in passages and surveys. Then Initial thirteen dimensions (constructs) and create Coding Scheme for each dimensions. A special survey was designed and used to validate these codes. The survey was completed by five members of the faculty as content experts. Based on the responses obtained, a content validity ratio (CVR) was calculated as per Lawshe {1975}. Codes with CVR below 0.99 were excluded from the list. All constructs are equally likely to be used and that a margin of error of 5 % is acceptable with a 95% confidence level. presidents' letters were downloaded from each university's website. The full text of these letters were analyzed, using the NVivo software, to determine the frequency of occurrence of each construct and its codes. The results were used to construct a 100 x 13 contingency table. Rows represented universities and columns represented the constructs. A chi- square test was applied to test for independence. The test supported the assumption of independence with a P-value < 0.0001. As such, principal components analysis was applied using the STATGRAPHICS software.

Conclusions

The result suggests some meta dimensions of quality in higher education including: empathy, attitude, safety, and reputation. These results indicated that perceptions of top administrators appear to be dominated by experience aspects.

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Book of POSTER

Table of Content

“Views of apology in linguistics: Examples of arabic culture”

ABDULLAH Y. SAMARAH

JEDDAH COLLEGE OF ADVERSITING/UNIVERSITY OF BUSINESS AND TECHNOLOGY

A.SAMARAH@UBT.EDU.SA
AJ.SAMARAH@GMAIL.COM

RCC
Research & Consultation Center
مـركـز الأبـحـاث و الاسـتـشـارات

INTRODUCTION

INTRODUCTION AND PURPOSE

IT IS IMPORTANT TO BE POLITE IN THE ARABIC CULTURE. MAYBE THIS IS ONE INTERESTING DIFFERENCE BETWEEN ARABIC SOCIETY AND WESTERN SOCIETY.

SOMETIMES WESTERNERS REACT TO WHAT THEY FEEL IS EXTREME POLITENESS ON PART OF ARABIC SPEAKERS, THERE ARE EVEN PEOPLE WHO INTERPRET THIS KIND OF POLITENESS AS THE INGRATIATION.

FOR THIS REASONS IT IS IMPORTANT TO EMPHASISE THE CULTURAL VALUE OF POLITENESS. SOME EXAMPLES MAY HELP TO SHOW THIS.

FOR INSTANCE, AN ARABIC CUSTOMER ENTERING A SHOP WILL NORMALLY MAKE AN 'APOLOGY' FOR DISTURBING THE SHOP ASSISTANT.

ANOTHER EXAMPLE, MOVING IN THE STREET YOU CAN'T AVOID (SOMETIMES) PUSHING OTHER PEOPLE; AN ARABIC SPEAKER WILL ALWAYS MAKE AN APOLOGY, OTHERWISE HE/SHE WILL BE IN TROUBLE. THE APOLOGY HAS A VERY IMPORTANT FUNCTION IN AVOIDING STRUGGLES BETWEEN THE TRIBES. THE TRADITIONAL IMPORTANCE OF APOLOGY IS ALSO REFLECTED IN THE HOLY *QUR-AN* WHERE HUMANS ARE ADVISED TO BE READY TO MAKE APOLOGIES TO HIS NEIGHBOR.

IN THE ARABIC STRIVING FOR HARMONY BETWEEN PEOPLE, THE APOLOGY HAS GREAT IMPORTANCE

IN THE PRESENT PAPER I WOULD LIKE TO DISCUSS THE *APOLOGY* EXPRESSIONS IN ARABIC. IN ADDITION, THE FOLLOWING QUESTIONS MIGHT BE DISCUSSED AS WELL:

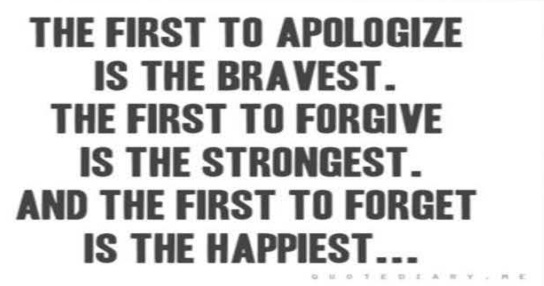
- *HOW IS THE APOLOGY EXPRESSION COMPOSED IN THE ARABIC LANGUAGE?*
- *WHAT IS THE SUCCESSFUL AND UNSUCCESSFUL APOLOGY?*
- *HOW DO WE DEFINE THE PHENOMENON OF APOLOGY ACCORDING TO SEVERAL WRITERS?*

IN MY POINT OF VIEW, THE ROLE OF APOLOGY IS IMPORTANT TO DESCRIBE FOR MANY REASONS:

I) TRYING TO REMOVE CULTURAL MISUNDERSTANDING AND MISINTERPRETATIONS, ETC. WHICH MIGHT OCCUR IN CULTURAL INTERACTION.

II) TO EXPLAIN, DISCUSS, AND ANALYSE THIS LINGUISTIC PHENOMENON IN ARABIC, AND

III) TO ADD A NEW INFORMATION IN LINGUISTIC FIELD, AND ESPECIALLY WHICH DEALS WITH 'PRAGMATICS' AND SPEECH ACT AREA.


THE FIRST TO APOLOGIZE
IS THE BRAVEST.
THE FIRST TO FORGIVE
IS THE STRONGEST.
AND THE FIRST TO FORGET
IS THE HAPPIEST...


"AN APOLOGY IS A LOVELY PERFUME; IT CAN TRANSFORM THE CLUMSIEST MOMENT INTO A GRACIOUS GIFT."
~ The Fresh Quotes ~


"Never Forget The nine most important words of any family"

I love you.
You are beautiful.
Please forgive me.

~ The Fresh Quotes ~

CONCLUSION AND FUTURE PERSPECTIVES

WE DO NOT CLAIM THAT, THROUGH THE PRESENT STUDY, WE HAVE COVERED EVERY ITEM THAT DESERVES TO BE DISCUSSED REGARDING THIS LINGUISTIC PHENOMENON IN ARABIC, HOWEVER, WE HAVE TRIED AS MUCH AS POSSIBLE TO DISCUSS THIS PHENOMENON (SECTION 2) FROM DIFFERENT CONCEPTS WHICH WE HOPE IN DOING THIS, WE HAVE GIVEN AN EXPLICIT PICTURE OF APOLOGY IN 'SPOKEN ARABIC'. MOREOVER, FOR FURTHER SUGGESTIONS IN THE FUTURE, WE WOULD SUGGEST THAT A SOCIAL, PHONETICAL , ETC COMPARISON OF THE STUDY OF APOLOGY PHENOMENON BETWEEN SEVERAL LANGUAGES E.G. ARABIC, ENGLISH, FRENCH, SWEDISH, ETC WILL BE USEFUL TO ADD A NEW LINGUISTIC INFORMATION, AND TO REMOVE, IN SOME EXTENT, THE AMBIGUITY BETWEEN THE SPEAKERS WHO CAME FROM DIFFERENT CULTURES TO INTERACT EACH OTHERS, AS WELL AS TO RISE A SUCCESSFUL CONTACT/COMMUNICATING AWAY OF ANY MISUNDERSTANDINGS, MISINTERPRETINGS, OR EVEN MISJUDGING EACH OTHERS. AS WE WOULD SUGGEST THAT VIDEO RECORDING/S OF SUCH EMPIRICAL STUDIES WILL SUPPORT OUR THIS STUDIES, ESPECIALLY, BY INCLUDING A NON-VERBAL COMMUNICATION.

REFERENCES

1. Austin, J.L. (1962). *How to do things with words.* Oxford: Clarndon Pres .١
2. Brown, P. Levinson, S (1978). *Universal of Language Usage;* .٢
Politeness Phenomena. In Goody, E. *Questions and Politeness.*
Cambridge University Press 1978.
3. Olshtain, E. and Cohen, A. (1983). *Apology: A speech act* set.
In Wolfson, N. and Judd, E. *Sociolinguistics and language acquisition.*
(pp. 18-36) Rowley, MA: Newbury House
4. Searle, J. R. (1969). *Speech Acts.*
Published by the Syndics of the Cambridge University, London.
5. Levinson, S.C. (1983). *Pragmatics.*
Printed in Great Britain by the University Press, Cambridge.

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Arabic linguistics and Sibawaihi

Abdullah Y. Samarah

Jeddah College of Advertising/University of Business and Technology

a.samarah@ubt.edu.sa
Aj.samarah@gmail.com

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Introduction

- Purpose

Purpose of the Study

The purpose of the present study is to discuss some of the important features of Arabic linguistics on the one hand, and show the importance of one of the greatest grammarians in Arabia - "Sibawa#ihi"- on the other. My study is mostly based on studies by Itkonen (1991), Savignac, Horsfield (1935: 270), and Grimme (1936: 90-5).

I will focus my present study on the following questions:

1. When did Arabic linguistics start?
2. Who were the most important Arabic linguists?
3. Who was the most famous figure and what did he achieve?
4. What were the most important sources for the Arabic linguists?
5. Finally, Have "Western linguists" really understood the role of Arabic linguistics in Arabia?

These questions have not been discussed enough in most of the articles I have seen, and I have found it necessary and useful to give additional information (during my previous studies of Sibawaihi's own work) in order to make the picture more complete in this area of historical studies.

- Introduction

The only existing remnants from the most ancient texts in Arabic writing are three graffiti on the wall of the Temple of Ramm in the Sinai and which have been dated to about 300 AD.

However, I would like to start by giving a short background of the history of the Arabic language.

First: Arabic is a Semitic language, and therefore one should begin by placing it in the context of other Semitic languages. Semitic is divided into two large branches:

A) Eastern Semitic. Language of ancient Assyria. And Babylonia and written in cuneiform characters.

B) Western Semitic. After a period in which there were only dialects viz. Ugaritic, Amorite, and Eblaitic. This branch was divided into two groups:

1. Northwest i.e. Canaanite, 2. Southwest i.e. North Arabic (the language that we deal with here) and South Arabic i.e. Ancient Ethiopian. (Geez). Hebrew and Phoenician also belong to the same family.

Conclusion and Future Perspectives

I will try to answer the five questions I introduced in the beginning of the present study.

1. The first question concerned the beginning of Arabic linguistics. Since we have said that the Islam started 1415 EM (emigration of Mohammed), and the Qura'n had been written after this period in very few years, then we may assume that linguistics as an academic discipline, appeared in Damascus (during Ommayad's domains) which means around 1350 years ago which is about 648 AD.

2. Concerning the second question, the names of some of the most important Arab linguists are: Al-Khalil Al-Faraahidi, Abo-Amr ibn Al-Ala', [illegible] ibn Jinni, Sibawaihi, ibn Malik, Al-Farraabi etc.

The main schools which had influence in this period are: Al-Basriyyah, Al-Kufiyyah, Al-Baghdadiyyah, and some of the other schools which are less important than the schools mentioned above.

3. The third question tries to identify the leading figure. Undoubtedly this was Sibawaihi. His main achievements were in the field of syntax.

4. Fourth, the basic data sources which they depended on in order to support their claims are three in number: The Holy Qura'n, The Oral Prophetic (upon Mohammed PBUH), and Poetry (mainly pre-Islamic time and to some extent after Islamic era).

Why did not the Arabic linguists concern themselves with their own language problems instead of creating some of their complicated examples and using them in theoretical battles? Certainly, they did so in order to support their claims as far as possible. But the point here is that such types of battle between the grammarians (and their students too) did come gradually. These battles started when the grammarians began to study the Arabic language in use (in speech and writing). Obviously, the kind of Arabic differs from the Arabic used in the Holy Qura'n.

Their analyses in both Qura'n, and ordinary language became more complicated.

5. Fifth, the Western linguists were ignorant of both Arabic linguistics and Arabic linguists. Because they were concerned with a very few linguists in order to explain the tradition of the Arabic linguistics, and on the other hand they did not know how to deal with the main sources of the Arabic language.

Finally, Sibawaihi was creating and adopting very important theories, and his style was very well known and acceptable too, as well as easier than many of the previous grammarians and also his successors in Arabic linguistics.

References

1. Lepschy, G.(1994) *History of Linguistics* .
volume 1. The Eastern Traditions of Linguistics. Longman London and New York.

2. Savignac, M.-R, Horsfield, G. (1935) Le temple de Ramma, Revue Biblique, 44,245-78. In Lepschy (1994)

3. Grimme, H (1936) A Props de quelques graffites du temple de Ramm, Revue Biblique, 45,90-5. In Lepschy (1994)

3. Itkonen, E. (1991) *Universal History of Linguistics Arabia.*
volume 65. (University of Ottawa). John Benjamins Publishing company.

4. Bohas, G. Cuillaume, J.- P, and Kouloughli, D.E. (1990).
The Arabic Linguistics Tradition. Printed in Great Britain by, Biddles Ltd, Guildford.

5. Al-Zawzany,H. (1971), *Explicit Of The Most famous Seven Poetry*. Egyptian house for printing. Egypt.

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Leadership online-identity on twitter: the case of saudi arabia and the USA

UNIVERSITY OF BUSINESS AND TECHNOLOGY
DR. HANEEN MOHAMMAD SHOAIB
HANEEN@UBT.EDU.SA

Research & Consultation Center
مـــركـــز الأبـحــاث و الاســتــشــارات

KEYWORDS

VIRTUAL SPACE, SOCIAL MEDIA, TWITTER, DRAMATURGY, SAUDI ARABIA, USA, ONLINE-IDENTITY, BACKSTAGE, SCRIPTS, RELIGION, CULTURE, POWER.

INTRODUCTION

ONLINE VIRTUAL SPACE PROVIDES DIFFERENT METHODS OF SOCIALLY CONSTRUCTING AND PERFORMING LEADERSHIP. SOCIAL MEDIA GLOBALLY IS A PHENOMENA THAT IMPACTS AND INFLUENCES IDENTITY CONSTRUCTION ON VIRTUAL SPACE. THIS PAPER WILL COMPARE BETWEEN DIFFERENT FACETS OF THE SAUDI ARABIAN AND THE USA'S ONLINE LEADERSHIP EXPRESSION REFLECTED IN THE SAUDI KING SALMAN BIN ABDUL-AZIZ AL SAUD AND THE AMERICAN PRESIDENT MR. DONALD TRUMP'S ONLINE IDENTITY MANIFESTED THROUGH THEIR VIRTUAL SPACE PUBLIC ENGAGEMENT ON TWITTER.

THEORETICAL GROUNDING

SOCIAL MEDIA PLAYS A SIGNIFICANT ROLE IN SHAPING AND INFLUENCING IDENTITIES IN RELATION TO THE AMOUNT AND DEPTH OF SELF-DISCLOSURE. BY EMPLOYING A DRAMATURGICAL LENS VARIOUS CONSTITUENTS OF LEADERSHIP IDENTITY IN RELATION TO THE BACKSTAGE SCRIPTS OF VIRTUAL SPACE INTERACTIONS ARE EXPOSED. THE RESEARCH WILL FOCUS ON A QUALITATIVE CONTENT ANALYSIS OF THE TIMELINE OF THE OFFICIAL TWITTER ACCOUNT OF BOTH KING SALMAN AND PRESIDENT TRUMP AND HOW SOCIAL MEDIA AFFECTED THE CONSTRUCTION OF THEIR ONLINE IDENTITY THROUGH THEIR FIRST WEEK OF ASSUMING POWER. THE IMPORTANCE OF THE STUDY LAYS ON THE CALL FOR RESEARCH ON UNDERSTANDING LEADERS' ONLINE COMMUNICATION (AHARONY, 2012).

SIGNIFICANCE

Twitter started in 2006

In 2016 Users increased to 313 Millions Monthly.
KSA: 11 Million - USA: 67 Million
(Statista, 2016)

Twitter 'is still in its infancy in the political arena'
(Aharony, 2012, p.598)

President Trumps election symbolizes the start of 'the Age of Twitter'
(Ott, 2017, P.66)

CONCLUSION

THE USE OF TWITTER BY LEADERS HAS CREATED A BACKSTAGE OF INTERACTIONS IN WHICH MESSAGES ARE NOT CENSORED OR FILTERED AS IN TRADITIONAL MEDIA. PREVIOUS RESEARCH POINTS THAT LEADERS USE TWITTER FOR EXPANDING OUTREACH AND TRANSPARENCY (AHARONY, 2012). THIS PAPER ADDS A THIRD ELEMENT TO LEADERSHIP ONLINE-IDENTITY ON TWITTER TO INCLUDE SOCIAL BONDING TO ENSURE AN IMPACTFUL RELATION WITH THE NATIONAL AND INTERNATIONAL PUBLIC. SURPRISINGLY THE ANALYTICAL CATEGORIES OF THE DATA WERE VERY SIMILAR INCLUDING, NATION PEOPLE, COUNTRY, WORK, RELIGION, WITH AN ADDITION OF FAMILY BY PRESIDENT TRUMP. RELATING BACK TO AN IMPORTANT ASPECT, GOING BACK TO BASICS.

REFERENCES:

AHARONY, N. (2012). TWITTER USE BY THREE POLITICAL LEADERS: AN EXPLORATORY ANALYSIS. *ONLINE INFORMATION REVIEW*, *36*(4), 587-603.

OTT, B. L. (2017) THE AGE OF TWITTER: DONALD J. TRUMP AND THE POLITICS OF DEBASEMENT, CRITICAL STUDIES IN MEDIA COMMUNICATION, 34:1, 59-68.

STATISTA.COM, (2016). STATISTA – STATISTIC PORTALS. RETRIEVED FROM HTTP://WWW.STATISTA.COM/STATISTICS/284451/SAUDI-ARABIA-SOCIAL-NETWORK-PENETRATION/

TWITTER. (2017). ABOUT TWITTER. RETRIEVED FROM HTTPS://ABOUT.TWITTER.COM/COMPANY.

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