



**Reading Highlights ♦
Of Academic Journals**

PREFACE

Reading Highlights of Undergraduate Students is an initiative to promote reading competency and expose undergraduate students of the United Arab Emirates University at the College of Humanities and Social Sciences (CHSS) to different innovative solutions and research methodologies. This work was carried out by the students independently under the supervision of Dr. Khaula Alkaabi, Associate Professor at CHSS. Such an initiative would not have been possible without the kind support of the CHSS Dean's Office.

DR. KHAULA ALKAABI

Associate Professor College of Humanities and
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Prof. Mohammed Hassan Ali Mohammed,
Acting Deputy Vice Chancellor for Academic Affairs & Provost

Reading is the key factor to continuous learning and academic achievements, as well as being an essential element of the research process. Reading results in building self-esteem, a better attitude, mature thoughts and a more developed personality. Reading is a great way to develop imaginative thinking, creativity, intelligence, and innovative ideas that help research skills at the university level, leading to a better future. Promoting the culture of reading at UAEU is essential to ensure knowledge development and building a future generation of leaders equipped with culture and knowledge. UAEU Libraries enable reading communities by providing a wide range of electronic collections, which include scholarly resources and databases in all disciplines, to support and facilitate learning and research requirements.

In alignment with National Reading Month, 'Reading Highlights' is a promising initiative to increase our undergraduate students' interest in reading, raise their awareness of scholarly work, and share their values with the community.



Prof. Hassan Alnaboodah,
Dean, College of Humanities and Social Sciences

This month, March 2021, UAEU is celebrating the month of reading. This year's theme was "My Family Reads." The importance of reading has been recognized as being integral to the success of the country, as it is one of the foundations of education, and vital to enhancing the thinking of youth in all areas of their professional and personal lives. In addition, the month of reading promotes the development of individual students, stimulates creativity and innovation, and contributes to the overall knowledge of the community. At UAEU, there have been many seminars, symposiums and online virtual dialogue sessions that have been organized in support of the objectives of this month's theme.

In addition, the Reading Initiative Booklet has been produced, highlighting the Reading Month's objectives, and the undergraduate students' achievements in academic reading collaboration and critical thinking.



Dr. Khaulaa Abdulla Alkaabi
Chief Innovation Officer, Associate Professor
Geography and Urban Sustainability Department
College of Humanities and Social Sciences

Reading is vital for advancing peoples and nations. Through reading, people rise and develop in their civilization, culture and knowledge . From this standpoint, the leadership of the United Arab Emirates has given great attention to reading, and has devoted March of every year to the promotion of reading. All institutions and departments in the country participate, by launching projects and initiatives that promote the value of reading. These initiatives are meant to establish and strengthen the knowledge of society, and to prepare citizens capable of bearing the burdens of national responsibilities.

In alignment with National Reading Month, this booklet 'Reading Highlights of Academic Journals,' aims to expose undergraduate students to various topics in reading across different fields in science - based on students' choices - that showcases their reading specializations and reflections. Such an initiative emphasizes the University's supportive role in stimulating creativity among students, and in building a community of reading and knowledge; ideally this will expand students' awareness of and connection with scientific society, as well as enhance their reading competency to open up promising future horizons.

STUDENT'S NAMES LIST

- **Amira Abdullah Almurshidi ID: 201303092**
[Title: 3-Dimensional Virtual Reality in Urban Management.](#)
- **Aysha Salman Alhammadi ID: 201408485**
[Monitoring Patient's Health with Smart Ambulance System Using Internet of Things \(IOTs\)](#)
- **Jawaher Alkaabi ID: 201403415**
[Drowning: How to Save Yourself](#)
- **Nashwa Salem Al Shamisi ID: 201206715**
[Smart Irrigation System](#)
- **Rauda Saeed Aldarmaki ID: 201412552**
[What Is Smart Luggage?](#)
- **Amal Ali Hamad ID: 201450149**
[Are Drivers Ready for Traffic Enforcement Drones?](#)
- **Maryam Yahya Alnuaimi ID: 201402334**
[Robotic Automated External Defibrillator Ambulance for Emergency Medical Service in Smart Cities.](#)
- **Shamma Hamdan Rasid ID: 201303747**
[Product Unbundling in the Travel Industry: The Economics of Airline Bag Fees](#)
- **Maryam Abdullah Alshehhi ID: 201404981**
[Investigating the Role of Virtual Reality in Planning for Sustainable Smart Cities](#)
- **Amna Mohamed Rashed ID: 201314861**
[From Urban Planning and Emergency Training oo Pokémon Go: Applications of Virtual Reality GIS \(VRGIS\) and Augmented Reality GIS \(ARGIS\) In Personal, Public and Environmental Health.](#)
- **Shamma Obaid Alkaabi ID: 201408097**
[Towards Assessment of Saudi Arabian Public Awareness of Water Shortage Problem.](#)
- **Aliya Salem Alkaabi ID: 201407007**
[Electricity and Water Consumption for Laundry Washing by Washing Machine Worldwide](#)
- **Ebtisam Alzaabi ID: 201408243**
[Textiles Progress](#)
- **Amnah Saeed Alyammahi ID: 201510158**
[Wristband Pool Safety Device Could Save Children from Drowning](#)
- **Saif Ali Alnuaimi ID: 201633914**
[The Learning Styles and Strategies of Effective Language Learners](#)

- **Abdulla Khalfan Almehrzi ID: 201406956**
[There's an App for That: The Development of an NFL Team Mobile Application.](#)
- **Saoud Ahmed Ali Al Dhanhani ID: 201504811**
[Nutrition Labels on Pre-packaged Foods: A Systematic Review](#)
- **Ammar Abdullah Ahmed ID: 201533228**
[The Growing Problem of Obesity in the UAE.](#)
- **Sanad Salem Fareaa ID: 201551211**
[TOWARDS SMART FARMING AND SUSTAINABLE AGRICULTURE WITH DRONES](#)
- **Muhanad Awad Mustafa Hassan ID: 201250235**
[PRECISION AGRICULTURE: TOMORROW'S TECHNOLOGY FOR TODAY'S FARMER](#)
- **Abdullah Al Hemyari ID: 201403665**
[Sport and Social Media Research: A Review.](#)
- **Ahmed Khaled Alzahmi ID: 201550044**
[RISKS AND DRIVERS OF HYBRID CAR ADOPTION: A CROSS-CULTURAL SEGMENTATION ANALYSIS.](#)
- **Ali Juma Alshamsi ID: 201550341**
[UNMANNED AERIAL VEHICLE FOR CLEANING THE HIGH RISE BUILDINGS.](#)
- **Samira Mohammed ID: 20120489**
[UNMANNED AERIAL VEHICLE](#)
- **Maryam Khaled Alblooshi ID: 201601731**
[Water-ice clouds and dust in the north polar region of Mars using MGSTES data](#)
- **Deema Obaid Rashed Al Mansouri ID: 201814507**
[Martian water ice clouds during the 2018 global dust storm as observed by the ACS-MIR channel onboard the Trace Gas Orbiter](#)
- **Shamma Juma Albedwawi ID: 201804469**
[Best folding bikes: Our pick of the best folding bikes for urban riding.](#)
- **Ahmed Salem Majed Alnuieme ID: 201704264**
[Traffic Risk Generated by Large Urban Commercial Centers](#)
- **Tayba Alkaabi ID: 201803336**
[The Role of Journey Purpose in Road Traffic Injuries: A Bayesian Network Approach](#)

Reading Title: 3-Dimensional Virtual Reality in Urban Management.

Author Names: S. T. Bhunu, H. Ruther and J. Gain.

Source: Virtual Reality.

Publication Year: 2002

Issue #: 34

Volume #: Part 6



RESEARCH OBJECTIVE

Virtual Reality is a computer-generated, visual experience, that takes place in a simulated environment. The main objectives of the paper are to apply Virtual Reality technology to understand the subject of interest from different viewpoints, to use a variety of information, and to simplify the complex information involved in urban design for easier communication with planners and marketing properties.

METHODOLOGIES

This paper discusses the application of 3-dimensional Virtual Reality technology to urban designs. A Virtual Reality model is also suggested as part of methodology to assess proposed new housing schemes in the urban context.

MAIN FINDINGS

The authors have presented reviews of different models. The model of London's West End shows a lower level of detail, which can be used for cellular telephone transmitter signal propagation. It is openly available to everyone through the World Wide Web. It has an upgradeable city database, and provides visitors with specific aids and engineering focused information which are linked to this model.

REFLECTIONS

The need for Virtual Reality is felt now more than ever before. It can simulate the computer models for real-time vision. This technology will help to avoid different risks of inaccuracy, without visiting the site through 3D urban planning, when using this model. This model actually helps more in the planning stage of certain urban designs, where complex designs can be seen easily. However, the complexity of including such detailed information at the planning stage is a bigger challenge. The usage and accuracy of Virtual Reality need to be tested for precision. More investigation should be done on the required supportive features before its full implementation in urban design.

STUDENT: AMIRA ABDULLAH ALMURSHIDI

ID: 201303092



REVIEW HIGHLIGHTS

Reading Title: Monitoring Patient's Health with Smart Ambulance system using Internet of Things (IOTs)

Author Names: Himadri N S, Neha FR and S Maitrayee.

Source: Annual Industrial Automation and Electromechanical Engineering Conference.

Publication Year: 2017

Issue #: 8th IEME Conference

Field: Health system



RESEARCH OBJECTIVE

Traffic management is becoming a vital issue in big cities these days. The objective of this research is to tackle traffic problems in case of a medical emergency, using the Internet of things (IoT). This study designed an IoT model that can be used, in case of medical emergencies, to improve traffic efficiency. It thus controls the traffic so that the ambulance can reach patient locations as soon as possible using Google Maps.

METHODOLOGIES

The objectives of this study are achieved using a methodology to design a medical device which will employ sensors for heartbeat and body temperature. Therefore, it requires an automatic circuit, which will alert the doctors, and an emergency ambulance can be employed.

MAIN FINDINGS

Pulse rate and temperature sensors will be connected through analog pins of Arduino. A computer code is generated to obtain the required objectives. A continuous monitoring device will send round-the-clock signals to doctors. In case of an emergency, doctors will alert the ambulatory service in order to reach the patient in time.

REFLECTIONS

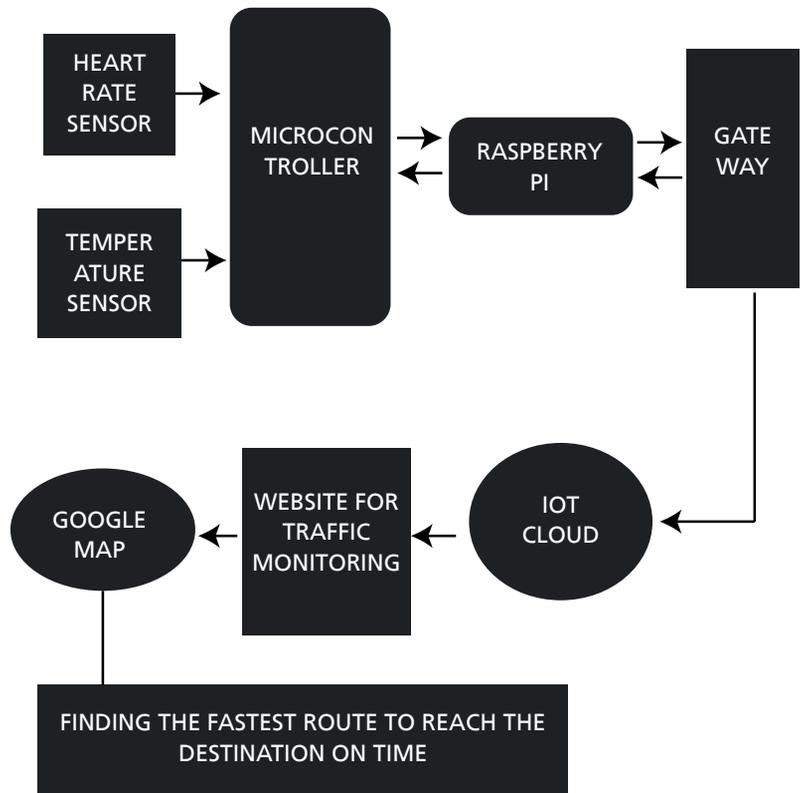
The strength of the research lies in its purpose of reducing the number of deaths of people with heart disease, using a smart ambulance. However, improvements are needed to make this idea applicable. The management of traffic is a key issue in this regard. A design for traffic control is needed, which is crucial for this purpose. Additionally, more improvements are needed in the ambulatory services, as well as access to patients' medical records.

STUDENT: AYSHA SALMAN ALHAMMADI

ID: 201408485



REVIEW HIGHLIGHTS



Reading Title: Drowning: How to Save Yourself.

Author Names: Yousra Zaki.

Source: Al Nisr Publishing LLC.

Publication Year: 2018



RESEARCH OBJECTIVE

The article looks into the differences between a swimming pool and the sea. It discusses ways to educate about precautions to take when swimming, in order to avoid drowning, and reviews the advantages and disadvantages of swimming in both a pool and the sea.

METHODOLOGIES

Historical statistics on drowning cases were used to build the argument around different swimming zones. Additionally, interviews were held and feedback from lifeguard specialists was taken into account. This research is mainly subjective, based on the writer's view and opinions.

MAIN FINDINGS

Drowning can occur in both the sea and the a. However, more drowning cases are reported in the sea (because of currents and large open areas) than in swimming pools. When drowning, muscular spasms seal the airways to prevent water from entering the trachea. Before swimming, the conditions of tides should be checked, and if they are very heavy, swimming should be avoided.

REFLECTIONS

The goal of raising awareness in order to reduce the number of drowning cases was achieved successfully by the article. However, not enough statistics and facts were used to describe the different elements of the article; it was more subjective than objective. The suggestion is that a device should be made which could assist people when drowning and can alert the concerned authorities, like the medical and ambulatory staff.

STUDENT: JAWAHER ALKAABI

ID: 201403415



Drowning deaths

 **42** people drown every hour 

372,000 people drown every year

 More than **50%** are aged **under 25**

91% of drownings occur in **low- and middle-income countries**

 **Under-5s** are at greatest risk: unable to swim, unaware of danger



 **Males** (men and boys) are **twice as likely** to drown than females

Most deaths from drowning
Rate per 100,000 people in 2012



Reading Title: Smart Irrigation System.

Author Names: Apurva Tyagi, Nina Gupta, JP Navani, Raghvendra Tiwari and Anamika Gupta.

Source: International Journal for Innovative Research in Science & Technology.

Publication Year: 2017

Issue #: 10

Volume #: 3



RESEARCH OBJECTIVE

In traditional irrigation, water conservation is not considered. The objective of this study was to create an automated irrigation mechanism, which turns the pumping motor on and off, using a soil moisture sensor to detect the moisture content of the earth. This will make it possible for the irrigation system to work efficiently without human intervention.

METHODOLOGIES

A model is established which uses a moisture content sensor to measure the amount of water in the soil. This sensor, along with a smart monitoring mobile device, is used to automatically monitor the moisture in the soil and eventually conserve water.

MAIN FINDINGS

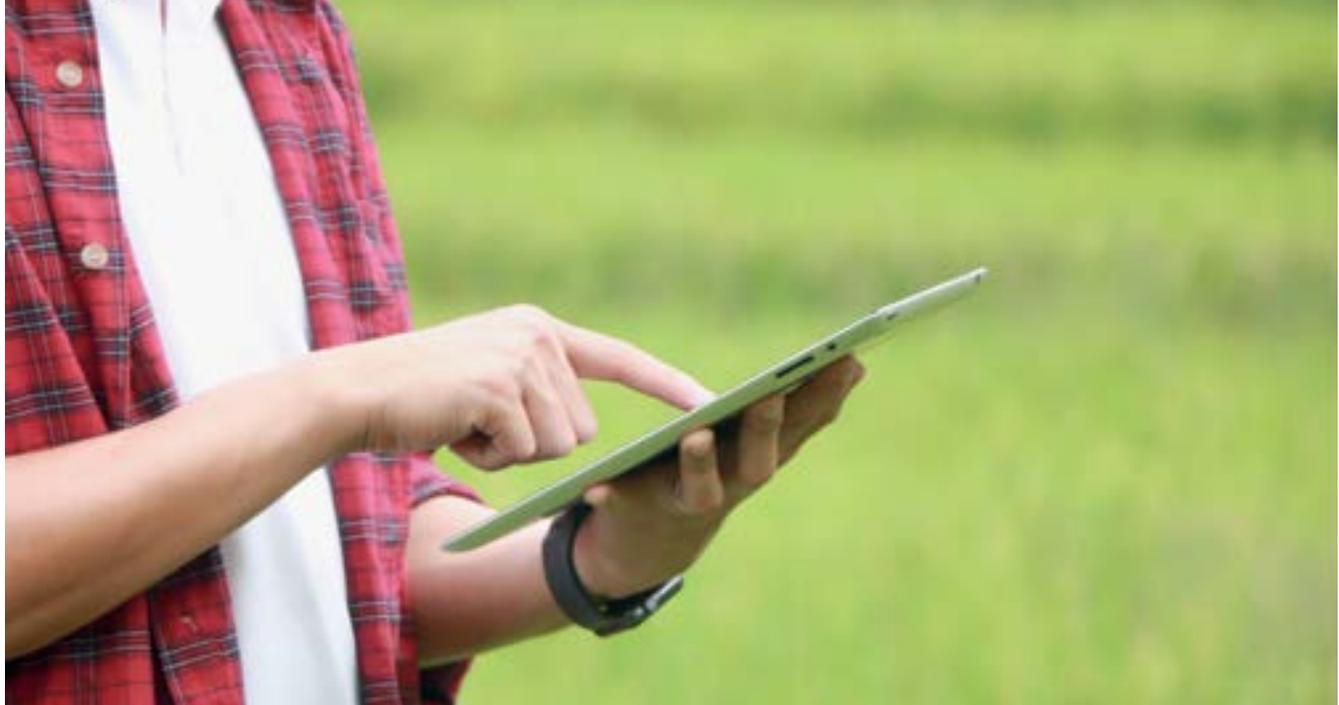
The Smart sensor (PROTEUS based Arduino), which is programmed in the C programming language, runs on a simple DC motor switch and standard resistor of 10 kilo ohm. It is programmed to collect the input signal according to the moisture content of the soil, and the output is used to operate the pump.

REFLECTIONS

The Project 'Smart Irrigation System' is very helpful in conserving water and would also save the effort required by the farmers. The positive side is that this system is quite affordable and feasible, which is more helpful in regions where there is water scarcity. It is a good step towards sustainability. However, the sensors need to be evaluated for different weather conditions. For example, in an arid region like the United Arab Emirates, where the temperature touches 40+ celsius in summer, these sensors would need to be able to withstand such harsh temperatures.

STUDENT: NASHWA SALEM AL SHAMISI

ID: 201206715



REVIEW HIGHLIGHTS

Reading Title: What Is Smart Luggage?

Author Names: Jerri Ledford.

Source: Lifewire.

Publication Year: 2019

Field: Technological and Travel System



RESEARCH OBJECTIVE

The purpose of smart luggage is to always be aware of the location of your luggage while travelling. In order to avoid the hassle of losing or misplacing luggage, the objective is to track the luggage, and lock it using an electronic locker.

METHODOLOGIES

This article reviews previous experiences of luggage transport and applies new electronic technology to overcome the challenges. Additional technological gadgets for smart luggage include device charging, GPS tracking, electronic locks, and Wi-Fi connectivity. The smart luggage is hard-shelled, and a combination of these technologies are added to it.

MAIN FINDINGS

Smart luggage is one of the best advances in travel. This luggage can be connected to the mobile phone to make its transportation process more efficient. It is the solution for many people who often lose their luggage at the airport or face several issues regarding their luggage, which can make travelling a difficult process.

REFLECTIONS

The article presented great ideas to help people to travel more efficiently, such as Bluetooth connectivity, Wi-Fi connectivity, and many other features that can be connected to the luggage. A GPS tracking system for the luggage is an attractive solution; it will ensure efficiency in the luggage retrieval process at the airport. To promote sustainability, the luggage can be designed to be powered with renewable energy, such as using solar panels and the movement of the wheels to generate energy.

STUDENT: RAUDA SAEED ALDARMAKI

ID: 201412552



REVIEW HIGHLIGHTS

Reading Title: Are Drivers Ready for Traffic Enforcement Drones?

Author Names: Ariel Rosenfeld.

Source: Accident Analysis and Prevention.

Publication Year: 2019

Issue #: 2019

Volume #: 122



RESEARCH OBJECTIVE

This research highlights the benefit of using drones in traffic management. It also investigates drivers' concerns over the use of drones and policy considerations for the deployment of traffic enforcement drones.

METHODOLOGIES

Surveys of drivers conducted in the United States and Israel were used as the input to discuss the results. Statistical measures were also used to compare between the Israeli and US data by using Mann-Whitney U-test for ordinal data, T-test for numerical data and the Wilcoxon signed rank test.

MAIN FINDINGS

The results discuss drivers' beliefs and perceptions related to traffic enforcement drones. The results showed that these drones are a more effective deterrent than the preexisting aerial resources used by the traffic police in the US and Israel. However, privacy remains the most troubling concern regarding the use of drones in general.

REFLECTIONS

The goal of this research is to reduce high-risk driving behavior which often leads to traffic crashes. However, the question still remains: will society accept this change? This challenge was discussed in the article but not in great depth. Monitoring the effect on drivers' behavior and its impact near airports can be difficult to report. The need for in-depth investigation is clear and it will help to answer these questions.

STUDENT: AMAL ALI HAMAD

ID: 201450149



REVIEW HIGHLIGHTS

Reading Title: Robotic Automated External Defibrillator Ambulance for Emergency Medical Service in Smart Cities.

Author Names: Hooman Samani and Rongbo Zhu.

Source: IEEE Access.

Publication Year: 2016

Volume #: 4



RESEARCH OBJECTIVE

The objective is to reduce the cases of sudden cardiac arrest, that can happen anywhere and lead to death, and to offer an immediate cure for cardiac attacks and reduce the time of response.

METHODOLOGIES

The methodology involves using literature reviews and expert knowledge to create vehicle robots that can arrive on time to help people suffering from cardiac arrests. Scientists use computer code to train the smart robotic devices, which can respond in emergency situations effectively and quickly.

MAIN FINDINGS

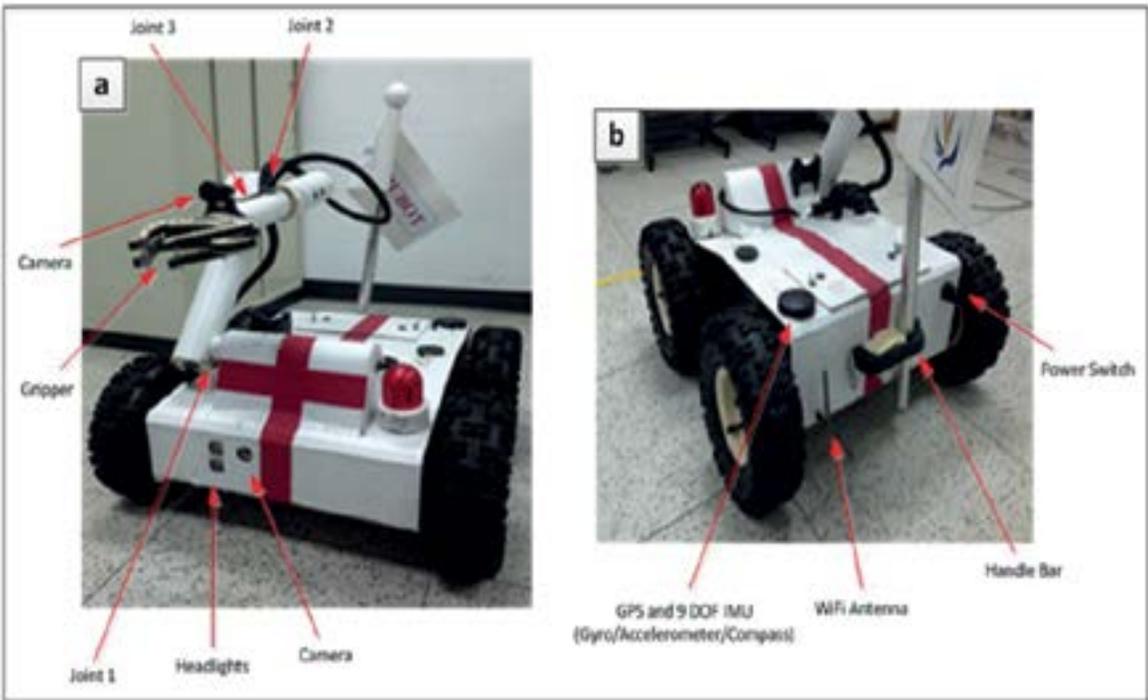
An Ambulance Robot (Ambubot) can be used to get to the nearest victim at a faster rate, thereby saving lives. This robot is equipped with an Automated External Defibrillator that can respond to cardiac arrest and also deliver an emergency message to the family members via Global System for Mobile Communication (GSM).

REFLECTIONS

The goal of this article is to reduce cardiac arrest deaths by changing primary medical equipment to modern self-contained medical equipment, which is highly useful to society. The GPS is used to serve all fields, which is a great feature. However, the shape of the Ambubot can be improved by using only two tires instead of four, and by adding solar energy sheets to make it more environmentally friendly. The programming and its Wi-Fi coverage need to be investigated in more detail.

STUDENT: MARYAM YAHYA ALNUAIMI

ID: 201402334



REVIEW HIGHLIGHTS

Reading Title: Product Unbundling in the Travel Industry.

Author Names: Jan K Brueckner, Darin N Lee, Pierre M Picard and Ethan Singer.

Source: Journal of Economics & Management Strategy.

Industry: The Economics of Airline Bag Fees.

Publication Year: 2015

Issue #: 3

Volume #: 24



RESEARCH OBJECTIVE

The main objective of this research is to measure the effect of bag fee adoption on fares and to find the impact of product unbundling in a major industry.

METHODOLOGIES

A simple economic model is generated from the cost of carrying passengers, the cost of bag-handling, bag fees and airfare. It uses economic research to model the estimated elasticities and linear demand of the prices.

MAIN FINDINGS

The resulted model predicts that airline fares should fall when it introduces a bag fee. However, the full-trip price (the bag fee plus the new fare) could either rise or fall. The empirical evidence presented in the paper provides strong confirmation of the prediction that the average fare falls by less than the bag fee itself so that the full price of a trip rises for passengers who choose to check bags.

REFLECTIONS

This article presented an economic comparison of airfare with and without baggage charges. The economic model through this study suggested that the average fare falls by less than the bag price itself. It also presented the economic solutions to those who opt to transport luggage during their travel. However, more in-depth analysis is needed to present these statistics to airplane companies in order to reduce the airfare for those who travel with less baggage. The suggestion is to charge the passengers with the weight (in kg) they carry while travelling.

STUDENT: SHAMMA HAMDAN RASID

ID: 201303747



REVIEW HIGHLIGHTS

Reading Title: Investigating the Role of Virtual Reality in Planning for Sustainable Smart Cities.

Author Names: Names: Jamei E, Mortimer M, Seyedmahmoudian M, Horan B and Stojcevski A.

Source: Sustainability.

Publication Year: January 2017

Issue #: 11

Volume #: 9



RESEARCH OBJECTIVE

An increase in population is challenging for urban designers in simulating designs for accommodation. The objective is to highlight the need for Virtual Reality in Urban Planning, to overcome the challenges in creating smart cities through material modeling and light simulation in a VR environment, and to understand the roles of planning policies in creating a smart city in the early design stages. .

METHODOLOGIES

The methodology was a review of Virtual Reality urban models for an environmental planning study for future development in Melbourne. The methodologies reviewed include examining the thermal consequence of implementing “Plan Melbourne” at the pedestrian level at a neighborhood scale.

MAIN FINDINGS

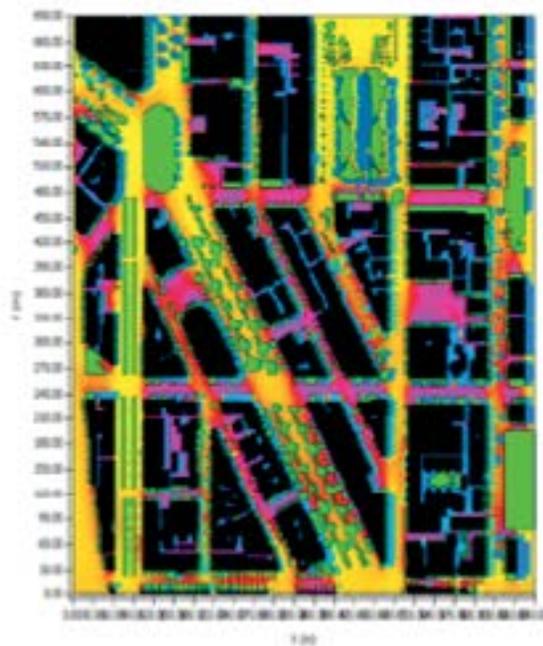
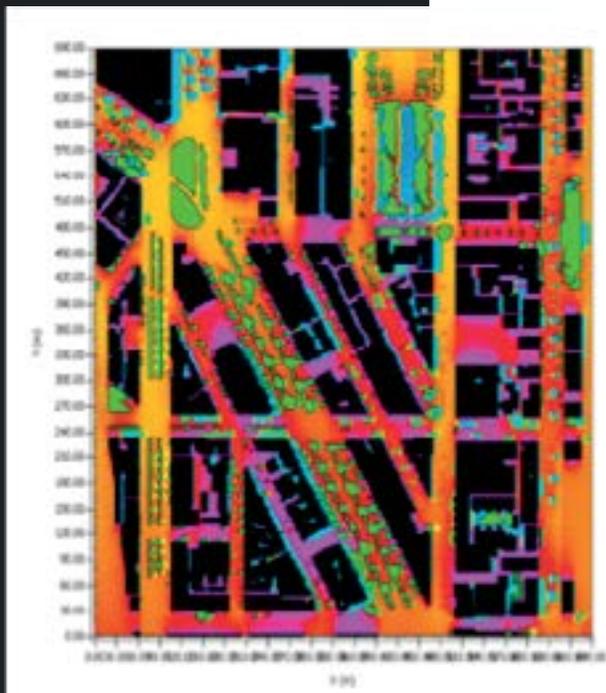
Virtual Reality should be initiated at the early design stages to avoid the risk of future design mistakes. It provides the capability to assess design ideas in a real-time, 3-dimensional space, with effective communication between different stakeholders, academics, professionals, and communities, and it saves significant amounts of time.

REFLECTIONS

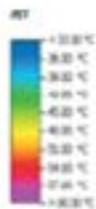
The benefits of Virtual Reality were explained in an in-depth manner in this article, which provided a deeper understanding, specifically from the designing and planning perspectives. However, the challenge is the high cost of Virtual Reality. An additional investigation is proposed to design it more cheaply and add more sensing features (e.g., temperature, smelling), so that the planners can have a real sense of the expected community requirements.

STUDENT: MARYAM ABDULLAH ALSHEHHI

ID: 201404981



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REVIEW HIGHLIGHTS

Reading Title: From Urban Planning and Emergency Training to Pokémon Go: Applications of Virtual Reality GIS (VRGIS)

Author Names: Names: Maged N. Kamel Boulos, Zhihan Lu, Paul Guerrero, Charlene Jennett and Anthony Steed. Stojcevski A.

Source: International Journal of Health Geographics.

Publication Year: 2017

Issue #: 7

Volume #: 16

Field: Urban planning and health



RESEARCH OBJECTIVE

Virtual Reality GIS (VRGIS) and Augmented Reality GIS (ARGIS) offer solutions for tackling public and environmental health problems. This review article looks into the use of this technology in public health problems and environmental problems, and investigates bringing about safer and healthier living options to individuals and communities.

METHODOLOGIES

This article mainly uses literature review to provide the subjective knowledge, opinions and thoughts about the subject of Virtual Reality. Thus, information and data has been adopted from the literature for this article.

MAIN FINDINGS

The use of VRGIS and ARGIS, when properly conceived and implemented, can enable healthier and safer living for individuals and communities. The use of the Internet of Things (IoT) in smart ambulances or environmental studies of forests can help better solve the given problem. IoT-driven smart cities benefit the most from the real-time, effective and highly integrated 3D visualization of big data via VRGIS.

REFLECTIONS

Looking into the future, there are virtually no limits to the possibilities of VRGIS and ARGIS applications in urban planning and almost all other sectors of life, including health. The concept explained in this research paper is highly useful. However, the next stage is to investigate these virtual technologies for more urban planning applications. As this technology is new, more research is needed to implement it on a wider scale, where it can have a useful impact on society.

STUDENT: AMNA MOHAMED RASHED

ID: 201314861



REVIEW HIGHLIGHTS

Reading Title: Towards Assessment of Saudi Arabia Public Awareness of Water Shortage Problem.

Author Names: Omar K M Ouda.

Source: Omar K M Ouda.

Publication Year: 2012

Issue #: 2012

Volume #: 3



RESEARCH OBJECTIVE

The Kingdom of Saudi Arabia lacks surface water resources due to minimal rainfall (average 100 mm/year). The country is facing an extreme water shortage. The objective of the study is to investigate the public awareness of the water shortage and measure the willingness of the public to pay for water.

METHODOLOGIES

The objectives were achieved through the systematic methodology of a questionnaire survey, which was distributed to the residents of Al Khobar City. The survey questions were designed in a multiple-choice format, where the respondent selects the answer that meets his or her point of view.

MAIN FINDINGS

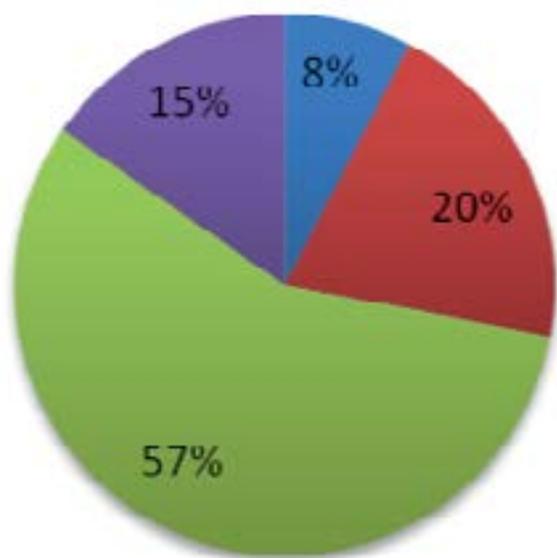
The findings of this research are not very favorable and show that extensive public awareness work is needed to educate the public with this sustainability issue. These awareness programs can be set to run through media campaigns and workshops. Public involvement is the key to water conservation.

REFLECTIONS

The strong point of this article is that it focuses on public awareness of water sustainability and ways to manage it successfully. Future research can focus on exploring more innovative solutions to water shortage in not just the GCC but in the entire world. Public awareness campaigns can be successful when the youth of the nation takes part in it. These campaigns can be set to run on social media to expand youth awareness.

STUDENT: SHAMMA OBAID ALKAABI

ID: 201408097



I don't know

Groundwater

Desalination

Ground water & Desalination

REVIEW HIGHLIGHTS

Article Title: Electricity and Water Consumption for Laundry Washing by Washing Machine Worldwide.

Reading Title: Christiane Pakula and Rainer Stamminger.

Source: Energy Efficiency.

Publication Year: 2010

Issue #: 4

Volume #: 3

Field: Environment



RESEARCH OBJECTIVE

The objectives are to examine the awareness among people of the importance of rationing electricity and water consumption. Specifically, the objective is to look at the importance of electricity in terms of its absolute impact on water resources. Another objective is to look further into improving the nexus of water and energy.

METHODOLOGIES

The methodology used was a questionnaire survey, which was based on previously published research. Then, the answers of the survey were statistically analyzed to obtain more specific answers for the given objectives.

MAIN FINDINGS

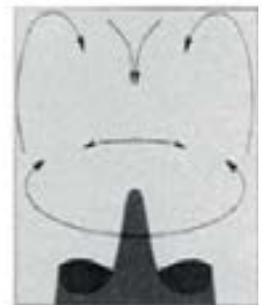
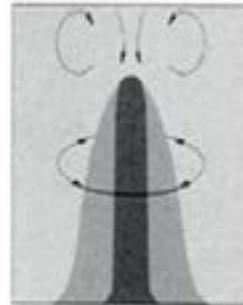
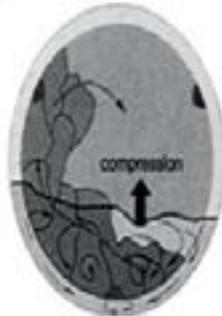
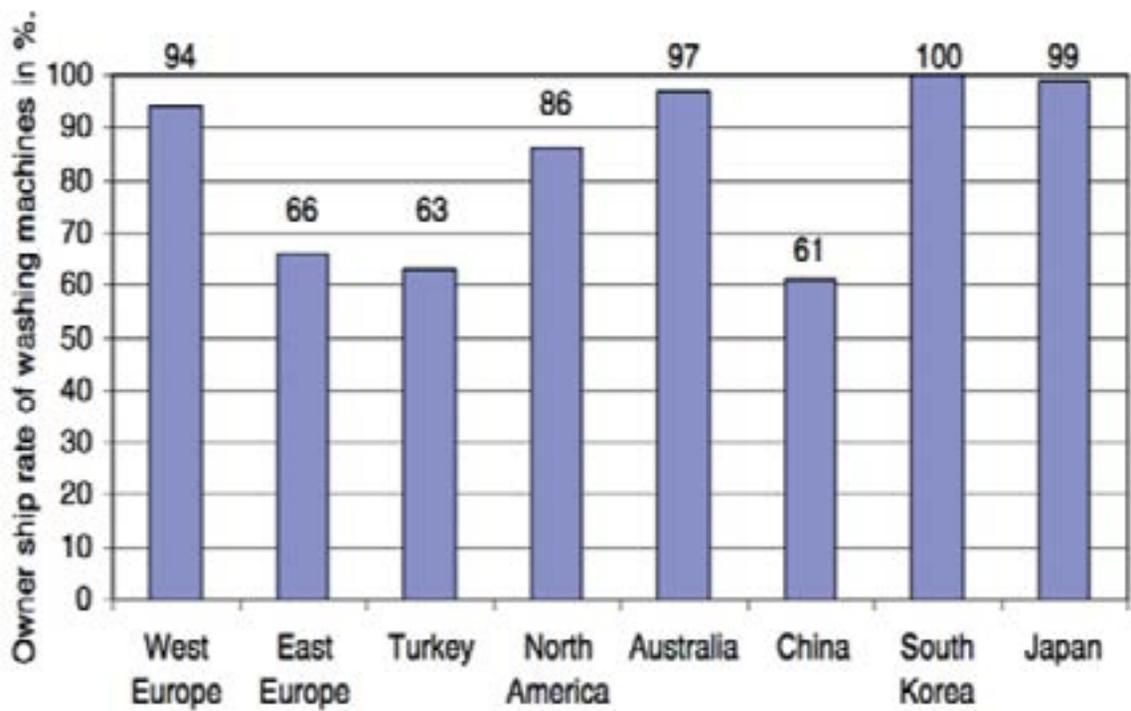
The results were surprising. They showed that laundry washing is done with different amounts of electricity and water in different parts of the world. The absolute and total comparison in this research showed that it is specific user behaviors which impact the water consumption and eventual energy consumption. South Koreans own the highest number of washing machines, percentage-wise.

REFLECTIONS

This research effectively showed statistics which provide an opportunity in society to reduce electricity and water consumption at home. However, public awareness is needed to convey these statistics to the public and encourage them to save water and energy. More sustainable and efficient water and electric laundry machines can be designed. Hence, these solutions lie in the hands of the public as well as the industrial business community.

STUDENT: ALIYA SALEM ALKAABI

ID: 201407007



REVIEW HIGHLIGHTS

Reading Title: Textiles Progress.
Author Names: Rajkishore Naya.
Source:Textiles in Air Filtration.
Publication Year: 2014
Issue #: 2
Book on Textiles Progress

RESEARCH OBJECTIVE

The textile industry is among the top five industries around the world. The use of textiles in our everyday life usually goes unnoticed. The objective of this study is to understand the importance of textiles in reducing the risk of death and injuries from accidents in automobiles.

METHODOLOGIES

A literature review was carried out to investigate the use of textiles. Statistics were used from previous journal articles and online official websites to gather information. The distribution of fabrics in different parts of cars was established.

MAIN FINDINGS

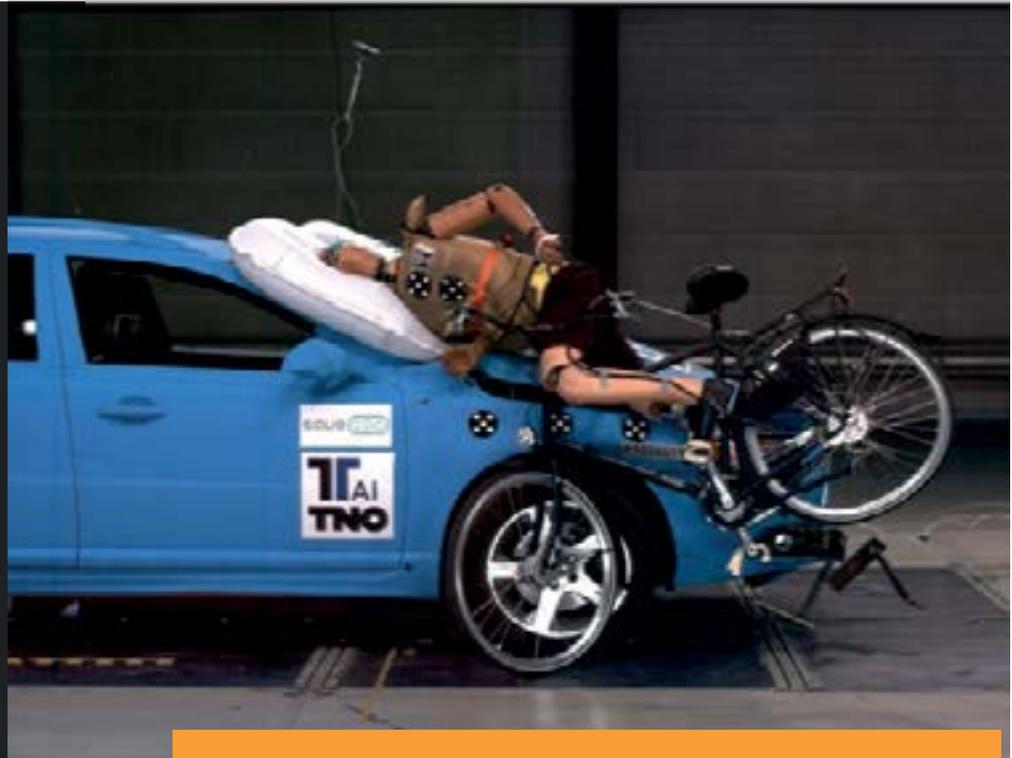
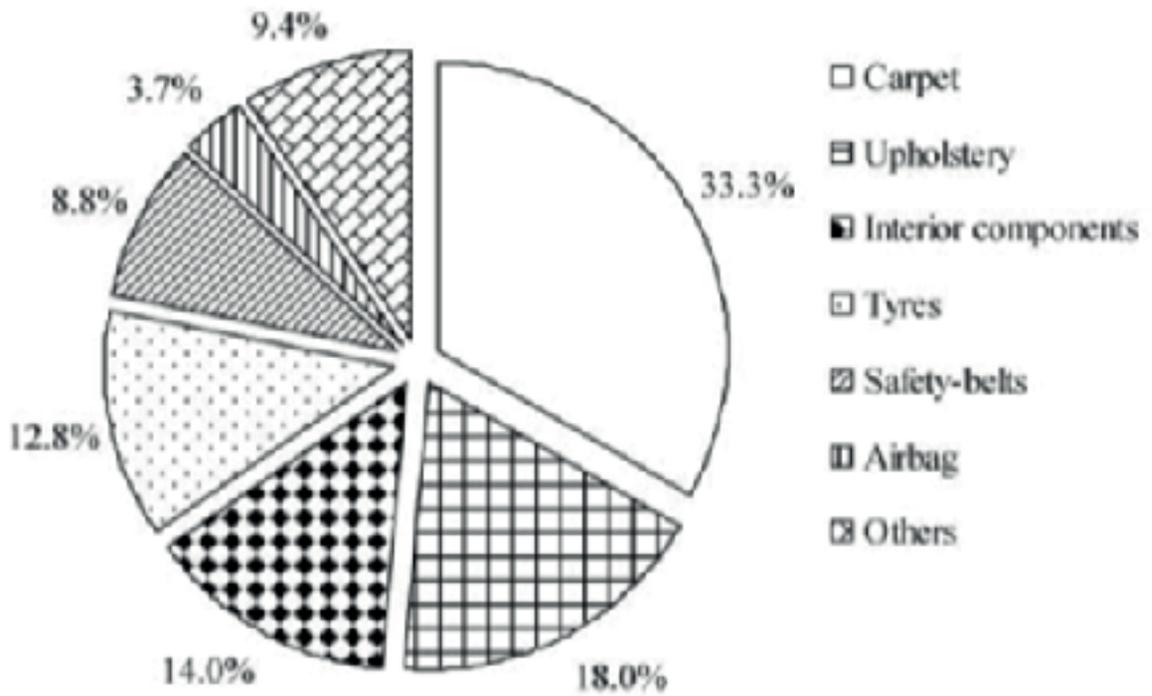
The result showed that 33.3% of textiles are used in the carpeting of a car. However, 3.7% are used in air bags. The growth of airbags is primarily driven by an increase in the production of passenger cars. Increasing federal regulations will enhance the growing awareness of safety. Further improvement can be made in development of smart sensors and new airbag designs (such as curtain airbags and side-impact airbags) that can assist in reducing car accident fatalities.

REFLECTIONS

The strength of this research is that it has shown how airbags have been enhancing safety on the roads. It also managed to spread awareness of how airbags reduce damage and danger in instances of accidents. In particular, how they reduce the risk to the driver. The weakness of this approach is that it just shows the use of textiles in a car for safety purposes but does not discuss its environment sustainability . Once an airbag has been deployed, it cannot be used again. Thus, an engineering design needs to be implemented to use the same airbag again, which will alleviate stress on our resources and will be helpful in saving lives.

STUDENT: EBTISAM ALZAABI

ID: 201408243



REVIEW HIGHLIGHTS

Reading Title: Wristband Pool Safety Device Could Save Children from Drowning.

Author Names: The National.

Source: The National; Abu Dhabi.

Publication Year: 2014

Volume #: 1



RESEARCH OBJECTIVE

This article looks into innovations that will help to reduce the mortality caused by drowning. It thereby creates a spirit of innovation by trying to develop or discover a way to save lives from drowning, such as a wristband pool safety devices.

METHODOLOGIES

The writer expressed his opinions and presented historical statistics from published journal articles to build his argument around the use of these wrist bands. It also looks into drowning cases and data from all over the world.

MAIN FINDINGS

The results show that the bracelet is an important and effective innovation for savings lives from drowning. The cost of the wristbands is high, as the price per unit is more than 7,000 UAE Dirhams. On the other hand, it is a good device that would help schools and parents keep an eye on children when swimming.

REFLECTIONS

A creative and innovative application to an existing problem in society has been created with the wristband pool safety device. Future research could focus on the implementation design for the use of this wrist watch and monitor its efficiency. This is the way forward, which can be tested from a certain location and used as a case study to motivate more buyers for the final product.

STUDENT: AMNAH SAEED ALYAMMAHI

ID: 201510158



REVIEW HIGHLIGHTS

Reading Title: The Learning Styles and Strategies of Effective Language Learners.

Author Names: Lillian L.C Wong and David Nunan.

Source: The System.

Publication Year: 2011

Volume #: 39



RESEARCH OBJECTIVE

Language is a means of communication, and diversity and in language is the beauty of humankind. The objective of the study is to compare the learning styles and strategies of effective and ineffective learners. This study thus investigated the learning of English by non-native speakers.

METHODOLOGIES

The methodology adopted was to carry out a survey. This survey was carried out among 110 undergraduate university students in Hong Kong. These students were categorized as more effective or less effective learners.

MAIN FINDINGS

The results of this study were really interesting. It revealed key differences in learning strategy preferences, different styles of learning and patterns of language use. The dominant learning style for most of the students was communicative, while for a lesser number it was authority-oriented. The study thus shows that both more and less effective learners can make an accurate appraisal of their language proficiency.

REFLECTIONS

The strength of the report is that it gives a clear strategy for students to learn how to improve their communication skills. However, the weakness is that the study just included undergraduate students, therefore it cannot be applied in all cases. More investigation is needed in this regard. By including students of different levels and comparing them, we could learn more about the factor of mental capacity and understanding and the role it plays.

STUDENT: SAIF ALI ALNUAIMI

ID: 201633914



Field independent

communicative

analytical

Active

Passive

concrete

authority-oriented

Field dependent

REVIEW HIGHLIGHTS

Reading Title: There's an App for That: The Development of an NFL Team Mobile Application.

Author Names: G Greenhalgh, B Dwyer, and B Biggio.

Source: Applied sport management.

Publication Year: 2014

Issue #: 4

Volume #: 6



RESEARCH OBJECTIVE

The objective of this research is to explore the adoption of a mobile app within a major professional sports organization: the initiation, adoption decision and implementation phases. A second objective is to analyze the managerial determinants which lead to the organization's adoption of the mobile app innovation.

METHODOLOGIES

The methodology adopted was to survey a wide range of NFL fans and to interview them, and to include the inputs of focus groups as well. The data obtained were described in detail and an analysis of themes or issues was also performed. This study incorporated member checks, peer examination and an audit trail.

MAIN FINDINGS

The findings were quite predictable. Fans and their teams need to interact with each other, as it enhances the game day experience and provides primary environmental determinants to the team's performance. This shift in the leadership's attitude towards innovation was described as a significant managerial determinant.

REFLECTIONS

The steps explained in the article about the interaction between teams and their fans, and the outcomes of bridging this gap, can be used to design a mobile application. This is a good smart solution given to the fans and players, which will help them in their different stages of initiation, adoption and implementation. However, more research needs to be done to find out the degree of impact on both the teams and the fans.

STUDENT: ABDULLA KHALFAN ALMEHRZI

ID: 201406956



REVIEW HIGHLIGHTS

Reading Title: Nutrition Labels on Pre-packaged Foods: A Systematic Review.

Author Names: Sarah Campos , Juliana Doxey and David Hammond.

Source: Public Health Nutrition.

Publication Year: 2011

Issue #: 8

Volume #: 14



RESEARCH OBJECTIVE

A balanced diet and proper nutrition are essential for a healthy body. The objective of this study is to review a buyer's understanding of the nutrition labels and comprehension of nourishment marks. This study also focuses on the impact of labelling on dietary habits and the consumer's perceptions of the direction of nutrition labels.

METHODOLOGIES

The author conducted a systematic review through electronic databases of 120 articles, which include cross-sectional surveys, experimental designs, natural experiments and longitudinal, population-based surveys. The area of study included the USA (88 articles), Europe (12 articles), Canada (9 articles), Australia and New Zealand (4 articles), Norway (2 articles), Thailand (1 article) and Trinidad (1 article).

MAIN FINDINGS

The main findings of this research include the consumer's lack of understanding of the labelling information and its use. These nutrition labels are cost-effective and have non-systematic or unparalleled reach. The government needs to investigate and explore new formats and different types of information that can ensure that the information provided is more accessible and understandable.

REFLECTIONS

The article empirically proved that many buyers face problems in understanding the nutritional facts and data provided on the labels. It was suggested to include the labelled data in simple, non-technical terms that are more understandable to the general public. The visual representation of the positive effect of these nutrients will be an added benefit in this respect.

STUDENT: SAOUD AHMED ALI AL DHANHANI

ID: 201504811



REVIEW HIGHLIGHTS

Reading Title: The Growing Problem of Obesity in the UAE.

Author Names: Panthayil Babu Rajan.

Source: Academicus International Scientific Journal.

Publication Year: 2018

Issue #: 9

Volume #: 18



RESEARCH OBJECTIVE

Obesity is widespread in the United Arab Emirates. The level of obesity in the UAE is the highest in the world. This study reviews the background information of lifestyles in the UAE, the different causes of obesity, the impact of obesity on a healthier society and the steps taken to overcome obesity.

METHODOLOGIES

The author investigates historical statistics and numbers from publicly available sources and research journals to build an argument around it. The lavish lifestyle, junk food and lack of exercise were also considered in this study. Personal experience was also used to explain some of the concepts in this article.

MAIN FINDINGS

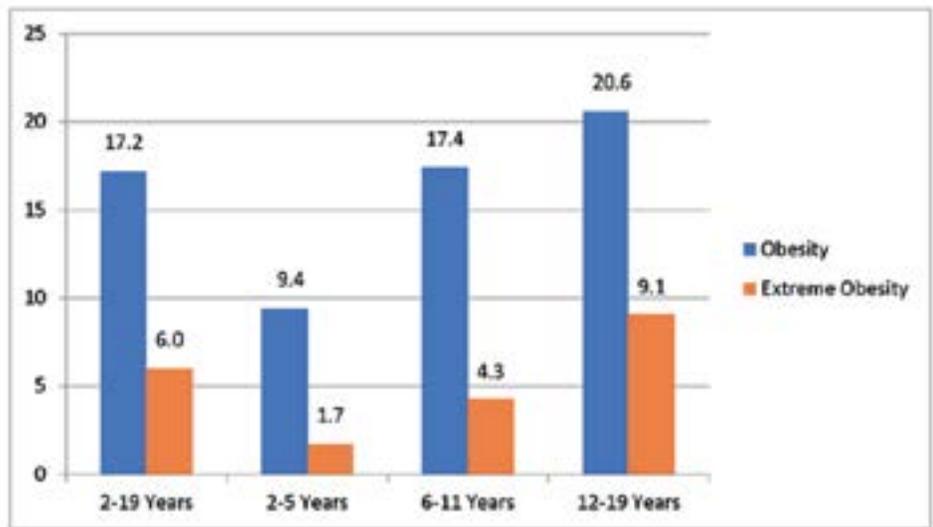
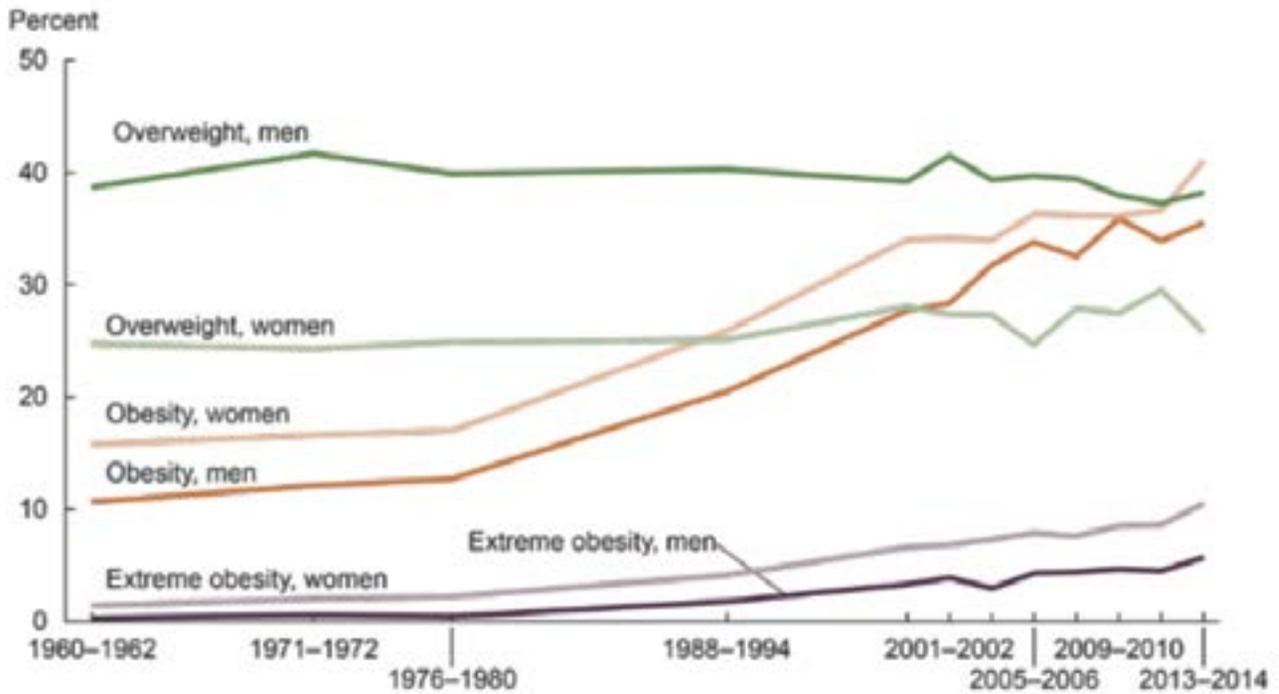
Obesity is a growing problem, not just in the UAE, but all around the world. The author explains that the reasons for obesity are fat-rich fast food, sedentary lifestyle, and harsh climatic conditions, which all pose negative impacts on the health and wellbeing of people. It can be controlled through the golden rule "Health is the most important wealth." The author also emphasizes the slogan "Healthy food and healthy lifestyle will help you look good, walk good and live good."

REFLECTIONS

The article did a great job in spreading awareness about obesity, its causes and its effects. It also looked into the already existing issues of obesity, specifically in the UAE. There is a need to spread awareness to tackle this disease through print, visual and social media. Public marathon races need to be made more frequent and participants should be encouraged.

STUDENT: AMMAR ABDULLAH AHMED

ID: 201533228



* obesity includes extreme obesity

REVIEW HIGHLIGHTS

Reading Title: Towards Smart Farming and Sustainable Agriculture with Drones.
Author Names: Paolo T, Massimo S. G, Giacomo D, Emanuele R and Carlo A. A.
Source: International Conference on Intelligent Environment.
Publication Year: 2015
Field: Drones & Agriculture



RESEARCH OBJECTIVE

Unmanned aerial vehicles known as drones are quite widespread these days. This study analyzes different fields, using drones and the RGB-D sensors, in agriculture for food production and soil exploration. It also assesses the benefits and limitations of using drones in agriculture.

METHODOLOGIES

The methodology used in this research includes soil-sensing technology as part of a robotic assessment system for an aerial vehicle, an RGB-D sensor and sensor software interface that are responsible for the navigation phase, and finally, the post-processing of the acquired data. It used an Asus Xtion Pro sensor on three different fields. The first parcel was empty, the second had 25 cm plow and the third had 50 cm plow.

MAIN FINDINGS

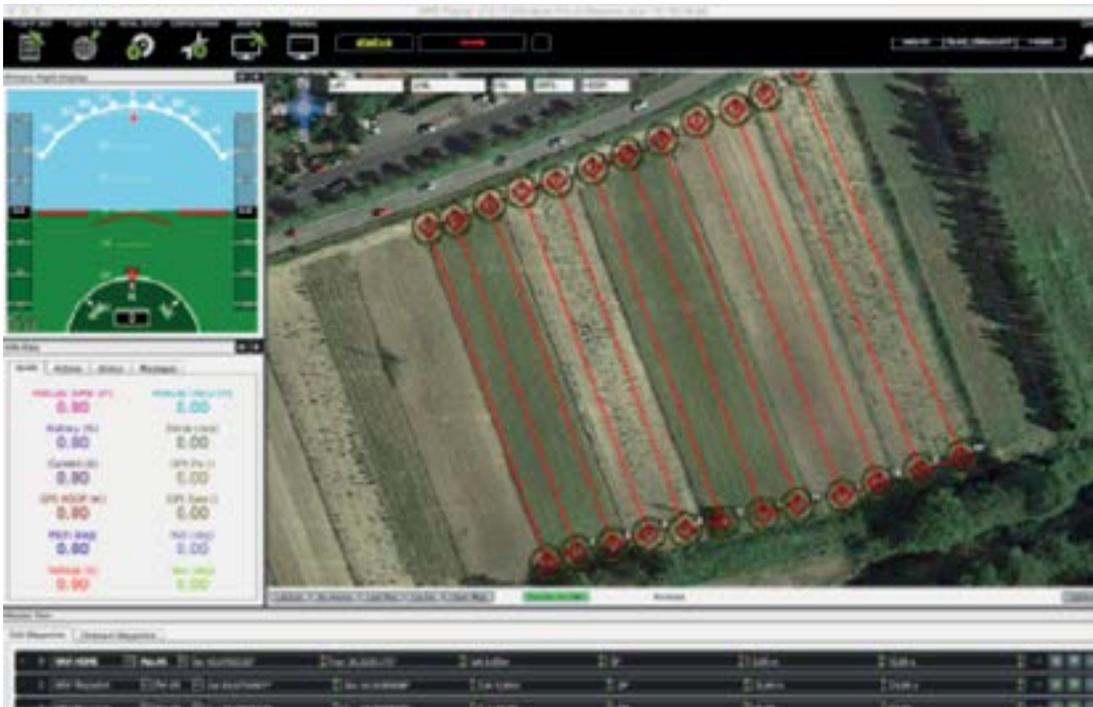
The drones successfully described soil characteristics, as this method was applied in the plowing type discrimination and test for the solution. This sensor was able to discriminate among three different fields, one of which was unplowed and the others with plowing depths of 25 and 30 cm. They successfully tested each field's storage of RGB-D on each parcel.

REFLECTIONS

The benefit of using drones in agriculture was clearly explained in this article. However, looking at countries like the UAE, the article failed to mention one important limitation, which is the use of drones in hot weather. Drones seem to function well in places with a temperate climate. However, more research is needed to explore the impact of heat on drones with agriculture applications.

STUDENT: SANAD SALEM FAREAA

ID: 201551211



REVIEW HIGHLIGHTS

Reading Title: Precision Agriculture: Tomorrow's Technology for Today's Farmer.

Author Names: S Banu.

Source: Food Processing & Technology.

Publication Year: 2015

Field: Drones & Agriculture



RESEARCH OBJECTIVE

Precision farming is an information technology-based farm management system. The objective is to use an information and technology-based farm management system to identify, analyze and manage variability within fields for optimum profitability and protection of the land resource.

METHODOLOGIES

This study uses Informatics, GIS and Global Positioning systems (GPS). The information was collected by primary and secondary methods, and the data were gathered through the primary method of field surveys. Thus, using computer and informatics tools, yield maps (i.e., soil-supported maps) were generated.

MAIN FINDINGS

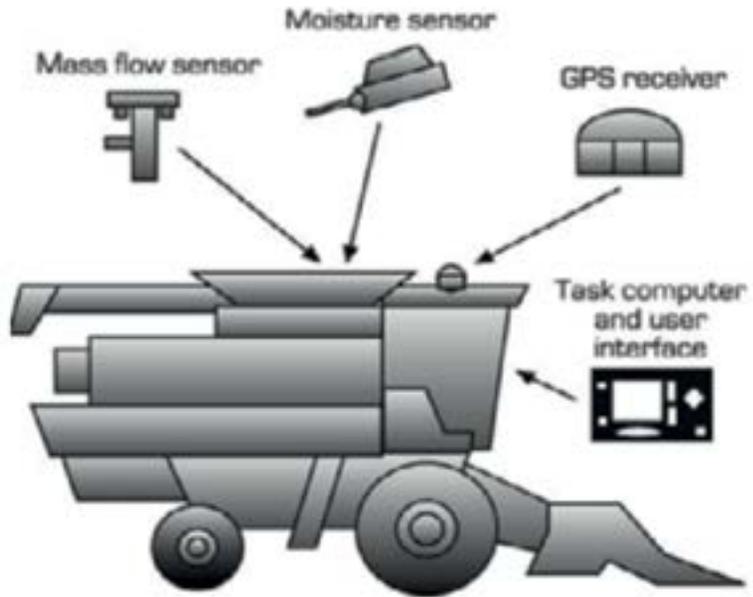
The main findings include the use of a satellite and remote sensing device to monitor yield of crops. The yield monitor is a combination of several components. The sensors measure the mass or volume of grain flow (grain flow sensors), separator speed and ground speed. If one wants to conduct soil sampling, it can be done across a large property and can be organized using the GPS and mapping software. The goal of precision soil sampling is to produce a map of nutrient needs, called an application map.

REFLECTIONS

Farming in the traditional way requires a lot of effort, and the owners spend a lot of money on labor. Every laborer has a different task to do, and thus, chances of human error are high, which might affect the farming quality. Therefore, precision in the farming process plays a huge role in the success of agricultural activities.

STUDENT: MUHANAD AWAD MUSTAFA HASSAN

ID: 201250235



REVIEW HIGHLIGHTS

Reading Title: Sport and Social Media Research: A Review

Author Names: Kevin Filo, Daniel Lock and Adam Karg.

Source: Sports Management Review.

Publication Year: 2015

Field: Sports



RESEARCH OBJECTIVE

In the age of social media, sports and games are profoundly impacted by fan interactions. This research thus focuses on the role of social media in sports management, which can be aligned with service-dominant logic and illustrative roles in cultivating relationships between brands and individuals.

METHODOLOGIES

In this review article, seven journals were identified to begin the review including, Journal of Sport Management, Sport Management Review, Sport Marketing Quarterly and International Journal of Sport Management.

MAIN FINDINGS

There are three categories of social media research: (1) strategic, (2) operational and (3) user-focused. The strategic category examines the role and function of social media from a brand's perspective, the operational category looks at the use of social media as research to review how a brand utilizes social media, and the user-focused category investigates sport fans' motivations, constraints, perceptions and preferences with regard to social media usage.

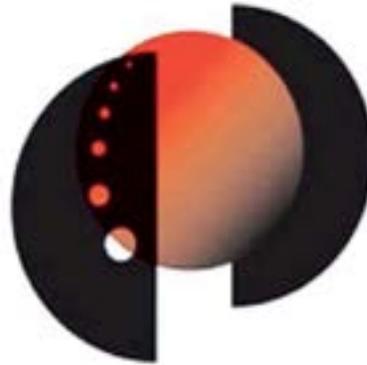
REFLECTIONS

Social media can affect a sport positively as well as negatively, as described next. Positively: Increases the percentage of those interested in sports and gaining experience about sports management. It also gives people the opportunity to voice their ideas and suggestions related to sports. Negatively: It can lead to the spread of fake sports news, and the promotion of illegal sports in social media.

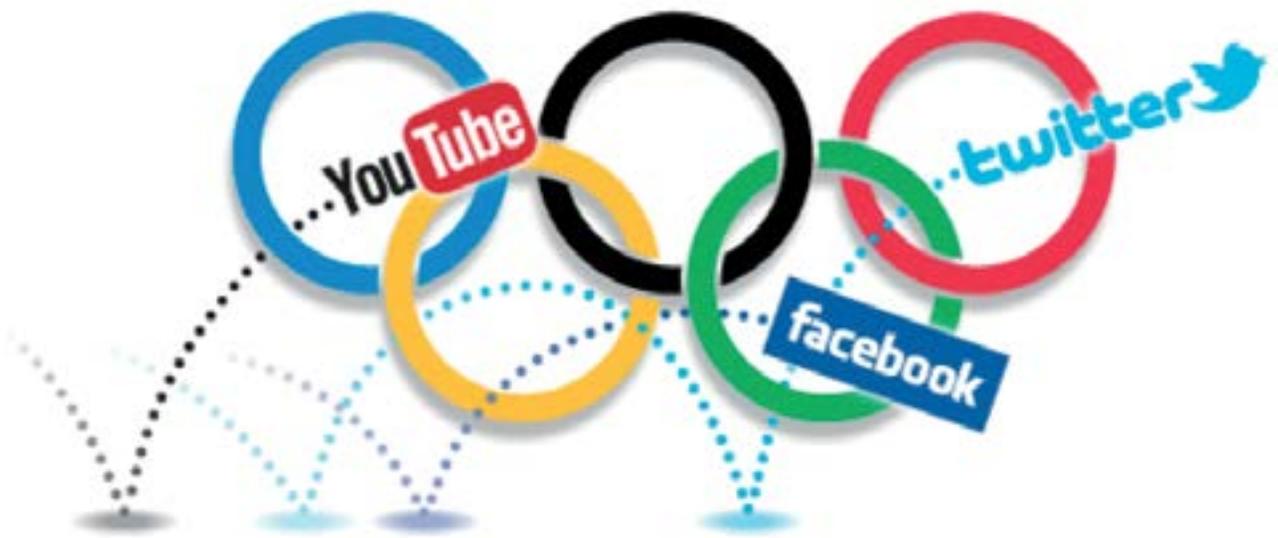
STUDENT: ABDULLAH AL HEMYARI

ID: 201403665

JOURNAL OF
SPORT
MANAGEMENT



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REVIEW HIGHLIGHTS

Reading Title: : Risks and drivers of hybrid car adoption: A cross-cultural segmentation analysis.

Author Names: Fraser McLeay a, Vignesh Yoganathan B, Victoria-Sophie Osburg c and Ameet Pandit.

Source: Journal of Cleaner Production.

Publication Year: 2018

Field: Cleaner Production



RESEARCH OBJECTIVE

Hybrid cars use more than one means of propulsion, which combines petrol or diesel with an electric motor, and were introduced to lower carbon emissions. The objective of this study is to know the risks faced by the people who purchase hybrid cars and try to avoid these kinds of risks, and to address the lack of cross-cultural research on eco-friendly cars and marketing.

METHODOLOGIES

The approach used in this study was an online survey. Participants were recruited using a financial incentive to participate in an online questionnaire. The questionnaire was designed to measure five types of risk that may act as barriers to purchasing hybrid cars. There were 817 usable responses with a mode age-category of 25–34.

MAIN FINDINGS

Four segments (pessimists, realists, optimists and casualists) of respondents were identified, so they got different opinions according to the different segments. They came up with results regarding marketing strategies and potential policy interventions aimed at mitigating risk perceptions and promoting the factors that drive hybrid car adoption.

REFLECTIONS

Overall, this study highlights the importance of taking a more holistic viewpoint with respect to making a hybrid car purchase decision. However, there are some weaknesses in this study, for example, the authors didn't provide comparisons between engines of the hybrid cars. The safety reason should also be included, which can be more motivating for the new buyers.

STUDENT: AHMED KHALED ALZAHMI

ID: 201550044



REVIEW HIGHLIGHTS

Reading Title: : Unmanned Aerial Vehicle for Cleaning the High Rise Buildings.

Author Names: SM Miraj Uddin, Md Reyad Hossain, Md Shahriar Rabbi, Md Akib Hasan and Md Saniat Rahman Zishan.

Source: International Conference on Robotics, Electrical and Signal Processing Technique.

Publication Year: 2019

Field: Drones



RESEARCH OBJECTIVE

The cleaning of high-rise building windows sometimes becomes challenging for the management of said building. The objective of this study is to present the possibility of remote-controlled drones for cleaning high-rise building windows. It also explains the history of drones, their usage in cleaning and the experience of auto-powered unmanned aerial vehicles.

METHODOLOGIES

The methodology includes the use of the Pixhawk 2.1 flight controller, which can control the whole system through monitoring, and ways in which these sensors experience meteorological parameters.

MAIN FINDINGS

This article focuses on the regional conditions of Bangladesh. The environment and dust regularly impact the windows and solar panels of high-rise buildings. This research thus presents a simple solution through the use of a lidar sensors, Pixhawk2, brushless motors, electric speed controllers, GPS and high performance batteries.

REFLECTIONS

This study helps us understand the use of drones and the production of customized drones. They are beneficial in terms of reducing the manpower hassle for reaching windows on high-rise buildings. However, the main concern is safety in flying drones. These drones can be made more sustainable with the inclusion of solar panels; thus, during the daytime, the energy can be taken from the shining sun. The age of the battery is also a key issue, which can be investigated more to increase flight time.

STUDENT: ALI JUMA ALSHAMSI

ID: 201550341



REVIEW HIGHLIGHTS

Reading Title: Unmanned Aerial Vehicle.

Author Name: Tariq Al Rawi.

Source: Planes.

Publication Year: 2015

Field: Drones

RESEARCH OBJECTIVE

The history of drones goes back to the age of the Pharaohs. The author analyzes and reviews the history of flying: from Egypt (the Pharaohs), to Leonardo Da Vinci, to the Wright Brothers, to William Samuel Henson. The history of flying in combination with the role of different UAVs was investigated in this article.

METHODOLOGIES

Field trips were conducted to practically observe the drones, surveys were conducted among drone users, and a new model was established based on these experiences of the flight of the drone.

MAIN FINDINGS

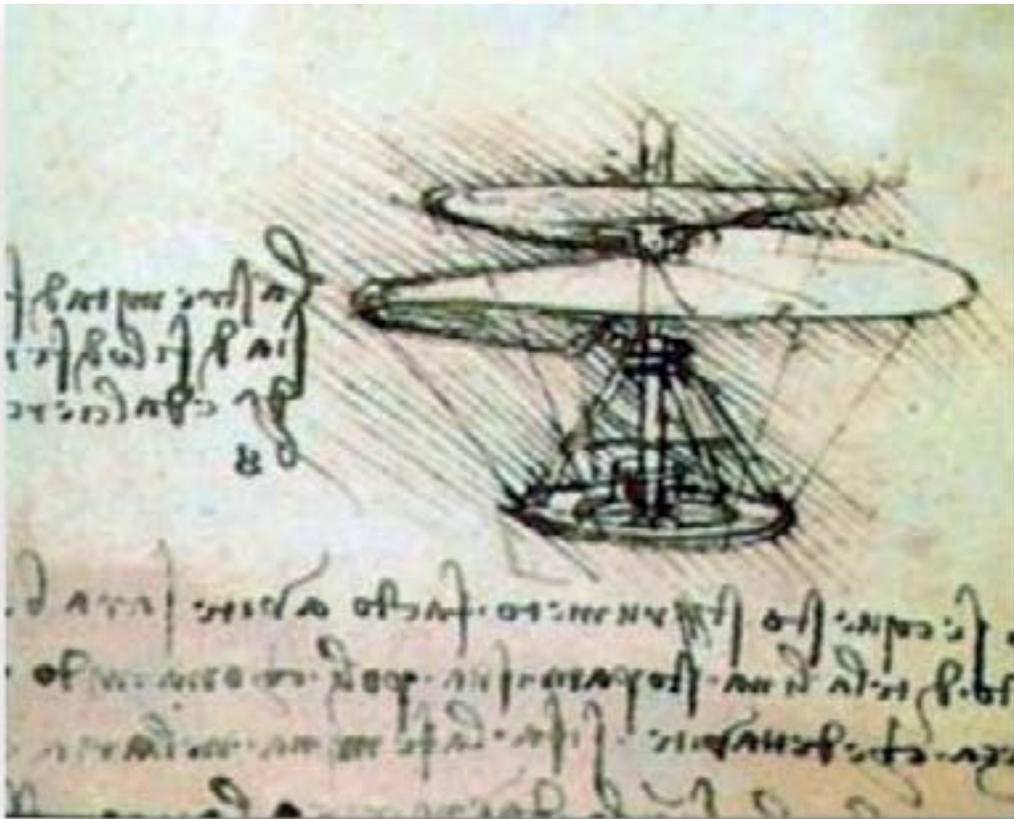
The technology of flying has transformed from flying a pilot-directed jet to flying unmanned aerial vehicles. The emergence of unmanned aerial vehicles has more advantages. The use of drones has been incorporated in the detection of goals such as, electronic warfare, rockets and police UAVs. On the civil side, drones are used to monitor hurricanes and wildlife, for internet connection, and for the transfer of medicine and goods.

REFLECTIONS

This article did a good job of presenting the history of flying from the age of the Pharaohs to the first plane built by the Wright brothers; it then discussed the evolution of drones and their uses starting from civil uses in the field of delivery to war uses. However, more investigation is needed in its usage on the civil side. These drones are helpful in reducing labor hours, and different ways that they can be used need to be further explored.

STUDENT: ALI JUMA ALSHAMSI

ID: 201204894



REVIEW HIGHLIGHTS

Reading Title: Water-ice clouds and dust in the north polar region of Mars using MGS TES data

Author Names: L.K. Tamppari, M.D. Smith, D.S. Bass, A.S. Hale

Source: Science Direct

Publication Year: 2007

RESEARCH OBJECTIVE

The objective of this research is to understand the cycles that will lend insight into the behavior of atmospheric dynamics. The atmosphere has the ability to transport dust, water-ice, and vapor to different parts of the planet. This research also aims to study how that ability changes as a function of dust and water-ice loading. Understanding the behavior of dust and water-ice clouds may provide insight into the difference in behavior between the polar caps and in the formation of the polar layer deposits.

METHODOLOGIES

The water-ice and dust optical depth mapping done in this study utilizes the data from the MGS TES instrument. TES is an infrared interferometer/spectrometer operating in the spectral range 6–50 mm. The spacecraft orbits Mars 12 times every 1-sol period covering the globe with equally spaced strips once a day. In this paper, we use the daytime data (varies between about 12:30 and 14:30 in the polar region). At this time of day, water-ice cloud formation is likely near its minimum since the diurnal temperatures will be near their maximum.

MAIN FINDINGS

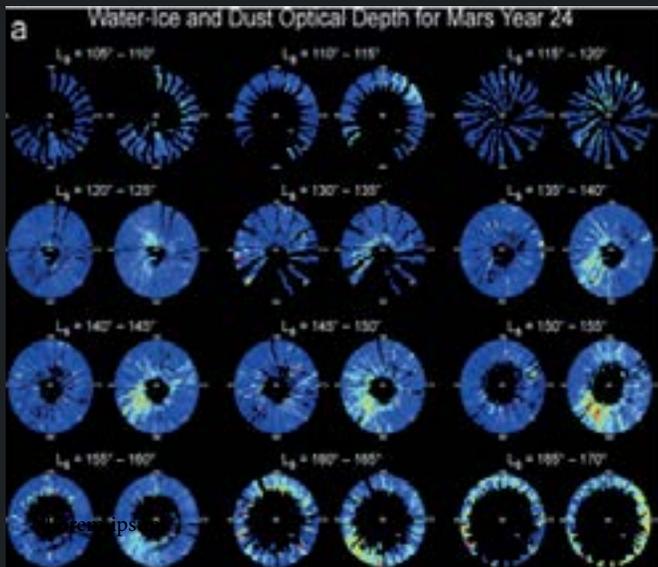
Water-ice cloud and dust optical depths have been mapped in the north polar region during northern spring and summer for three Mars years. Longitudinal variability in the optical thickness of the NPH exists, both during springtime recession and late-summer onset. Late-spring NPH recession water-ice clouds and late-summer NPH onset water-ice clouds tend to be patchy in nature. Water-ice cloud background optical depth levels decrease to summertime low levels (typically 0.1 and below) starting at Ls 1/4 801 in each year. The background water-ice optical depths appear to reach minimum values in the longitudinal region. The observations show many examples of water-ice clouds that are associated with elevated dust optical depths as well as examples where water-ice clouds do not correlate with elevated dust optical depths.

REFLECTIONS

One of the important things before doing research is studying the place. This article has taught me the atmospheric dynamics of Mars and how the particles are being transported throughout the planet. Learning the techniques the authors used to get information on Mars' weather is complex, but the results are useful to map out the ice clouds during various period of time during the day, looking at its minimum and maximum rate. The reading that the researchers obtained during the late spring and late summer identified the different variations. Because these observations show the spatial and seasonal changes in water-ice and dust optical depth over three Mars years, they will provide useful support for models of dynamics and water-ice cloud formation. To sum up, this article is useful for future reading and research reports since the UAE has recently sent an orbiter to Mars; students and researchers will get an idea about what to expect and what new information they might get.

STUDENT: Maryam Khaled Alblooshi

ID: 201601731



REVIEW HIGHLIGHTS

Reading Title: Martian water ice clouds during the 2018 global dust storm as observed by the ACS-MIR channel onboard the Trace Gas Orbiter
Author Names: A. Stcherbinine, M. Vincendon, F. Montmessin, M. J. Wolff, O. Korablev, A. Fedorova, A. Trokhimovskiy, A. Patrakeev, G. Lacombe, L. Baggio, A. Shakun
Source: Journal of Geophysical Research: Planets (JGR)
Publication Year: 2020

RESEARCH OBJECTIVE

Researchers aimed to monitor Martian water ice clouds and derivation of vertical particle size profiles using a $3\mu\text{m}$ spectral band. Also, they aimed to observe a shift in water ice clouds at maximum altitudes from about 60 km before the GDS to over 90 km during the storm, as well as to detect the changes happening in ice cloud particles as a result of the 2018 dust storm.

METHODOLOGIES

The researchers used various methods to aid them in their journey. The main methodologies to gather data for research were: Continuum extraction, Haze top determination, $3\mu\text{m}$ band monitoring, Water ice cloud modeling, Water ice particle size retrieving method, Filtering of dust/ice ambiguous cases. These methods helped the researchers gather the most accurate data in an efficient manner.

MAIN FINDINGS

Particularly noteworthy are some large water ice particles ($\text{reff} \geq 1.5\mu\text{m}$) at surprisingly high altitudes during the GDS (50 – 70 km). These results suggest that GDS can have a significant impact on the formation and properties of high altitude water ice clouds compared to the usual perihelion dust activity. Using the ACS MIR data set, they have developed a method for identifying water ice clouds, measuring their opacity and estimating their particle size. The method makes it possible to identify clouds with a particle size smaller than $2\mu\text{m}$. They observe that there is a general trend of decreasing particle size at altitude for the whole data set and, more specifically, that the particle size within a given cloud/profile also decreases at altitude, typically from 1 to $2\mu\text{m}$ at the bottom of the cloud to less than $0.2\mu\text{m}$ at the top.

REFLECTIONS

This article would be of great help to our research as it helped us broaden our knowledge of the certain effects of natural causes on water ice clouds. It also helped us analyze the data much better with the graphs and estimates included. Reading about the effects of the global dust storm on water ice clouds helped us better in grasping the idea of how these clouds change and get affected.

STUDENT: Deema Obaid Rashed Al Mansouri

ID: 201814507



REVIEW HIGHLIGHTS

Reading Title: Best folding bikes: Our pick of the best folding bikes for urban riding
Author Name: Colin Levitch
Source: Cycling news
Publication Year: September 29, 2020
Issue #: Folding bike and environmental friend

RESEARCH OBJECTIVE

The research aims to provide information on the types of folding bikes. It addresses aspects related to speed, comfort, and safety of the driver, as well as the main characteristics of folding bikes.

METHODOLOGIES

The article presented several methods and types of folding bicycles, and listed their features such as size, speed, and weight. It also offered a reference site if the reader wanted to buy a folding bicycle. The article was enjoyable to read and the related pictures made the topic much more understandable.

MAIN FINDINGS

The article explained the usefulness of the folding bike, because you can shorten it in several parts. It advised maintaining safety and keeping the folding bike instead of a normal frame bike. I believe that the cyclist community would enjoy reading this article, particularly workers who do not have a driver's license and who use public transportation.

REFLECTIONS

The article will help me in my research project because it has given me general ideas about the types of folding bicycles, which certainly helps me to compare it with my proposed folding prototype bike, and about how can I make it more environmentally friendly.

STUDENT: Shamma Juma Albedwawi

ID: 201804469



REVIEW HIGHLIGHTS

Reading Title: Traffic Risk Generated by Large Urban Commercial Centers

Author Names: Serban Raicu, Dorinela Constescu, Raluca Raicu, Mihaela Popa

Source: Transportation Research Procedia

Publication Year: 2016

RESEARCH OBJECTIVE

The study aims to explore the consequences of development in urban societies, including road traffic risk, road safety, and understanding people's needs. The authors applied spatial analysis methods to examine the effects of locating large mall centers in the middle of the city. For example, the authors used Object class, Actor class, Spatial Structure class, and Temporal structure class to define time and location of the traffic system entries, phase of activity, as well as the intensity of daily and seasonal movements.

METHODOLOGIES

The authors considered 72 centers that are located in 80 transport analysis zones, and then started to define the places that were the most attractive to visitors (like a catchment area or trade area). They then applied the converse model for a shopping mall located in a high-risk area and eight other malls having the same features. They used the Huff probabilistic model in order to assess the size and the origin of the entering traffic flows for the selected shopping malls. This model allows the estimates of total travel attracted by the analyzed center.

MAIN FINDINGS

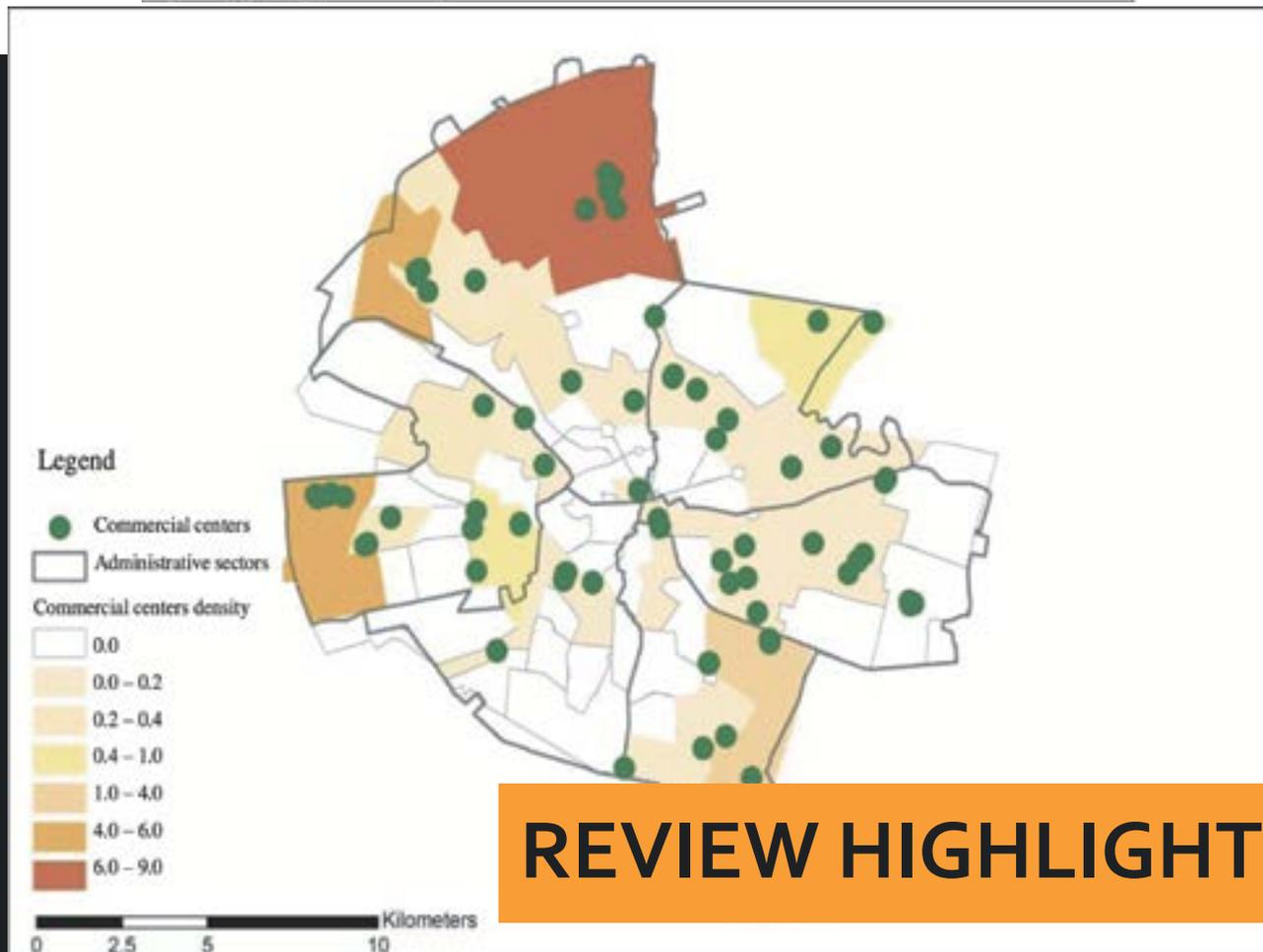
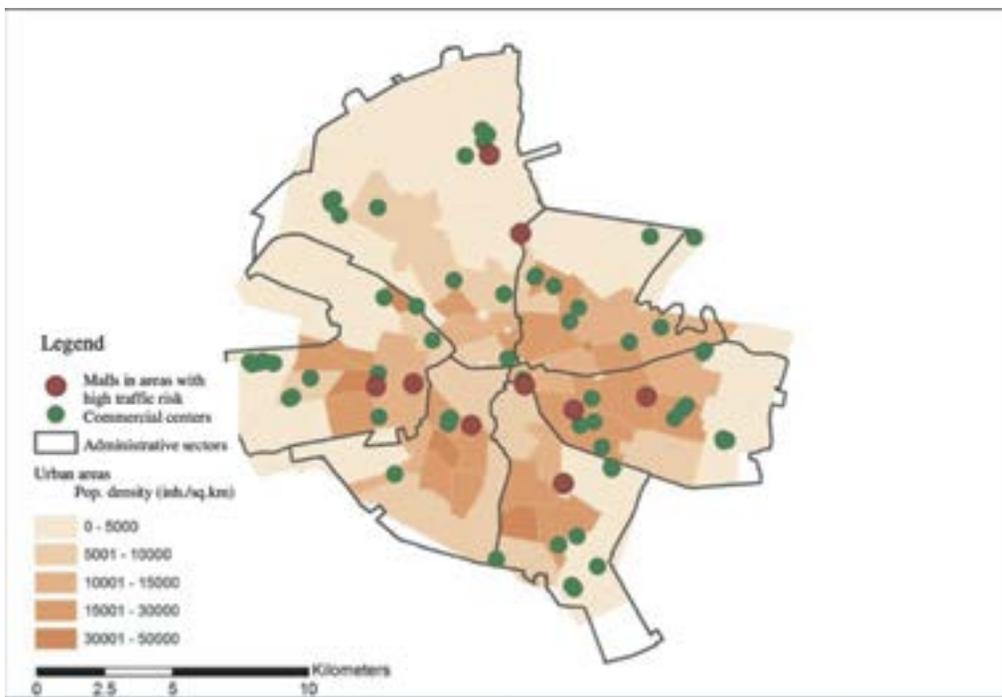
Large businesses and commercial centers like malls and hyper markets tend to attract more people, leading to an increase in car traffic congestion around them. This requires a better urban development strategy and assessment to mitigate the consequences of traffic around commercial center locations.

REFLECTIONS

I found this article very interesting and enjoyable to read, and it helped to support my understanding in the subject area. I found the provided information, statistics and spatial analysis methods applied in this article were helpful in developing my research project.

STUDENT: Ahmed Salem Majed Alnuieme

ID: 201704264



REVIEW HIGHLIGHTS

Reading Title: The Role of Journey Purpose in Road Traffic Injuries: A Bayesian Network Approach

Author Names: Febres, J., Mohamadi, F., Mariscal, M., Herrera, S., & García-Herrero, S.

Source: Journal of Advanced Transportation

Publication Year: 2019

RESEARCH OBJECTIVE

The objective of the research is to find out the cause of traffic accidents by exploring the purpose of the journey. In this study the journey purpose is classified into three groups: commute refers to travel from home to work and vice versa, business refers to when a driver travels for work-related purposes, and leisure refers to when a driver travels solely for pleasure. Variables that influence the occurrence of a traffic injury can be divided and defined in four groups: demographic factor, human factor, vehicle factor and circumstantial factor.

METHODOLOGIES

The sampling technique used in this study is a systematic sampling method. The authors have applied the Bayesian network, and focused on variables emphasizing the importance of the relationship between driver behavior and the level of harmfulness of drivers in traffic accidents. Other variables include wearing a seat belt, wearing a helmet, speeding, distracting the driver and making mistakes.

MAIN FINDINGS

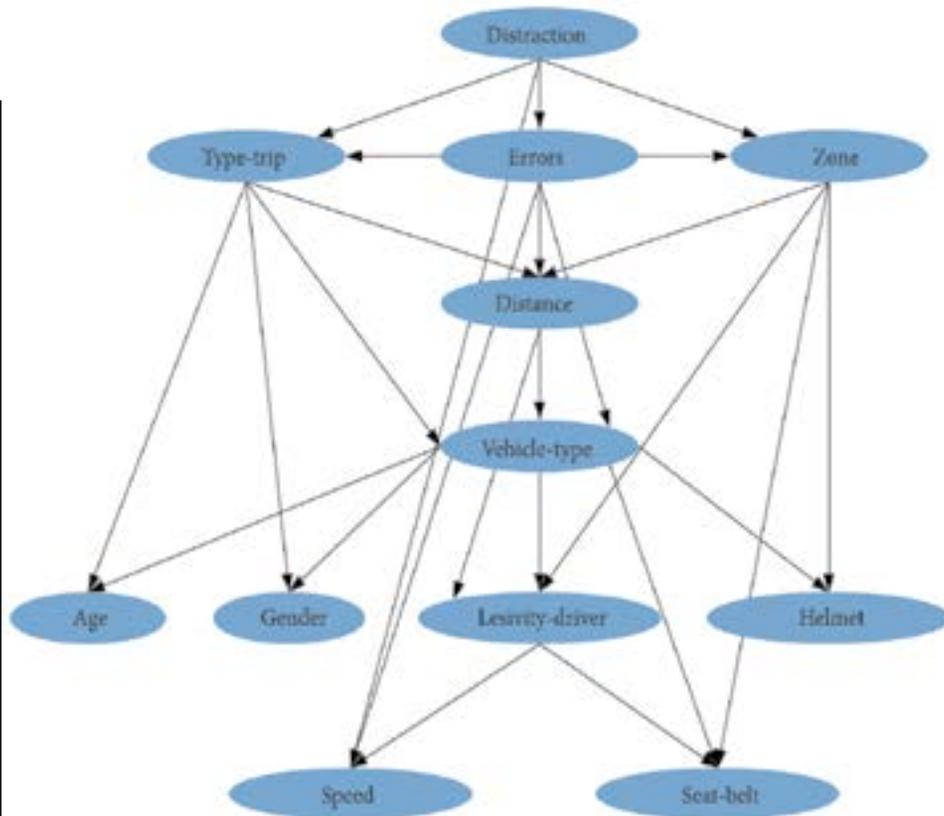
Overall, the authors found higher probability of accidents on leisure trips. Moreover, young, male drivers are particularly affected on business trips. Also, the authors found that people can suffer a fatal accident depending on the zone, leisure trips on the motorway, and business trips at crossings.

REFLECTIONS

This article was very informative and showed me a different perspective, since I always thought the injuries on the road happened due to driver or victim's mistake. But now I am aware that sometimes the purpose of travel leads to accidents. This article was very interesting, and I had an enjoyable time reading and understanding it. This was new information to me, and broadened my knowledge. This article will be useful to me when I do my group project. Not only will this help me better frame my research problems and research methods, it also will increase my knowledge and related vocabulary used in similar topics.

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REVIEW HIGHLIGHTS

Reading Highlights 
Of Academic Journals
Spring 2021