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INTERNATIONAL RESEARCH CONFERENCE PROCEEDING

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CONFERENCE PROCEEDING

DR. MAR THEOPHILUS INSTITUTE OF MANAGEMENT STUDIES,
Navi Mumbai, Maharashtra, India

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In Collaboration

EUDOXIA
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Conference on
Research Methodology for Qualitative and Quantitative Research
2024

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- Dr. Marichu Cruz Sta Ana, Professor, Philippine Christian University, Philippines
- Dr. Katarzyna Miłek, **Państwowa Akademia Nauk Stosowanych in Głogów, Poland**

Agenda

Day 1

Inaugural Program

- The Welcome Note was delivered by Dr. Neha Sharma at 10.30 am.
- The lamp lighting and prayer ceremony was conducted by Rev. Fr. Santosh Varghese at 10.35 am.
- The inaugural address was delivered by Rev. Fr. Abraham Joseph at 10.45 am.
- An address on DMTIMS & EUDOXIA Partnership by Eudoxia Research Center India was given by Dr. Rajesh Konnur & Dr. Sukhwinder Singh at 10.50 am.
- The welcome address by the Chief Guest, Dr. Nitin Joshi, was delivered at 10.55 am.
- Mr. Abraham Eso, Trustee VES Trust, delivered an address at 11.05 am.
- Dr. Ashok Luhar, Director IIBM, delivered an address at 11.10 am.
- Dr. Susen Varghese, Director DMTIMS, delivered an address at 11.15 am.
- Dr. Pinaki Mandal gave an introduction to the Eudoxia international Conference at 11.20 am.
- The vote of thanks for the inauguration ceremony was delivered by Dr. Neha Sharma at 11.25 am.
- The paper presentations commenced after the inauguration ceremony.

Session A – Eudoxia 2024

Dr. Alpha Lokhande delivered the Welcome Address.
11: 35 am- 12:30am IST:

	PAPER PRESENTATIONS	
No.	**Presenter Name**	**Title of presentation**
1	Anuradha Singh	“Social Entrepreneurship: A Comparative Analysis of its Requirement in Contemporary World”
2	Dr. Vishal Ghag	" Uncovering the potential of Blockchain and AI implementation in designing modern supply chains"
3	Dr Premendra Sahu	“Brand experience of Gen-Z in retailing :An interpretive structural modeling approach.”
4	Dr. Radhika	"An investigation into How well campus recruitment training impacts Job placement"
5	Ayush Patade	"A Study on Influence of Digital Marketing on Buying Behavior of Youth"

6	Arul Kumar Pandhan	“A study on evolution of augmented reality in E-commerce: consumer awareness, adoption and impact on fashion based products with special reference to Panvel Region”
7	Dr. Neha Sharma	“Software piracy in the Indian software industry in the context of market dynamics”
8	Surbhi Ratawa	"Study on impact of GST on Retailers with reference to Navi Mumbai"
9	Pragati Dumbre	"Application and Implaince of Automation in Supply Chain Managements"

Vote of Thanks for the first session was conveyed by Prof. Nikhil Shirsat

Inaugural Session B

Prof. Radhika Kiran Kumar delivered the Welcome Address.
13:45 pm- 16:00 pm:

PAPER PRESENTATIONS		
No.	**Presenter Name**	**Title of presentation**
10	Asit Urkunde	"A Study of Online Shopping Behaviour of Females in Navi Mumbai Region And Impact Of Social Media On There Buying Behaviour"
11	Avinash Kahar, Shamal More	"Understanding social entrepreneurship in India"
12	Bilal Samani	"A study on customer behaviour for McDonald’s products w.r.t. children vs adult preference in thane"
13	Mahesh Chaudhari, Mandar Dhume	"A research on work – life balance & workplace flexibility"
14	Akshata Waje, Prachi Joshi	"Digital payment trends in India."
15	Gauresh Koli, Atul Jadhav, Pranay Shinde	"A study of preference of consumer at time of purchasing car in Navi Mumbai region"

16	Jino Johnson	“A study on the impact of GST on the buying behaviour of gen z in the suburbs of Mumbai”
17	Vaishnavi Sawant	"A Study on Role of public finance in economic development"
18	Harsh Naidu, Yogesh Patil	"Financial Planning Among, Youth Generation in “Mumbai City”
19	Sudhanshu Thakare	"Exploring the Viability of AI Chatbots in Facilitating Investment Decision-Making Among Management Students Mumbai University"
20	Gauri Jagtap, Apeksha Jadhav	"Acceptance of digital payment method by senior citizen in metropolitan city(sanpada and Juinagar)"
21	Pawan Kumar Mabeli	"Exploring the Customer Journey: Insight, Strategies and Best Practices"
22	Trinkal Bothara, Chitrakshi Choudhari	“Gamification – A new process of recruitment”
23	Puja Godse	"Examining the impact of fintech disruption on customer experiences: a comparative analysis between traditional banks and neobanks in Navi Mumbai”

Vote of Thanks for the first session was conveyed by Prof. Amit Ahire

Day 2

Inaugural Session A – COM 4.0

10:00 am- 10:15 am IST:
Lighting of the lamp & Welcome Speech by Hon'ble President, Eudoxia Research University, USA

Inaugural Session B
10:15 am- 10:40 am:
Welcome Speech by Pro Vice Chancellor, Patron, ERU, USA
Address note by Convener, Organizing Secretary, Coordinator, Organizing Committee Members

Date: 29h March 2024, Time: 10:40 am -1:00 pm IST Technical Session 1: Presentation by Keynote Speaker:

SL. No	Name	Affiliation	CNID
1	Dr Rey Ty	Department of Peace Studies, International College, Payap University, Chiang Mai, Thailand	KSP01
2	Prof. Dr. Rhituraj Saikia	President, Eudoxia Research University, USA	KSP02
3	Prof. Dr. Caleb Moyo	VC, Eudoxia Research University, USA	KSP03
4	Prof. Dr. S K Baral	Indira Gandhi National Tribal University, India	KSP04
5	Rania Lampou	Greek Ministry of Education, Directorate of Educational	KSP05
6.	Bipin Kumar Shah	Retired General Manager Liaison and Coordination, Bharat Petroleum Corporation Limited	KSP06
7.	Dr. Velissa C. Rubaya	Rizal Technological University, Philippines	KSP07
8.	Dr Kelvin Lee Yong Ming	School of Accounting and Finance,Taylor's University	KSP08

1:00 pm- 3:00 pm IST: Lunch Break

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Technical Session 2: Royal Golden Award Ceremony, Time: 3:00 pm to 4:00 pm IST

Sl No	Name	Award Name	Country
1	Dr. Goutam Banerjee	Distinguished Teacher Award 2024	India
2	Krishna Kumar Saikia	Golden Muse Award 2024	India
3	Keith N. Gustafsson	Global Iconic Award	Sweden

Technical Session 3: Keynote Speaker Session, Time: 4:00 pm to 5:00 pm IST

SL. No	Name	Affiliation	CNID
1	Verine Y. de Jesus	University of Santo Tomas – Faculty of Pharmacy, España Blvd., Manila, Philippines	KSP09
2	Dr. A. V. V. S Subbalakshmi	VIT University, Vellore, India	KSP10
3	Dr.Mary Anbarasi Johnson	Professor and Head,Pediatric Nursing Department ,College of Nursing,CMC Vellore, India	KSP11
4	Prof. Dr. Annie P. Alexander	Global President, NAPA, Eudoxia Research Centre, India	KSP12
5	Dr. Sumit Kumar Mishra	Wipro Certified Full Stack Developer, India	KSP13
6	Dr. Baljeet Kaur	Department of Commerce, Atma Ram Sanatan Dharma College,University of Delhi	KSP14

ISBN: 978-81-973714-8-6

Technical Session 4:

Oral Presentation Time: 4:45pm to 7:30 pm IST

Oral Presentations

Serial No.	Name	CNID
1	Dr. Katarzyna Milek & Magdalena Knast	OP001
2	Lesser A. Loc	OP002
3	Dr. Pritam Chattopadhyay	OP003
4	Ilfa Ijlal	OP004
5	Dr. Gursharan Kaur	OP005
6	Israt Jahan	OP006
7	Ranjeeta Verma	OP007
8	Kazi Tanvir	OP008
9	Dr. M. Gnana Ruba Priya	OP009
10	Swetamarali D	OP010
11	Md. Ashraful Amin	OP011
12	Filip Sobczak	OP012
13	Magdalena Knast	OP013
14	Zuzanna Zdrojewska	OP014
15	Marcos Carlos Miguel	OP015
16	Shaktiranjan Das	OP016
17	Magdalena Figaj	OP017
18	Salvador Magno Ximenes	OP018
19	Dr B M Magaji	OP019
20	Dr. Shikha	OP020
21	S. Sathya	OP021
22	Russel J. Aporbo	OP022
23	Dr Ambika Hanchate	OP023
24	Dr. Priyadarshani Moon	OP024
25	Dr. Harshal Ashok Pawar	OP025

Day 3: COM- 2024

Date: 30th March 2024, Time: 10:00 am – 1.00 pm IST

Guest of Honor: Dr. Susen Varghese – Director DMTIMS

Technical Session 5: Keynote Speaker

10:00 am- 1:00 pm: Presentation by Keynote Speaker

SL. No	Name	Affiliation	CNID
1	Prof .Dr. Mrs. Anupama Oka	Riddhi Vinayak College of Nursing, India	KSP15
2	Prof. Dr. Rajesh G Konnur	Pro-VC, Eudoxia Research University, USA	KSP16
3	Dr Sukhwinder Singh	Registrar, Eudoxia Research University, USA	KSP17
4	Dr. Vijay B Gadicha	P R Pote Patil College of Engineering and Management, India	KSP18
5	Dr. Roy Fabrigas Bermudez	Quality Management System, Researcher, Educator, Qatar	KSP19
6	Dr. Shyam Akashe	Dean (International Cooperation & Projects) and Professor, Electronics & Communication Engineering ITM University,	KSP20
7	Dr. Dimitrios A. Karras	Associate Professor in “Digital Systems”, National and Kapodistrian University of Athens (NKUA), School of Science, Dept. General, Athens, Greece	KSP21
8	Dr Anjum Nazir Qureshi	Rajiv Gandhi College of Engineering Research & Technology, India	KSP22

1:00 pm- 3:00 pm IST: Lunch Break

Technical Session 6:
Global Iconic Award Ceremony, Time: 3:00 pm to 4:00 pm IST

Sl No	Name	Award Name	Country
1	Dr. Yogesh Babu Thunga	Global Iconic Award	India
2	Dr Vivek Viswanathan	Global Iconic Award	India
3	Gadhi Raj Magar	Global Iconic Award	Nepal
4	Dr Swayam Prabha Satpathy	Global Iconic Award	India

Technical Session 7:
Oral Presentation, Time: 3:30 pm-7:30 pm IST
Oral Presentations:

Serial No.	Name	CNID
1	Dr Bireswar Pradhan	OP026
2	Varpe S N	OP027
3	Jose G. Tan Jr	OP028
4	Maria Angela G Cunan	OP029
5	Ajayi, Olayemi T	OP030
6	Arasada Subashini	OP031
7	Pavanpreet Kaur	OP032
8	Rohini R. Gore	OP033
9	Dr. Mukunda Mishra	OP034
10	Khalid Mehraj	OP035
11	Kun Wang	OP036
12	Luthando Mpho Molefe	OP037
13	Richa Rajshree	OP038
14	Dr. Minaxiben A. P.	OP039
15	Dr. R Prasanna	OP040
16	Samanta Wolnicka	OP041
17	Sara Nowińska	OP042
18	Marta Ruszkiewicz	OP043
19	Paulina Gozdowska	OP044

20	Dr. Kazi Kutubuddin Sayyad Liyakat	OP045
21	Jagoda Napieralska	OP046
22	Wiktoria Kwiatkowska	OP047
23	Jakub Jagiełło	OP048
24	Dr.Muhammad Hafeez	OP049
25	Dr. Sudipta Das	OP050
26	Tufael	OP051
27	Dr. Thayalini Majureshan	OP052
28	Vinit Patil	OP053
29	Aditya Nautiyal	OP054
30	Rachel Anne D Belangel	OP055
31	Dr (Mrs) Adefunke Adetutu Odumosu	OP056
32	Ir. Dr. Ranjit Singh Sarban Singh	OP057
33	Subhajit Chatterjee	OP058
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35	Balwant Singh	OP060
36	Magdalena Knast	OP061
37	Komati Srinivas	OP062
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39	Ranjeeta Singh	OP064
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41	Sumit Ramswami Punam	OP066
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44	Dr Mayurkumar Mukundbhai Solanki	OP069
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49	Dr. Lawrence S Edeh	OP075
50	Ravikiran Petluri	OP076
51	Saket Bihari	OP077
52	Farhat Fatma	OP078

Editorial Board Message

We are delighted to inform you that the **Fourth International Conference on Research Methodology for Qualitative and Quantitative Research 2024** (2 Days) Live| New Castle, USA and Bangalore, Mumbai and Guwahati, India organised by **Eudoxia Research University USA and Eudoxia Research Centre-India**, in collaboration with **Dr. Mar Theophilus Institute of Management Studies (DMTIMS)** was held on**: Dated: 28th March (Thursday) to 30th March (Saturday), 2024**

The goal of this **International Conference EUDOXIA COM 2024** (Fourth International Conference on Research Methodology for Qualitative and Quantitative Research) in today's rapidly evolving world, there is a growing need to bridge the gap between traditional academics and the practical skills required in professional industries. This Live International Conference on Multidisciplinary Research (**EUDOXIA COM-2024**) serves as a critical platform for academicians and researchers to transform their educational practices and align them with the demands of the industry. This essay explores the necessity of **EUDOXIA COM-2024** in fostering a shift towards professional, industry-based, skill-based education.

The accepted abstract of this International Conference will be published in the Abstract Book of EUDOXIA COM-2024 and accepted full papers will be published in the book titled: ***"Research Exploration: Transcendence of Research Methods and Methodology Vol. 4"*** with ISBN number as book chapter.

1. Crunching the Code: NASnet Large Unleashes Precision in Identifying Apple Leaf Diseases for a Bountiful Harvest

Kazi Tanvir, Md. Sayem Kabir, Lisha HV, Domadharan R, Tasnim Sultana Sintheia

Abstract: Apples are a diverse fruit with over 2,500 varieties, pack a powerful punch of fiber, and are one of the most popular fruits in the world. Crunching on an apple offers a double benefit: a tasty dose of vitamins and fiber for your health, plus a boost to the economy as a widely-cultivated and affordable fruit. Cedar-apple rust, apple scab, and apple black rot are all fungal diseases that can wreak havoc on your apple trees. Cedar-apple rust is unique as it requires junipers as an alternate host, while apple scab and black rot cause unsightly blemishes on leaves and fruits, reducing both harvest quality and quantity. Early detection and treatment with fungicides is key to keeping these diseases in check and ensuring a healthy apple harvest. This study proposes a transfer learning approach using NASnet LArge model for efficiently classifying Cedar-apple rust, apple scab, and apple black rot leaf from a healthy apple leaf. The model achieves a accuracy of 96.85% along with precision, recall and F1-score of 98.63%, 100% and 99.31% respectively. The robustness of the NASnet Large model assure accurate classification of apple leaf diseases in a very affordable approach.

2. Natural Hazards Triggered Early Marriage: A Case Study on Kajipur Upazilla, Sirajganj.

Israt Jahana, M Shahriar Sonetb, Asikunnabyc
a student, Department of Disaster and Human Security Management, Bangladesh University of Professionals, Dhaka-1216
b student, Department of Disaster and Human Security Management, Bangladesh University of Professionals, Dhaka-1216
c Lecturer, Department of Disaster and Human Security Management, Bangladesh University of Professionals, Dhaka-1216

Abstract: Child marriage shaped by various factors, including natural disasters, profoundly impacts the future girls envision for themselves. This study explores the prevalence and determinants of early marriage, particularly in response to natural disasters, which often serve as significant catalysts for this harmful practice. Using purposive sampling, primary data was collected through questionnaire surveys, focus group discussions (FGDs), and key informant interviews (KIIs) involving female respondents aged 15-45 years. Employing the DPSIR model as a conceptual framework, the study analyzes the data through descriptive and chi-square statistical analysis. Results indicate a strong statistical significance between various variables and the age of first marriage, suggesting potential influences on early marriage within the study area. The findings highlight that poverty exacerbated by extreme weather events is a key driver

of early marriage. The community faces severe socioeconomic challenges, with a significant portion lacking education beyond primary level. A staggering 91% of girls experience early marriage, with a strong statistical significance indicated by a chi-square test of 0.02. Displacement caused by recurrent disasters like floods and riverbank erosion, coupled with migration, worsens economic hardships. Families struggle to resume normal life after 2-4 months, leading to vulnerability to poverty and gender-based violence (GBV). Consequently, parents often resort to early marriage to ensure security and reduce family size.
Keywords: Child marriage, Natural disasters, Prevalence, Socioeconomic challenges.

3. Exploring Game-Based Interactive Learning Module (GBILM) for Students Mastery on Basic Operations in Algebra.

Lesser A. Loc
Department of Education, Philippines

Abstract: Mastery of basic operations in algebra is a fundamental skill for students, serving as a cornerstone for advanced mathematical concepts. This study investigated the effectiveness of Game-Based Interactive Learning Module (GBILM) in improving Grade 10 students' mastery of basic operations in algebra. Utilizing a pre-experimental research design, 64 non-numerate students were purposefully selected to undergo intervention over a period of 5 days. Results revealed a significant increase in students' mastery level, as evidenced by pretest and posttest scores of low (mean = 21.23) and high (mean = 44.25), respectively. Statistical analysis demonstrated a substantial difference in mastery levels before and after the intervention ($z = -6.975$, $p < 0.001$), with a large effect size ($r = 6.14$). These findings affirm the efficacy of the intervention in enhancing students' proficiency in basic algebraic operations. Recommendations include the development of more student-centered, interactive, and activity-based learning materials to foster active engagement. Furthermore, it is advised to integrate the GBILM into lower grade levels' curriculum to address challenges in mastering basic algebraic concepts and prepare students for advanced mathematical studies. This research holds implications for educators seeking innovative approaches to enhance mathematical learning outcomes among secondary school students. By embracing interactive and game-based learning strategies, educators can cultivate a conducive learning environment that promotes active participation and deepens students' understanding of fundamental mathematical concepts. This approach not only enhances academic achievement but also nurtures critical thinking skills and problem-solving abilities essential for success in higher-level mathematics and real-world applications.
Keywords: Algebra, Basic Operations, Game-Based, Mastery Level

4. Importance of Content Analysis Method in Qualitative Research.

Dr.Mayurkumar Mukundbhai Solanki
Assistant Professor, Department of English, Shri S.K.Shah and Shri Krishna O.M.Arts College Modasa, India

Abstract: There are many methods of conducting research and among them content analysis method is very useful in Qualitative Research. It is true that Researchers use content analysis to find out about the purposes, messages, and effects of communication content. They can also make inferences about the producers and audience of the texts they analyze. Content analysis can be used to quantify the occurrence of certain words, phrases, subjects or concepts in a set of historical or contemporary texts. Content analysis can be used to study a wide range of topics, including media coverage of social issues, political speeches, advertising messages, and online discussions, among others. It is often used in qualitative research and can be combined with other methods to provide a more comprehensive understanding of a particular phenomenon. This paper is a sincere attempt to justify the importance of content analysis method in qualitative method.
Keywords: Qualitative research, contentanalysis, words, phrases, comprehensive, phenomenon

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5. In silico studies of Benzimidazole derivatives EZFR inhibitor for Breast Cancer.

Ranjeeta Verma1 and Dr. Shweta Verma2
1Research Scholar Dept of Pharmaceutical Chemistry IFTM University Moradabad UP, IndiaAssociate Professor Dept of Pharmaceutical Chemistry IFTM University Moradabad UP, India

Abstract: In the current study, Various derivative of Benzimidazole have been synthesized .The synthesis of substituted derivatives was confirmed by FTIR and NMR analysis . Molecular docking technique routinely used in modern drug discovery for understanding the drug receptor interaction. To understand the binding mode of synthesized Benzimidazole, three compound (IA,IB and IC) were selected and place in EZFR tyrosine kinase based on their kinase Inhibitor potencies . Docking study indicated that compound I(c) show two hydrogen bonding with residues of Arg705 and Arg297 at the binding sites.
Keywords: Benzimidazole, Docking, EGFR Inhibitors activity

6. Exploring Methodological Challenges and Innovations in Human Resource Management:

A Comprehensive Review.

Ms. Sneha Dutta1 and Dr. Rajib Dutta2
1State Aided College Teacher, Department of BBA, Asutosh College Research Scholar, Amity Business School, Amity University, India Associate Professor, Amity Business School, Amity University, Kolkata, WB, India

Abstract: This paper presents a comprehensive review of methodological challenges and innovations in the field of Human Resource Management (HRM). Recognizing the paramount importance of robust methodologies in advancing HRM research, this study systematically examines the various hurdles and advancements encountered by researchers. Through a thorough analysis of existing literature, both qualitative and quantitative methodological issues are identified and discussed, encompassing areas such as sampling techniques, data collection methods, measurement validity, and analytical approaches. Additionally, this review explores emerging trends and innovative methodologies that have reshaped HRM research landscape, including mixed-methods approaches, longitudinal studies, and advancements in data analytics. By shedding light on methodological intricacies and advancements, this paper provides valuable insights for researchers, practitioners, and educators in HRM, facilitating a deeper understanding of contemporary challenges and opportunities in conducting rigorous and impactful HRM research.

Keywords: Methodological challenges, Innovations, Human Resource Management, Research methodologies, Quantitative methods and Qualitative methods

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7. Socio-Economic and Cultural Status of Paddari Tribe of Paddar subdivision of District Kishtwar in Jammu and Kashmir UT.

Mr. Balwant Singh
Assistant Professor {Sociology}, Dogra Degree College {Affiliated to the University of Jammu} Bari Brahmana, Jammu, MA, UGC NET{Sociology}, MA {Pub. Administration}, B.Ed., PGDRD,India

Abstract: The Parliament passed the Constitution (Jammu and Kashmir) Scheduled Tribes Order (Amendment) Bill, 2024, which added the communities of "Pahari Ethnic Group, Paddari Tribe, Koli, and Gadda Brahmin" to the list of Scheduled Tribes of the Jammu and Kashmir Union Territory. By giving Scheduled Tribe status, the historic bill seeks to empower the following groups: (i) the Pahari Ethnic Group; (ii) the Padari Tribes; (iii) Koli; (iv) the Gadda Brahmin. These communities have been waiting a long time for this. Despite facing severe winters and difficult terrain, the 'Paddari tribe' has silently survived for years, maintaining their distinctive cultural heritage. The Paddari tribe has reached a significant milestone with the award of Tribal Status, after years of hardship and determination. An important step forward in their pursuit of justice, inclusivity, and equality is this official recognition. The Paddari tribe has several different facets to their way of life. They reside in the mountainous region of the Kishtwar district. The Paddari homeland has boundaries with Pangi in Himachal Pradesh to the south, Zanskar (Ladakh) to the east, and the remainder of J&K to the west. The population of Paddari was 21548 in 2011; of these, 83.6% were Hindus, 9.5% were Buddhists, and 6.8% were Muslims. The language spoken by the locals there is Paddari. The goal of the current study was to ascertain the socioeconomic standing of the residents of the mountainous area. Agriculture is a significant source of economic activity for the Paddari people. The Paddari tribe continues to follow their traditional practices, ceremonies, and traditions in social contexts. The relevant data utilized in this study was obtained from secondary sources, which included e-journals, official publications, articles, reports, the Indian population census 2011, evaluations of related literature,newspapers, government websites, and an abundance of other internet resources.

Keywords: Parliament, Paddari Tribe, Socio-Economic, Cultural, Jammu and Kashmir

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8. Type 1 diabetes incidence and prevalence in children under the age of 15 in Essaouira (Morocco), from 2022 to 2023.

EL FADELI Sana[1]&[2] and BARKOUCH Yassir[2] 1Higher Institute of Nursing Professions and Health Technology, ISPITS Marrakech annex Essaouira, Morocco

Laboratory of computer mathematics and modeling of complex systems, Higher School of Technology of Essaouira, Cadi Ayyad University, Morocco

Abstract: Introduction: Insulin-dependent diabetes mellitus (IDDM), commonly referred to as type 1 diabetes, is a chronic autoimmune disease that is defined by the death of the pancreatic beta cells that produce insulin. The prevalence of type 1 diabetes varies greatly among populations and geographical areas worldwide. Methods: All patients with Type 1 diabetes under the age of 15 years old had their birth dates, places of origin, diagnoses, and genders recorded in the neonatal and pediatric department registry of CHP Sidi Mohammed ben Abdellah Essaouira between January 2022 and December 2023.Results: There were 92 prevalent cases of Type 1 diabetes over the 2-year period. The prevalence of Type 1 diabetes was 1,84 % and was higher in boys than in girls (1,08 % vs 0,76 % ; P < 0.001). There were 32 incident cases in 2023 (The prevalence 0.64 %). The incidence was slightly higher among boys (0,4 %) than girls (0,24 %); the boy: girl case ratio was 1.42. The mean patient age at diagnosis was 9,65±3,80 years. The highest proportion of cases (43,48 %) was diagnosed in

children aged 11–14 years. Conclusions: This is the first study to report the incidence and prevalence of Type 1 diabetes in children in CHP Sidi Mohamed ben Abdelah Essaouira Morocco. Type 1 diabetes in children aged 11 to 14 years represents a significant public health problem.
Keywords: type 1 diabetes, children, incidence, prevalence

9. Examining Fuzzy Partial Metric Space and Associated Outcomes.

Renu P. Pathak1, Rohini R. Gore2*
1HOD, Department of Mathematics, Sandip University Nashik, India 2Research Scholar, Department of Mathematics, Sandip University Nashik, India

Abstract: In this paper, we introduce the concept of a fuzzy partial metric space by using the concept of partial metric space with fuzzy. Self-distance of any Point is not necessarily equal to zero in Partial metric space. Partial metric is a generalization of ordinary metric. We define also continuous t- norms. Here we define partial fuzzy contraction mapping. Also we show that by using contraction mapping, complete partial metric space has unique fix point under some conditions. The results are provided by using related examples.
Keywords: Fuzzy metric space, Partial metric space, Fuzzy sets, Fixed point theorem.

10. Significance of Serum Biomarkers in Early Diagnosis of Hepatocellular Carcinoma in Patient with Fisher Groups.

Tufael
Department of Microbiology, Parul Institute of Applied Sciences, Parul University, Gujrat, India

Abstract: Introduction: This study investigates the relationship between serum biomarkers and the detection of hepatocellular carcinoma (HCC) in different fisher groups in Bangladesh. The research adopts a descriptive and experimental approach to demonstrate the health risks faced by fishermen, including tobacco consumption, polluted drinking water, and insufficient sunlight exposure. Method: We used serum biomarkers such as vitamin D, alpha-fetoprotein (AFP), creatinine (Cr), and hemoglobin A1C (HbA1c) to evaluate their significance in distinguishing between different categories and sexes. Result: We determined a strong and direct correlation between insufficient vitamin D levels and an increased risk of liver cancer. The combination of AFP, vitamin D, and Cr (AFP+Vit-D+Cr) emerges as a highly predictive tool, enhancing diagnostic accuracy and providing a reliable means of identifying hepatocellular carcinoma. Conclusion: The identified correlation showed the significance of addressing lifestyle factors and promoting nutritional support to mitigate the risk of liver cancer

among fisher groups. The AFP+Vit-D+Cr combination is a promising diagnostic tool for hepatocellular carcinoma, offering an improved early detection and intervention approach.

Keywords: Liver Cancer Detection, Fisher groups, Serum Biomarkers, Vitamin D Insufficiency, Health Risk Factors

11. Evaluate the effectiveness of information booklet on awareness regarding SBAR (Situation, Background, Assessment, and Recommendation) among staff nurses in selected departments of Bombay Hospital, Indore.

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Abstract:- Background: - SBAR is a model used in communication that standardizes information to be given and lessons on communication variability, making report concise, objective and relevant. Aims:- A pre experimental study to evaluate the effectiveness of information booklet on awareness regarding SBAR (Situation ,Background, Assessment, Recommendation)among staff nurses in selected departments of DUPMC Godavari Hospital,Jalgaon Material and Method: Quantitative research approach, a structured close ended questionnaire. Quasi experimental design within pre- experimental one group pre and post test. A non probability convenient sample of 30 samples of staff nurses about awareness of SBAR in selected departments of Godavari hospital, Jalgaon. Statistical method- Students paired t test, Chi-square Test. Result: It reveals that in pretest mean of the knowledge score obtained by the subject was 6(20%) poor knowledge, 15(50%) of staffs of SBAR were having average knowledge,9(30) had were good level of knowledge score. the mean post test knowledge score (14.4) is apparently higher than the mean pretest knowledge score (8.5) and the computed‘t’ value shows that there is a significant difference between pretest and post-test mean knowledge score (t=25.701) .This indicates that the information booklet regarding awareness of SBAR was effective. The t value of the H1 is accepted. There is significant association between, posttest knowledge score with the age, gender, educational qualification, experiences of staff nurses, and the previous knowledge regarding awareness of SBAR, Hence H2 is accepted.

Conclusion: - overall the study is statistically interpreted that effectiveness of information booklet on awareness regarding SBAR is benefits for NABH Hospital for improving communication of among staff nurses in during handing and taking over in selected departments of Godavari Hospital Jalgaon.

Keywords: - staff nurses in selected departments of Bombay Hospital, Information booklet awareness of SBAR (situation, background, assessment, recommendation)

12. The Influence of Instituto Católico para a Formação de Professores (ICFP) Graduate Teacher Leadership on Student Learning Achievement in Baucau Primary schools. A Study of Graduates with 7 Years of Experience.

Salvador Magno Ximenes
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Abstract: This research aim was to understand the work of teacher leaders in three primary schools in Baucau, Timor-Leste, in order to understand how they demonstrated their leadership roles. Nine teacher leaders participated in this research, all of whom are graduates of Instituto Católico para a Formação de Professores (ICFP) Baucau with at least 7 years of experience working in primary schools. Questionnaires were used to measure the strength of their opinions about working in a collaborative environment, peer learning, the nature of leadership and the need to produce data on their own teaching and learning. The data from the questionnaires were tabulated and analysed by using a descriptive statistical analysis with excel. Then, all participants were interviewed with open-ended questions, allowing them to describe their experiences of leadership and reflect on their influence on student learning and staff relationships. The findings show that those graduates benefited greatly from exercising teacher leadership roles and working collaboratively in their schools. These are significant for Timor-Leste because teachers generally do not have the opportunity to properly exercise leadership roles and work collaboratively in this country. It motivates teachers and leaders to be more professional in their work, to build better relationships and to constantly learn from each other, extend each other's skills and influence better student engagement and learning outcomes. Therefore, all schools in Timor-Leste has to introduce collaborative practices among their staff and that teachers and leaders who are interested in further developing their leadership skills participate in existing leadership programs.

Keywords: Leadership, Statistical Analysis, Learning and Students

13. Harnessing Entrepreneurial Ecosystems for Sustainable Agriculture: Exploring Opportunities in India's Agribusiness Sector.

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Abstract: The agricultural sector in India encounters a multitude of obstacles arising from the variability of the climate, intricate socioeconomic dynamics, and incoherent policies. To

solve these issues and to augment farm income by promoting sustainable practices in India's agriculture industry, this research examines the function of entrepreneurial ecosystems. It explores the potential that agri- entrepreneurship offers, which is fueled by national policy reforms, globalization, and technological improvements. Agribusiness owners boost economic growth, improve food security, and generate jobs in rural areas by utilizing value addition and creative ways. The study looks at the factors that propel entrepreneurial ecosystems, such as funding availability, government programs, technology developments, consumer demand, and infrastructure support. It also covers the difficulties and issues that agricultural businesses must deal with, including small farm sizes, inadequate supply networks, a lack of funding, and climate change. The study also emphasizes the necessity and significance of entrepreneurial ecosystems for the growth of Indian agribusiness, with a focus on value addition, job creation, sustainable agriculture, export potential, digital transformation, and food security. In the end, the study emphasizes how important agribusiness entrepreneurship is to building sustainability and resilience in India's agriculture industry.
Keywords: India, rural development, food security, agribusiness, entrepreneurship, agricultural ecosystem, and entrepreneurial ecosystem

14. The System of Environmental-Economic Accounting: Tool for Monitoring Sustainable Development Goals.

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Abstract: Accounting is the language of business is well-known understanding when it comes defining what is accounting is. Business may be for a private institution or for a public one like the government. And when it comes to government, economy sounds greater than accounting per se. In this study, the awareness as to the System of Environmental-Economic Accounting (SEEA) when it comes to decision-making will be taken into consideration. Another thing for consideration is the importance of SEEA in the Sustainable Development Goals' achievement as a monitoring tool in the eyes of the member countries. This was conducted with the used of qualitative research design specifically the content analysis approach. One of the findings is that as of 2023, there were only half of the United Nations member countries saw the importance of SEEA through proper implementation in different stages.
Keywords: Accounting, Sustainable, SDGs, Environmental-Economic, United Nations

15. A Study on Various HRM Practices in Transnational Context: Descriptive Approach.

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Abstract: The rapid rise of multinational Corporations (MNCs) from emerging economies has led to greater interest and urgency in developing a better understanding of the deployment and diffusion of managerial strategies from their perspective and without assuming the prevailing any kind of ethnocentric orthodoxy. This paper develops a conceptual framework of global HR strategies and practices in MNCs from emerging economies across their subsidiaries in both developed and developing markets. In this paper, we widen the horizon of International HRM to include HRM strategies and practices from emerging economies. The purpose of the paper is to explore how HRM strategy of the MNCs in emerging economies is formed and how it operates in practice. First, we outline the issues relating to emerging MNCs. Second, we develop a conceptual framework of global HR strategies and practices in MNCS from emerging economies. This provides managerial insights and guidance into the motives, strategic opportunities and constraints in cross national transfer of HR policies and practices.
Keywords: HRM strategies, HRM Policies, International HRM, MNC

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16. Advancing Research Methodology: Integrating Qualitative and Quantitative Approaches in the Digital Age.

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Abstract: In the rapidly evolving landscape of research methodology, the integration of qualitative and quantitative approaches has become increasingly essential, particularly in the digital age. This paper explores the synergistic potential of combining qualitative and quantitative methods to address complex research questions and enhance the rigor and depth of scholarly inquiry. By leveraging the strengths of both approaches, researchers can achieve a more comprehensive understanding of phenomena, phenomena, capturing nuanced insights while also quantifying patterns and trends. Moreover, the advent of digital technologies offers unprecedented opportunities for data collection, analysis, and dissemination, further enriching the research process. Drawing on case studies and theoretical frameworks, this paper elucidates strategies for effectively integrating qualitative and quantitative methodologies in diverse disciplinary contexts, highlighting the benefits, challenges, and ethical considerations inherent

in this approach. Ultimately, this paper advocates for a paradigm shift towards holistic, interdisciplinary research methodologies that capitalize on the convergence of qualitative and quantitative approaches in the digital era.

Keywords: Quantitative Methods, Qualitative, Theoretical Frameworks, Challenges

17. The Impact of InsurTech on Customer Satisfaction: A Quantitative Exploration.

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Abstract: With the government having eased the norms for the entry of foreign players in the financial service industry in 1991(Ahluwalia, 2002), the entire industry has undergone a paradigm shift. The insurance industry is witnessing a transformative shift with the rise of InsurTech (Insurance Technology). Focusing on key areas like product personalization, claims processing efficiency, management of customer services using artificial intelligence (AI) - based assistance, it has been analyzed that how InsurTech is redefining this customer journey. By leveraging AI, big data, and mobile platforms, insurers are crafting bespoke policies, expediting claims settlements, and tailoring pricing based on individual risk profiles. This has demonstrably led to increased customer satisfaction through improved convenience, transparency, and perceived value. This study employs quantitative analysis to explore the patterns and drivers of InsurTech adoption. The data has been leveraged from life insurance policyholders to examine the influence of adoption across various demographics and InsurTech services. Partial least square- structural equation modeling (PLS-SEM) has been utilized to analyze the data. The analysis has been performed on 304 usable responses. The findings of the study shed light on the current landscape of InsurTech adoption and highlight key areas impacting its growth. This data-driven approach provides valuable insights for both insurance companies in tailoring their strategies and traditional insurance players navigating the changing landscape.

Keywords: Financial Service, AI, Risk Profiles, Insurance and Customer Satisfaction

18. Income Insecurity Management Planning in the Purulia District of India using Classification and Regression Tree (CART).

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Abstract: The Classification and Regression Tree (CART) by architecture is a rule-based method of generating a binary tree through binary recursive partitioning that divides a node into affirmative or negative answers as predictor values. Each division is based on a 'splitter,' and the rule generated at each step minimizes the variability within each resulting subset, splitting them further according to the different relationships. The present study employs the CART algorithm to make a spatial decision for managing income insecurity conditions in the district of Purulia in India. The present model uses 14 predictors to explain the binary outcome variable of Income Insecurity. The splitting points of each competitor bisect the spatial units into two - the areas with favorable conditions for secured income and the adverse situation that exists on the other side. All the splitting points of the competitors with an improvement level >0.01 are considered for the preparation of a map. The map shows that a wider part of the district suffers from multiple factors of unsecured income. Only the modifications in the wage employment system are insufficient. Rather broader aspects of society and the economy are to be carefully considered in prescribing effective strategies for secured income.

Keywords: Spatial planning; Recursive partitioning; Inequality analysis; Multivariate analysis; Machine learning.

19. Assistant professor Poojya Doddappa College of Engineering, India

Abstract: This research provides a thorough evaluation of the advantages and disadvantages of using intermediate stories vs void stories in tall structures. The choice of design features has a major influence on the functioning and sustainability of tall buildings, which have become ubiquitous in contemporary urban landscapes. In this study, we compare and contrast two different design methodologies by exploring their structural contexts and aesthetic qualities. Contrarily, void floors provide open space inside the structure, which may serve a variety of functions including increasing natural ventilation and serving as leisure places. Our research takes a holistic look of tall structures with these design features, taking into account things like structural displacement, drift, and base shear. The purpose of this article is to provide guidance to professionals as they decide between an intermediate level and a void level for a certain project. The structure is modeled in ETABS, loads are applied, and the structural behavior is analyzed.

Keywords: Contemporary Urban Landscapes, ETABS, Design Features

20. Predicting early signs of Alzheimer's using Machine Learning.

Abstract: Alzheimer's disease is a neurological disorder that damages the brain cells resulting in reduced brain size. An individual having this disease generally suffers from dementia which means that as the individual grows older his or her cognitive, behavioural and social skills deteriorate which effects on the quality of life of the individual. There is no cure for

Alzheimer's, if diagnosed early there are therapies which can slow down the progression and improve the management of the disease. Thus, a machine learning system can be used to predict the disease at an early stage. Dementia can be detected medically by MRI (Magnetic Resonance Imaging) which provides a graphical representation of the brain. The graphical depiction can be of two types longitudinal and cross-sectional, for this paper we would be using the cross-sectional dataset from OASIS (Open Access Series of Imaging Studies) website. The goal is to recognize dementia among patients using dataset provided by OASIS (Open Access Series of Imaging Studies). We will be applying machine learning models such as SVM (Support Vector Machine), logistic regression and decision tree.

Keywords: SVM (Support Vector Machine), logistic regression, Open Access Series of Imaging Studies, Alzheimer's disease

21. Digital Image Watermarking: Framework, Optimization and AI for Enhanced Security

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Abstract: The advent of the technology and the advancement in the digitalization, there is a need for security of the data due to the compromise in the strong firewall. As a result, data encryption has evolved such as cryptography, steganography and digital watermarking. Recently, it has been observed that image sharing has become easier due to the portability of sharing the data. At the same time, it was observed that there is threat to the cyber security framework. Hence, in the current article, we review various aspects image watermarking frameworks and standards to design these frameworks will be presented. At the same time, new technologies such as machine learning and artificial intelligence have become a substantial interest, a framework which can envelope the current watermarking technique much more easily to design but with more sophisticated security.

Keywords: Digital image watermarking, Machine learning, optimization, wavelet transforms.

22. Investors' Perception and Behaviour towards Systematic Investment Plan of Mutual Funds as an Investment Avenue in Bengaluru.

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Abstract-: The financial sector of the country is a sector made up of firms and institutions that provide financial services to commercial and retail customers. The sector covers a wide range of industries including banks, investment companies, insurance companies, real estate firms, Mutual fund companies etc. This study focuses on the systematic investment plan of mutual funds which provide a roadmap to the general investor so as to participate in the capital market with professional fund management companies handing the funds. Systematic investment plan of mutual funds, as a part of financial markets is gaining popularity among investors because of their convenient nature, and they provide an opportunity to invest in a diversified, professionally managed portfolio with easy operations and good returns. It has seen a tremendous growth in the recent times and gaining attention amongst the investors with the various innovative schemes. This study examines the investors' perception and behaviour towards systematic investment plan of mutual funds in Bengaluru and thereby tries to understand the savings and investment pattern of investors, risk awareness, factors influencing the decisions of the investors. The descriptive research will be adopted with quantitative research design with a sample size of 540 investors. The convenient sampling technique will be followed to collect the primary data and the inferential analysis will be done to interpret the results and makes an attempt to know the investors' perception and behaviour towards SIP of mutual funds.

Keywords: Behavior, Convenience, Diversified, Innovative, Investmen

23. This study investigates a linguistic exploration of English blended instruction in selected universities, emphasizing simplification, explicitation, and normalization.

Abstract: It seeks to answer key questions on linguistic features of English blended instruction, their contribution, and insights from teachers employing these features. The study uses the framework of analysis of Carter's Linguistic Features. Employing a qualitative research design, the study uses a sequential explanatory design, beginning with a document analysis of the class sessions followed by interview sessions of the teacher participants based on the findings of the document analysis. Findings show that the linguistic features of simplification, explicitation, and normalization are employed by the teacher-participants. These features are equally employed across the observed learning sessions of the teacher-participants with explicitation as mostly used followed by simplification and then normalization. The data imply the interplay of these language features to cope with meaningful learning experiences for the learners. These linguistic features when employed adeptly, contribute to several aspects that have crucial roles for pedagogical effectiveness, collaborative learning environment, practical applicability, and teacher dedication and innovation as reflected in the emergent themes. Future research should delve deeper into longitudinal, cross-cultural studies, and specifics of simplification, explicitation, and normalization.

Keywords: linguistics, linguistic features, simplification, explicitation, normalization.

24. A study on the Role of Faculty Development in advancing Sustainability in Higher Education: with reference to Qualitative Research studies.

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Abstract: This research paper examines the critical role of faculty development programs in promoting sustainability within education institutions. Drawing on a comprehensive review of literature and case studies, the paper explores various strategies, challenges, and best practices associated with faculty development initiatives aimed at fostering sustainability in higher education. Key themes include the importance of integrating sustainability principles into faculty development programs, the role of institutional leadership in promoting sustainability initiatives, the impact of interdisciplinary collaboration, and the evaluation of effectiveness and outcomes of faculty development efforts. The paper concludes with recommendations for enhancing faculty development programs to ensure long-term sustainability in education institutions.
Keywords: Faculty development, Sustainability, Education institutions, Higher education, Interdisciplinary collaboration, Leadership, Best practices, Evaluation.

25. Advanced Materials and Enabling Technologies: Driving the Energy Revolution in Sustainable Smart Buildings of the Future.

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Abstract: Thanks to the implementation of enabling technologies and information technology, many advanced materials are now available. These materials optimize energy requirements in buildings and monitor their performance throughout their life cycle, from installation to decommissioning. Smart materials possess the attribute of facilitating the transition from a stationary to a moving state, responding to various external stimulants, and altering one or more of their traits, such as mechanical, optical, electrical, chemical, and thermal characteristics. The aim of this research is to analyze the advancement of scientific research concerning Smart Buildings, more precisely, the use of intelligent building materials in passive energy systems and energy efficiency practices. The study begins by providing a systemic review and presenting obtainable outcomes of energy retrofitting practices. Advanced materials aid the digitalization of the entire construction supply chain (AEC) by allowing for the monitoring of the supply from storage sites to the construction site through their incorporation into building

material packaging. Further investment in materials research enhances not only the effectiveness of smart buildings but also the efficiency of the entire construction supply chain.

Keywords: advanced smart materials, material characterization, KETs, ITC

26. Understanding the HRM Research-Practice Divergence: A Scoping Review and Roadmap for Future Research.

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Abstract: The call for evidence-based HR decisions has sparked heated debate in recent years. Several HRM scholars have identified an alleged research-practice gap, which has resulted in practice recommendations. The extent to which the assumption of this gap is justified, theoretically or empirically, remains unclear. Thus, based on a systematic literature search and the development of eligibility criteria for articles, we conducted a scoping review of the existing research landscape. Our goal was to investigate the gap's components, causes, and consequences. Overall, research activity has been heterogeneous, with a significant number of articles being conceptually driven and a large proportion addressing HR practitioners' knowledge gaps. There was little knowledge of empirically supported methods in personnel selection, according to a subset of consistent survey-based research. Research with little practical significance or different interests between academics and practitioners like employee enthusiasm were among the other influences that the qualitative, mixed-method, and content-analysis studies uncovered. Few clusters were identified as the causes of the gap based on the conceptual contributions: (1)lack of decision making (2) lack of communication (3) methodological problems and (4) accessibility, visibility, and dissemination of HR research The expected effects of the gap (e.g., worse organisational outcomes) were not as much taken into account as the assumed causes and their resolution. Even though early empirical data suggests that there may be a research-practice gap in some HRM domains. The study comes to the conclusion that there hasn't been enough empirical research done on the HRM research-practice gap in isolation. We explore the implications of this and create a research agenda for the future.

Keywords: HRM domains, Researchpractice gap, HR practices, Innovation, HRIS, HR decision

27. **Effect of Amurthathi Chooranam on Ethylene Glycol -Induced Urolithiasis in Wistar Albino Rats.**

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Abstract: Background: Nephrolithiasis has affected and can persist, with serious medical attention in mankind throughout their lifetime. This may due to obstruction, hydronephrosis, infection, and haemorrhage in the urinary tract system. Supersaturation of urine with stone forming constituents is considered to be one of the major reasons for calculogenesis. The current scenario medical management of nephrolithiasis is either costly or with several side effects. Many remedies have been employed since ages to treat urolithiasis and most of them were from plant based.
Aim & objective: This study was aimed to evaluate the effectiveness of Amurthathi Chooranam (AMC) on wistar albino rats as a preventive as well as curative agent against the development of renal stones.
Materials and Method: Activity of AMC was studied by using Ethylene glycol induced urolithiasis in preventive and curative regimen. Standard drug Cystone was used. Several parameters were used including urinary volume, urine pH, urine analysis and serum analysis to assess the activity.
Results: The results indicated that the administration of AMC in wistar albino rats with Ethylene glycol induced Urolithiasis significantly reduced and prevented the growth of urinary stones ($P < 0.05$). Also, the treatment of urolithiasis induced rats by AMC restored all the elevated biochemical parameters and restored the urine pH which was come to normal, and increased the urine volume significantly ($P < 0.05$) when compared to the control group.
Conclusion: Study results showed that the experimental groups curative regimen mid dose and high dose have been found to reduced number of crystals which showed that the drug might have curative action against ethylene glycol induced urolithiasis and groups preventive regimen mid dose and high dose might have mild preventive action against ethylene glycol induced urolithiasis. This study supports the usage of AMC in urolithiasis and the utility could further be confirmed in other animal models.
Keywords: Amurthathi Chooranam, Siddha formulation, Ethylene glycol, Urolithias

28. Control Processes-Deployment Dynamics on Control Standarads of Organisation.

Abstract: The competitive market expects high demand of productivity and quality with quatitative standarads.To improve the potential and sustainability of the operations of the managementvarious dynamic systems,lean operations are implemented with high lead strategies as the practitioners focus on the implementation of strategic dynamics as per the

requirement of the management which is very important for deployment of the effective strategies. Control plays a vital role in an effective organization which is one of the major aspects in rendering services and implementation of high technology modulations to bring Control in various systematic approaches in systems of the organisation. Affective Dynamic approaches are discussed with a view posits that affect reflects the error signal of a feedback loop managing rate of progress at goal attainment or threat avoidance. Negative feelings signal doing poorly, demanding more effort. Positive feelings signal doing better than necessary, allowing coasting, which yields goal attainment without unnecessary facilitating attainment of all. The motive to bring out control in process of delivering the technology services is to help employees on building quality and quantitative approach in variances reliability, valuation, and accuracy. Statistical systematical dynamic theories, lean operations, six sigma strategies are different control systems on accordable control systems to implement and improve design management. Reasearch on understanding managerial control process and systems is essential for the long –term effectiveness of organisation. Hence variations on failure of approaches still posess disaster in the organisation of innovation and organisation model.
Keywords: Control processes, operations,lead technology strategies,six sigma approaches oncontrol implementatons.

29. Linguistic Features of Legal Discourse: Genre Analysis of Police Reports.

Abstract: This genre analysis aimed to investigate the different linguistic features, cohesive devices, linguistic moves as well as narrative structures found in legal discourse specifically, police reports. The gathered linguistic corpora from the selected police stations in Davao del Norte were analyzed, categorized and interpreted through the lens of Finnegan's language structure and use, Halliday and Hassan's Text's Connected Theory, Labov and Walezky's Narrative Theory and Riberio's moves of police reports. Results showed that the linguistic features found in police reports are technical jargon, archaic expression, doublet, compounding, formality, derivational morpheme, and sentence complexity. The identified syntactic features are passives, prepositional phrases, derivational morphemes, unique determiners, parallel structure, participle, and relative clauses. Using the Text Connected Theory, the identified cohesive devices are reference, conjunctive elements, substitution, and lexical cohesion. Two types of reference are also identified such as cataphoric and esphoric reference. Conjunctive elements are also categorized into four namely, additive, temporal, adversative, and causal conjunctive. The lexical cohesion found are reiteration and collocation. As to linguistic moves, four linguistic moves were present in writing police reports such as move 1) Identifying and situating the agency, the Police Report (PR) and its circumstances; move2) Classifying the fact and its circumstances; move 3) narrating (reporting) the facts; and move 4) identifying the personnel responsible of the report. Narratives are also framed according to Labov and Walezky's Narrative Theory consisting of six elements such as abstract, orientation, complication, evaluation, resolution, and coda. Exploring the genre of police reports equips officers in understanding the specific conventions that facilitate law enforcement documentation. Genre analysis essentially helps police officers in identifying and navigating these requirements, ensuring that the produced reports from their stations are not only informative but also meet the necessary legal requirements. The meticulous process of creating narratives is not merely a bureaucratic duty, but rather a critical aspect of ensuring and maintaining accountability, integrity and public trust of the criminal justice system.

Keywords: linguistic features, legal discourse, genre analysis and police reports

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30. A Review of Research on Sino-Vietnamese Border Trade.

Kun Wang

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Abstract: Border trade is one of the important forms of transnational or trans-regional commodity and material exchanges, which not only enhances the economic, cultural and even political exchanges between countries or regions, but also integrates the coordinated development of inter-regional economy and culture, for which academics have been paying continuous attention to and researching on border trade. Sino-Vietnamese border trade has an important role and influence on China and Vietnam, and related research is also rich. In this paper, we use qualitative analysis to analyze the research theories of Sino-Vietnamese border trade, and compare and contrast the contents of the Sino-Vietnamese border trade research texts to sort out different research perspectives, so as to promote the in-depth study of future related research.

Keywords: Sino-Vietnamese Border Trade; Research Review; Border Trade Theory; Qualitative Analysis Approach

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31. Development of Polyherbal Tablet Formulation using Principles of Quality by Design.

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Abstract: The present research work was aimed to develop a polyherbal antioxidant tablet formulation using principles of Quality by Design. Initially quality target product profile (QTPP) was defined based on the properties of the drug product and drug substance. Identification of Critical Quality Attributes (CQA) based on the severity of that attribute to

affect the quality, efficacy, and safety of the final product.% concentration of microcrystalline cellulose (MCC) and % concentration of Sodium Starch Glycolate (SSG) were identified as high-risk variables with the help of initial risk assessment and its effect on critical Quality Attributes that was disintegration time and hardness were investigated using 32 factorial design with help of design expert software. It was observed that % concentration of MCC and SSG had a significant effect on hardness and disintegration and with the help of results optimization of the formulation was done. The optimized batch showed a disintegration time of 13 minutes and a hardness of 3 kg/cm2. The optimized formulation was evaluated for in vitro antioxidant activity with help of DPPH scavenging assay. This study can confirm that quality by design is an effective approach to understanding the quality parameters for developing and optimizing formulation.

Keywords: Polyherbal formulation, Quality by Design (QbD), Quality target product profile (QTPP), Critical Quality Attributes (CQA), DPPH.

32. Assessment of Compliance to Pedagogical and Studio Ethics among Student Artists in Southwest Nigeria.

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Abstract: The Federal Polytechnic Ilaro, Ogun State, Nigeria Abstract: Ethics investigates what is morally right or wrong, just or unjust, and the intellectual justification for our moral judgments. Aspirant artists' ethical foundations and their conscientious artistic community are significantly influenced by art education. This inquiry focuses on the subtleties of ethical issues and how they affect the creative growth and moral principles of budding artists. The extent to which developing artists in Nigeria follow ethical standards while pursuing their studies and studio practice, however, is not fully understood. This study uses a mixed-methods technique to collect both quantitative and qualitative data by mixing surveys and interviews. A representative sample of student artists in southwest Nigeria was surveyed, and professionals and educators in the field of art were interviewed. Based on the data gathered, analysis is performed to identify patterns and trends in ethical behavior. The study demonstrates the impact of instructional strategies and studio conditions on ethical decision-making by revealing a range of ethical adherence levels among student-artists in selected institutions across southwest Nigeria. The study is anchored on the Social Learning as well as Social and Cultural Theories. The findings emphasize the necessity of a thorough integration of ethical education into art courses, stressing mentorship programs, and developing an ethically conscious community. It places emphasis on the value of establishing a moral outlook throughout the educational process, encouraging responsible artistic expression, and building a solid ethical basis. The study's result highlights the critical role that ethical education plays in influencing the practices and behaviors of aspiring artists. Enhancing art curricula to include clear

ethical instruction, promoting mentorship programs, and cultivating a welcoming environment that follows ethical norms are just a few of the recommendations. These actions are essential to ensuring that Nigerian artists of the
future are morally and socially responsible.
Keywords: Artists, Education, Ethics, Southwest Nigeria, Pedagogy,Studio

33. Beyond Cut-Money: What can strengthen Panchayat Raj Governance in West Bengal?

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Abstract: Panchayat Raj Institutions (PRIs) are crucial for rural development and good governance in India. By enabling local participation in decision-making, they empower communities. However, challenges like "cut money," a system of unofficial deductions from development funds, hinder their effectiveness. This qualitative study, based on focus group interview in narrative with 12 participants, explores how cut-money moderates good governance. While participants acknowledged cut-money as an obstacle, they emphasized the importance of public awareness to overcome it. The study argues that strengthening citizen engagement offers a more sustainable solution than solely focusing on eliminating cut-money. The study suggests that direct resident involvement at the grassroots level is more effective than indirect participation in local governance for rural areas. This is because residents have a deeper understanding of their communities compared to outsiders. However, for residents to leverage their knowledge and skills effectively, they need the willpower to see projects through.
Keywords: cut-money, governance, sustainable, decision-making, residents

34. Molecular Insights on the Drug Resistance of Methicillin-Resistant Staphylococcus aureus (MRSA): A Mini-Review

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Abstract— Methicillin-resistant Staphylococcus aureus (MRSA) is a major factor in

nosocomial and community-acquired infections worldwide. The fast and accurate identification of MRSA is therefore vital to improve patient clinical outcomes through appropriate antibiotic therapy. Despite active surveillance and development of antibiotics, MRSA remains a significant pathogen with persistently high mortality rates. The increased concern regarding MRSA calls for prompt diagnosis and stringent infection control to minimize its effect on public health. This study therefore provides a mini-review on the information concerning MRSA with a molecular focus for the ease of future research works. Only considering the most relevant articles published at GoogleScholar, PubMed, and ScienceDirect from 2018 to 2023, the most recent molecular methods, methicillin-resistant genes, and updates on MRSA were reported. Molecular methods such as Polymerase Chain Reaction (PCR) and Whole Genome Sequencing were described in the study. After reviewing articles relevant to the study, it can be concluded that the field of molecular biology contributes largely to increasing literature regarding MRSA diagnosis. An example of which is the application of PCR which expedites detection of MRSA as other PCR methods such as multiplex PCR, RT-PCR, and isothermal PCR have also been developed due to the rise of MRSA cases.

Keywords: Drug-resistance, Genes, Methicillin-resistant Staphylococcus aureus, Methods, Molecular

35. Enhancing Maritime Security in the Indian Ocean: An Analysis of Promoting Regional Collaboration to Address the Somalia's Pirates Challenge.

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Abstract: This paper scrutinizes Maritime security in the Indian Ocean faces significant challenges, notably the threat posed by Somalia pirates. This paper offers an analysis of strategies to enhance regional collaboration in addressing this issue. By examining historical patterns of piracy, current security measures, and the role of international actors, it explores avenues for promoting cooperation among Indian Ocean states. Effective collaboration is essential for combating piracy, as it requires coordinated efforts across borders and jurisdictions. The paper discusses mechanisms such as joint patrols, information sharing, capacity building, and legal frameworks to strengthen regional security architecture. Moreover, it highlights the importance of addressing root causes of piracy, including poverty, political instability, and lack of governance in Somalia. By fostering collaboration and addressing

underlying drivers, the Indian Ocean region can mitigate the piracy challenge and safeguard maritime trade routes. This analysis contributes to the discourse on maritime security and offers insights for policymakers and stakeholders invested in maintaining stability in the Indian Ocean.

Keywords: Maritime security, Indian Ocean, Somalia pirates, regional collaboration, piracy challenge.

36. To Develop a Deep Learning-Based Classification System for Disease Diagnosis using IoT.

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Abstract: The demand for healthcare services is tremendously increasing and many countries are experiencing a shortage of healthcare practitioners, especially physicians. The tremendous strides that have been made in biotechnology, and the establishment of public healthcare infrastructures have resulted in a monumental increase in the generation of sensitive and important healthcare data. Telehealth technology is also relevant in developing the healthcare system in expanding and infrastructure designed to meet the current needs. The advances in wireless technology and smartphones have provided opportunities for on-demand healthcare services using health tracking apps and search platforms and have also enabled a new form of healthcare delivery, via remote interactions, available anywhere and anytime. The trend of death due to Heart Disease is still rising which has become a constant source of concern amongst the human beings. When intelligent data analysis methods are used, numerous fascinating patterns may be used for the early and onset identification as well as the prevention of a number of illnesses that can be deadly are uncovered. The ensemble learning approach known as the Voting Classifier can be done by combining the results of many different classifiers, such as the Gradient Boosting Classifier and the Convolutional Neural Network (CNN), which is used in the detection of heart disease. The Gradient Boosting Classifier is a method of machine learning does by successively integrating weak learners, such as decision trees. CNN is a technique to deep learning that is often used for problems involving image and signal processing. The proposed model obtained an accuracy of 92% while classifying the input data.

Keywords: Heart disease · Internet of things · Gradient boosting · Convolutional neural network Voting classifier

37. Healthcare Record for Heart Related Disease.

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Abstract: Current loosening up in masses has affected to in kink in number of patients master's work environments. Today most prominent endeavour for the managers in fixing community is to keep up recuperate the patient's data. The data keeping up is a critical endeavor any spot all through the world. Obvious techniques or advances are perceived to zero in on data, as a matter of fact. Moreover understanding the recent concern this development is proposed to recuperate data at speedier rate in a crucial way by using NFC card. The system is showing sharp flourishing record for patients information (ordinary, PVC, heart patient, and so on) taking into account reports request is ready. ECG results are showed up on outline. For accuracy happens conflicting timberland region evaluation is used. Structure in this manner sees atrial fibrillation consequently from signs recorded utilizing an unpretentious bed mounted vibration sensor. All around system is gotten to give right data confirmation correspondingly keeps up unmistakable patient history.

Keywords: Heart Patient, Record, Patient History, ECG

38. FACTS device localization using the wild horse optimization technique for power system security enhancement.

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Abstract: The increasing demand for electricity was pushing a lot of strain on the security of the power system. System security was compromised as a result of high load or large unintended interruptions, which makes the system unstable. The system incorporates a compensator to address the problems and enhance system stability. Flexible AC transmission systems (FACTS) are frequently utilised to increase the security of the power system. Because it had the ability to regulate reactive power and change the transmission line's dynamic properties. However, the effectiveness of compensators was mostly determined by the suitable localizations and ranges. The optimal problem of compensators was solved by more researchers using a variety of methodologies, although these methods have significant limitations. This paper proposes an advanced optimal technique to solve the optimal power flow (OPF) problems under various conditions. The power system was outfitted with five different FACTS devices in order to boost system security while consuming the least amount of fuel cost. To improve system security, the wild horse optimization (WHO) was suggested

for choosing the position and size of the FACTS device. Real power loss, line overload sensitivity index (LOSI), voltage variation, investment cost, sensitivity index, fuel costs, and constraints were used as objective functions to pinpoint where FACTS devices should be placed. Based on the WHO inspiration, the objective functions are reduced to find the localization of devices in order to boost system security. In IEEE 30 and IEEE 118 bus systems, the proposed model was put to the test in three separate scenarios: generator failure, line failure, and both failures. The outcome of proposed model approach was compared to some other existing models like firefly algorithm (FA), atom search optimization (ASO), and particle swarm optimization (PSO).
Keywords: power system security, optimal power flow, flexible ac transmission system, fuel cost reduction, wild horse optimization.

39. An Analysis of Qualitative Marketing Research.

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Abstract: This article focuses on the research methods and techniques used for evaluation of qualitative marketing research. The main aim is to present the unique aspect of the qualitative methods in marketing to obtain valid and reliable information. This study provides a literature review and analysis on the role of quantitative methods with qualitative methods in marketing research. Combined with quantitative bias of top tier journals, many qualitative researchers do not utilise the full benefit of their adopted methodologies. This makes it challenging for qualitative researchers to publish their work. Therefore, the current paper is intended to help academics and post-graduate researchers to be aware of their mistakes that can be made when undertaking qualitative research.
Keywords: qualitative research, marketing, research methods.

40. The Beginning of E-Commerce.

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Abstract: Before jumping into the numbers, let’s go back in history. In 1979 Michael Aldrich invented electronic shopping, which today is known as e-commerce. technology did it “by connecting a transaction-processing computer with a modified TV through a

telephone connection." Studies say that the system was marketed in 1980 and offered as business-to-business systems that were then sold in the UK, Ireland, and Spain. But besides that, the start of e-commerce became possible in the 90s, and it has evolved a lot over the decades. The internet was one of the inventions that most impacted the 20th century, and it's responsible for making society and companies communicate more efficiently.

Over the years and with the success of computers and the internet in that decade, e-commerce began to gain more and more space in many countries. By 1999, more than 40 million people worldwide had access to the internet.

Keywords: - E commerce E marketing, digital marketing, E commerce business models.

41. A drug design strategy based on Molecular docking, Molecular dynamics simulations and 3D QSAR applied to development of inhibitor against Breast cancer by semisynthetic derivatives of Quercetin

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Abstract:
Flavonoids, widely distributed secondary plant metabolites, significantly contribute to preventing various chronic diseases, including cancer. Breast cancer presents a formidable challenge to the global public health community due to its increasing prevalence, particularly triple-negative breast cancer (TNBC), which constitutes 10–15% of all breast malignancies and is more prevalent in women under 40, especially those of Indian descent or carrying the BRCA1 mutation. TNBC is characterized by the absence of oestrogen and progesterone receptors (ER, PR) and varying levels of HER2 expression, representing an aggressive form of breast cancer with limited therapeutic options and a poorer prognosis. In our research, we utilized TNBC protein data collected from the Protein Data Bank (PDB) in its most stable configuration. We focused on Quercetin, a well-known bioactive molecule with anti-cancer properties, and utilized its derivatives to design potential anti-cancer drugs using computational tools. We applied and modified structural activity relationship methods to these derivatives, evaluating the probability of active (Pa) and inactive (Pi) outcomes using pass prediction scores. Additionally, we employed in- silico approaches, including assessing absorption, distribution, metabolism, excretion, and toxicity (ADMET) parameters. Three- dimensional structure-activity relationship (3D-QSAR) is a widely-used technique in drug design and development, enabling quantitative prediction of the interaction between a molecule and the active site of a specific target. Each 3D-QSAR study involves creating a three-dimensional model to find a fitting between computational descriptors and biological activity, serving as a predictive tool in drug design. Comparative Molecular Field Analysis (COMFA), a grid-based

and alignment-dependent 3D-QSAR method, was used to study the correlation between the molecular properties and HER2 inhibitory potency of Quercetin derivatives. We conducted virtual screening of semisynthetic inhibitors through molecular docking and dynamic simulation, resulting in a common hit Quercetin ligand with low dock scores for EGFR and HER2 targets. The inhibitory action of semisynthetic compounds was validated by comparing them with reference compounds, Geftinib for EGFR and Neratinib for HER2. Molecular dynamic simulation of EGFR and HER2 lead complexes ensured appropriate ligand refinement in the dynamic system. The interaction motif between target and ligand complexes established a high affinity of lead candidates in a dynamic system, similar to molecular docking results. This study suggests that Quercetin as a hit molecule could be developed as a novel multi-target EGFR and HER2 inhibitor with greater potential and lower toxicity.

Keywords: Flavonoids, 3D-QSAR method, ADMET, anti-cancer drugs

42. Examining the investment patterns and Strategies of Individual Investors in Future and Option Markets: An Empirical study in J&K.

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Abstract: The research focuses on futures and options trading in Jammu and Kashmir, emphasizing demographics, knowledge levels, and trading patterns among retail investors. It highlights a male-dominated participation (75% male, 25% female) and the need for inclusivity efforts. While most investors feel well-informed about F&O trading, a minority lacks awareness, stressing continuous education. Younger individuals (25-30 age range) are active participants, with sustained interest across different age groups. The majority of investors are new to F&O trading (66% with <5 years' experience), indicating growing interest among novices. Chi-Square tests reveal insights into the relationship between investment experience, trading patterns, and risk management, showcasing the complexity of decision-making in trading influenced by various factors. The research will employ a quantitative approach to analyze investment patterns, behavior, strategies, and risk mitigation among retail investors in futures and options markets. A cross-sectional study with a sample size of 100 respondents from Jammu and Kashmir, using purposive sampling, aims to ensure representation across different investor segments. Data will be gathered via structured questionnaires and complemented with secondary data from financial reports and scholarly literature to give a full examination of the region's trading landscape.

Keywords: Future and options, Demographic profiles, Trading Experiences, Investment Patterns and Risk management techniques.

43. Impact of Manual Therapy and Inclined Board Standing on Low Back Pain: A Pilot Study.

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3Agile Institute of Rehabilitation Sciences Bahawalpur, Pakistan

Abstract: Background: Low back pain is a common musculoskeletal condition that affects everyone. Manual therapy stimulates mechanoreceptors to produce short-term pain relief and restore functional movements.

Objectives: The primary objective is to assess the effects of Manual Therapy and Inclined Board Standing on low back pain and functional disability, and secondary objective is to asses health related quality of life.

Methodology: 10 individuals (18–60 years old) with low back pain (LBP), with or without radiation, acute or chronic episodes, and decreased range of motion (ROM) were divided into two groups at random: group A received manual; therapy with passive hip Abductors stretching and inclined board standing; group B received inclined board standing treatment only; and outcomes were evaluated for dependent variables. Results: A statistically significant change between pre- and post-intervention ($p < 0.05$) indicates that the mean difference is significant. The study's overall findings demonstrated that both groups improved with time relative to their starting points because the p value is less than the normal p value. ($P=0.05$). At the 0.05 level, results showed no differences between groups in terms of disability, and quality of life due .Similarly results showed no differences between groups over the course of an intervention lasting 2 weeks ($p > 0.05$). As this pilot study, Statistical significance typically requires a larger sample size and a longer duration of intervention to detect meaningful differences between groups.

Conclusion: This research concluded that manual therapy, passive stretching of the hip abductors, and inclined board standing are more effective than inclined board standing alone in managing low back pain and improving physical function.

Keywords: Manual Therapy, Inclined Board, Low Back Pain

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44. IoT in Electrical Vehicle-Health Management (EV-HM):A Study.

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Abstract- Internet of Things-IoT, is a fast increasing industry adoption across a wide range of businesses, including electric vehicles (EVs). Thanks to IoT, EV manufacturers can now produce connected cars with cutting-edge features like location-based services and remote diagnostics, all while enhancing the user experience. Moreover, IoT technologies are making

it possible to create predictive maintenance systems and integrate EVs into smart grids. The potential of IoT in EVs will be covered in this essay, with an emphasis on the benefits and difficulties of implementing it. The capacity to monitor and analyse data in real time is the primary benefit of utilising IoT in EVs. Manufacturers are able to gather and examine data from several sensors, including location, speed, and performance measures, by linking the car to the cloud. The car's performance may then be enhanced, problems can be found and fixed, and driving enjoyment can be maximised using this data. IoT-enabled EV technology can also be utilised to lower energy usage and carbon emissions while establishing a safer, more sustainable, and efficient energy system. Using IoT in EVs also makes it possible to offer a personalised experience to clients. Manufacturers can utilise IoT to gather information about customers' driving patterns and preferences, and then utilise that information to customise the features and settings of the vehicle to meet their needs.

Keywords-IoT, Electrical Vehicle, Electric Motor, Charging Station, Sensors,

45. Entrepreneurship Training and the Career Paths of Students: A Case Study on Retention of Entrepreneurial Mindset among Students of Lagos State University of Education, Lagos, Nigeria.

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Abstract: Globally, entrepreneurship education has gained significant attention as a means to foster innovation and cultivate entrepreneurial mindsets among students. This study investigates the impact of entrepreneurship training on Business Ideation and Opportunities (ECL 203) on the career paths of undergraduates at Lagos State University of Education, Lagos, Nigeria (LASUED), with a specific focus on the retention of entrepreneurial mindset. The study used primary data obtained from 500 LASUED undergraduate students using a Google form questionnaire and the collected data were analyzed using simple linear regression. Analysis indicates that the entrepreneurship training significantly influences LASUED students' retention of an entrepreneurial mindset ($R2 = 0.549$, Adj $R2 = 0.548$, $p = 0.000 < 0.05$). This indicates that the trained students are more likely to maintain entrepreneurial thinking, potentially enhancing their readiness for future opportunities and pursuits. Additionally, the results demonstrated that students who had received the training had a significantly different perception of entrepreneurial opportunities than students who had not ($R2 = 0.529$, Adj $R2 = 0.528$, $p = 0.000 < 0.05$), suggesting that students' perspectives can be shaped by the training, resulting in a more proactive and knowledgeable approach to identifying and seizing entrepreneurial opportunities. Furthermore, the results showed that graduates' career advancement is significantly influenced by maintaining an entrepreneurial

mindset ($R2 = 0.477$, Adj $R2 = 0.476$, $p = 0.000 < 0.05$), indicating that students who have an entrepreneurial mindset are better positioned to pursue a variety of career paths, which may result in increased professional success as well as opportunities for innovation and leadership in their respective fields. Recommendations for educators, legislators, and other stakeholders in entrepreneurship education are explored in light of the findings.
Keywords: Career paths, ECL 203, Entrepreneurship education, Entrepreneurial mindsets, Entrepreneurial opportunities

46. Order of Inflectional and Derivational Affixation of Bicol-Catanduanes.

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Abstract: The Department of Education (Department of Education) Order 74 (s. 2009), also known as the Mother Tongue Based- Multilingual Education (MTB-MLE), emphasized the importance of studying learners' linguistic diversity as well as developing and making materials available in a variety of Philippine languages such as Bicol- Catanduanes. Understanding the order of affixes is crucial for understanding the morphology of the language . This study analyzes the patterns of inflectional and derivational in terms of order of affixation. Tang Tacio's column "Isip-Isipon Ta" was analyzed through morpheme- based analysis. Emergent coding is used to determine the patterns of inflectional and derivational affixes. The results of the research were validated by chosen language teachers in Catanduanes. In the analysis of the common words which are kinawatan, igasuratan, kinaraonan inflectional affixes –in, -iga, -in, -ara are in the first part of the words while the derivational affix-an is in the last part of the word. In terms of order of inflection and derivation, Bicol-Catanduanes has fixed pattern inflectional affixes comes first before derivation in reference to the root word. Based on the result it is evident that Bicol-Catanduanes is an agglutinative language which has more inflectional than derivational affixes.
Keywords: Affixation, Bicol-Catanduanes, Inflectional and Derivational Affixes

47. Purifying Protein: Evaluating Methods for Enhanced Research and Industrial Efficiency.

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Abstract: Protein purification is an important part of biochemical research and industrial use;

to achieve high yield and purity, the most appropriate method must be selected. This summary provides a comparative analysis of various protein purification methods used in research and industry. Introduction: Proper protein purification is essential for elucidating protein functional patterns, studying protein interactions, and developing bio therapeutics. However, the choice of purification method depends on factors such as the properties of the protein, its scale, and the desired level of purity. The purpose of this content is to evaluate and compare the activity, specificity, and activation capacity of different protein systems. Method: A literature review was conducted to identify and describe protein purification techniques. Each method was evaluated based on important factors such as specificity, yield, purity, cost and scalability. Chromatographic methods, precipitation methods, ultrafiltration, dialysis, electrophoresis, and other new purification techniques are reviewed and compared. Results: chromatography techniques, which include affinity chromatography, ion exchange chromatography, mass separation chromatography, and hydrophobic interaction chromatography, are versatile and have many methods suitable for the purification of a variety of proteins. Precipitation methods such as salting, ammonium sulphate precipitation, and heavy organic precipitation give good results but may result in lower purity. Ultrafiltration and dialysis provide good separation based on size and molecular weight, while electrophoresis techniques enable visualization and separation of proteins based on size and charge.

Discussion: Selecting an appropriate protein purification method depends on many factors, including protein properties, purity requirements, scale, and available resources. The combination of different purification methods often leads to good results, allowing researchers to obtain pure protein structures suitable for a variety of applications. Additionally, advances in protein engineering and bioprocessing technology continue to drive innovation in protein purification techniques. Conclusion: A good understanding of the advantages and limitations of different purification methods is essential for optimizing protein purification protocols. By considering factors such as specificity, yield, purity, cost, and scalability, researchers can make informed decisions about protein purification and enable research, exploration, and exploitation.

Keywords: Protein purification, Chromatography, Precipitation, Ultrafiltration, Electrophoresis, Bioprocessing

48. Biomarkers for the Early Diagnosis of Hepatocellular Carcinoma.

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Abstract: Introduction: Hepatocellular carcinoma (HCC) represents a major worldwide health concern, often diagnosed at advanced stages, resulting in poor prognosis. Timely detection is critical for improving patient outcomes. Serum biomarkers have shown promise in facilitating early HCC diagnosis, but their effectiveness can vary among different demographic groups.

Methods: The investigation was conducted in Bangladesh's Dhaka at the Ibn Sina Diagnostic and Imaging Center. In a cross-sectional analysis conducted between March 2022 and February 2023, 412 patients were included. Results: Among the 412 patients in the study, the distribution across age groups revealed that the majority(105, 25.5%) were aged 51-55. In terms of gender, 294 (71.4%) were male, while 118 (28.6%) were female. Notably, AFP showed promising results, particularly in older age groups, with a sensitivity of 81.7% and specificity of 88.4% in patients aged 51-55. AFP exhibited the highest diagnostic accuracy, followed by CA19.9 and CEA. Conclusions: This study highlights serum biomarkers, especially AFP, in the early detection of HCC. Age-specific variations in biomarker performance suggest the importance of considering demographic factors when assessing their efficacy. These findings offer valuable insights for tailoring early HCC diagnosis strategies, ultimately improving patient outcomes.
Keywords: Hepatocellular carcinoma, biomarkers, early detection, demographic factors, liver enzymes.

49. Exploring Ontology in Qualitative Analysis: Alleging Sources with Domain Requirements.

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"If there were only one truth, you couldn't paint a hundred canvases on the same theme."
----Pablo Picasso, 1966

Abstract: Introduction: The function of ontology, alongside research data, is to explore and establish connections between existence and reality. Similarly, qualitative analysis serves to validate research objectives and hypotheses by examining relationships, characteristics, and other pertinent elements. Through this process, ontology and qualitative data analysis are utilized to uncover evidence supporting the research objectives. Consequently, researchers engage in an ontological process to ascertain the relationship between qualitative data sources and the most suitable domain and method of analysis.
Definition of Important Terms:
1.Ontology: According to (Gruber, 2009) "They define primitives, that is, classes, properties and relations among the members of classes that are relevant to model the knowledge of a domain". Through the properties, classes and entities of thing and establish the connection between existence and reality.
2.Qualitative Analysis: "A research method for the subjective interpretation of the content of texts data through the systematic classification process of coding and identifying themes or patterns"1
3.Sources: A simple definition of source is that "Source is where something comes from or is obtained. It can refer to a person, place, thing, or document that provides information or

contributes to a particular outcome". It is the most essential thing in any type of research. In qualitative analysis it's format.
Methodology: Here, a researcher applied "ontological inquiry" method to complete the study. In this inquiry a researcher determines various sources and connects its application with disciplinary concept.
Henceforth, the relationship with the sources and application and check its applicability with qualitative analysis. This study has been presenting the ontological presentation of sources and their usability in discipline wise qualitative analysis. In this study, the probable sources of research data itself primary data to analysis and interpretation for this study.
Result: Four primary sources—namely, verbal accounts, direct observation, photographic evidence, and documented records—were identified to support the ontological inquiry in this study. Each source category encompasses various subcategories, offering a wide range of resources that can be utilized in the qualitative analysis of any subject domain.

50. The impact of e-commerce on Indian Customs Processes and Procedures.

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Abstract: This study was conducted to analyzes the interplay between the e-commerce and customs administration performance using the India Customs Administration as a case study. The study results indicate that e-commerce emerged in a more proactive environment that easily encountered acceptance by India Customs and supply chain network and Trade Community. The surge of e-commerce impacted in customs clearance procedures and processes aimed at handling e-commerce parcels, it represented both an opportunity and a challenge for Indian Customs that embarked in reforms to respond to the challenges posed by e-commerce. This paper recommended: creation of Single Window platform for e-commerce and small shipments that integrate supply chain stakeholders; exempt shipmen value up to USD 1000 per shipment; redesign the shipment bill to reflect correct payment terms; Implement the risk management for e-commerce; returned goods regime need to be enforced properly to avoid incur on payment of undue customs duties.
Keywords: Indian Customs, e-commerce, Single Electronic Window, AI, Machine Learning;

51. Radhabinod Pal's warm heart toward post- war Japan.

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Abstract: This year marks the 76th anniversary of the International Military Tribunal for the Far East (November 12, 1948). At that time, an 11-member panel of judges was organized for the Tokyo Tribunal, which judged Japan's war crimes, and Justice Radhabinod Pal (1886-1967) was assigned as the judge representing India. The year 2024 marks the 72nd anniversary of the establishment of diplomatic relations between Japan and India. Although the cultures of the two countries were different, they were moving in the same direction. After the end of the war, Japan was the first democratic nation to emerge from the bitterness of defeat, and at the same time, India was also beginning to build a nation that had just given birth to its independence. The person who was deeply revered by the Japanese people after the war was Radhabinod Pal, a Justice representing India at the International Military Tribunal for the far East, and his argument for the "acquittal of Class A war criminals" was one of the most strongly felt events of the war. In this presentation, I will go through the "Japanese Innocence Theory" written by Justice Radhabinod Pal. This is an account of Judge Pal's consideration for the defeated nation of Japan, based on his own pursuit of a legal mindset and a just trial in compliance with international law. Although the governments of both countries hold Justice Radhabinod Pal in high esteem, the reality is that there are too few researchers on Justice Pal in India. Therefore, the purpose of this paper is to enlighten people about the activities of Justice Pal, who argued for the innocence of Japan based on the spirit of law, without bowing to the pressure of the Supreme Command of the Allied Powers and the British, who ruled India at that time.
Keywords: Indian Independence Movement, Gandhi, Rash Behari Bose, Yasaburō Shimonaka, Japan innocence theory

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52. Exploring the Factors that Shape the Intentions of Namibian Youths Towards Social Entrepreneurship.

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Abstract: This study investigates the factors influencing social entrepreneurial intentions among youth in Namibia and explores their relationship with social entrepreneurship. The research adopts a mixed methods and descriptive design. 69 youths participated in the study, where 42 were females and 22 males. Data was collected through an online survey using simple random sampling. The data are analysed using factor analysis and regression analysis. The findings show that among young Namibians, self-efficacy and prior experience are major predictors of social entrepreneurship goals. In addition, when asked about the obstacles preventing them from launching social initiatives, respondents stated that 68% cited restricted access to cash as the key barrier, 7% mentioned a lack of self-esteem and competence in the area of social entrepreneurship, and 4% mentioned a lack of support networks. These findings offer valuable insights into the primary factors influencing social entrepreneurship in the Namibian context, providing guidance for policymakers and practitioners aiming to promote social entrepreneurship among youth. Additionally, the study recommends that higher education institutions incorporate social entrepreneurship into their curricula across various subjects. By providing insights to educators, policymakers, and youth, this research underscores the positive impact of social entrepreneurship on communities, contributes to the ongoing discourse, and raises awareness about social entrepreneurship among young individuals.

Keywords -Social entrepreneurship; Empathy, Social support; Moral obligation; Self-efficacy and prior-experience.

53. Servant Leadership: A Systematic Literature Review.

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Abstract: Servant leadership has emerged as a prominent leadership model characterized by a focus on serving others and prioritizing their needs above one's own. This systematic literature review synthesizes the existing research on servant leadership to provide insights into its conceptualization, antecedents, outcomes, and practical implications. Drawing upon a comprehensive search across various academic databases, a total of peer-reviewed articles published between were analyzed. The review begins by defining servant leadership and delineating its core principles, including empathy, humility, stewardship, and empowerment. It explores the historical roots of servant leadership, tracing its origins to ancient philosophical teachings and religious traditions, and examines its evolution into a contemporary leadership paradigm. Furthermore, the review identifies key antecedents of servant leadership, such as individual characteristics (e.g., personality traits), organizational factors (e.g., culture), and situational variables (e.g., context-specific challenges). In terms of outcomes, the literature review discusses the impact of servant leadership on various organizational and individual outcomes, including employee satisfaction, organizational commitment, performance, and innovation. It also examines the mediating mechanisms through which servant leadership

influences these outcomes, such as trust, psychological empowerment, and follower self-efficacy. Moreover, the review highlights the practical implications of servant leadership for organizational leaders and managers. It offers insights into how leaders can cultivate servant leadership behaviors through training, development programs, and organizational interventions. Additionally, it discusses the challenges and limitations associated with implementing servant leadership in different contexts and provides recommendations for future research to address these gaps.

Overall, this systematic literature review contributes to a deeper understanding of servant leadership as a valuable approach to leadership that prioritizes the well-being and development of followers, fosters a culture of collaboration and mutual respect, and ultimately contributes to organizational effectiveness and success.

Keywords: Leadership, empowerment, historical roots, challenges, limitations

54. Smart Bank Vault Security System.

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Abstract: To counter the increase in bank robberies and house break- ins, we've devised a smart security system utilizing image recognition technology. This system ensures access to bank vaults, house doors, and safes which is limited to authorized individuals, effectively deterring unauthorized entry. The setup involves a SONAR-equipped door or vault, activating a camera linked to an Arduino upon detecting an individual's proximity. Face detection, facilitated by Python code using haarcascade, OpenCV, NumPy, or an ESP32 camera module, captures the individual's face. This image is compared to a database of registered individuals using a face recognition algorithm like Fisherface. Upon a successful match, an electronic door lock, accompanied by a servo motor controlled by the Arduino, unlocks the door. If there's no match, the individual's image is sent to the owner's smartphone for approval. Upon owner confirmation, access is granted, and the electronic lock unlocks the door enabling the servo motor to open the door. Additionally, the system can trigger an automated alert AI generated voice call to the nearby police station stating the address of the location at the owner's discretion. This comprehensive approach enhances security by utilizing advanced technology to authenticate individuals and prevent unauthorized access, providing a robust solution to combat theft and burglary.

Keywords:-Security System, Image RecognitionTechnology, Authorized Access, Theft Prevention

55. Are Sustainable Companies Make More Money? Exploring the Relationship between ESG Performance and Financial Performance.

Dr. Kelvin Lee Yong Ming

Abstract: In recent years, Environmental, Social, and Governance (ESG) factors have garnered increasing attention from investors, regulators, and companies alike. Companies are becoming more attentive to unfavorable publicity and the negative views expressed by the stakeholders, including shareholders, customers, suppliers, and employees. The ESG score has also been used to assess the firm's sustainability levels. This study aims to investigate the correlation between ESG practices and the financial performance (profitability and revenue) of listed companies in Malaysia. The findings suggest a growing consensus that companies prioritizing ESG considerations tend to exhibit stronger financial performance over the long term. However, the nature and magnitude of this relationship may vary across industries and regions. Understanding the interplay between ESG practices and financial outcomes is essential for investors seeking to integrate sustainability considerations into their investment decisions and for companies striving to create long-term value for their stakeholders in an increasingly ESG-conscious market landscape.

Keywords: ESG; Sustainability; Financial Performance.

56. Teaching strategies for introducing Western literary texts to Ordinary Level English literature students in Sri Lanka.

Ilfa Ijlal
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Abstract: This study investigated teaching strategies for introducing Western literary texts to Ordinary Level English literature students in Sri Lanka. The objectives included identifying cultural barriers and challenges faced by Sri Lankan students when engaging with Western literary texts and exploring effective pedagogical strategies to make these texts more accessible and relevant. The research involved 3 English literature teachers and 40 English literature students, utilizing a mixed- method approach incorporating questionnaires and interviews. The sample was selected using purposive sampling technique. Results revealed that 68% of students encountered difficulties, primarily stemming from differences in cultural norms, values, and a lack of familiarity with Western historical and social contexts. Teachers suggested pedagogical strategies such as using visual aids, multimedia resources, providing background information, and incorporating supplementary resources to overcome these obstacles. This research is essential for educators, curriculum developers, and policymakers seeking to enhance the inclusivity and effectiveness of English literature education in Sri Lanka. By addressing cultural barriers and implementing tailored pedagogical approaches, educators can foster

greater engagement and understanding of Western literary texts among Sri Lankan students.
Keywords: Teaching strategies, English literature students, Western literary texts

57. Future Healthcare Delivery via Telenursing: A Prospective Vision.

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Abstract: Despite the large number of nurses in the world, we need more, to meet the healthcare demands of the emerging population. The nursing shortage is impacting the hospitals to elevate the nurse-to- patient ratios and more work. A higher workload is linked to prolonged hospital stays, more significant safety concerns for patient errors, and Hospital Associated Infections, all of which increase the likelihood of missing nursing care. By using electromagnetic channels, such as radios and optical fibers, to transfer speech, data, and video communication
signals, telecommunication technology may be used in nursing to improve patient care. A new area of nursing called telenursing promises to address the scarcity of nurses by using technology to deliver health education and remote care to patients at a lower cost while maintaining high standards of care and patient satisfaction. This is especially important in rural areas where access to nearby hospitals and clinics is limited. In many nursing specialties, telenursing can make use of phone conversations, video visits, and remote monitoring equipment. Additionally, telenursing can give nurses more direct patient contact while lessening their workload. The experts should be persuaded to see telenursing as subordinate to expert practice, in contrast to the belief that they are unquestionably “superseded” by gadgets. This will help to preserve the nurse’s knowledge base, clinical competence, and ability to analyze vital parameters for coherent patient care. Legal issues such as malpractice, negligence, and accountability are complex to preserve. Ethical issues such as patient integrity are essential regarding telenursing; henceforth, the nursing cadre needs extra training to become acquainted with updated technological knowledge and skills.
Keywords: distance healthcare, nursing shortage, technology, telehealth, telenursing.

58. Navigating Complexity: Exploring Thematic Analysis in Social Sciences.

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Abstract: Thematic analysis stands as a versatile and widely employed qualitative research method within the social sciences, offering researchers a systematic approach to uncovering patterns of meaning within qualitative data. However, the process of thematic analysis is not without its complexities, presenting researchers with a myriad of challenges and considerations. This abstract delves into the multifaceted nature of thematic analysis within the context of social sciences research. It begins by elucidating the fundamental principles of thematic analysis, highlighting its iterative nature and emphasis on identifying, analyzing, and interpreting recurring themes or patterns within qualitative data. Furthermore, the abstract explores the diverse theoretical frameworks that underpin thematic analysis in social sciences, ranging from constructivism and interpretivism to critical realism and post- structuralism. By examining the theoretical underpinnings of thematic analysis, researchers can navigate the complexities of data interpretation and theory-building, while remaining attuned to the epistemological assumptions that shape their analytical insights. Moreover, this abstract discusses the methodological challenges and considerations inherent in conducting thematic analysis within the social sciences. It addresses issues related to data saturation, researcher reflexivity, intercoder reliability, and the role of context in shaping thematic interpretations. Additionally, it explores the potential for bias and subjectivity in the coding and theme development process, underscoring the importance of methodological rigor and transparency. Ultimately, this abstract emphasizes the importance of reflexivity and critical engagement in navigating the complexities of thematic analysis within the social sciences. By embracing methodological diversity, interdisciplinary dialogue, and theoretical reflexivity, researchers can harness the transformative potential of thematic analysis to generate rich, nuanced insights into complex social phenomena and advance theoretical understandings within the field.

Keywords: theory-building, thematic analysis, Social Sciences

59. Unveiling the Impact of Teacher Communication on Student Academic Succes.

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Abstract: This research investigates the influence of teacher communication on student academic success. Through an exploration of various communication strategies utilized by educators, this study aims to uncover the significant role they play in shaping students' learning outcomes, engagement, and overall academic development. Drawing upon a synthesis of scholarly literature and empirical evidence, the study elucidates the intricate relationship between effective teacher communication and student achievement. It examines how clear, empathetic, and customized communication fosters a conducive learning environment, enhancing student motivation, confidence, and cognitive growth. Through a comprehensive review of literature and empirical evidence, this study aims to reveal the intricate relationship between effective teacher communication and student achievement. It explores how clear, empathetic, and tailored communication fosters a conducive learning environment, promoting student motivation, confidence, and cognitive growth. This research contributes valuable

insights to the field of education by highlighting the critical importance of teacher communication in optimizing pedagogical practices and fostering student success.

Keywords: Teacher Communication, Student Academic Success, Pedagogy, Learning Outcomes, Engagement, Educational Development

60. Women's Safety and Digital World; Social Justice.

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Abstract :We all are living in the AI generation, modern trends, and digital India. as well it's moving toward different initiatives, policies, and plans under the government system like Vikas Bharat, skill India, make India, Atmanirbhar so and so on but every scheme's main agenda is to protect the people's lives across the issue based on basic values to complete the social security mission without discrimination. On one side science and technology along with all multidisciplinary fields are interconnecting the government initiative plans and modifying people's lives easily in all ways. With all technology and tools women are leading their life in all sectors. From home to world tour, they are doing all different life access works which gives the freedom to live and educate one step ahead in the digital world. But the question is; then why women are still facing critical issues from domestic violence, why they not raise their voices, still why gender inequality is dominating society? maybe one nation can lead in a successive way towards development mode but it will never become the underlying 100% development nation if it's not seeking & implementing the perfect actions to control all that we are seeing & listening against uncountable crimes on women women's like rumors, cybercrimes, privacy leakage, online harassment, etc, even having all online assistants, helpdesk and tough laws and rules, etc. Until unless provoking a strong agenda on women's safety, everything will be worthless, and setbacks as dead plans.

Keywords: social media for women, Government initiatives, self- educated, prime agenda & digitalization.

SOCIAL ENTREPRENEURSHIP: A COMPARATIVE ANALYSIS OF ITS REQUIREMENT IN CONTEMPORARY WORLD

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ABSTRACT

In recent years the scenario is changing fast regarding social entrepreneurship in the entire world in general and India in particular. There are a lot of positive changes in all spheres of social welfare as well as economic growth. It can be renewable energy, women welfare, e-learning, e- business, sustainable environmental development, education, health sector and so on and so forth. Social entrepreneurship is the call of the day. The major aim of this research paper is not only to provide information about the social entrepreneurs who have uplifted the downtrodden but also how they have added in policy making of their governments. It is also a study of those social entrepreneurs who are working to uplift the moral values amidst masses. Additionally, it studies those who are having their enterprises in major areas of boosting up the technology and creating varieties of job opportunities. There are bountiful of social entrepreneurs worldwide. Who are torch bearers for Indian entrepreneurs and provided them innovative ways of social enterprises. Thus this paper is a comparative analysis of not only global enterprises but also a selective study of those who belong to India.

Keywords: Prima–facie, sustainable -development, economic growth, social welfare, enterprise.

INTRODUCTION

Social entrepreneurs work in six areas i.e. people, problem, plan, prioritize, prototype, and pursue. Now adays a new business model has taken place i.e. a mixture of governmental and social organisations. In the past governments had not adhered to social causes under the shade of normal business scenario. Private sector too is turning out to be philanthropists and moving hand in hand for the growth of economies along with governments. This is happening worldwide. It can also be called as not-profit and for-profit companies. Social entrepreneurs set to establish varieties of businesses which not only earns profit but also helps society to improvise. They are the leading figures in the field of entrepreneurs. They often contribute to their communities or help those in need.

How Social Business Venture Benefits Economies

An economy and society can benefit from business support in a number of ways. First of all, entrepreneurs create new companies. They envision work and goods, generating commerce, and oftentimes they exert an increasing impact, generating more and more turns of events. For example, following the establishment of a few data innovation companies in India in the 1990s, businesses engaged in adjacent industries—such as call center operations and equipment suppliers—began to expand and provide support services and products. Entrepreneurs with vision increase the gross public pay. Already-existing companies may continue be restricted to their industry and eventually reach a salary ceiling. Nevertheless, new products or innovations create new markets and wealth. Additionally, increased revenue and corporate expansion increase a nation's expenditure base, enabling more significant government expenditures on open ventures.

Visionary business leaders transform society. They defy convention with inventive innovations that reduce dependency on tried-and-true methods and frameworks, occasionally producing antiquated results. For example, mobile phones and their apps have disrupted work and pleasure everywhere in the world.

Entrepreneurs with a vision invest in neighborhood projects and assist charitable organizations and other non-profit groups in addition to their own. For example, Charge Entryways has included his broad wealth for education and wellness initiatives.

Enterprising biological systems

Research demonstrates the way that elevated degrees of independent work can slow down monetary turn of events: Business venture, while possibly not properly regulated, can lead to debasing and unfair market practices, and such a big number of businesspeople might create salary inequities that are visible to the public. But generally speaking, business is the fundamental force behind both monetary and developmental advancement. Thus, promoting commercial ventures is an important component of many local and public states' financial development strategies worldwide.

To this end, legislatures normally assist in the advancement of enterprising biological systems; potential contributors include investors, government-backed assistance programs, and businesspeople themselves. Non-governmental organizations such as training programs, business incubators, and business people's groups may also be included.

California's Silicon Valley is in many cases referred to act as an illustration of a well-working pioneering biological system. The locale has an advanced funding base, an enormous pool of knowledgeable ability, particularly in specialized fields, and an extensive variety of government and non-taxpayer supported initiatives cultivating new pursuits and giving data and backing to business people.

Contemporary Province of Social business venture across the world:

As indicated by a review by the World Monetary Gathering there are around 10 million social undertakings internationally, joined by the guideline of putting reason before benefit. Social ventures are producing nearly $ 2 trillion in income every year while having a positive effect. Social endeavours are making 200 million positions across different areas, from horticulture to monetary administrations. Social undertakings are looking for around $1.1 trillion in outside support (past private reserve funds). One out of two social ventures all over the planet are driven by ladies, contrasted with 1 out of 5 customary undertakings. The area is bigger than the $1.57 trillion clothing industry and two times the size of the $875 billion publicizing industry.

Importance of India's Social Entrepreneurship:

Mostly social entrepreneurs in India are resolved to tackle social issues. They begin with innovative ideas. They are major change agents in all kinds of societal issues. These social entrepreneurs take care of all social problems and environmental issues that plague the country. Few of them like Ratan Tata and Kumar Mangalam Birla do not only focus on profit but on social welfare as well. In India, the prevalent issues are poverty, unemployment, gender inequality, and environmental degradation.

India's Social Entrepreneurship:

Social entrepreneurs of contemporary India are highly innovative and creative problem solvers. They are growing by leaps and bound along with the development pro policies of Indian government. The government is offering skill development, and access to a supportive network of social change, which is being felicitated by The World Economic Forum. Indian social entrepreneurs are also supporting 384 late-stage in more than 190 nations. Indian social entrepreneurs are praised and eulogized across the world for their selfless services.

As stated by the Impact Investors Council (IIC), more than USD 9 billion has been invested in about 600 Indian impact enterprises. 500 million lives have been positively impacted by this. Through these initiatives, more than 226 million kids and teenagers have received an education. In addition, these social entrepreneurs have contributed to the reduction of about 192 million tons of CO_2. About 50 millions of rural areas have been provided basic amenities. And more than 100 million have been blessed with electricity.

In India, social entrepreneurship has enhanced standards of education, increased access to healthcare, improved livelihoods, and provided sustainable energy options with savings of over $6.7 billion. India ranks among the top nations that not only prioritizes its own social issues but also joins 46 percent of social entrepreneurs worldwide in singing "Vasudhaiv-Kutumkam," the national song. India is followed by the United States (40), Kenya (34), Brazil (29), South Africa (26), and Uganda (26).

Social entrepreneurs and economic development across the world:

Social entrepreneurship is playing a significant role in job creation. Organizations are actively integrating marginalized groups into the job market, promoting and gradually shifting societal norms. The **Organization for Economic Co-operation and Development (OECD)** confirms the role of social enterprises in intermediaries that bridge the gap between unemployment and the work force there are plenty of examples which illustrate this change, and make organizations employ disabled workers and promote gender diversity in traditionally male-dominated concerns.

Micro-financing is the call of the day basically in a country like India, where a measurable number of people live below poverty line. **Social entrepreneurs** have taken up this challenge through the same, providing credit to those who lack collateral, financial literacy, or access to traditional loans. Taking up inspiration through Grameen Bank in Bangladesh and SKS Microfinance in India have played a key role in uplifting the economically disadvantaged.

Climate change, an outcome of over-exploitation and environmental degradation, is a resultant global crisis. **Social entrepreneurs** have taken a proactive role in handling such issue through promotion of sustainable environmental development. Innovation, and collaboration is also a major part of it. Poonsap Suanmuang's work in Thailand, which focused on preservation of nature through sustainable development procures the potential of social entrepreneurship in resolving climate change.

Healthcare access is a fundamental human right, yet more than fifty percent of the gentry of the world lacks affordable and quality healthcare. Governments are struggling to provide solutions due to lack of finance. Visionary leaders like Bill Gates through the Bill and Melinda Gates Foundation, have channelized their resources to address critical healthcare issues, such as HIV/AIDS and tuberculosis.

Business in 2024 (world)

The Territory of Social Endeavor 2024 is the first, thorough worldwide informational collection to appraise the size and extent of social undertaking around the world. The information illuminates policymakers about the commitment regarding social undertaking towards manageable turn of events, and needs to work on the empowering conditions for the area. It has been created in organization with individuals from the Schwab Establishment's Worldwide Collusion for Social Business, including Bertelsmann Establishment, Impetus 2030, Euclid Organization, SAP, Social Venture UK and the Social Endeavor World Gathering. The exploration additionally tracks down huge holes in the information. The numbers thus act as instructive outline as opposed to a conclusive depiction of the condition of social endeavor.

Business venture in 2024 (India)

Anshu Gupta - Organizer behind Goonj

Goonj is an exceptional social venture. It manages the issue of attire and other fundamental requirements for individuals in rustic India. The association first gathers disposed of apparel from metropolitan regions. Then, at that point, sorts it, and sends it to those deprived in towns. Goonj likewise energizes and works with provincial turn of events. They use training, medical services and cleanliness, and local area working to bring improvement.

Harish Hande - Pioneer behind SELCO India

SELCO is an energy administration organization. It gives economical and reasonable energy answers for poor people. The organization has a creative plan of action. It centers around giving sun oriented fueled lighting to low-pay families. They offer energy answers for schools, and private ventures in rustic regions.

Ravi Shankar - Pioneer behind Starting point for Greatness India Trust

FFE India Trust gives merit-based grants to oppressed understudies across India. These assist them with seeking after advanced education. The association has affected more than 16,000 understudies from financially more vulnerable segments. It has assisted them with accomplishing their fantasies.

Shelly Batra - Pioneer behind Activity ASHA

Activity ASHA is a non-benefit association. It gives treatment and anticipation administrations to tuberculosis (TB) in oppressed networks. The association has fostered a remarkable innovation stage. It smoothes out the treatment cycle and has offered north of 80,000 TB patients date.

Zubaida Bai - Organizer behind Ayzh

Ayzh is a social venture. It plans and conveys minimal expense, life-saving maternal and infant wellbeing items. By giving reasonable, excellent items to ladies in low-asset settings. Ayzh has taken huge steps in diminishing maternal and newborn child death rates

Madhu Pandit Dasa - Organizer behind Akshaya Patra Establishment

Akshaya Patra Establishment is a non-benefit association. It gives late morning feasts to school-going kids in India. The association is the world's biggest NGO-run kitchen and serves over 1.8 million feasts consistently. They guarantee youngsters get legitimate nourishment and remain in school.

Lakshmi Menon - Organizer behind Unadulterated Living

Unadulterated Living is a climate accommodating cleaning items organization. It gives environmental items to homes and working environments in India. The organization's main goal is to establish a superior climate for all. They accomplish this by decreasing the utilization of destructive synthetic substances.

Satyen Das - Organizer behind Jump For Word

Leap for Word is a helping stage that expects to connect the education hole in India. The association trains and places volunteers in oppressed schools and networks. They instruct English to small kids in far off regions. Until now, the association has prepared north of 30,000 understudies across India.

Dhruv Lakra - Organizer behind Mirakle Messengers

Mirakle Messengers is a dispatch administration that utilizes hearing-weakened people. The organization gives preparing, business, and monetary steadiness to those with hearing impedances. It assists them with having an existence with respect.

Anu Sridharan - Pioneer behind Next Drop

NextDrop is a social undertaking that gives continuous water supply data to metropolitan regions in India. NextDrop is dynamic in various urban areas in India and has gotten acknowledgment from associations like Forbes and The Watchman. Sridharan's work has been instrumental in further developing admittance to water assets. He advances feasible water the board practices and helps networks.

The Dire Requirement for Social Business

Social business isn't an extravagance; it is a need. Our aggregate future relies upon embracing regenerative ways to deal with business and financial aspects. The difficulties we face today, from environmental change to medical care incongruities, require prompt activity. Social business people are driving the charge, yet they need support, particularly from the more youthful age. It's apparent from the report mentioned in the paper that now a days the number of youngsters is more inclined towards social enterprises. Many of them are women. They are really very successful in this field. There is a dire need of such entrepreneurs and its increasing by leaps and bounds too.

REFERENCES:

- https://www.investopedia.com/terms/e/entrepreneur.asp
- https://www.javatpoint.com/top-10-entrepreneurs-in-india
- https://www.coursera.org/in/articles/social-entrepreneurship
- https://www.uschamber.com/co/start/startup/what-is-social-entrepreneurship
- https://www.isdm.org.in/blog/social-entrepreneurship-revolutionizing-india-an changing-world
- https://www.forbesindia.com/blog/entrepreneurship/why-india-needs-more-social-entrepreneurs/
- https://www.geeksforgeeks.org/social-entrepreneurship-in-india/
- https://www.weforum.org/agenda/2015/12/explainer-what-is-a-social-entrepreneur

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ERROR ANALYSIS OF CV WRITING: A STUDY ON SRI LANKAN ESL UNDERGRADUATES IN THE FACULTY OF ENGINEERING

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ABSTRACT

Error analysis is a type of linguistic analysis that focuses on the errors learners make. It consists of a comparison between the errors made in the Target Language (TL) and that TL itself. For learners themselves, errors are 'indispensable,' since the making of errors can be regarded as a device the learner uses in order to learn. Researchers are interested in errors because they are believed to contain valuable information on the strategies that learners use to acquire a language. Hence, an error analysis is the best tool for describing and explaining errors made by speakers of other languages in order to know the sources of these errors and the reasons behind their continued occurrence year after year with different groups of learners.

This study focuses on errors in English essay writing of Sinhala speaking undergraduates in order to identify whether the L1 transfer is the major cause for errors in English writing of Sinhala undergraduates. If this were to be true, then it could be concluded that the reason behind all those errors is Negative L1 transfer/ Mother Tongue interference. This paper further attempts to identify and describe Sinhala speaking undergraduates' errors in English essay writing and thereby make efforts to minimize the problems encountered in their English writing. Target Population were the selected Sinhala speaking undergraduates who are offering English as a Second language for their BA (General) Degree at the Universities of Kelaniya, Peradeniya and the Sabaragamuwa University of Sri Lanka.

For the selection of a corpus of language, following the guidelines offered by (Ellis, 1995) samples of written assignments were collected from 60 students who are in the first and the second academic years of their degree programmes. These students were provided with the topics 'An Unforgettable Day in My Life' or 'My University Life' and asked to write on them in 200 to 250 words. They were given sufficient time to write (Ellis, 1997). They started with an outline, then a first draft and a final draft.

This highly objective and outcome-oriented investigation reflects negative L1 transfer/interference is not the major cause for errors in the English writings of Sinhala speaking undergraduates. This would enable the academic researchers, language teachers, linguists to build up a further discussion on errors of Sinhala speakers' English writing.

Key words: Errors, Undergraduates, Sinhala, Second Language, L1 Transfer

INTRODUCTION

‘Systematically analyzing errors made by language learners makes it possible to determine areas that need reinforcement in teaching’ (Corder, 1974).Error analysis is a type of linguistic analysis that focuses on the errors learners make. It consists of a comparison between the errors made in the Target Language (TL) and that TL itself. Corder (1967) is the ‘Father’ of Error Analysis. It was with his article entitled ‘The Significance of Learner Errors’ that EA took a new turn. He contended that those errors are ‘important in and of themselves.’ For learners themselves, errors are ‘indispensable,’ since the making of errors can be regarded as a device the learner uses in order to learn. Gass and Selinker (2001) defined errors as ‘red flags’ that provide evidence of the learner’s knowledge of the second language. Researchers are interested in errors because they are believed to contain valuable information on the strategies that learners use to acquire a language (Richards, 1974; Taylor, 1975; Dulay and Burt, 1974). Moreover, according to Richards and Sampson (1974) “At the level of pragmatic classroom experience, error analysis will continue to provide one means by which the teacher assesses learning and teaching and determines priorities for future effort.” Before 1960s, when the behaviouristic viewpoint of language learning was prevailing, learner errors were considered something undesirable and to be avoided. It is because in behaviourists perspectives, people learn by responding to external stimuli and receiving proper reinforcement. A proper habit is being formed by reinforcement, hence learning takes place. Therefore, errors were considered to be a wrong response to the stimulus, which should be corrected immediately after they were made.

This belief of learning was eventually discarded by the well-known radically different perspective proposed by Chomsky (1957). He wrote in his paper against (Selikner, 1989) that human learning, especially language acquisition, cannot be explained by simply starting off with a ‘tabula rasa’ state of mind. He claimed that human beings must have a certain kind of innate capacity which can guide learner through a vast number of sentence generation possibilities and have a child acquire a grammar of that language until the age of five or six with almost no exception. He called this capacity “Universal Grammar” and claimed that it is this very human faculty that linguistics aims to pursue.

According to Corder (1974), error analysis has two objectives: one theoretical and another applied. The theoretical objective serves to “elucidate what and how a learner learns when he studies a second language.” And the applied object serves to enable the learner “to learn more efficiently by exploiting our knowledge of his dialect for pedagogical purposes”. The investigation of errors can be at the same time diagnostic and prognostic. It is diagnostic because it can present us the learner’s state of the language (Corder, 1967) at a given point during the learning process and prognostic because it can inform course organizers to reorient language learning materials on the basis of the learners’ current problems.

As an English teacher, the researcher is well aware of the fact that the Sinhala speaking undergraduates in the Faculty of Social Sciences and Languages: Sabaragamuwa University of

Sri Lanka commit many errors in English writing.
The following quotation provides evidence.
William Wordsworth is Romantic poet. He is a nature lover. He use his experiences and uses beutiful image to create a these kind of poem. When we consider about poem 'I Wandered lonely as a colud' he visualizes the beauty of the nature. He not satisfy talking about nature. however he is believe neture can make a better world. Written by a Sinhala Speaking undergraduate - in Eng 121-2007 Semester I.

It is obvious that people communicate orally and/or in writing. "In spoken conversations with others, they make sense of the dialogue in a complex back-and-forth process of negotiation of meaning between speakers. In written texts, this back-and-forth negotiation is not possible. The sentence is written and it is read. Because there is no possibility of negotiating meaning of written documents, the inevitable problems of misunderstandings are exacerbated" (Penman, 1998). Hence, it is evident that writing is an intricate and complex task; it is the most difficult of the language abilities to acquire. Its level of difficulty varies between native speakers (NS) who think in the language used (in our case it will be English) and non-native speakers (NNS) who think in their own native language (in this case it will be Sinhala). While writing, non-native speakers have, in general, to think about all those rules they need to apply, rules that native speakers are supposed to have automatized. Therefore, non-native speakers are more prone to making mistakes and/or committing errors.

It is essential here to make a distinction between mistake and error; both Corder (1967, 1974) and James (1998) reveal a criterion that helps us to do so: it is the self-correctability criterion. A mistake can be self-corrected, but an error cannot. Errors are 'systematic,' i.e. likely to occur repeatedly and not recognized by the learner. Hence, only the teacher or researcher would locate them, the learner wouldn't (Selinker and Gass, 1994). And it is in this light that the researcher selected to focus on students' errors not mistakes.

Some of these students have been studying English for their whole lives and still, their errors are numerous. Hence, the researcher decided to conduct an error analysis- the best tool for describing and explaining errors made by speakers of other languages (Johanson, 1975) - in order to know the sources of these errors and the reasons behind their continued occurrence year after year with different groups of learners.

It is essential here to mention the fact that the language these students speak at home is mainly Sinhala, not English; hence, they are ESL students, however immersed in English they might be at school and at a university."To use two languages familiarly and without contaminating one by the other is very difficult" (Johnson, 1761).

Can this fact account for the problems? Is our undergraduates' native language (L1) 'contaminating' their English (L2)? If this were to be true, then the reason behind all those errors is Negative L1 transfer/Mother Tongue interference. 'And the best way to discover such a transfer is through error analysis' (Sridhar, 1980). However, can transfer alone justify all the errors made?

RESEARCH PROBLEM

"Is negative L1 transfer/interference the major cause for errors in the English writings of Sinhala speaking undergraduates?"

PROBLEM STATEMENT

Various researchers have concentrated on errors which demonstrate the influence of one's native language to second language acquisition. Before Corder's work, interference errors were regarded as inhibitory; it was Corder who pointed out that they can be facilitative and provide information about one's learning strategies. According to Hagège (1993) interference between L1 and L2 is observed in children as well as in adults. In adults it is more obvious and increases continuously, as a monolingual person gets older and the structures of his first language get stronger and impose themselves more and more on any other language the adult wishes to learn. In contrast, as regards children, interference features will not become permanent unless the child does not have sufficient exposure to L2. If there is sufficient exposure, then instead of reaching a point where they can no longer be corrected (as often happens with phonetics features), interference features can be easily eliminated.

This study focuses on errors in English essay writing of Sinhala speaking undergraduates in order to identify whether the L1 transfer is the major cause for errors in English writing of Sinhala undergraduates.

Rationale for the Study

"Very surprisingly there are few published descriptions of how or what children learn. (There... is) little about what mistakes the children made and how these can be explained, or what generalizations and learning strategies the children seem to be developing" (Richards, 1974).
After having reviewed the literature, the researcher noticed that no large scale investigation which involves Sinhala speaking undergraduates' who have been learning English since childhood as a second language, had been conducted. Consequence of that problems relating to the teaching of English as a second language of Sinhala speakers are continuously being discussed.

This sort of error analysis would really significant in three ways:

- to the teacher: they show a student's progress
- to the researcher: they show how a language is acquired, what strategies the learner uses.
- to the learner: he can learn from these errors.

This study would enable the academic researches, language teachers, and linguists etc. to build up a further discussion on errors of Sinhala speakers' English writing.

AIMS AND OBJECTIVES OF THE STUDY

To attempt to identify, describe and categorize errors in English essay writing of Sinhala speaking undergraduates and thereby make efforts minimize the difficulties encountered by them.

HYPOTHESES

Negative L1 transfer/interference is the major cause for errors in the English writings of Sinhala speaking undergraduates.

Negative L1 transfer/interference is not the major cause for errors in the English writings of Sinhala speaking undergraduates.

TYPE OF RESEARCH

This highly objective and outcome oriented investigation is based on a research question. In this cross sectional study different groups of learners who are offering English as a second language for their BA Degree, were examined

at the same time and the different learners were then be assumed to represent different stages of development.

Target Population

Selected Sinhala speaking undergraduates who are offering English as a second language for their BA (General) Degree at the Universities of Kelaniya, Peradeniya and Sabaragamuwa University of Sri Lanka.

It is evident that most of the students, who offer English as a second language for BA Degree of the above three universities, belong to the Upwardly Mobile Middle class. From infancy they have been exposed to an extensive use of Sinhala and frequent Code-Mixing involving a few English expressions. Their primary and secondary levels of educations have been in Sinhala. At the same time some have more opportunities to use the English language from their infancy than the students of Upwardly Mobile Middle class.

METHOD OF DATA COLLECTION

For the selection of a corpus of language, following the guidelines offered by Ellis (1995) a sample of written works were collected from 60 students who are in the first and the second academic years of their Degree programmes. They are taught English mainly by qualified instructors and lecturers.

These students were provided with the topics‘An Unforgettable Day in Your Life’ and ‘My University Life’ and were asked to write on it in 200 to 250 words. They were given sufficient time to write (Ellis, 1997). They started with an outline, then a first draft and a final draft.

RESULTS/DISCUSSION

Structurally different areas of the two languages involved would result in interference. Dulay and Burt (1974), Krashen (1982) suggest that there are two possible ways of describing the term 'interference'. One is from a psychological perspective, which suggests that there is influence from old habits when new ones are being learned. The second is from a sociolinguistic perspective which describes the language interactions which occur when two language communities are in contact. Nemser (1971) argues 'in creating Interlanguge (IL), learners sometimes make the L1 or L2 categories equivalent and sometimes they do not'.

The main findings of the study reveal that the negative L1 transfer/ interference is not only the cause for errors in the English writing of Sinhala speaking undergraduates.

However, as Larsen - Freeman and Long (1991) identified different language errors; free variation /non systematic variation, systematic variation, developmental errors, L1 interference in the interlanguage produced by non native speakers, Sinhala speaking undergraduates' English writing cannot be categorized only under negative L1 interference

Errors in Sinhala Speaking Undergraduates' English Writing

- Categorized under Larsen-Freeman's and Long's Classification

As revealed by the Figure 1, only 20% of the errors occur due to the influence of the L1 interference while majority of them (45%) can be identified as developmental errors.

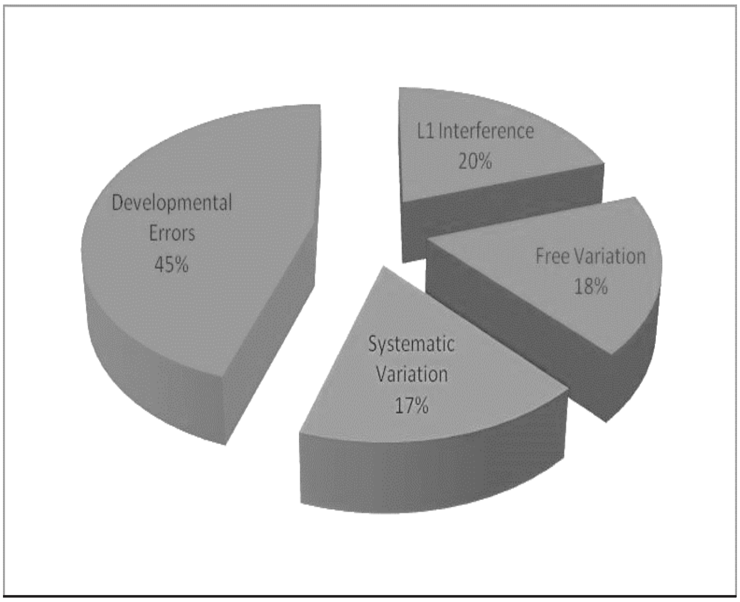

Figure :1 Errors in Sinhala speaking undergraduate English writing

Felix (1980) states an English learner of German uses the word "warum" to mean both "why" and "because". Felix points out that in Spanish or Greek, this one equivalent word does carry these two meanings. So his error would almost certainly have been identified as interference. Errors, Felix suggests, will always correspond to structures in some language. All of this suggest that while transfer seems to be a reasonable and logical explanation for some part of the nature and form of ILs, there are certain reservations that should be born in mind. Only certain structures or forms seem to be transferable from the L1 and the identification of these items is further complicated by the variables of context and the individual in question. SOV languages are generally seen to have pre posed rather than post posed adjectives.There is evidence and counter evidence of transfer in studies related to word order. Studies have focused on whether, for example, SVO L1s carry this pattern over into the L2. Rutherford (1986) **s**uggests that Japanese learners do not use their L1 SOV in learning English. McNeill (1979) in fact argues for the SOV pattern as being the basic, universal word order in L1 acquisition.
The following example taken from the sample of writing conveys the influence of the LI SOV over L2 acquisition.
Sri Lankan experience has directly influenced to use the phrases *temple priest (pansale hamudhuruwo)* for reverend and *one at home (gedhara kena)* for husband in the following

a) maʈə siduʋi:mə kaʋəda:ʋat amətəkəʋennenæ
I (s) the incident (o) never (adv) forget (v) (example)

Subject Object Verb
I never forget the incident. (correct)

b) ʋiʋe:kə ka:ləyətulə api krikət sellamkəʈa:
During the leisure
time (adv) we (s) cricket (o) play.(v) (example)

Adverbial Subject Object Verb
During the leisure time we play cricket. (correct)

c) antime:di api sa:dəyə saŋʋida:nəyəkəla:
Finally (adv) we(s) party (o) organized(v) (example)

Adverb Subject Object Verb
Finally we organized a party. (correct)

d) owun e:kəʈə kæmətyi
They (s) it (o) liked (v) (example)

Subject Object Verb
They liked it. (correct)

The following example taken from the sample of writing conveys the influence of the LI SOV over L2 acquisition.
Sri Lankan experience has directly influenced to use the phrases *temple priest (pansale*

hamudhuruwo) for reverend and *one at home (gedhara kena)* for husband in the following sentences produced by Sinhala speaking undergraduates . This is considered as a direct translation and it effectively shows the LI interference.

a) We went to meet the ***temple priest***.

b) She started to cry as the ***one at home*** died.

Since ‘be’ verbs and ‘helping verbs’ are not being used in Sinhala, the English learners of Sinhala have tendency to ignore them in their writing.

a) ohu bayəuna:
Subject adjective

He afraid (example)
He is afraid . (correct)

b) ape: ʋisʋəʋidya:ləyet ehemayi
subject adjective

Our university also same (example)
Our university is also same. (correct)

c) mamə satuʈu ʋenəʋa
subject adjective

I please (example)
I am pleased (correct)

d) mamə kutuhaləyəʈa patuna:
subject adjective

I confuse (example)
I am confused. (correct)

The order of a prepositional phrase in English is preposition and then the noun governed by the preposition but in Sinhala the order is the same the opposite.

ʈaməya gænə - Sinhala
about the child - English

“However, Sinhala speaking undergraduates are accustomed to use prepositions in clause level where prepositions are not required” (Ariyaratne, 2008)

a) **mamə e:gænə sæləkilləyomukəla:**
subject preposition verb

I it about considered

I considered about it (example)
I considered it (correct)

b) **eya: ohu gænə æhuva**
subject preposition asked

She him (from) asked
She asked from him (example)
She asked him (correct)

c) **mamə mage: visvavidya:ləyəʈə a:dərəyəkərənəva**
subject object love

I my university to love
I love to my university (example)
I love my university (correct)

At the same time Sinhala speaking undergraduates use inappropriate

a) api ekə pa:dam en igenəgatta
subject adverbial preposition verb

I was ill so I took medicine [correct]
Because I was ill I took medicine. (correct)

Sinhala has different types of negative makers (NM). Therefore the verb with NM has a free word order in sentence level in Sinha

Following the free word order of this kind the students simply transfer Sinhala sentence structure in to English in which the word order is not fixed and make the erroneous statements as follows:

a)	**eya:**	**bat**	**kanne**	**næ**	Present Tense
	subject	object	verb	NM	
	he/she	rice	eat	no	
	Nimal does not eat rice				
b)	**kanne**	**næ**	**eya:**	**bat**	
	verb	NM	subject	object	
	eat	no	he/she	rice	
	Nimal does not eat rice				
c)	**kanne**	**næ**	**bat**	**eya:**	
	verb	NM	object	subject	
	eat	no	rice	he/she	
	Nimal does not eat rice				

This incomplete application of rule makes it clear that the subjects are encountered a difficulty with the rule of insertion of auxiliary ‘do’ or ‘does’ with ‘not’ to form a negative in the Present Tense. As a result of that they simply add ‘no’ or ‘not’ before the verb in a negative.However, according Larsen-
Freeman and Long (1991) learner’s alternation between the two

forms *no* and *not* to express the same language function is considered as free variation as it does not co- relate with any environment factors and is unpredictable in similar linguistic environment.

It is the similarities, not the differences that cause the greatest problems. (Koutsoudas and Koutsoudas 1962) According to Wode (1978) ‘only if L1 and L2 have structures meeting a crucial similarity measure will there be interference, i.e. reliance on prior L1 knowledge.’

However, it is apparent that all other errors except the analyzed above cannot be categorized under L1interfernce.

Developmental errors are caused because of the learners’ efforts to build up hypothesis about the language from his limited experience in the classroom. Richards classifies these errors under various heads like, overgeneralization, ignorance of rule restrictions, incomplete application of rules and false concepts hypothesized.

Richards (1971) “refers to the learner’s competence at a particular time, as the transitional competence.”He says that the learner’s competence at a particular stage is full of what he calls as intralingual or developmental errors. These errors illustrate some of the characteristics of language acquisition. The learner’s competence is transitional because it keeps changing as long as the learner tries to improve his competence. If he stops learning his competence at a particular stage becomes his final grammatical competence.

These errors are systematic and are not caused by memory lapses, fatigue and the like. These errors occur repeatedly “from one year to the next with any group of learners” (Richards,1971**)**.

The following errors demonstrate three different developmental language errors in the sample of writing.

a) Father **leaved** the country after hearing the news.

b) Then I asked **where is the post office?**

c) I was **araid** and went to meet my **frinds.**

In the first example, the learner has overgeneralised the rule so *leaved* is used instead of *left.* The second also overgeneralises to embedded questions: Then I asked where is the post office? The third shows clear spelling mistakes. As discussed earlier all three are considered as developmental errors.

In short, language learning began to be seen as a process which involved the construction of an IL, a 'transitional competence' reflecting the dynamic nature of the learner's developing system. According to Larsen-Freeman and Long (1991) "the systematicty of IL consists of common developmental sequences within morpho-syntactic domain through which, with only minor variations, all learners seem to pass, regardless of age, native language or learning context." Wode (1981) was aimed at finding a universal sequence, true in essentials of all learners of all languages.

He suggested that learners go through five distinct stages of development:

1. Anaphoric sentence external: *"No"*
2. Non-anaphoric sentence external*: "No finish"*
3. Copula 'be': "*That's no good"*
4. Full verbs and imperatives with "don't": "You have a not fish" or "*Don't say something"*
5. "Do" forms: *"You didn't can throw it"* (Cook, 1991)

Studies suggest that learners from different L1 backgrounds do in fact follow the developmental order suggested by Wode. Larsen-Freeman and Long (1991) identifies another variation:Free Variation which does not correlate with any environment factors and is unpredictable in similar linguistic environment.
Mathews (1997) definition modified by Ellis (1999) Free variation can be held to exist, when two or more variability of the same linguistic variable are seen to be used randomly by individuals with regard to all of the following.

a) Same discourse context(s)

b) Same linguistic context(s)

c) Same situational context(s)

d) Same illocutionary meaning

e) Same planning condition

IL's seem to exhibit more variability than do native languages. For example, in the sample the adult Sinhala speaking undergraduates alternate between the forms to express the same language function.

a. My sister **no enter** the university

b. Faculty **not commence** the academic programme.

Initially, the variation in the use of these two forms is non systematic. That is the forms are used interchangeably with no apparent difference in meaning. This is considered as one source of variability with regard to the variable use of the two forms on negation, *no* and *not.*

"Learners tend to pass through stages as they acquire a particular syntactic rule or feature of the language. For example, learners acquiring negation in English as a second language begin by placing a negator in front of some sentence nucleus, such as *No+drink beer* for *I don't drink beer.* In a subsequent stage, learners place the negator within the nucleus: *I no drink beer* (here, don't may occur as a variant of no).Later, modals appear and the negator is attached to them. For many learners, however, the negated modal may be an unanalyzed unit, such as *I can't drink beer* or *I won't drink beer.* In the final stage, learners reach native like negation as the modal and auxiliary system comes under control." Larsen-Freeman and Long (1991.

According to Eisenstein and Madden (1982) adult ESL learners use *V-ing* and *simple verb forms* in a cross- sectional study in free variation, to express similar functions, (Giving me/ Give me the book etc.) It is almost certain that Sinhala speaking undergraduates' English writing indicates the learner's use of simple and progressive verb forms like:

a) Giving me what I asked for give me what I asked.

b) Taking steps to prevent… for take steps to prevent .

"There is another type of variation that may occur from the early stages- *Systematic Variation.* It is evidenced when two or more sounds/grammatical forms vary contextually. Some variation is linguistically based; some is sociolinguistically determined. While ILs are indeed synchronically variable, much of the internal inconsistency is not due to free variation, *systematic."* Larsen-Freeman and Long (1991)

In other words, at least part of the variability can be predicted and accounted for, as due to the effect of situation, linguistic context, degree of planning, or some other identifiable cause. The same learner on a given day may alternate between supplying and omitting definite /indefinite articles, between using plural NPs with and without a plural S allomorph.

It is evident that the sample of writing provides enough examples to show that the learner is not aware of the exact place where the indefinite/definite articles are used. Therefore the learners have overgeneralised the use of indefinite/definite articles'

a) I went (the)home and spoke to (the) Perera

Overgeneralization

b) The students meet at night to discuss the papers as usual but that (the)particular day they did not.

Overgeneraliz ation Larsen-Freeman and Long (1991) terms the situation expressed above *flooding.* According to him it is a process by which the use of a given linguistic form is generalized to all environment, which share one feature with the environment in which the form had previously being used.

At the same time the learner provides evidence for variation in the use andnonuse of the plural /s/ even on the same lexical item.
Examples from the sample are given below.
a) Sinhalese, Tamil(s), Muslim(s) and other ethnic group(s) study togetherin the university.
Plural NPs without a plural S allomorph.

a) Usually student(s) visit the temples situated around the university.

Plural NPs with and without a plural S allomorph.

b) I never forget what soldier(s) did at that moment especially they wantedto hit the innocent civilians.

Plural NPs with and without a plural S allomorph.

c) Everybody began to shout but the teacher(s) in the classes did not evenmove.
Plural NPs with and without a plural S allomorph.

CONCLUSIONS

It is evident that this highly objective and outcome oriented investigation reflects negative L1 transfer/interference is not the major cause for errors in the English writings of Sinhala speaking undergraduates.

REFERENCES

Ariyaratne, M. (2008) A Comparative Study of Word Order in Spoken Sinhala and English**.** Unpublished PHD thesis.

Chomsky, N. (1957) Syntactic Structures, Mouton and Co. http:www//.protile.mypace.com, Accessed on 30th of December 2007.

Cook, V. (1991) Second Languages Learning and Languages Teaching, London, Edward

Arnold. Corder, S.P. (1967) The Significance of Learners' Errors. Reprinted in J.C.Richards (ed.) (1974, 1984) Error Analysis: Perspectives on Second Language Acquisition. London: Longman, (Originally in International Review of Applied Linguistics, v. 5 (4), pp. 19 - 27.

Corder, S.P. (1974) Error Analysis. In J. P. B. Allen and S. Pit Corder (eds.) Techniques in Applied Linguistics (The Edinburgh Course in Applied Linguistics:3), London: Oxford University Press (Language and Language Learning), pp. 122-154.

Dulay, H. and Burt, M. (1974). You Can't Learn without Goofing. In Error Analysis. ed. J. C. Richards. London: Longman.

Eisentein, B. and Madden (1982) in Freeman, D.L and Long, M. (1991) An Introduction to Second Language Acquisition Research. New York: Longman.

Ellis, R. (1995) Understanding Second Language Acquisition. Oxford: Oxford University Press. Ellis, R. (1997) SLA Research and Language Teaching. Oxford: Oxford University Press.

Ellis, R. (1999) Theoretical Perspectives on Interaction and Languages Learning. Accessed on 8th of September 2009 from http:ll www.benjamins.com/egi-bin/t

Felix, S.W. (1980) The Effect of Formal Instructions on Second Language Acquisition, http:www.interscience.wiley, Accessed on 15th of January 2008.

Gass, S. and Selinker, L. (2001) Second Language Acquisition: An Introductory Course. Mahwah, NJ: LEA, chapter 3.2.

Hegège, C. (1993) The Language Builder (Current Issues in Linguistics Theory), John Benjamins Publishing Company.
James (1998) Errors in Language Learning, http:www//. linguistlist.org/issues. Accessed on 30th of December 2007.

Johanson, S. (1761) in Freeman, D.L and Long, M. (1991) An Introduction to Second Language Acquisition Research. New York: Longman.

Johanson, S. (1975) The Uses of Error Analysis and Contrastive Analysis I. English Language Teaching, v. 29 (3) pp. 246- 253.

Koutsoudas and Koutsoudas (1962) in Freeman, D.L. and Long, M. (1991) An Introduction to Second Language Acquisition Research. New York: Longman.

Krashen, S. (1982) Principles and Practice in Second Language Acquisition. Oxford: Pergamon Press.

L**arsen-Freeman, D. and Long, M. (1991)** An Introduction to Second Language Acquisition Research. New York: Longman.

Mathews (1997) in Freeman, D.L. and Long, M. (1991) An Introduction to Second Language Acquisition Research, New York: Longman.

McNeill (1979) in Freeman, D.L. and Long, M. (1991) An Introduction to Second Language Acquisition Research, New York: Longman.

Nemser, W. (1971) Approximative System of Foreign Language Learners. http:www// eric.ed.gov, Accessed on 30th of November 2007.

Penman, R. (1998) Communication and the Law, Communication Research Institute of Australia, CRIA http://www.communication.org.au/html/ paper_23.html.

Richards, J.C. (ed.) (1971) Error Analysis, Perspectives on Second Language Acquisition. London: Longman.

Richards, J. (1974) A Non-Contrastive Approach to Error Analysis. In Richards, J. (Ed.). Error Analysis: Perspectives on Second Language Acquisition, Essex: Longman, pp. 172-188.

Richards, J.C. and Sampson, P. (1974) The Study of Learner English, In J.C. Richards (ed.) Error Analysis, Perspectives on Second Language Acquisition, pp. 3-18. Rutherford, W. (1986) Grammatical Theory and L2Acquisition: a brief overview, University of California.

Selinker, B.F. (1989) Recent Issues in the Analysis of Behavior, Merill Publishing Co, Columbus, Ohio.

Selinker and Gass (1994) Second Language Acquisition, An Introductory Course, Lawrence Erlbaum, Associates, Hillsdale.

Sridhar, S.N. (1980) Contrastive Analysis, Error analysis, and Interlanguage, IN: J. Fisiak (ed.) Contrastive Linguistics and the Language Teacher. Oxford: Pergamon Press.

Taylor, B.P. (1975) The Use of Overgeneralization and Transfer Learning Strategies by Elementary and Intermediate Students of ESL, Language Learning, 25, pp. 73-107.

Wode, H. (1978) Developmental Sequences in Naturalistic SLA in E. Hatch (ed) Readings in Second Language Acquisition, Rowleg, M.A. Newbury House.

Wode, H.(1981) in D.L Freeman, and M. Long, (1991) An Introduction to Second Language Acquisition Research. New York

A STUDY ON INVESTMENT AVENUES OF MIDDLE CLASS FOLKS OF MUMBAI METROPOLITAN AREA

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ABSTRACT
An investment is an asset or item acquired with the goal of generating income or appreciation. Appreciation refers to an increase in the value of an asset over time. When an individual purchases a good as an investment, the intent is not to consume the good but rather to use it in the future to create wealth. Investment is the sacrifice of certain present value for the uncertain future reward and uncertainties / risk hence in the present study researcher has put an effort to understand different investment avenues of middle class people of Mumbai metropolitan area. For this researcher has collected primary as well as secondary data. The primary data has been collected from 50 respondents and secondary data from various articles published in journals. The present study found that, there are wide range of investment avenues available in the market but awareness is on lower side.

KEYWORDS: Investment avenues, middle class, investment, awareness of investment

INTRODUCTION

Investment is the surrender of certain amount of present value for a prospective reward. This involves making many choices like kind, blend, extent, rhythm etc. of investment and disinvestment. Furthermore, this decision-making has to be both continuous and logical. All in all, an investment decision involves balancing between risk and return. Every investment option is made at some point in time with personal investment objectives and taking into account the uncertain future. However, securities investments are reversible; so the goals for investing are temporary and the business environment fluid; hence reasoned expectations become rather weak as one regards a remote future. In view of new information, altered predictions as well as ends, security owners will want to occasionally reassess and reclassify their various investments too.

OBJECTIVES

1. To study the profile of middle class folks.
2. To understand awareness on different avenues available with middle class folks
3. To examine various source of investment avenues available with middle class folks.

REVIEW OF LITERATURE

Charkha, Sanket & Lanjekar, Jagdeesh. (2018)[1] have determined via the analysis of their study that investing is a sort of activity that people who need to save money perform. To put it another way, people invest the money they save. There are many other investment possibilities accessible, including mutual funds, banks, gold, real estate, post services, and much more. Investors constantly have a variety of goals and purposes in mind when they invest their money, including profit, security, appreciation, and stable income.

Rammya, B., & Rao, D. R. (2017)[2] It is worth noting that investment is an economic activity that involves the utilization of money saved in productive venture to generate reasonable income through taking it into account some level of risk rather than keeping it idle. The study aimed at determining the level of awareness and factors behind middle class workers' investments in private companies. This implies that middle class people have become independent enough to choose their investment vehicles for themselves and decide where, when, how much and how they will invest on these vehicles. Middle class has changed its attitude towards investing since they now regard money and investment as a source of pride and self-confidence which would warrant respect for them and finally enhance their standard of living.

PATEL, C. P., & PATEL, C. V. (2013)[3] discovered that investing is the use of money with the hope of earning a return. It is the commitment of money that has been set aside for future expenses in the hopes of reaping rewards. It is therefore compensation for waiting for money. Savings is thus the first step towards investing. Generally speaking, saving refers to setting money away, such as by depositing cash in a bank account or contributing to a pension plan. When used more broadly, the term "saving" often connotes cost-cutting, economizing, or saving someone or something.

T, HEMLATHA. M., & S, PAVITHRA. (2018)[4] has said that in order to avoid difficult circumstances at any point in their life, middle class people should begin to consider and comprehend the significance of money, savings, and its investing element. They must acquire the abilities to make financial plans. The middle class typically hoards cash rather than investing it. They frequently believe that this "idle cash" can be utilized to pay for jewelry, beauty salons, and other costs. Compared to professionals and business owners, salaried middle class employees have different investment patterns because they prioritize stability, tax savings, regular income streams, safety, and retirement benefits.

Mittal, D., & Aggarwal, N. (2017)[5] According to him, everyone has to be employed to earn money for their survival and other needs. People do different works. Some people do commercial activities while others may be involved in casual labour jobs or office jobs according to their needs. They are paid for what they do. They save their income. Everybody is saving his or her income with the intention of being able to invest in something better tomorrow. The investment is a portion of wealth that is laid aside for future profits by either buying securities or owning properties such as land buildings etc. Income from such an investment may take the form of interest, dividend, rent etc., as the case may be. Examples include fixed deposits, post office savings schemes, PPF bond, stocks and real estate among others. Investment however is not limited to males alone but females also take part in this activity. Equity shares happen to be chosen much more frequently by men compared with women who prefer real estate or fixed deposits among equity share, retirement planning and education/marriage expenses of children are some common objectives that prompt investors into making investments in these areas Men usually believe that they should go for capital appreciation because it will strengthen their wealth base when it comes time to retire or send kids to college/weddings SHUKLA, N. S. (2018)[6] demonstrates how the Indian middle class is currently actively involved in many spheres of society, including politics, media, science, technology, education, and achieving financial independence. The middle class has begun to actively invest their surplus funds in response to changing circumstances, though this is dependent on a number of factors, including their willingness to take on some risk, the influence of friends and family, and their willingness to explore new and cutting- edge investment opportunities. As a result, the study's conclusion shows that the working middle class makes investments in a variety of financial vehicles.

RESEARCH METHODOLOGY

Primary data were gathered through the use of questionnaires and in-person interviews. The respondents received the structured closed-ended and open-ended questions. In the chosen sample region, the researcher randomly selected fifty respondents. Each question on the questionnaire was personally discussed to the respondents to ensure that any issues they may have had were cleared, and 50 respondents were interviewed. Information gathered from books, publications, journals, and numerous internet downloads was incorporated in the secondary data. The study covers the entirety of Mumbai, from Borivali to Mumbai Central.

DATA ANALYSIS AND INTERPRETATION

Data analysis and interpretation on profile of the middle class respondents

Following analysis represents profile of the middle class respondents

1. Majority of respondents are from the age group 30-40 years i.e. 20 respondents (40%), 30 per cent respondents belongs from the age group of 22-30 years i.e. 15 respondents, 20 per cent from the age group of 40-50 years i.e. 10 respondents, 10 per cent belongs to the age group of 18-22 years i.e. 5 respondents. Hence the majority of the respondents belongs from the age group of 30-40 years i.e. 20 respondents.

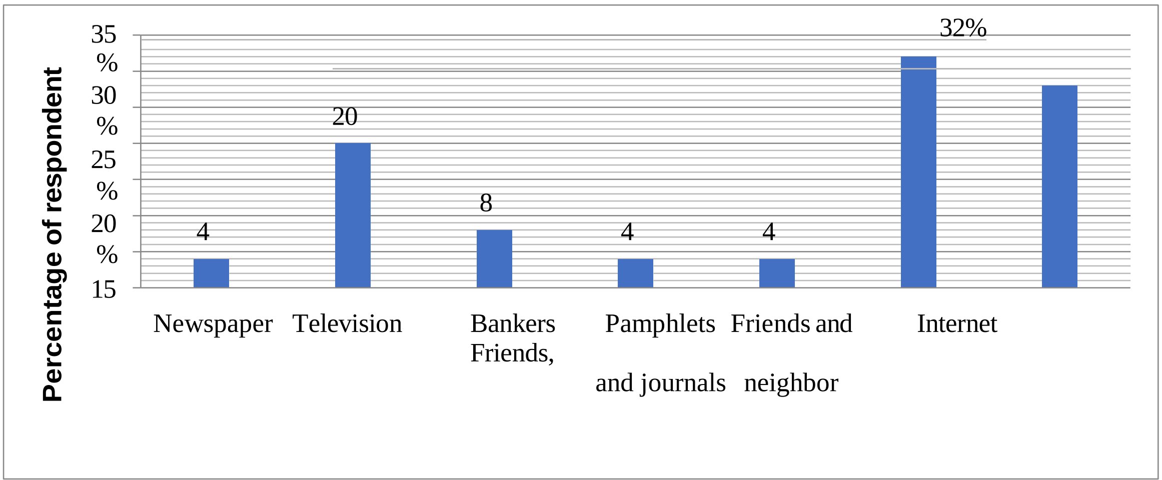
2. Majority of respondents are from the graduates and post graduates i.e. 22 respondents

(44%) and 12 per cent respondents belongs from the higher secondary i.e. 6 respondents. Hence the majority of the respondents belong from the graduates and post graduates i.e. 22 respondents (44%).

3. Majority of respondents are from service i.e. 21 respondents (42%), 38 per cent belongs from the professionals group i.e. 19 respondents and 10 per cent belongs from the student and self- employed group i.e. 5 respondents. Hence the majority of the respondents belongs from the service group i.e. 21 respondents (42%)

4. Majority of the respondents have 15000-25000 income i.e. 20 respondents (40%), 22 percent respondents have 25000-35000 income i.e. 11 respondents, 16 per cent respondents have 5000-15000 income i.e. 8 respondents, 12 per cent respondents have 35000-45000 income i.e. 6 respondents, 6 per cent respondents have 45000 and above income i.e. 3 respondents, 4 per cent respondents have 5000 income i.e. 2 respondents. Hence the majority of the respondents have 15000-25000 income i.e. 20 respondents (40%).

DATA ANALYSIS AND INTERPRETATION ON AWARENESS OF INVESTMENT AVENUES



The above graph reveals that majority of the respondents get awareness of investment from internet
i.e. 16 respondents (32%), 28 per cent respondents get awareness from friends, neighbor and internet
i.e. 14 respondents , 20 per cent respondents get awareness from television i.e. 10 respondents ,8 per cent respondents get awareness from bankers i.e. 4 respondents and 4 per cent respondents get awareness from newspapers, pamphlets and journals and friends and neighbor i.e. 2 respondents . Hence the majority of the respondents get awareness of investment from internet i.e. 16 respondents (32%).

DATA ANALYSIS AND INTERPRETATION ON ACTUAL AND PREFERED INVESTMENT AVENUES

INVESTMENT AVENUES	Actual		Preferred	
	No. of respondents	Percentage of respondents	No. of respondents	Percentage of respondents
Cash	30	60%	12	24%
Land	9	18%	20	40%
House	6	12%	13	26%
LIC	45	90%	50	100%
Medical Insurance	39	78%	32	64%
Home	18	36%	31	62%

Sources: Complied from questionnaire

Majority of the respondents invest in LIC preferred i.e. 50 respondents (100%) actual 45 respondents (90%), 78 per cent invest in medical insurance in actual i.e. 39 respondents and 64 per cent invest in medical insurance in preferred i.e. 32 respondents, 62 per cent respondent invest in home insurance in preferred and 36 per cent invest in actual i.e. 18 respondents and in , 60 per cent respondents invest in cash in actual i.e. 30 respondents and 24 per cent respondents invest in preferred i.e. 12 respondents and 40 per cent invest in land in preferred i.e. 20 respondents and in actual 18 per cent i.e. 9 respondents. Hence the majority of the respondents' invest in LIC preferred i.e. 50 respondents (100%) actual 45 respondents (90%).

CONCLUSION

This study focuses on middle class people's investing options in the Mumbai metropolitan area. An investment strategy is a plan designed to help an investor select the best possible investment portfolio that will enable them to reach their financial objectives in a specific amount of time. Investing can lead to greater overall economic growth and prosperity by boosting personal wealth. Investing is a procedure that assists businesses in raising funds through financial markets. Certain investment kinds have additional advantages for the investor, the company, and the community. Indian investors have many possibilities, but they are not well-versed in the various investing channels.

REFERENCES

1. Charkha, Sanket & Lanjekar, Jagdeesh. (2018). Research Paper - "A Study Of Saving And Investment Pattern Of Salaried Class People With Special Reference To Pune City (INDIA)".

2. Rammya, B., & Rao, D. R. (March - 2017). A Study On Investment Pattern And Behaviour Of Middle Class Employed In Private Companies In Bangalore. INDIAN JOURNAL OF APPLIED RESEARCH - ORIGINAL RESEARCH PAPER, Volume - 7(Issue - 3), issn - 2249-555x, 414-417

3. Patel, C. P., & Patel, C. V. (October, 2013). A Study Of Investment Perspective Of Salaried People (PRIVATE SECTOR). *Asia Pacific Journal of Marketing & Management Review*, *1*(2), issn 2319-2836, 136-146.

4. T, Hemlatha. M., & S, Pavithra. (July – Sept 2018). A Study On Savings And Investment Pattern Of Salaried Middle Class In Coimbatore District. *International Journal of Research and Analytical Reviews*, *5*(3), issn 2348 –1269, 143-148.

5. Mittal, D., & Aggarwal, N. (2017). Investment behavior of Working Middle class---A Study of Ludhiana district in Punjab. *International Journal Of Business Management*, *3*(1), issn no. 2349-3402, 2163-2170.

6. Shukla, N. S. (February 2018). A Study of Investment Preference of Working Middle class of North Gujarat Region. IJSART, 2(2), 2395-1052, 68-73.

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AN EMPIRICAL STUDY OF RENEWABLE ENERGY TECHNOLOGY ACCEPTANCE IN GHANA USING AN EXTENDED TECHNOLOGY ACCEPTANCE MODEL

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ABSTRACT

Energy consumption, and its impact on the environment, has become an increased focal point in Ghana, a sub-Saharan African country, following population growth and rapid urbanization. Ghana has high potential for renewable energy generation; nevertheless, low acceptance and usage have been found. An extensive study is required to understand the causes driving poor acceptability and the intentions to use renewable energy. This study aims to empirically investigate the acceptance of renewable energy using an extended technology acceptance model (TAM). A cross-sectional survey was conducted, from 1 February 2021 to 30 June 2021, using a self-administered questionnaire. The survey was carried out on Ghanaian adults of the age 18 years and above. Data was collected from 1068 respondents from Ghana's northern and southern parts and analyzed using partial least squares structural equation modeling (PLS-SEM) with SmartPLS software. The results of the data analysis reveal that environmental awareness is the biggest predictor of the intention to use renewable energy in Ghana. Perceived affordability was also found to be the most significant predictor of attitudes towards the use of renewable energy in Ghana. The findings of this research will give policymakers, manufacturers, and the providers of renewable energy appliances a better understanding of the factors that determine the intention to use renewable energy.

Keywords: renewable energy; technology acceptance model (TAM); cross-sectional survey; partial least squares structural equation modeling (PLS-SEM); environmental awareness; perceived affordability

INTRODUCTION

Energy is a critical topic that has been discussed extensively throughout human existence. Access to energy is essential for improving people's living standards and for contributing to social and economic growth [1]. Many fundamental human needs are met by energy, especially fire, mechanical strength, and light. Energy research has accelerated in response to the need to reduce carbon emissions [2]. A greater percentage of the energy consumed worldwide is derived from conventional nonrenewable energy resources, such as oil, gas, and coal. These sources of energy are known to contribute to climate and environmental issues due to increased greenhouse gas emissions [3]. In addition to the high growth rate of greenhouse gas emissions, existing energy supplies are insufficient to sustain human life. Experts have forecasted the depletion of oil and gas reserves for over a century [4–6]. According to the British Petroleum Statistical Review of World Energy, reports based on proven oil reserves estimate reserves of the world's oil at 1733.9 billion barrels. In 2019, global demand was estimated to be around 35.9 billion barrels. A simple estimate shows that if proven reserves do not rise, and demand remains stable at 2019 levels, it will take about 48 years, or sometime in 2067, to deplete those reserves [7]. This information makes it crucial to use clean energy sources and identify strategies to lower CO_2 [8].

Because of the high levels of pollution and emissions caused by the use of fossil fuels, most countries have prioritized the development of cleaner energy sources, such as renewable energy [4]. Governments have incorporated effective and sustainable renewable energy generation strategies into their national energy plans [9,10]. For an energy policy to be viable and successful, [11] asserts that it should have two primary priorities. The first priority is to improve access to affordable, contemporary sources of energy, and the second is to identify the right balance of energy resources and services to decrease the negative environmental consequences while ensuring long-term growth. Renewable technology has grown in popularity over the past few decades as a reliable and sustainable source of energy. Renewable energy is an integral part of everyday energy use and a promising area for future energy growth [12]. Renewable energy technology will save resources, satisfy energy demand, and achieve energy sustainability [13].

Furthermore, the production of green energies will protect the atmosphere and reduce carbon emissions [14,15], which is a vital step in dealing with potential climate change. Adequate, stable, and long-term energy is the fundamental guarantor of national economic growth and social development. Moreover, it is rational to make appropriate use of renewables to achieve cost-effective and efficient energy generation.

Ghana is currently grappling with low per capita energy use and increasing demand, resulting in tensions between the energy supply and economic growth [16]. Figure 1 shows that, in 2020, the country's entire energy supply reached roughly 12,038 ktoe, representing a yearly compounded growth rate of 3.3% from 2000 to 2020 [17]. Biomass accounted for the majority of the country's overall energy supply until 2011 when oil took over as the major source of energy supply. This change was a result of the commencement of the commercial production of oil in 2011. Oil has since been the primary fuel and an essential part of the Ghanaian economy. In 2020, oil production fell by 6.3% (from 71,440 thousand barrels to 66,927 thousand barrels) from the previous year due to the COVID-19 pandemic. This decrease caused a rise in the supply of biomass over oil, accounting for nearly 36% of the overall energy supply, with oil and natural gas accounting for 34% and 25%, respectively. Hydropower accounted for less than 10% of the total energy supply from 2000 to 2020. Natural gas became part of Ghana's energy

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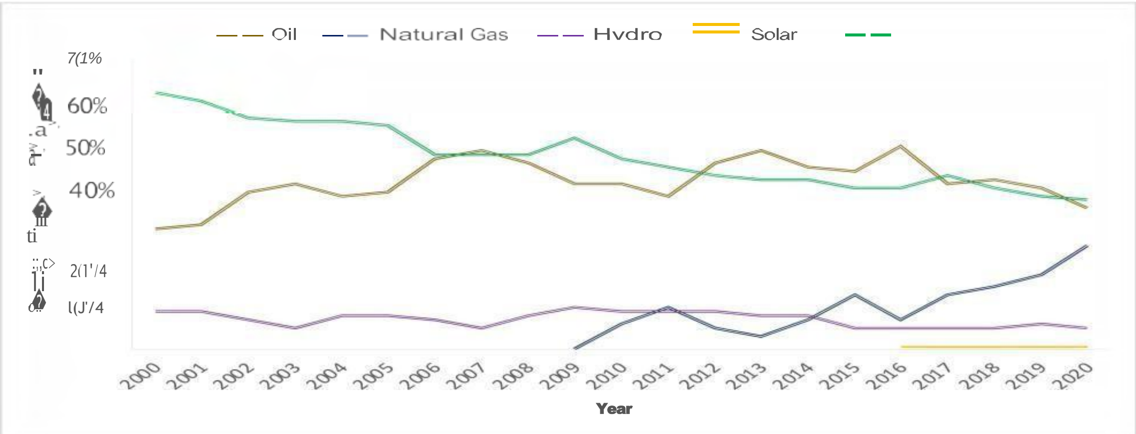
mix in 2010 and has increased consecutively from 13% in 2017 to 25% in 2020 (Figure 1). Ghana's natural gas imports from Nigeria fell over the years when commercial gas production started in 2014. In 2020, there was a remarkable increase of 72.2% in natural gas production, from 55.3 tBtu in 2019 to 95.2 tBtu in 2020. Solar energy contributes the least to the energy supply, with values of less than 1% from 2016 to 2020.

Figure 1.



Ghana's total energy supply by source.

Energy consumption data from the Ghana energy commission shows that the residen- tial sector consumed an estimated 3477 ktoe of energy in 2020 (Figure 2). From the year 2000 to 2020, the residential sector remained the top consumer of energy. The transport sector is the next largest consumer of energy, consuming 3293 ktoe of energy in 2020. Energy consumption in the transport sector increased significantly over the years and could rise above the residential sector in the next few years. In 2019, the transport sector accounted for 37% of total energy consumed and 38% in 2020, while the residential sector's consumption fell from almost 42% in 2019 to 40% in 2020 [17]. From 2000 to 2016, the industry sector consumed less than 1000 ktoe of energy until 2017, when industry con- sumption rose above 1000 ktoe. The service sector, agricultural sector, and the nonenergy use sector (comprises energy products that are used as raw materials in other industries, e.g., construction materials, lubricants, and fertilizers) have the lowest consumption. These three together accounted for only 7% of the total energy consumed.

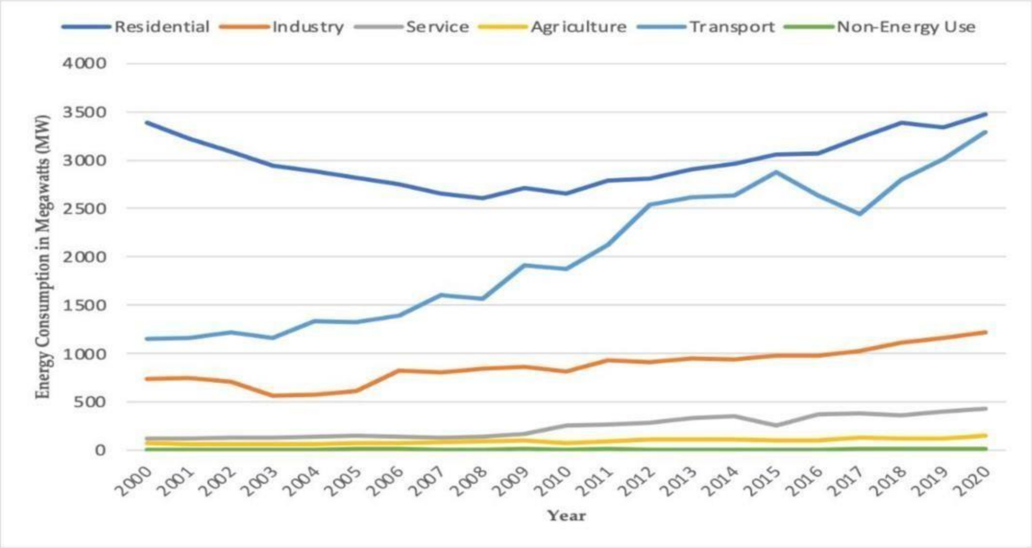


Figure 2. Energy consumption by sector (MW).

Ghana gets its power from hydroelectricity, thermal power plants powered by crude oil, natural gas and diesel, solar, and imports from Côte d'Ivoire. Ghana also exports power to Togo, Benin, and Burkina Faso [17]. The total installed capacity for existing plants in Ghana is 5288 (MW), consisting of 1580 MW hydro, 3649 MW thermal, and 59 MW renewables [17]. The total power generation from these energy sources for 2020 was estimated to be 20,170 GWh (hydro 36.2%; thermal 63.6%; and solar less than 0.3%). About 83% of the population has access to electricity, with 50% of the rural population, and 9% of urban inhabitants, connected to the national grid. A major obstacle to economic progress has been the lack of access to dependable power. As part of Ghana's efforts to achieve Sustainable Development Goal (SDG) 7, the government has pledged to provide universal access to electricity by 2030 [15,18–20]. There are concerns about Ghana's ability to fulfill the objective of having a dependable and sustainable electricity supply [18]. Governments have been unable to develop and implement a resilient and sustainable power infrastructure to fulfill the ever-increasing demand for electricity throughout the years. It is especially imperative for a low-middle income country like Ghana to assess population growth and increased industrialization with respect to the rise in electricity demand [18]. The power grid has been subjected to undue strain, especially because power production has been insufficient to satisfy rising demand. A comprehensive expansion of the power system is urgently needed to satisfy increasing demand while maintaining the optimal reserve margin required for the power system's secure service. In this regard, multiple generation extension projects in Ghana have been commissioned to increase generation capacity, using both traditional and renewable energy sources.

Despite the government's numerous regulations, actions, and initiatives, the number of renewable energy installations among Ghanaians remains relatively low [15]. Public interest in renewable energy, on the other hand, is increasing, since limiting the use of fossil energy and promoting the use of renewable energy have been identified as a way to mitigate climate change. Public awareness studies [21–24] have increased awareness and the need to use renewable energy. The demand for renewable energy is rising globally, making it imperative to understand users' attitudes and intentions towards renewable energy. Several acceptance studies have been conducted using varied methods to explain users' attitudes and their intentions to use renewable energy [25–29]. Most of these studies find some level of acceptance of renewable energy. Agyekum et al. [29] found a general level of acceptance of renewable energy in Ghana, with varying acceptance levels among different individuals. Ahmad et al. [26] reveal that attitude, perceived ease of use, and perceived usefulness have a significant impact on the intention to use solar photovoltaic technology in Malaysia. Harrouz et al. [28] conducted a survey on the social acceptance of renewable energy in Algeria, and their results show a high level of acceptance. In another study conducted by Al- Fatlawi, Saidur, and Rahim [30] in Malaysia, it was found that there is a good level of acceptance of solar photovoltaic energy, even though many people did not know the benefits of using the solar photovoltaic system. Nkundabanyanga et al. [31] used ordinary least squares (OLS) to analyze the survey data of 199 households collected from two districts in Uganda. They found that the social acceptance of renewable energy in Uganda is significantly related to the perceived low vulnerability of energy systems and environmental opportunities and threats [26].

To the best of our knowledge, none of the studies on the acceptance of renewable energy have added environmental awareness and perceived affordability to the technology acceptance model (TAM) to investigate the determinants of the intention to adopt renewable energy in Ghana.

This research empirically investigates the determinants of the intention to use renew- able energy in Ghana with an extension of the TAM by including environmental awareness and perceived affordability. Ref. [32] agree that the explanatory power of the technology acceptance model can be increased in a specific context by incorporating relevant variables in the model. This research will aid policymakers, renewable energy providers, and sup- pliers in better understanding the factors that influence the intention to adopt renewable energy in Ghana.

The rest of the paper is divided into seven sections: Section 2 discusses Ghana's renewable energy; Section 3 presents the theoretical framework and hypothesis of the research; Section 4 presents the methodology; Section 5 shows the results of the empirical analysis; Section 6 discusses the results and findings; Section 7 concludes the paper; and Section 8 states the paper's limitations.

Ghana's Renewable Energy

Ghana has significant, yet under-exploited, renewable energy sources. These include bioenergy, solar, wind, and hydropower [20]. The Ghanaian government has recognized renewable energy as one of the possibilities that can contribute to the total energy supply mix while minimizing the negative environmental consequences of energy production. As part of Sustainable Development Goals (SDG) 7 and 13 targets, Ghana released a Renewable Energy Master Plan in 2019, intending to increase Ghana's installed renewable energy generation capacity to about 2500 MW by 2030. It is critical for Ghana to tap into the vast availability of renewable energy sources to achieve sustainable growth. Energy from renewable sources is important for energy conservation and environmental preservation. Indeed, recent renewable energy programs and initiatives have proven to have great potential in significantly reducing poverty and promoting the country's socioeconomic growth, especially in rural areas. According to Arthur et al. [33], most of the current renewable energy projects in the country are being implemented by the government as new initiatives or on a short-term basis, with low private sector participation. As a result, there is no obvious integrated strategy for the long-term development and promotion of the country's various renewable energy resources [33].

Renewable energy generation capacity increased from about 1656 MW in 2019 to 1663 MW in 2020 [34]. In 2020, 95% of the renewable energy generated was from hy- dropower, and the remainder was from solar and biogas. As illustrated in Figure 3, renewable energy generation has not grown much over time, and the share of renewable energy in electricity generation has also fallen successively. The percentage of renewable energy in total electricity generation fell from 55% in 2011 to 32% in 2020. The various sources of renewable energy in Ghana are discussed below.

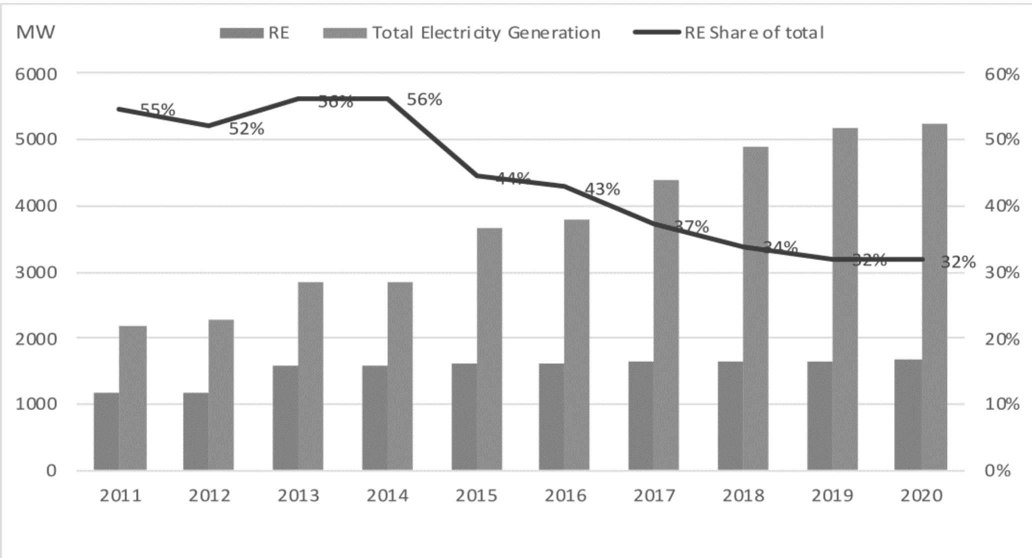


Figure 3. Ghana's renewable energy generation capacity.

Hydropower

Hydropower has played a major part in Ghana's electricity generation. Hydropower in Ghana has an installed capacity of 1580 MW, and a dependable capacity of 1400 MW [17]. Ghana has considerable hydropower capacity, which generated about 36.2% of the coun- try's electricity in 2020. Because of decreasing reservoir levels, hydropower output has decreased in recent years. It is, therefore, unable to generate sufficient power to supplement thermal energy output. Thus, current energy shortages have resulted in nationwide power outages [16]. Despite the potential of big and small hydropower, hydropower generation remains underexploited.

Ghana's hydropower is generated from three large hydroelectric dams (the Akosombo, Kpong, and Bui Dams), and one recently constructed small hydroelectric dam (the Tsatsadu Generating station). While hydropower has proven to be a dependable and clean source of energy, the construction of hydroelectric power plants has created many environmental and social problems. For example, the construction of the Akosombo Dam displaced 80,000 people, increased flooding, and caused a loss of fertility in the surrounding land leading to a reduction in farming activities and aquatic habitats [35]. Since the construction of the Kpong Dam, bilharzia has been a major health issue in the region [36]. The Bui Dam project flooded Bui National Park, home of the black hippopotamus in Ghana, and made the people around the area prone to waterborne diseases due to the change in water temperature and pollution [35,36].

Ghana is committed to producing more environmentally friendly hydropower and has already taken some steps to generate hydropower that does not affect biodiversity. During the construction of the Tsatsadu Generating Station (TGS), the Bui Power Authority (BPA) reported that the plant has no negative consequences on the environment. To ensure further environmental benefits, an afforestation program has been implemented, and trees are planted on the site of the Tsatsadu Generating Station to protect the banks of the river against siltation, sedimentation, erosion, nitrogen, and phosphate loads [37]. The afforestation program is expected to mitigate the effects of climate change and reduce the effects of hydropower generation on biodiversity.

Despite being one of the most widely used renewable energy sources in Ghana, hydropower is mostly used to supply energy to the national power grid. Because of the obvious relatively high cost of constructing and generating hydroelectricity, hydropower plants are controlled mainly by the government for transmission to the national power grid. The development of small hydropower plants for power supply in rural areas is still limited because of the dispersed settlement patterns and low economic activity in rural areas.

Solar Energy

Solar photovoltaic (PV) tends to be the second-highest electricity output from renew- able sources in Ghana, after hydropower. Because of its dependability, solar PV is becoming the most popular energy source in households, particularly for electric gadgets. Ghana has substantial solar power potential. This is due to Ghana's proximity to the equator, the enormous availability of sunshine throughout the country, and the potential growth in electricity use in rural communities that now lack a consistent electricity supply. The northern part of Ghana receives the most irradiation each year. The daily sun irradiation in Ghana is between 4 and 6 kWh/m2. Every year, the sun shines for 1800 to 3000 h on average [38–40]. According to the Ghana Energy Commission, over 38,200 off-grid solar systems, including lanterns, and 25 grid-connected solar systems, with a total installed capacity of 8 MW, have been installed in 120 communities [41].

Ghana only had 64 megawatts of solar generation capacity by the end of 2019, but by the end of 2020, the government had installed a 5-megawatt floating solar photovoltaic system on the Bui Hydroelectric Dam's reservoir. The 5-megawatt prototype photovoltaic system is the first phase of a 250-megawatt floating photovoltaic project that will be built in 50-megawatt units. The solarproject was connected to the transmission system of the Chinese company Sinohydro's 404 MW Bui hydropower dam, which was completed in 2013. The Bui Power Authority (BPA), a corporation established in 2007 to run the dam, is developing the huge floating PV project [42].

Solar PV's initial cost is a key barrier to acceptance and extensive use, particularly in rural parts of the country. Because of the unreliability of the national grid in rural parts of the country, solar powered mini-grids have been installed in selected rural communities in Ghana with funding from the World Bank [43]. These mini-grids have provided these communities with economic benefits and also sustainable electricity supply systems. Solar mini-grids have a promising future for Ghana's energy sector, not just in terms of increasing access to energy, but also in terms of promoting the use of renewable energy which has a direct impact on achieving the Paris Agreement's Sustainable Development Goals (SDGs) of increasing access to cleaner sources of energy (SDG 7), and inclusive and sustainable economic growth (SDG 8). Solar energy is used chiefly for streetlights and lamps in homes. Solar energy is projected to become more widely used to satisfy the energy requirements for heating, drying farm produce, pumping systems and irrigation, and other applications.

Biomass Energy

Biomass has been the most prevalent type of renewable energy used in developing countries and is one of Ghana's most abundant and used energy sources [20,44]. In Ghana, energy from biomass is from charcoal, firewood, and others, such as sawdust and sawmill residue [40]. Most waste products, except for firewood, are never turned into energy. Biomass energy resources constitute around 20.8 million hectares of Ghana's 23.8 million hectares of landmass, accounting for about 36% of the country's total energy consumption in 2020 [17]. Due to increased fossil fuel use, the percentage of biomass in the sources of energy in Ghana has been progressively declining [16]. According to the energy commission, the quantity of wood used for firewood has declined since 2000. A slight increase was seen in 2020, from 1418 ktoe to 1438 ktoe. In contrast, the wood used for charcoal production increased at an average annual growth rate of 4.8% from 2000 to 2020. In 2020, 65.67% of the total wood supply was used for charcoal production, up from 28% in 2000.

Biomass is usually generated in rural areas and offers a convenient and viable alterna- tive to grid power. This is due to the fact that the resource is easily accessible in Ghana's rural communities. Large amounts of biomass, in the form of firewood and charcoal, are used in most rural Ghanaian households for domestic purposes, such as cooking and light- ing [16,45]. However, in urban areas, the type of biomass needed is mostly determined by the energy conversion process and the form in which the energy is required. For example, charcoal is used as an excellent alternative to liquid petroleum gas for cooking, which in many ways offers higher outputs to replace traditional fossil- based energy sources [46]. The development and use of renewable energy and waste-to-energy resources have the prospect of ensuring Ghana's energy stability while mitigating the harmful effects of cli- mate change. Even while biomass offers a significant quantity of energy in the long term, it causes deforestation and harms the ecology. In this context, Ghana needs to find alternative methods of producing biomass without chopping down trees.

Wind Energy

According to Sun, Khan, and Bashir [47], Ghana is yet to connect wind energy to the national grid in an official capacity. The Ayitepa upwind farm near Accra is the only wind farm under development, with a nameplate capacity of around 225 MW when finished. It contains 75 turbines, with a maximum height of 140 m [47]. Between 2002 and 2005, the United Nations Environment Program (UNEP) financed research on the potential of wind energy in Ghana. The famed US institution, the National Renewable Energy Lab (NREL), partnered with the Ghana Energy Commission and the Meteorological Service to analyze Ghana's wind power potential on and offshore. The study was called the Solar and Wind Energy Resource Assessment (SWERA). The study revealed that there is a 413 km square region with good-to-excellent (Class 4–6) wind resources that could sustain slightly more than 2000 MW of wind power, and if moderate-to- excellent wind resources are added, that could increase to 5640 MW. The highest amount of energy that might be extracted from the country's available wind potential for electricity is projected to be 500–600 GWh per year [48]. According to the Ghana Energy Commission, wind energy can significantly contribute to the country's energy mix, with 10% of installed capacity and about 5% of total electricity generation potential coming from wind energy.

Pertaining to the continuing talks regarding renewable energy in Ghana, it is clear that the willingness to use renewable energy exists and that the required energy is accessible. Setting up the equipment for electricity generation for many families and businesses via solar energy, biomass, wind, or water requires careful consideration on where to place the power plants, turbines, panels, and mills. Given the high level of mismanagement and inadequate resources, financing this environmentally friendly technology and eventually providing people with power would most likely be difficult. The Ghana Energy Commis- sion, with funding from the United Nations Environment Program (UNEP), is already conducting the initial phase of surveying different regions for different sorts of potentials for on and offshore wind energy.

THEORETICAL FRAMEWORK AND HYPOTHESIS

Scholars have developed several models in their quest to understand the factors that influence consumers' acceptance of technology [26]. These models have been validated several times to establish their suitability for a wide range of information technology-based applications [49]. The technology acceptance model (TAM), created by Davis [50], is the most well-established and fundamental framework for technology acceptance [49]. The TAM is the most widely adopted model in technology acceptance research studies [51–54]. The TAM originated from the combination of the theory of reasoned action (TRA) and the theory of planned behavior (TPB). The TRA and the TPB are comprehensive theories of behavior, and the TAM extends these two theoretical predecessors to explain the factors that determine users' acceptance of a wide range of technologies [55].

The TAM, according to Ducey and Coovert [56], shows that an individual's attitude toward a type of technology or innovation, and their subsequent desire to adopt that technology, are greatly influenced by their views about the perceived usefulness and the perceived ease of use of that technology. Azjen and Gilbert Cote [57] are of the view that a person's attitude toward technology constitutes one of the biggest determining factors of that person's intention to use that technology. The TAM, in particular, uses the intention to adopt technology as a dependent variable to determine the degree to which a technology is used. The dependent variable, "intention to adopt technology", which is affected by the user's attitude toward technology, is split into two categories: perceived usefulness and perceived ease of use [58].

Perceived usefulness was initially defined by Davis, Bagozzi, and Warshaw [59] as "the extent to which a person believes that utilizing a specific system will improve work performance". Perceived ease of use, on the other hand, was defined as "the degree to which a person believes that using a particular system would be free of effort" [59]. The technology acceptance model strongly asserts that the intention of users to adopt new technology is highly dependent on the perceived ease of use of the technology [60]. According to Davis [61], perceived ease of use has a direct effect on perceived usefulness, but perceived usefulness does not affect perceived ease of use. Discussing the ease of use of renewable energy from a technological viewpoint, Bandar and Amarasena [62] argued that perceived ease of use is affected by consumers' opinions about installation, frequent usage, maintenance, and the recycling of new technology.

According to [63], attitude is the most important predictor of a person's intentions or behaviors Fishbein and Ajzen [64] defined attitude as an individual's negative or positive feelings toward the behavior in question. The original TAM incorporates attitude as a mediator in the model according to Fishbein and Ajzen's attitude theory. In their works, Fishbein and Ajzen [64], Ducey and Coovert [56], and Verma et al. [63] have agreed that perceived usefulness and ease of use are significant predictors of attitude. The following hypotheses were developed from the original version of the TAM and are shown in Figure 4.

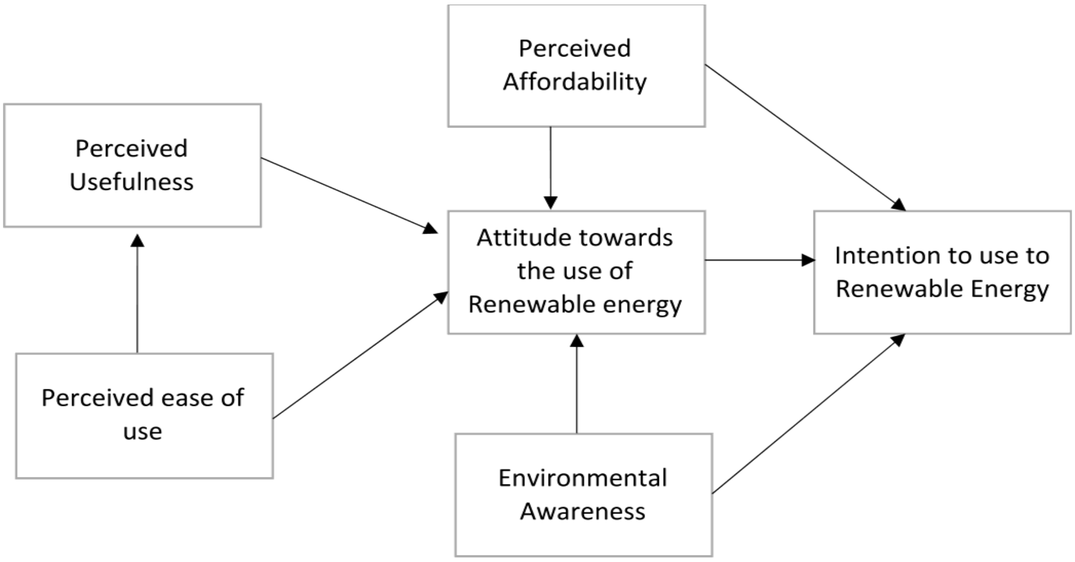


Figure 4. The framework of the study

H1. Attitude has a significant positive effect on the intention to use renewable energy.

H2. Perceived usefulness has a significant positive effect on attitude towards using renew- able energy.

H3. Perceived ease of use has a significant positive effect on attitude towards the use of renewable energy.

H4. Perceived ease of use has a significant positive effect on the perceived usefulness of renewable energy.

Extension of the TAM Model

Numerous studies have raised concerns about using the technology acceptance model (TAM) to describe users' intentions to use new technology. Adnan et al. [65], and Verma et al. [63], have argued that the TAM may be expanded to incorporate new constructs and variables that might enhance the model and increase its explanatory power. According to King and He [66], the original TAM is an objectively basic model that may be updated or expanded in many directions, despite its empirical validity and efficacy as an important and robust predictive model for understanding and explaining varied behaviors.

MATERIALS AND METHODS

For this study, a cross-sectional survey design using self-administered questionnaires was employed. The research was carried out between 1 February 2021, and 30 June 2021. The questionnaire included 36 questions consisting of two sections. Section One included questions about the participants' basic demographic data, such as gender, age, level of education, employment, average yearly income, and where they are in Ghana. Section Two included questions for the study model's constructs (perceived ease of use, perceived usefulness, attitude, perceived affordability, environmental awareness, and intention to use). To quantify the responses of the measured variables, a five- point Likert scale was used to collect responses on the level of agreement to the statements from between strongly disagree (1) to strongly agree (5). The questionnaire was created using a review of the available literature on technology acceptance research and renewable technology studies. A pilot study with 80 randomly chosen Ghanaian adults was undertaken to verify the questionnaire's efficacy—questionnaires obtained from the pilot research aided in increas- ing its effectiveness with certain context-specific changes. The data came from a nationwide survey of Ghanaians aged 18 years and above. A random stratified sampling approach was used in the investigation. The country was divided into two sections: southern andnorthern. As a result, while choosing respondents for the survey, a proportional to size sample method was used to determine the number of respondents to be selected from each section. All participants were allowed to sign a formal consent form outlining the aim of the study, as well as assurances of confidentiality and data protection.

Data Analysis

The data from the questionnaire were edited, coded, and entered into the computer using the Statistical Package for Social Scientists (SPSS) and Smart PLS 3.0. Data will be categorized and tabulated to address the objectives of the study. The data gathered from the survey were further evaluated using partial least squares (PLS). Because of its soft modeling assumptions, the PLS method for SEM is becoming more popular for estimating large complex models [67]. PLS-SEM is used mainly because this research seeks to uncover the key determinants of renewable energy adoption for success. While PLS-PM, as a data estimation technique, is prone to errors, it gives data-driven insights into causation and magnitudes.

Nonetheless, because PLS-SEM was used because the observations are adequate, as evidenced by their psychometric characteristics. The PLS model is made up mainly of structural and measurement models. Internal reliability and validity measurements are used to analyze the structural model. After analyzing the structural model, the PLS method uses t-testing and path values to validate the hypothesis. The PLS-SEM analysis was used to experimentally evaluate the conceptual framework and validate the hypothesized relationships between the constructs [68].

RESULTS

Out of the 1200 questionnaires administered, 1068 were retrieved, giving a response rate of 89%. Some respondents did not return the questionnaires, and a few of them returned them with inconclusive results. This resulted in the inability to add the remaining 132 questionnaires to the analysis. However, all 1068 respondents willingly filled out the questionnaire independently, or with a bit of assistance, and returned them

Table 1. Demographic Data.

Demographic		Frequency	Percentage
Male		556	52.1%
Gender	Female	501	46.9%
Other		11	1%
18–25		171	16%
26–33		460	43.1%
Age	34–41	235	22%
42–49		116	10.9%
50 and above		86	8.1%
Junior high		54	5.1%
Senior high		137	12.8%
Level of Education	Bachelor	238	22.3%
Master		482	45.1%

PhD or higher		136	12.7%
Unemployed		97	9.10%
Student		289	27.10%
Occupation Self-e Public Servant	Employed	203 267	19% 25%
Civil servant		154	14.40%
Other		58	5.40%
1000–10,000		278	26%
10,001–20,000		406	38%
Average Yearly Income	20,001–30,000	160	15%
30,001–40,000		117	11%
40,0001–50,000		66	6.20%
Above 50,000		41	3.80%

Demographic data revealed that males outnumbered females in the research

As shown in Table 1, the male respondents represented 52.1 % of valid responses, and the females represented 46.9%. We grouped the age structure because of the sensitivity around asking people their ages. We wanted to make the respondents comfortable answering this question. The age demographic showed high participation among the young people. More than 50% of respondents were in the 18– 25 and 26–33 years age groups. The 26–33 years age group was represented the most, by 43.1%. The results on the level of education of the respondents are competitive between master's and bachelor's degrees. More than 65% of respondents either had a master's or a bachelor's degree. Respondents who had a junior high and senior high education were only 5.1% and 12.8%, respectively, and 12.7% of respondents had a PhD or higher. They were 27% students, 25% public servants, and 19% civil servants, and most respondents had a yearly income of from 10,001–20,000 Ghana cedis (38%), with 43% from the northern part of Ghana, and 53% from the southern part of Ghana.

1.2. *Measurement Model*

Cohen [69] recommends that, when testing for construct validity, the scale be exam- ined using convergent, discriminant, and nomological validity tests. We used composite reliabilities, Dijkstra- Henseler's rho (RhoA) and Cronbach's alpha, to measure reliability. Composite reliability measures the internal consistency of the items on the scale. The re- sults in Table 2 show that the composite reliability, RhoA, and the Cronbach's alpha values are above 0.7. This means that all of the constructs in this study's measurement items are accurate [70,71]. The same table also indicates that all average variance extracted values for all constructs are greater than 0.50. The resulting factor loading for each construct passes the minimum prerequisite requirement of 0.7 for the convergent validity test to pass [68].

Table 2. Construct Reliability and Validity.

	Loadings	Cronbach' Alpha	RhoA	Composite Reliability	Average Variance Extracted (AVE)
	0.778				
	0.780				
ATT	0.757	0.848	0.849	0.891	0.622
	0.807				
	0.819				
	0.733				
	0.798				
EW	0.820	0.860	0.864	0.899	0.641
	0.853				
	0.794				
IU	0.768	0.825	0.825	0.877	0.589
	0.802				
	0.790				
	0.726				
	0.749				
PA	0.768	0.820	0.823	0.874	0.582
	0.802				
	0.790				
	0.792				
	0.802				
PEOU	0.779	0.856	0.857	0.897	0.634
	0.839				
	0.768				
	0.788				
	0.827				
PU	0.844	0.852	0.853	0.895	0.631
	0.820				
	0.680				

ATT = attitude; EW = environmental awareness; IU = intention to use; PA = perceived affordability; PEOU = per- ceived ease of use; PU = perceived usefulness.

We also tested for discriminant validity to check if the measurements that are not anticipated to be related are, in fact, unrelated. The results of the discriminant validity test are shown in Table 3. The square root of the average variance extracted for each construct should be greater than its highest correlation with any other construct, according to the Fornell-Larcker criterion [72–75].

Table 3. Discriminant Validity.

	ATT	EW	IU	PA	PEOU	PU
ATT	0.789					
EW	0.680	0.801				
IU	0.710	0.740	0.768			
PA	0.675	0.712	0.584	0.763		
PEOU	0.523	0.770	0.464	0.746	0.796	
PU	0.674	0.655	0.717	0.730	0.697	0.794

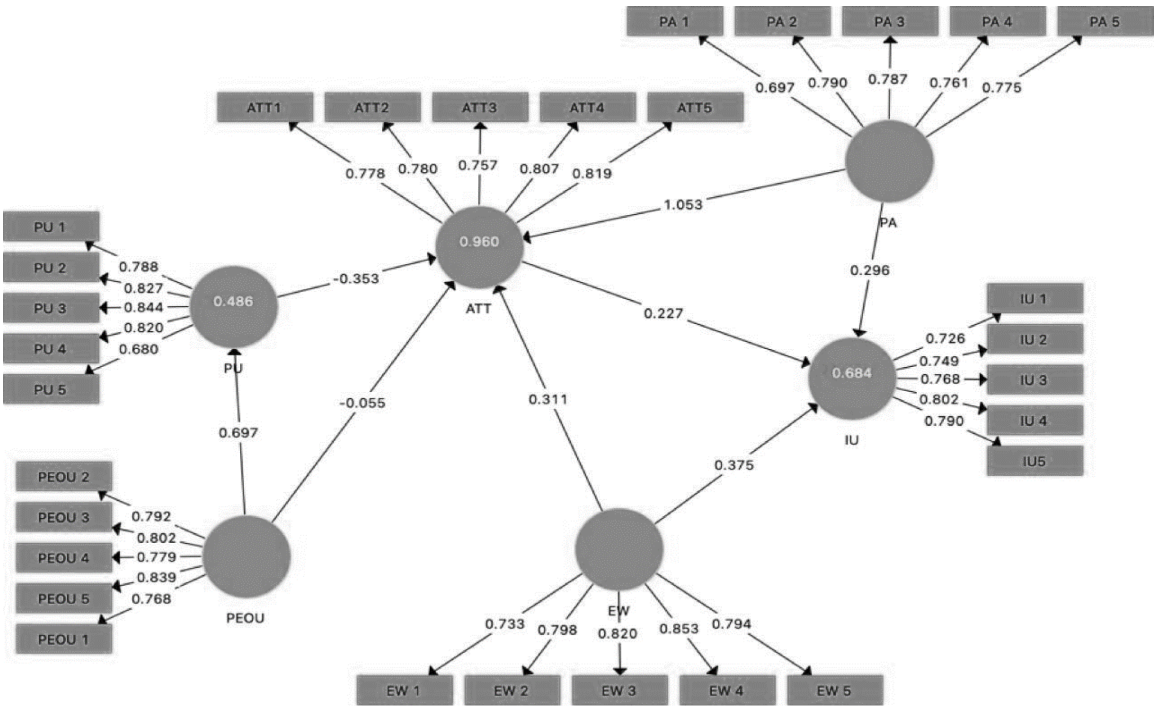
ATT = attitude; EW = environmental awareness; IU = intention to use; PA = perceived affordability; PEOU = per- ceived ease of use;
PU = perceived usefulness.

1.3. *Structural Model*

Relationships were evaluated in the structural model (Figure 5) using Smart PLS 3.0. The model used for this study had three endogenous variables and three exogenous variables.

The values of the R^2 (coefficient of determination) and path coefficients were to draw the statistical inference. Validation of the data for the hypothesized model is enhanced by the values of R^2 and the path coefficient. The structural model helps to determine the relationship between unobserved constructs [76].

Figure 5. Structural Model.



The output generated by the structural model for the correlations between the con- structs of the hypothesized model are presented in Table 4 and Figure 5, with the values of all path coefficients and R^2. The results imply a significant positive effect of all the factors toward the intention to use renewable energy. All the hypotheses are accepted and have a high level of statistical significance. Attitude has a positive significant influence on the intention to use renewable energy (H1: β = 0.227, *p* = 0.016). PU and PEOU have a positive significant effect on ATT (H2: β = 0.353, *p* = 0.000: H3: β = 0.055, *p* = 0.000), PEOU has an effect on PU (H4: β = 0.697, *p* = 0.000), while PA has a positive and significant influence on IU (H5: β = 0.296, *p* = 0.002: H6: β = 1.053, *p* = 0.000). At the same time, EW had a positive influence on ATT and IU as well (H7: β = 0.375, *p* = 0.000: H8: β = 0.311, *p* = 0.000). The results also reveal that attitude towards the use of renewable energy, environmental awareness, and perceived affordability accounted for 68% of the variance in the intention to use renewable energy. The combined effect of perceived usefulness, perceived ease of use, environmental awareness, and perceived affordability explains the 96% variance in attitude towards the use of renewable energy, and 49% of the variance in PU was explained by PEOU.

Table 4. Hypothesis Testing.

Hypothesis	Value Status	Path	Coefficients	Statistics	Probability
H1	ATT ⇒ IU	0.227	2.424	0.016	Accepted
H2	PU ⇒ ATT	0.353	13.630	0.000	Accepted

H3	PEOU ⇒ ATT	0.055	3.997	0.000	Accepted
H4	PEOU ⇒ PU	0.697	19.631	0.000	Accepted
H5	PA ⇒ IU	0.296	3.149	0.002	Accepted
H6	PA ⇒ ATT	1.053	18.275	0.000	Accepted
H7	EW ⇒ IU	0.375	14.555	0.000	Accepted
H8	EW ⇒ ATT	0.311	10.802	0.000	Accepted

ATT = attitude; EW = environmental awareness; IU = intention to use; PA = perceived affordability; PEOU = perceived ease of use; PU = perceived usefulness.

1.4. *The Effect Size*

The effect size [77,78] is a measure of the intensity of the relationship between variables that is independent of the sample size. Cohen's f^2 coefficient is the most used [77,78]. Effect sizes of 0.02, 0.15, and 0.35 are referred to as modest, medium, and big, respectively [78]. Values below 0.02 have no effect size. Table 5 shows that ATT (0.108) and PA (0.112) have small effects on IU, while EW (0.218) has medium effects on IU. EW (0.156) and PU (0.299) all have medium effects on ATT. Furthermore, PEOU has small effects on ATT and large effects on PU.

Table 5. Effect Size F^2.

	ATT	**IU**	**PU**
ATT		0.108	
EW	0.156	0.218	
PA	0.511	0.112	
PEOU	0.022		0.945
PU	0.229		

1.5. *Predictive Relevance*

Q^2 demonstrates how effectively empirical data can be recreated using the model and PLS parameters [79]. According to Akter et al. [67], predictive relevance is essential for determining how effectively the model reproduces observed values. The formula for calculating predictive relevance is:

$$Q^2 = 1 - \frac{SSE}{SSO}$$

where SSE = Sum of the Squared Prediction Errors and SSO = Sum of Squared Observations. We calculated the predictive relevance of the model using the blindfolding procedure on SmartPLS

3.0. If the value of Q^2 is less than zero, it means the model is very poor, and all dependent variables cannot explain the independent variable. According to Chin [80], the predictive values of 0.02, 0.15, and 0.35 have small, medium, and large predictive relevance, respectively. Table 6 shows that the Q2 values for ATT (0.592) and IU (0.398) have a large predictive relevance, while the PU (0.297) has a medium predictive relevance. As a result, the model's predictive significance is confirmed because the Q^2 values of all endogenous constructs are greater than zero.

Table 6. Predictive Relevance.

	Q^2
ATT	0.592
IU	0.398
PU	0.297

DISCUSSION

This study was carried out within a theoretical framework based on the technology acceptance model (TAM). We accept H1 because we found a significant relationship between attitude and intention to use renewable energy. This suggests that the attitude of Ghanaians towards renewable energy is influenced by their intentions. This conclusion is consistent with the findings of other TAM-related research [63,81]. In a similar context, Rezaei and Ghofranfarid [82] state that people who have a positive attitude toward new technology have a psychological readiness for it and are better equipped to respond favorably to it. This psychological readiness may influence the intention to use technology. According to psychology theory, the elements of attitude, which include effect, cognition, and behavior, lead to a positive response in people's desire to use technology [81]. Furthermore, several researchers have confirmed that attitude is a reliable predictor of behavior throughout the early phases of technology adoption [83]. As a result, knowing the attitude of Ghanaians towards the use of renewable energy is crucial because all programs and policies connected to the deployment and promotion of renewable energy technology would be futile if the role of attitude were not considered. As predicted, two of the original TAM's core constructs (perceived usefulness and perceived ease of use) have positive and significant relationships with attitude (H2 and H3). These findings indicate that the positive attitude of Ghanaians towards renewable energy is due to the ease of use and the benefits of using renewable energy. Cheung and Vogel [83], Ahmad et al. [26], and Verma et al. [63] achieved similar results, indicating that the more helpful renewable energy is, the more favorable users' attitudes will be. According to Gefen and Straub [84], perceived usefulness is a reaction to user assessment in its extrinsic, i.e., task-oriented outcomes and goals, such as task efficiency and effectiveness. In such cases, if consumers are aware of the benefits of using renewable energy, they are more likely to have a positive attitude toward it. Khazaei Pool et al. [85], and Ahmad et al. [26], pointed out that improved perceived ease of use might lead to a more positive attitude toward technology implementation. More precisely, perceived ease of use is associated with the nature of the job [84] and the fundamental characteristics of technology, such as simplicity of use, clarity, and adaptability [86]. As people learn how to use technology and become more familiar with it, they are more likely to have positive views about it [87]. The significance of H2 and H3 makes it important to take appropriate actions to encourage the creation of positive attitudes regarding renewable energy technology among Ghanaians.

Consistent with previous research [88,89], the perceived ease of use was found to have a substantial positive influence on the perceived usefulness of renewable energy (supporting H4). This finding suggests that if renewable energy technology can be used without difficulty, Ghanaians will regard it as more helpful. Venkatesh and Davis [58] suggest that the less effort required to use a system, the greater the gain in work perfor- mance attained by using it. Additionally, Yi et al. [88] revealed that a reduction in effort is a significant component in the usefulness that a person receives from adopting innovations or technology. In other words, innovation with a challenging application is unlikely to be viewed as helpful [89]. Individuals who find it easy to use technology will appreciate its use and be willing to put it to use [89]. In the current study area, when Ghanaians are dealing with clear and easy-to-use renewable energy devices, they tend to identify and acknowledge the renewable energy device's qualities that make it more beneficial. As a result, perceived ease of use is critical in encouraging the adoption of any technology, including renewable energy, and promoting a more significant feeling of usefulness.

The results of this study indicated that H5 and H6 were supported in the extended TAM in the sense that perceived affordability had significant positive effects on the attitude towards the use of renewable energy and the intention to use renewable energy.

Furthermore, environmental awareness was found to have a statistically significant relationship with both intention and attitude, supporting H7 and H8. In general, the use of renewable energy requires the user to have some level of conscience about protecting the environment. This is consistent with the findings of [90,91]. Karasmanaki and Tsantopoulos stated that students were in favor of renewables because of their environmental concerns and enhanced environmental awareness in general. In a similar context, Karaog˘ lan and Du- rukan added that an environmentally conscious user would choose environmentally friendly products not just in energy use, but in different categories. Hence, as people become more en- vironmentally conscious, their desire to save energy increases. Therefore, those with a higher level of environmental awareness would have a higher intention to use renewable energy.

CONCLUSIONS

This study developed an extended TAM model to investigate users' intentions to use renewable energy among Ghanaians. This research model explains 68% of the variance in the intention to use renewable energy. According to the research findings, factors like perceived usefulness, perceived ease of use, environmental awareness, and perceived affordability positively affect attitudes toward the use of renewable energy. The results of the study also show that environmental awareness, perceived affordability, and attitude toward the use of renewable energy have a positive and significant effect on users' intention to use renewable energy.

The data analysis interpreted by SmartPLS shows that environmental awareness is the most important determinant of the intention to use renewable energy in Ghana. Perceived affordability is an important determinant of the attitudes towards the use of renewable energy in Ghana. This is a good sign for future endeavors in green energy. Existing research aids in explaining and comprehending user attitudes toward the adoption and use of renewable energy. Because attitudes toward the use of technology are highly dependent on a variety of variables, the suggested model provides basic information for the improvement and comprehension of renewable energy use intentions.

The study's findings give in-depth knowledge and valuable guidelines that will assist the government of Ghana, and other organizations, in their efforts to promote the use of renewable energy. The analysis has shown that environmental awareness is a critical factor in determining the acceptance of renewable energy in Ghana. Ghanaians with a high level of environmental awareness are more likely to use renewable energy. The promotion of environmental awareness campaigns and education on climate change will go a long way in promoting the use of renewable energy in Ghana.

Prospects for using renewable energy resources to their full potential in the next decade are high. With the current renewable energy plan, Ghana will achieve reduced air pollution, increase energy diversity, and reduce the use of fossil fuels by 2030. This will, in effect, create eco-friendly jobs and promote sustainable development.

LIMITATIONS

This paper is limited in the mode of analysis. Like many other types of research, this paper has numerous limitations that should be acknowledged. To begin with, because this study was done in a developing sub-Saharan African country, the findings may not accurately represent the intention to use renewable energy in other countries and continents. Thus, researchers should exercise caution when generalizing the findings.

It is also important to note that the findings in this article are based on datacollected from a small sample of the population and are, thus, susceptible to error. Despite our assur- ances that responses would be kept confidential, some respondents may have submitted responses that would portray them in a positive light. We suspect that a level of social desirability bias seeped into the statistics on education levels due to the prestige attached to higher levels of education in Ghana, resulting in a higher percentage of high levels of education than the national demographic.

Furthermore, although the variables used in this study were able to account for a significant portion of the variance in the intention to use renewable energy in Ghana, there are still many other factors that could have been added to this analysis. Future research can add more factors using different models with mediating and moderating variables to explain the intention to use renewable energy. Finally, because this study used a cross- sectional design that collects data at a particular time, future studies may explore using a longitudinal design that accounts for temporal differences.

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REFERENCES

1) Atuguba, R.A.; Tuokuu, F.X.D. Ghana's Renewable Energy Agenda: Legislative Drafting in Search of Policy Paralysis. *Energy Res. Soc. Sci.* **2020**, *64*, 101453. [CrossRef]
2) Kwakwa, P.A. What Determines Renewable Energy Consumption? Startling Evidence from Ghana. *Int. J. Energy Sect. Manag.* **2021**, *15*, 108–118. [CrossRef]

3) Sharvini, S.R.; Noor, Z.Z.; Chong, C.S.; Stringer, L.C.; Yusuf, R.O. Energy Consumption Trends and Their Linkages with Renewable Energy Policies in East and Southeast Asian Countries: Challenges and Opportunities. *Sustain. Environ. Res.* **2018**, *28*, 257–266. [CrossRef]

4) Moriarty, P.; Honnery, D. Can Renewable Energy Power the Future? *Energy Policy* **2016**, *93*, 3–7. [CrossRef]

5) Momete, D.C. Analysis of the Potential of Clean Energy Deployment in the European Union. *IEEE Access* **2018**, *6*, 54811–54822. [CrossRef]

6) Kirsch, S. Running out? Rethinking Resource Depletion. *Extr. Ind. Soc.* **2020**, *7*, 838–840. [CrossRef] [PubMed]

7) Ersoy, E.; Schaffer, M.E.; Ditzen, J. *BP Full Report—BP Statistical Review of World Energy 2019*; BP: London, UK, 2019.

8) Behrouzi, F.; Nakisa, M.; Maimun, A.; Ahmed, Y.M. Global Renewable Energy and Its Potential in Malaysia: A Review of Hydrokinetic Turbine Technology. *Renew. Sustain. Energy Rev.* **2016**, *62*, 55–74. [CrossRef]

9) Visschers, V.H.M.; Siegrist, M. Find the Differences and the Similarities: Relating Perceived Benefits, Perceived Costs and Protected Values to Acceptance of Five Energy Technologies. *J. Environ. Psychol.* **2014**, *40*, 117–130. [CrossRef]

10) Dagoumas, A.S.; Koltsaklis, N.E. Review of Models for Integrating Renewable Energy in the Generation Expansion Planning. *Appl. Energy* **2019**, *242*, 1573–1587. [CrossRef]

11) Michael, A.; Wisdom, A.; Ebenezer, A. Technical and Socio-Economic Issues of Small-Scale Solar PV Electricity Supply in Rural Ghana. *Energy Power* **2017**, *7*, 10–21.

12) Shahnazi, R.; Dehghan Shabani, Z. Do Renewable Energy Production Spillovers Matter in the EU? *Renew. Energy* **2020**, *150*, 86–796. [CrossRef]

13) Asif, M. Urban Scale Application of Solar PV to Improve Sustainability in the Building and the Energy Sectors of KSA. *Sustainability* **2016**, *8*, 1127. [CrossRef]

14) Bhowmik, C.; Bhowmik, S.; Ray, A.; Pandey, K.M. Optimal Green Energy Planning for Sustainable Development: A Review. *Renew. Sustain. Energy Rev.* **2017**, *71*, 796–813. [CrossRef]

15) Mahama, M.; Derkyi, N.S.A.; Nwabue, C.M. Challenges of Renewable Energy Development and Deployment in Ghana: Perspectives from Developers. *GeoJournal* **2021**, *86*, 1425–1439. [CrossRef]

16) Kuamoah, C. Renewable Energy Deployment in Ghana: The Hype, Hope and Reality. *Insight Afr.* **2020**, *12*, 45–64. [CrossRef]

17) Energy Commission. *National Energy Statistics 2020 Edition*; Energy Commission: Accra, Ghana, 2021; ISBN 0302813764.

18) Eshun, M.E.; Amoako-Tuffour, J. A Review of the Trends in Ghana's Power Sector. *Energy Sustain. Soc.* **2016**, *6*, 9. [CrossRef]

19) Aboagye, B.; Gyamfi, S.; Ofosu, E.A.; Djordjevic, S. Status of Renewable Energy

Resources for Electricity Supply in Ghana. *Sci. Afr.* **2021**, *11*, e00660. [CrossRef]

20) Acheampong, M.; Yu, Q.; Ertem, F.C.; Ebude, L.D.E.; Tanim, S.; Eduful, M.; Vaziri, M.; Ananga, E. Is Ghana Ready to Attain Sustainable Development Goal (SDG) Number 7?—A Comprehensive Assessment of Its Renewable Energy Potential and Pitfalls. *Energies* **2019**, *12*, 408. [CrossRef]

21) Ribeiro, F.; Ferreira, P.; Araújo, M.; Braga, A.C. Public Opinion on Renewable Energy Technologies in Portugal. *Energy* **2014**, *69*, 39–50. [CrossRef]

22) Ediger, V.S¸.; Kirkil, G.; Çelebi, E.; Ucal, M.; Kentmen-Çin, Ç. Turkish Public Preferences for Energy. *Energy Policy* **2018**, *120*, 492–502. [CrossRef]

23) Kim, J.; Jeong, D.; Choi, D.; Park, E. Exploring Public Perceptions of Renewable Energy: Evidence from a Word Network Model in Social Network Services. *Energy Strategy Rev.* **2020**, *32*, 100552. [CrossRef]

24) Albattah, M.; Attoye, D.E. A Quantitative Investigation on Awareness of Renewable Energy Building Technology in the United Arab Emirates. *Sustainability* **2021**, *13*, 6665. [CrossRef]

25) Feng, H.Y. Key Factors Influencing Users' Intentions of Adopting Renewable Energy Technologies. *Acad. Res. Int.* **2012**, *2*, 156–168.

26) Ahmad, S.; bin Mat Tahar, R.; Cheng, J.K.; Yao, L. Public Acceptance of Residential Solar Photovoltaic Technology in Malaysia. *PSU Res. Rev.* **2017**, *1*, 242–254. [CrossRef]

27) Zaharim, A.; Mat, S.; Sopian, K.; Jedi, A.; Zaharim, A.; Safari, M.A.M.; Masseran, N.; Rahim, A.B.A. Public Acceptance on Stand-Alone Renewable Energy Project in Rural Area of Malaysia. In Proceedings of the 2017 International Conference in Energy and Sustainability in Small Developing Economies (ES2DE), Funchal, Portugal, 10–12 July 2017; IEEE: Funchal, Portugal, 2017.

28) Harrouz, A.; Belatrache, D.; Boulal, K.; Colak, I.; Kayisli, K. Social Acceptance of Renewable Energy Dedicated to Electric Production. In Proceedings of the 2020 9th International Conference on Renewable Energy Research and Application (ICRERA), Glasgow, UK, 27–30 September 2020.

29) Agyekum, E.B.; Ali, E.B.; Kumar, N.M. Clean Energies for Ghana—An Empirical Study on the Level of Social Acceptance of Renewable Energy Development and Utilization. *Sustainability* **2021**, *13*, 3114. [CrossRef]

30) Al-Fatlawi, A.W.A.; Saidur, R.; Rahim, N.A. Researching Social Acceptability of Renewable-Energy Technology in Malaysia. In Proceedings of the 3rd IET International Conference on Clean Energy and Technology (CEAT), Kuching, Malaysia, 24–26 November 2014. [CrossRef]

31) Nkundabanyanga, S.K.; Muhwezi, M.; Musimenta, D.; Nuwasiima, S.; Najjemba, G.M. Exploring the Link between Vulnerability of Energy Systems and Social Acceptance of Renewable Energy in Two Selected Districts of Uganda. *Int. J. Energy Sect. Manag.* **2020**, *14*, 1089–1122. [CrossRef]

32) Gbongli, K.; Xu, Y.; Amedjonekou, K.M. Extended Technology Acceptance Model to Predict Mobile-Based Money Acceptance and Sustainability: A Multi-Analytical Structural Equation Modeling and Neural Network Approach. *Sustainability* **2019**, *11*, 3639. [CrossRef]

33) Arthur, R.; Baidoo, M.F.; Osei, G.; Boamah, L.; Kwofie, S. Evaluation of Potential Feedstocks for Sustainable Biogas Production in Ghana: Quantification, Energy Generation, and CO2 Abatement. *Cogent Environ. Sci.* **2020**, *6*, 1868162. [CrossRef]

34) IRENA. *Renewable Capacity Statistics 2021*; IRENA: Abu Dhabi, United Arab Emirates, 2021.

35) Darko, D.; Kpessa-Whyte, M.; Obuobie, E.; Siakwah, P.; Torto, O.; Tsikata, D. *The Context and Politics of Decision Making on Large Dams in Ghana: An Overview*; FutureDAMS Working Paper: Manchester, UK, 2019.

36) Shirazu Alhassan, H. Viewpoint—Butterflies vs. Hydropower: Reflections on Large Dams in Contemporary Africa. *Water Altern.* **2009**, *2*, 148–160.

37) 45 kW Tsatsadu Generating Station.Available online:https://buipower.com/tsatsadu- generating-station/ (accessed on 14 September 2021).

38) Energy Commission. *Annual Report for 2011*; State Enterprises Audit Corporation: Accra, Ghana, 2011.

39) Asumadu-Sarkodie, S.; Owusu, P.A. A Review of Ghana's Solar Energy Potential. *AIMS Energy* **2016**, *4*, 675–696. [CrossRef]

40) Akom, K.; Shongwe, T.; Joseph, M.K.; Padmanaban, S. Energy Framework and Policy Direction Guidelines: Ghana 2017–2050 Perspectives. *IEEE Access* **2020**, *8*, 152851–152869. [CrossRef]

41) Gyamfi, S.; Modjinou, M.; Djordjevic, S. Improving Electricity Supply Security in Ghana—The Potential of Renewable Energy.

42) *Renew. Sustain. Energy Rev.* **2015**, *43*, 1035–1045. [CrossRef]

43) PV Magazine On-Going Initiatives to Accelerate Sustainable Uptake of Renewable Energy. Available online: https://www.pv- magazine.com/2020/12/15/first-unit-of-250-mw-floating-pv- project-comes-online-in-ghana/ (accessed on 18 August 2021).

44) Bukari, D.; Kemausuor, F.; Quansah, D.A.; Adaramola, M.S. Towards Accelerating the Deployment of Decentralised Renewable Energy Mini-Grids in Ghana: Review and Analysis of Barriers. *Renew. Sustain. Energy Rev.* **2021**, *135*, 110408. [CrossRef]

45) Merem, E.C.; Twumasi, Y.; Wesley, J.; Isokpehi, P.; Fageir, S.; Crisler, M.; Romorno, C.; Hines, A.; Ochai, G.S.; Leggett, S.; et al. Assessing Renewable Energy Use in Ghana: The Case of the Electricity Sector. *Energy Power* **2018**, *8*, 16–34. [CrossRef]

46) Karakara, A.-W.A.; Dasmani, I. An Econometric Analysis of Domestic Fuel Consumption in Ghana: Implications for Poverty Reduction. *Cogent Soc. Sci.* **2019**, *5*, 1697499. [CrossRef]

47) Karekezi, S.; Afrepen, W.K. Renewable Energy Development. In Proceedings of the

The Workshop for African Energy Experts on Operationalizing the NEPAD energy Initiative, Dakar, Senegal, 2–4 June 2003.

48) Sun, H.; Khan, A.R.; Bashir, A.; Alemzero, D.A.; Abbas, Q.; Abudu, H. Energy Insecurity, Pollution Mitigation, and Renewable Energy Integration: Prospective of Wind Energy in Ghana. *Environ. Sci. Pollut. Res.* **2020**, *27*, 38259–38275. [CrossRef] [PubMed]

49) Opam, M. *On-Going Initiatives to Accelerate Sustainable Uptake of Renewable Energy*; Energy Commision: Accra, Ghana, 2015.

50) Carter, L.; Bélanger, F. The Utilization of E-Government Services: Citizen Trust, Innovation and Acceptance Factors. *Inf. Syst. J.* **2005**, *15*, 11–20. [CrossRef]

51) Davis, F.D. Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Q.* **1989**, *13*, 318–340. [CrossRef]

52) Okazaki, S. What Do We Know about Mobile Internet Adopters? A Cluster Analysis. *Inf. Manag.* **2006**, *43*, 127–141. [CrossRef]

53) Mital, M.; Chang, V.; Choudhary, P.; Papa, A.; Pani, A.K. Adoption of Internet of Things in India: A Test of Competing Models Using a Structured Equation Modeling Approach. *Technol. Forecast. Soc. Chang.* **2018**, *136*, 339–346. [CrossRef]

54) Pal, D.; Funilkul, S.; Charoenkitkarn, N.; Kanthamanon, P. Internet-of-Things and Smart Homes for Elderly Healthcare: An End User Perspective. *IEEE Access* **2018**, *6*, 10483–10496. [CrossRef]

55) Rafique, H.; Anwer, F.; Shamim, A.; Minaei-Bidgoli, B.; Qureshi, M.A.; Shamshirband, S. Factors Affecting Acceptance of Mobile Library Applications: Structural Equation Model. *Libri* **2018**, *68*, 99–112. [CrossRef]

56) Park, N.; Rhoads, M.; Hou, J.; Lee, K.M. Understanding the Acceptance of Teleconferencing Systems among Employees: An Extension of the Technology Acceptance Model. *Comput. Hum. Behav.* **2014**, *39*, 118–127. [CrossRef]

57) Ducey, A.J.; Coovert, M.D. Predicting Tablet Computer Use: An Extended Technology Acceptance Model for Physicians. *Health Policy Technol.* **2016**, *5*, 268–284. [CrossRef]

58) Ajzen, I.; Gilbert Cote, N.G. Attitudes and the Prediction of Behavior. In *Attitudes and Attitude Change*; Crano, W.D., Prislin, R., Eds.; Psychology Press: New York, NY, USA, 2008; pp. 289–311.

59) Venkatesh, V.; Davis, F.D. A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Manag. Sci.* **2000**, *46*, 186–204. [CrossRef]

60) Davis, F.D.; Bagozzi, R.P.; Warshaw, P.R. User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Manag. Sci.* **1989**, *35*, 982–1003. [CrossRef]

61) Akram, U.; Fülöp, M.T.; Tiron-Tudor, A.; Topor, D.I.; Căpus, neanu, S. Impact of Digitalization on Customers' Well-Being in the Pandemic Period: Challenges and Opportunities for the Retail Industry. *Int. J. Environ. Res. Public Health* **2021**, *18*, 7533. [CrossRef] [PubMed]

62) Davis, F.D. User Acceptance of Information Technology: System Characteristics, User Perceptions and Behavioral Impacts. *Int. J. Man-Mach. Stud.* **1993**, *38*, 475–487. [CrossRef]

63) Bandara, U.C.; Amarasena, T.S.M. Impact of Relative Advantage, Perceived Behavioural Control and Perceived Ease of Use on Intention to Adopt with Solar Energy Technology in Sri Lanka. In Proceedings of the 2018 International Conference and Utility Exhibition on Green Energy for Sustainable Development (ICUE), Phuket, Thailand, 24–26 October 2018.

64) Verma, S.; Bhattacharyya, S.S.; Kumar, S. An Extension of the Technology Acceptance Model in the Big Data Analytics System Implementation Environment. *Inf. Process. Manag.* **2018**, *54*, 791–806. [CrossRef]

65) Fishbein, M.; Ajzen, I. *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*; Addison-Wesley: Reading, MA, USA, 1975.

66) Adnan, N.; Nordin, S.M.; bin Abu Bakar, Z. Understanding and Facilitating Sustainable Agricultural Practice: A Comprehensive Analysis of Adoption Behaviour among Malaysian Paddy Farmers. *Land Use Policy* **2017**, *68*, 372–382. [CrossRef]

67) King, W.R.; He, J. A Meta-Analysis of the Technology Acceptance Model. *Inf. Manag.* **2006**, *43*, 740–755. [CrossRef]

68) Akter, M.S.; D'Ambra, J.G.; Ray, P.K. An Evaluation of PLS Based Complex Models: The Roles of Power Analysis, Predictive Relevance, and GoF Index. In Proceedings of the The Seventeenth Americas Conference on Information Systems (AMCIS 2011), Detroit, MI, USA, 4–8 August 2011; Association for Information Systems: Atlanta, GA, USA, 2011; pp. 1–7.

69) Hair, J.F.; Hult, G.T.M.; Ringle, C.M.; Sarstedt, M. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*; Sage: Thousand Oaks, CA, USA, 2014.

70) Cohen, J.B. Exploring Attitude Construct Validity: Or Are We? *Adv. Consum. Res.* **1979**, *6*, 303– 306. Vogt, W.P. *Quantitative Research Methods for Professionals*; Pearson: New York, NY, USA, 2007. Dijkstra, T.K.; Henseler, J. Consistent Partial Least Squares Path Modeling. *MIS Q.* **2015**, *39*, 297–316. [CrossRef]

71) Fornell, C.; Larcker, D.F. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *J. Mark. Res.* **1981**, *18*, 39–50. [CrossRef]

72) Ab Hamid, M.R.; Sami, W.; Mohmad Sidek, M.H. Discriminant Validity Assessment: Use of Fornell & Larcker Criterion versus HTMT Criterion. *J. Phys. Conf. Ser.* **2017**, *890*, 012163. [CrossRef]

73) Henseler, J.; Ringle, C.M.; Sarstedt, M. A New Criterion for Assessing Discriminant Validity in Variance-Based Structural Equation Modeling. *J. Acad. Mark. Sci.* **2015**, *43*, 115–135. [CrossRef]

74) Venkatesh, V.; James, Y.L.T.; Xu, X. Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Q.* **2012**, *36*, 157–178. [CrossRef]

75) Byrne, B.M. *Structural Equation Modeling with AMOS*; Routledge: New York, NY, USA, 2010.

76) Cohen, J. *Statistical Power Analysis for the Behavioral Sciences*; Lawrence Erlbaum: Hillsdale, NJ, USA, 1988. Cohen, J. A Power Primer. *Psychol. Bull.* **1992**, *112*, 115. [CrossRef] Fornell, C.; Cha, J. *Partial Least Squares (PLS)*; Unpublished work; 1993.

77) Chin, W.W. How to Write Up and Report PLS Analyses. In *Handbook of Partial Least Squares*; Springer: Berlin/Heidelberg, Germany, 2010. Hussein, Z. Leading to Intention: The Role of Attitude in Relation to Technology Acceptance Model in E-Learning. *Procedia Comput. Sci.* **2017**, *105*, 159–164. [CrossRef]

78) Rezaei, R.; Ghofranfarid, M. Rural Households' Renewable Energy Usage Intention in Iran: Extending the Unified Theory of Acceptance and Use of Technology. *Renew. Energy* **2018**, *122*, 382–391. [CrossRef]

79) Cheung, R.; Vogel, D. Predicting User Acceptance of Collaborative Technologies: An Extension of the Technology Acceptance Model for e-Learning. *Comput. Educ.* **2013**, *63*, 160– 175. [CrossRef]

80) Gefen, D.; Straub, D. The Relative Importance of Perceived Ease of Use in IS Adoption: A Study of E-Commerce Adoption. *J. Assoc. Inf. Syst.* **2000**, *1*, 8. [CrossRef]

81) Khazaei Pool, J.; Kazemi, R.V.; Amani, M.; Lashaki, J.K. An Extension of the Technology Acceptance Model for the E-Repurchasing of Sports Match Tickets. *Int. J. Bus. Manag. Res.* **2006**, *6*, 1–12.

82) Gangwar, H.; Date, H.; Ramaswamy, R. Understanding Determinants of Cloud Computing Adoption Using an Integrated TAM-TOE Model. *J. Enterp. Inf. Manag.* **2015**, *28*, 107–130. [CrossRef]

83) Teo, T. Modelling Technology Acceptance in Education: A Study of Pre-Service Teachers.*Comput. Educ.* **2009**, *52*, 302–312. [CrossRef]

84) Yi, M.Y.; Jackson, J.D.; Park, J.S.; Probst, J.C. Understanding Information Technology Acceptance by Individual Professionals: Toward an Integrative View. *Inf. Manag.* **2006**, *43*, 350–363. [CrossRef]

85) Lee, Y.-H.; Hsiao, C.; Purnomo, S.H. An Empirical Examination of Individual and System Characteristics on Enhancing E-Learning Acceptance. *Australas. J. Educ. Technol.* **2014**, *30*, 562–579. [CrossRef]

86) Karaog˘ lan, S.; Durukan, T. Effect of Environmental Awareness on Willingness to Pay for Renewable Energy. *Int. J. Bus. Manag. Invent.* **2016**, *5*, 42–48.

87) Karasmanaki, E.; Tsantopoulos, G. Exploring Future Scientists' Awareness about and Attitudes towards Renewable Energy Sources. *Energy Policy* **2019**, *131*, 111–119. [CrossRef]

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THE NOTION OF ABSURDISM IN KAFKA'S A HUNGER ARTIST

Puja Mazumder

ABSTRACT

Albert Camus' philosophy of the Absurd has been used as one of the many interpretative dialogues for Franz Kafka's literary works, particularly his short story, A Hunger Artist. This paper explored the various facets of absurdism described in The Myth of Sisyphus and connects it with the short story by arguing that A Hunger Artist has more to reveal than its narrative content. Examining the similarities and differences between Camus' Sisyphus and the protagonist of A Hunger Artist, helps produce absurdist interpretations of the text. The question of finding meaning in an indifferent universe and the predicament of being wedged in an endless loop of a monotonous cycle of life is explored until the very end of the short story. The dilemma of the protagonist, the disillusionment with society fused with the complicated reality of the human condition are all elements present in A Hunger Artist that help identify existentialism through fiction. When seen through the absurdist perspective, the hunger artist stands as a figure, depicting the disunity between man and the universe, and the internal and external conflict between the rational and irrational in an unresponsive universe. Analysing this fiction through the philosophy of absurdism generates significant standpoints that bring forth the author's individual reasoning as a consolation to the questioning, existentialist mind.

Keywords: Absurdism, Camus, Kafka, hunger artist, isolation, Illusion of freedom

INTRODUCTION

Franz Kafka, one of the major literary figures of the twentieth century, commonly been considered as a "staple of absurdism."[1] Born into an upper-middle class Jewish family in 1833, Franz Kafka led an arduous life – from his early childhood to adulthood until his death from tuberculosis in 1924.[2] The loss of his siblings in earlier years during World War II, his strained relationship with his father, the difficulties faced during his school and work years are, in some form, reflected in the literary works he produced. Most of Kafka's work and literary fame achieved appreciation posthumously, through his friend Max Brod. His novels and short stories transcended his times, and were immensely influential in the war era in Germany.[3] Kafka's stories are still popular and significantly analyzed by scholars and students alike for their themes of alienation, absurdity, existential guilt of characters that face inexplicable and insurmountable predicaments that are often a fusion of realism and fantasy.

Kafka's writing has been so innovative and far-reaching that the term 'Kafkaesque' is often use to describe situations, whether in fiction or in reality, that are similar to those depicted in his works. A New York Times (1991) article, written by Ivana Edwards, focuses on Franz Kafka's critical biography whose author is Frederick R. Karl. The article specifically endeavors to define what the term 'Kafkaesque' means to prevent its common misconception. Edwards says, "What's Kafkaesque is when you enter a surreal world in which all your control patterns, all your plans, the whole way in which you have configured your own behavior, begins to fall to pieces, when you find yourself against a force that does not lend itself to the way you perceive the world.''[4] He further states that despite it being impossible to win against, it is Kafkaesque to never accept defeat in the face of that force. These situations are vividly depicted in Kafka's most popular *The Metamorphosis* and *The Castle.* The protagonists in the short story and the novel respectively are isolated and are seen struggling against the greater forces of socio-bureaucratic power. There have been numerous critics who have analysed these works through the existentialist philosophy. Francis and Prahaladaiah, exploring the theme of alienation and the absurdist perspective in *Metamorphosis*, wrote: "…(Kafka) brought out human condition in industrialized world.''[5] He primarily addressed the human alienation in the world and absurd life, which causes guilt. 'The Metamorphosis' is such one writing where he reflects human state in the world of industrialization."[6]

The topic of the human condition has been analyzed from various perspectives, including philosophy, religion, psychology and literature. Kafka is an author who depicts the gruesome yet hopeful nature of the human condition remarkably well in his stories, while using language that appears 'natural' yet is rich with numerous symbols and metaphors. John Sutherland in his book *A Little History of Literature* writes about Kafka's depiction of the human condition as something that is "well beyond tragic or depressed. It is 'absurd'. […] There is no 'meaning' to make sense of our lives."[7] The focus of the current study is on one such short story of Kafka, *A Hunger Artist,* which represents this absurdity and human condition. He wrote this while being ill and completed it shortly before he passed away.

The Absurd is an idea that first appears in Kierkegaard's works, but it was later popularized by and further developed into a philosophy by Albert Camus, in his detailed essay, *The Myth of Sisyphus*. He opens the essay with one of the most iconic lines in the history of philosophy: "There is but one truly serious philosophical problem, and that is suicide."[8] The Absurd arises from the meeting of our hunger for meaning with a universe that is meaningless. Camus explains this through the analogy of Sisyphus who is condemned by the gods to roll a boulder up a hill, only for it to roll back down every time it nears the top, with Sisyphus stuck in an endless loop of coming close but never completing the task. The tension between the discord for meaning and the impossibility of satisfying it is, according to Camus, the core of absurdism.

It is this tension for finding meaning that can also be investigated in Franz Kafka's short story *A Hunger Artist*. The story revolves around death, art, isolation, asceticism, futility and personal failure, all faced by a 'hunger artist' as observed by an unnamed narrator. The hunger artist's determination and pride in his art showcases a series of symbolic representations that form an important discourse of finding one's purpose, striving towards happiness and suffering in an absurd life.[9] The disillusionment with society, a non-reaction to the strange, absurd realizations, and the illusion of freedom and control in the cyclical meaninglessness of life are all notions that exist within Camus' absurd universe – which can also be explored in *A Hunger Artist*.

As it is often considered that literature holds a mirror to society, reality can be observed or mirrored in fiction; Kafka's characters in this narrative cause its readers to open up significant deliberations on the inherent meaningless of life in a society that values finding purpose and wanting to better itself in every aspect. Yet the indifferent universe does not let society, or the individual, become successful in their purpose. Camus himself describes how important art and literature are for society in *The Myth of Sisyphus*. He writes, "Without culture, and the relative freedom it implies society, even when perfect, is but a jungle. This is why any authentic creation is a gift to the future."[10]

Hence, this paper seeks to find certain connections to Camus' philosophical perspective of the Absurd and the struggles of leading a meaningful life in a universe that does not foster purpose, with Kafka's succinct yet engaging literary piece *A Hunger Artist*. Conducting this study allows to view this fictional piece from an entirely different perspective, one that is not dependent on the mainstream interpretation of the hunger artist standing in for the struggle and suffering for art, rather through the philosophical representation of the hunger artist's turmoil with society, himself and the indifferent universe. This study seeks to do an in-depth literary analysis of Franz Kafka's short fictional story, *A Hunger Artist*. It attempts to examine the story based on the philosophical perspective of absurdism as developed in Albert Camus' essay *The Myth of Sisyphus*. Only certain facets of the absurdist philosophy are taken into consideration when analysing *A Hunger Artist*. These are absurdity (and how it is applied in literature), disillusionment from society, realization of the absurd, the human condition, absurd freedom and the entrapments of a meaningless, cyclical life – as illustrated through the Greek myth of Sisyphus.

OBJECTIVES

- To identify the idea of the absurd and how it is represented within Kafka's *A Hunger Artist.*
- To determine how the characters and their behaviour in the story reinforce the notion of the absurd man.

Camus' solution to the existential dilemma is presented through the absurdist philosophy, which suggests accepting that life has no purpose, and to revolt against this idea. The hunger artist, however, fails to revolt and instead embraces an elusive purpose in his life, his art of hunger performance. This proves to be emotionally, physically and mentally challenging for the artist, which eventually leads to his death. By analysing Kafka's text and characters, this research aspires to explore the extent of Camus' absurdist philosophy presented in the selected fictional piece.

Research Questions

- How is finding one's meaning in life and indifference of the universe presented in the short story?
- How does the story reflect Camus' relation of the Greek myth of Sisyphus?
- If the hunger artist experiences a realization of the absurd, how does he react to it?

This study is significant in developing a greater insight through Kafka's writing, on the struggles of creating meaning in the absurd world. With consciousness on absurdism increasing ever more in the current globalized yet isolated world, this study can provide a symbolic approach to one of the most significant philosophies in existentialism for literary scholars, students, workers and the average human alike.

LITERATURE REVIEW

Neil Cornwell in The Absurd in Literature goes on to define it as the "broader cultural context of existentialism" that Albert Camus purports to be a depiction of the modern sense of human purposelessness in a universe without value, which is reflected in Kafka's characters and the events in his stories. He goes on to say, "The absurd is born of nihilism, out of existentialism, fueled by the certainty of death (anxiety, dread and death being the scourge of the existentialist). Often characterized by meaningless actions, events and unstructured plots, absurdist fiction explores the experiences of characters in situations where their lives have no meaningful purpose. It borrows concepts like inherent value and the truth of human condition from existentialism. Different theories exist in the literature regarding Kafka showing such concepts in his stories.

In Cambridge Introduction to Theatre and Literature of the Absurd, the author claims that Kafka's works reflect the notion of the absurd as "the reader of Kafka's stories and Kafka's characters are left reeling in a nonsensical world, trying, but failing at rational enterprise to make sense of what is happening". When there is no "questioning voice" of the omniscient narrator or no sufficient context provides the absurdist view Camus build upon in his analogy of Sisyphus.[11] Furthermore, Franz Kafka is regarded as one of the forefathers of the literary absurd, along with Alfred Jarry, OBERIU, and Antonin Artaud, as they brought in certain elements that helped build the absurdist literary movement. For Kafka, the elements included the introduction of the "strange" and the "absurd situation" through non-experimental language and straightforward stories. Bennet further notes the response, or lack thereof, to the absurd situations faced by Kafka's characters. He writes, "The mark of the Kafkaesque and really absurd literature is the (non)reaction to a strange and unique situation"[12] which can be observed in Kafka's novel The Metamorphosis and other stories.

Lee in his paper titled Fathering the Kafkaesque: Transcendental Authority and the Problem of the Absurd in Kafka, deems the absurd in Kafka's works to be of a social nature, where the greater societal and authoritative forces are in battle with the protagonist's ability to comprehend and fit in with these forces.[13] He writes, "Kafka's characters are trapped in two conflicting situations: the necessity of understanding others to find a place among them and the fundamental human condition of being unable to understand others."[14] The depiction of social relationships in Kafka's fiction are seen as unhinged, and often the characters are seen to be struggling to know their role in society.

The author makes several connections with Kafka's personal life to his fiction. He is questioning "the absurdity of obligation in the general social mandate" is reflected in his conflict-ridden relationship with his father, Hermann: "Just as Kafka's characters are involuntarily subjected to a social mandate, Kafka was forced into bondage to his father,… subject to the non-negotiable authority of his parents."[15] This struggle between obedience to authority or the bourgeoisie and independent action in Kafka's stories is seen as a reflection of his private life, which was dominated by the trauma inflicted upon him by his father.

According to Steinhauer the mainstream interpretation of the hunger artist representing the struggling artist role in the modern world is "unanimously wrong." Steinhauer goes on to mention Kafka's writing as something that is written explicitly and without complicated language, stating that he "has no style and no literary diction.''[16] He further states that Kafka often presents his characters trying to balance the demands of the ideal with their worldly aspirations. *A Hunger Artist* is no different in this regard. In fact, it is not at all a story about the fate of an artist in the modern world; rather, it is a "phenomenology of religion" and symbolism, representing the loss of religion due to immense focus on faith and religious beliefs in the medieval ages.

Previous research has established that Kafka's stories are meaningful in the sense that they have no meaning; they hold the form of the absurd in them. Akbar and Khan in their analysis assert that 'being' and existence of the protagonist in *A Hunger Artist* are connected with his determination to continue his art, because "without art, he is nothing but a herd whose existence does not matter to anybody.''[17] His identity and existence rely at the expense of refuting food to progress his art and give meaning to his life, ironically, by ending it from starvation.

Apart from the thematic interpretations, scholars also examine Kafka's masterful ability to have his works radiate hidden meanings through a symbolic approach. One research conducted by Abu- Snoubar takes the symbolic approach of deconstructing Kafka's *A Hunger Artist* and exploring the different meanings and interpretations of them. In the paper, symbols such as the cage, clock, act of fasting, hunger, the artist himself, the impresario and the panther are discussed in order to illuminate the themes of isolation and the existence of the hunger artist.[18] The researcher further claims that the story delves into examining humanity and artists alike; "The psyche and perspective of the hunger artist represents the thirst of artists who delve into the apotheosis of their art." [19]

Looking at *A Hunger Artist* from a different perspective, Hooti and Borna suggest in their study the implicature of failing to complete one's ideals yet possessing them anyway holds the essence of human reality – this can be seen in the hunger artist's quest for public admiration in place of physical nourishment.[20] They further elaborate on the hunger artist's conflict with facing reality and instead opting for the ideal by keeping himself isolated from social forces; "The hunger artist, in the cage has separated himself from the other people, and without communicating with people, attempts to prove himself to the other people." [21]

THEORETICAL FRAMEWORK

The research builds upon Albert Camus' philosophy of Absurdism as written in his book-length essay *The Myth of Sisyphus* and makes use of his concepts of the realization of the absurd, a disconnect from society and the endless cycle of an individual trying and failing to find purpose in an indifferent universe.

METHODOLOGY

The current research is a qualitative study, which makes extensive use of reading relevant literature on understanding Camus' philosophy of absurdism and its conceptual engagement with Kafka's *A Hunger Artist*. It analyses the content of various subjective texts appropriate for the aim of this study by relevant scholars that helps develop an interpretation on the underlying absurdist ideas in Kafka's narrative. This paper attempts to unfold the hunger artist's existential dilemmas and his reaction to the absurdity of his situation. The data is collected from various journal articles, books, book sections, web articles, reports, and theses that are closely connected to the crux of this study's investigation.

DISCUSSION

The short story *A Hunger Artist* is a third-person narrative depicting an artist who performs the act of starvation in a world where "interest in hunger artists has greatly diminished," sitting in a cage containing nothing but the straw he lies on and a clock that tells time.[22] The story does not introduce a setting, a developed location or time. It exists solely to focus on the hunger artist's condition and the public's reaction to his performance. The story more so places attention on the hunger artist's physical and mental challenges of his art and the realization of his situation; stuck in an absurd universe that does not entertain the illusions of purpose or a meaningful life.

This fictional narrative explores the hunger artist's dedication to go to any length to achieve his 'purpose' of starvation. He does so to seek admiration from his audience, even though the art of starvation was not in popular demand at the time of his act. Regardless, the hunger artist remains popular; he would gather crowds, whether it be day or night, children or adults, they would surround his cage in order to satisfy their curiosity and be engaged with amusement by this act of emaciation. However, the artist himself would participate with his audience at first but "then would sink into himself, paying attention to no one," which illustrates the first evidence of the artist experiencing isolation, a disconnect from society.[23]

Later on in the story, the artist voluntarily isolates himself in his cage, away from the public, and this is because of the inward dissatisfaction he experiences by not being able to achieve his standard of starvation. The hunger artist always seems to be striving for more in his art, which is what gives him happiness and achievement. He wants to go beyond his limit of forty-day fasts set by the impresario and becomes frustrated by being forcefully fed at the end of his fasting period. Scrutinizing Camus' version of the absurdity of the human condition in his essay, we find the reflection of the hunger artist: "He feels within him his longing for happiness and for reason. The absurd is born of this confrontation between the human need and the unreasonable silence of the world."[24]

This 'unreasonable silence of the world' is depicted in the story as the lack of understanding between the impresario, the guards that take watch, the public audience and the hunger artist's motivation behind his art. Where the hunger artist finds purpose and meaning in starvation and strives to achieve it, he is haltered by the impresario's business-hungry mindset. When the hunger artist wants his art of starvation to be realized as something genuine and true, he is suspected of foul play, thinking that he might be possibly cheating and sneaking in food without anyone's notice. Another aspect is that perhaps his performance is downplayed by the card-players, giving him opportunity to eat while they willfully not look towards his cage. The artist's response to this is to sing loudly, in the hope of proving that his mouth is not full of food, but there too he is doubted. Such hindrances, coupled with the public's skeptical perspective of his performance, creates a divide between the hunger artist and society that reinforces the idea of isolation and disillusionment.

This divide between the artist and his audience is further seen in the part where he claims how easy his act is, and he tries to convey this explicitly, but no one believes him: "For he alone knew what no other initiate knew: how easy hungering was. It was the easiest thing in the world."[25] This leads into another aspect of the absurdist theme where life is pointless, and the absurd man is faced with the deception of the freedom of action in his lifetime. The hunger artist believes and conveys in his actions that his life is meaningful as long as he can outperform his act of starvation. And he does this by firing the impresario who cannot find worthy shows due to the neglected fame of hunger artists in the world and joining a circus with no demands of his own. Camus talks about the idea of absurd freedoms as:

"I can understand only in human terms. What I touch, what resists me – that is what I understand. And these two certainties - my appetite for the absolute and for unity and the impossibility of reducing this world to a rational and reasonable principle – I also know that I cannot reconcile them"[26]

In the short story, 'the appetite for the absolute' is the hunger artist's never-ending desire to be better in his art. In the end, it becomes 'impossible' to fulfill this because the world is not rational enough to understand his motivation or inspiration behind his art and the 'unity' breaks down when his desire to achieve increasing hunger fails to be in agreement with the physical need for food and nourishment, eventually leading to his death. This is also explored in *The Profound Sense of Dissatisfaction* where the authors state that the Kafka introduces "characters (that) somehow are imprisoned in their ideal" and fail to form a balance between their desires and needs.[27]

The hunger artist believes himself to be in control of his performance, when in essence, it is the art that has actually consumed him, and he is no longer the one in control. The rational world where he is to be expected to break his fast, survive for nourishment, is always rejected: "And at this moment the hunger artist always resisted."[28] It is rejected in hopes of being released from the passions that have already consumed the hunger artist, who believes he wants to do this art. However, in the end, it is revealed that he had no choice because: "I could not find the food that was to my taste. If I had found it, believe me, I would not have caused a stir, and would have eaten my fill, like you and everybody else."[29] When taken literally, this quote reflects Camus' notion of absurd freedom.

According to Camus, the absurd man is free having given up the idea that his life has any value or any meaning and does not feel bound to pursuing any particular aims in life. Thus, he is able to approach every moment at hand without being held back by the constraints of thought and action that one normally conforms to in society. The hunger artist experiences absurd freedom when refuses to eat food and transforms his thoughts and actions into the art of emaciation. However, it can be debated from the previously mentioned quote whether the hunger artist made an active choice, or he was simply unable to find any food he liked.

Furthermore, in Camus' essay, he mentions how the Greek mythological character of Sisyphus is condemned to roll a boulder up a hill for eternity, only for it to come back down each time he reaches the top. This, he illustrates, reflects the mundanity and cyclical nature of life where man is forced to repeat his daily life doing the same thing over and over again expecting different results but not getting any because of the pointlessness of the human condition in a universe that does not entertain meaning. In Kafka's story, this is perfectly portrayed in the hunger artist's ceaseless determination of starving himself for greater recognition that he never seems to achieve to his standards. He dreams "of becoming not only the greatest hunger artist of all times, which, indeed, he probably was already, but also to outperform himself far beyond all comprehension, for he felt there were no bounds to his capacity for hungering."[30]

This idea of him believing in his boundless capacity for hungering even when he faces the misunderstanding of society and the struggles of not receiving enough reward echoes Camus' quote in his essay, "What I believe to be true, I must therefore preserve. What seems to me so obvious, even against me, I must support.[31] This shows, the hunger artist is trying to give meaning and following his purpose in the midst of an endless loop of cynical life that does not come to fruition; in the end, he dies of starvation and gets replaced by a zealous panther that attracts more people than he ever did. This reflects how humans' search for meaning in life has been rendered futile by the universe's disregard for them.

Likewise, the idea of the absurd and its realization is also depicted in the short story. Camus writes that before someone encounters the absurd, they live their life with “aims, a concern for the future or for justification” and once they realize the absurdity of life, they become unhappy, “That idea that 'I am' … all that is given the lie in vertiginous fashion by the absurdity of a possible death.”[32] The hunger artist goes through this same process when he realizes his efforts, his art, and his goals of achieving more with his passion all come to dust when faced with the public that is seemingly indifferent to his motivations. He wonders, “If he could endure hungering still further, why wouldn’t they endure?”[33]

When the hunger artist joins the circus, everything in the beginning seems to be going well. After all, he is not weighed down by the impresario’s rules and limits of forty-day fasting. Now, he can go on hungering for as long as he desires, outperforming any previous achievements he had gained. However, still yet he is dissatisfied due to the uncaring audience that would much rather go toward the stables than spare a glance in his direction. He becomes frustrated with this yet is stubborn in his belief that it is not the performance, his purpose that is not interesting; rather it is the lack of understanding for this art that has made the situation this way – “Anyone who doesn’t feel it can’t be brought to understand it.”[34]

This can be explained through the idea of thinking one has the freedom in action and choice while it is merely the illusion of such, seeing as through the absurdity of the universe. Drawing from Sander L. Gilman, the hunger artist “has no real control over his actions, he must become what he is fated to become, a hunger artist. Here Kafka evokes a ritual of starvation not through the agency of the artist but because of a programmed capacity of the artist’s body over which he has no control.”[35] The act of starving himself for whatever reason, the hunger artist in the end claims he had no choice. He says,

“I have to hunger; I cannot do otherwise, because I could not find the food that was to my taste. If I had found it, believe me, I would not have caused a stir, and would have eaten my fill, like you and everybody else”[36]

This builds upon the idea of the absurd that the strive for finding meaning in a meaningless universe is inherently purposeless because there is no choice or action that can lead one to such a conclusion; it was merely an illusion. The hunger artist’s death is a significant representation of the absurd as well, or an attempt to escape from it. According to Camus, one can either escape the realization of the absurd through suicide or confront it by accepting that life in inherently purposeless and revolt against that idea. In this story, however, the hunger artist fails to accept and realize the futile, meaningless nature of his motivations in life and ends up dying while still trying to cling to his purpose, "Death is the only reality."[37] However, when Kafka writes, "These were his last words, but his exhausted eyes still held the firm, though no longer proud, conviction that he was still continuing to hunger", he makes apparent the enduring hope and belief of the hunger artist. The hunger artist still believes his struggle was valuable, his art caused him to remain hopeful in a meaningless universe and perhaps, caused him happiness just as Camus asks us to "imagine Sisyphus happy" because the "struggle itself towards the heights is enough to fill a man's heart."[38]

In the end, when the hunger artist's cage is replaced by the energetic panther that attracts the larger audience, Kafka creates a strong contrast in the ambition and motivations between the new inhabitant of the cage and the hunger artist. The panther, though kept in a cage, it "didn't even seem to miss its freedom" and "its joy of life came with such fiery breath from its jaws that it wasn't easy for the spectators to resist it" yet the audience still surrounded the panther, mesmerized by its vitality.[39] On the contrary, the hunger artist is shown as feeble and ineffectual in gathering spectators around his cage.

This divergence between the two represents the different relationship with the absurd both beings have. The panther is carefree in the cage, it is happy as long as it gets its food on time (no matter what the taste) and because of its strong aura, it attracts a larger audience around him – "The panther is symbolic of the grace and power that can be attained by engaging with the world around."[40] It chooses to remain unaware of the absurdity of life, rejects isolation, and accepts mundanity. Though it is happy, it does not achieve self-actualization through the questioning or confrontation of the absurd – it is merely ignorant of the universe.

The hunger artist, on the other hand, strives for self-actualization through his art of hungering. Though there is a sense of alienation and isolation within him, and he fails to survive his conflict between the meaningless universe and his fight for purpose, the struggle alone is enough to deem him a man that has realized the absurdity of life. Hence, he dies without pride while maintaining conviction.

CONCLUSION

In the end, it can be observed that Kafka's A Hunger Artist holds several notions of the absurdist philosophy proposed by Albert Camus in his essay The Myth of Sisyphus. This was particularly seen in the voluntary isolation of the hunger artist, the depiction of the futility of the human condition where the hungering was never understood or admired up to the artist's standards by the public, the ruthless, cyclical nature of life that never catered to the artist's attempts for bettering himself and the illusion of freedom in the artist's action that gave him the deceptive idea of being in control of his own life.

This study viewed Kafka's efforts in exploring the human condition and the philosophical questions through the hunger artist's conflict between his ideals and reality. It motivates the reader to question the mundanity of life, to realize the absurd condition but most of all, it does not offer despair. Kafka's short story inspires within the reader to not remain vulnerable in the illusive forces of freedom and to realize that the universe is absurd, and that life may be meaningless. Nevertheless, to not give up hope in the face of this realization, and keep struggling like the hunger artist to achieve your sense of being, and not remain ignorant and obedient to authority like the panther that replaced him.

[1] Cornwell, N., Franz Kafka: otherness in the labyrinth of absurdity. In N. Cornwell, The absurd in literature , Manchester University Press, 2006, pp.184-214

[2] Biography.com Editors. Franz Kafka Biography. From The Biography.com Web site: https://www.biography.com/writer/franz-kafka-- accessed on (2021, May 10)

[3] Ibid

[4] Edwards, I. (1991, December 29). The Essence of 'Kafkaesque'. From The New York Times Web site: https://www.nytimes.com/1991/12/29/nyregion/the-essence-of-kafkaesque.html-- accessed on 2021,June 20

[5] Francis, S., & Prahaladaiah, D., Existential Approach to Franz Kafka's 'The Metamorphosis'. Online International Interdisciplinary Research Journal,(2019), 22-27

[6] Ibid.

[7] Sutherland, J., Absurd Existences. In J. Sutherland, A Little History of Literature , Yale University Press, 2013,
pp. 179-184

[8] Camus, A., The Myth of Sisyphus. Great Britain: Penguin Books, 1979,p 20

[9] Kafka, F., A Hunger Artist. In F. Kafka, A Hunger Artist and Other Stories, Oxford University Press. 2012, pp. 94-103

[10] Op.Cit. Camus, A. The Myth of Sisyphus

[11] Bennet, M. Y., Cambridge Introduction to Theatre and Literature of the Absurd. Cambridge University Press.2015, p.15

[12] Ibid.

[13] Lee, K. (2017). Fathering the Kafkaesque: Transcendental Authority and the Problem of the Absurd in Kafka. doi: https://doi.org/10.17615/k34c-g386-

[14] Ibid.

[15] Ibid.

[16] Steinhauer, H., Hungering Artist or Artist in Hungering: Kafka's "A Hunger Artist". Criticism, 1962, pp.28– 43.

[17] Akbar, M. A., & Khan, N. U., Anguish and Nothingness in Kafka's 'A Country Doctor' and 'The Starvation- Artist'. Elementary Education Online, (2021) 2835-2841

[18] Abu-Snoubar, T. K. Symbolism and the Alienation of the Artist in a Hunger Artist. Forum for World Literature Studies, (2020), 158-173

[19] Ibid.

[20] Hooti, N., & Borna, M. R., The Profound Sense of Dissatisfaction: A Comparative Study of Franz Kafka's A Hunger Artist and Maulana Jalalu-d'-Din Muhammad i Rumi's A Man of Baghdad. Advances in Language and Literary Studies, (2014), 53-57

[21] Ibid.

[22] Op.Cit. Kafka, F. A Hunger Artist. In F. Kafka, A Hunger Artist and Other Stories

[23] Ibid.

[24] Op.Cit. Camus, A., The Myth of Sisyphus.

[25] Op.Cit. Kafka, F., A Hunger Artist. In F. Kafka, A Hunger Artist and Other Stories

[26] Op.Cit. Camus, A., The Myth of Sisyphus

[27] Op.Cit. Hooti, N., & Borna, M. R., The Profound Sense of Dissatisfaction: A Comparative Study of Franz Kafka's A Hunger Artist and Maulana Jalalu-d'-Din Muhammad i Rumi's A Man of Baghdad.

[28] Op.Cit Kafka, F., A Hunger Artist. In F. Kafka, A Hunger Artist and Other Stories

[29] Ibid.

[30] Ibid.

[31] Op.Cit. Camus, A., The Myth of Sisyphus

[32] Ibid.

[33] Op.Cit. Kafka, F., A Hunger Artist. In F. Kafka, A Hunger Artist and Other Stories

[34] Ibid.

[35] Gilman, S. L. (2005). A Life ill. In S. L. Gilman, Franz Kafka, Reaktion Books. 2005, pp. 102-130

[36] Op.Cit. Kafka, F., A Hunger Artist. In F. Kafka, A Hunger Artist and Other Stories

[30] Ibid.

[31] Op.Cit. Camus, A., The Myth of Sisyphus

[32] Ibid.

[33] Op.Cit. Kafka, F., A Hunger Artist. In F. Kafka, A Hunger Artist and Other Stories

[34] Ibid.

[35] Gilman, S. L. (2005). A Life ill. In S. L. Gilman, Franz Kafka, Reaktion Books. 2005, pp. 102-130

[36] Op.Cit. Kafka, F., A Hunger Artist. In F. Kafka, A Hunger Artist and Other Stories

REFERENCES

1. Abu-Snoubar, T. K. Symbolism and the Alienation of the Artist in a Hunger Artist. Forum for World Literature Studies, 2020

2. Akbar, M. A., & Khan, N. UAnguish and Nothingness in Kafka's 'A Country Doctor' and

'The Starvation- Artist'. Elementary Education Online, 2021

3. Bennet, M. Y., Cambridge Introduction to Theatre and Literature of the Absurd. Cambridge University Press, 2015
4. Biography.com Editors. Franz Kafka Biography. From The Biography.com Web site: https://www.biography.com/writer/franz-kafka accessed on 2021, May 10
5. Camus, A., The Myth of Sisyphus. Great Britain: Penguin Books, 1979
6. Cornwell, N., Franz Kafka: otherness in the labyrinth of absurdity. In N. Cornwell, The absurd in literature. Manchester University Press.2006
7. Edwards, I. (1991, December 29). The Essence of 'Kafkaesque'. From The New York Times Web site: https://www.nytimes.com/1991/12/29/nyregion/the-essence-of-kafkaesque.html
8. Francis, S., & Prahaladaiah, D. Existential Approach to Franz Kafka's 'The Metamorphosis'. Online International Interdisciplinary Research Journal, 2019
9. Gilman, S. L., A Life ill. In S. L. Gilman, Franz Kafka . Reaktion Books, 2005
10. Hooti, N., & Borna, M. R., The Profound Sense of Dissatisfaction: A Comparative Study of Franz Kafka's A Hunger Artist and Maulana Jalalu-d'-Din Muhammad i Rumi's A Man of Baghdad.
11. Advances in Language and Literary Studies, 2014
12. Kafka, F., A Hunger Artist. In F. Kafka, A Hunger Artist and Other Stories. Oxford University Press, 2012
13. Lee, K. (2017). Fathering the Kafkaesque: Transcendental Authority and the Problem of the Absurd in Kafka. doi:https://doi.org/10.17615/k34c-g386
14. Steinhauer, H. Hungering Artist or Artist in Hungering: Kafka's "A Hunger Artist". Criticism, (1962) Sutherland, J., Absurd Existences. In J. Sutherland, A Little History of Literature. Yale University Press, 2013

A STUDY ON INFLUENCE OF DIGITAL MARKETING ON BUYING BEHAVIOR OF YOUTH

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ABSTRACT
People now use technology to assist them with every work because it has developed so quickly throughout the world. People used to employ a variety of tactics in the past to market their products in businesses. However, too many people nowadays rely too heavily on technology support for their personal or professional tasks. To put it simply, digital marketing is the process of promoting companies or products online or through electronic devices. Digital marketing is expanding quickly these days due to the fact that young people are increasingly using the internet for online shopping, online communication, online surfing, and other activities. Even older people are starting to use these online platforms for bill payment, bill payment, shopping, information searching, and other purposes. People's behaviours created a chance for businesses to readily market their goods and attract clients. It has also been discovered that many people prefer to shop online using websites or other technologies rather than going to physical stores. Users' time and energy are saved, which has a beneficial effect on their purchasing decisions. We will focus on the impact of digital marketing on young people's purchasing habits in this study.

Keywords: Technology, Marketing strategy, Digital marketing, Buying behavior

INTRODUCTION

Digital Marketing includes the promotion of goods or services via digital channels to connect with consumers, aiming to boost brand visibility across various digital platforms. It encompasses internet- based marketing strategies as well as offline digital avenues, including mobile devices (such as SMS and MMS), social media platforms, display ads, and search engine marketing.

Experts assert that digital marketing represents more than just another marketing channel; it demands a fresh marketing approach and a deeper understanding of consumer behavior. This contains analyzing and quantifying the impact of digital engagements like mobile app downloads, Twitter interactions, and Facebook likes.

Digital marketing encompasses a wide range of techniques, including SEO, SEM, and link building, both on the internet and through non-internet digital platforms like SMS, MMS, e-books, and games. A primary objective of digital marketing is to engage customers and foster interaction with the brand through the delivery of digital content. This often involves prompting users to take specific actions, such as registering or filling out forms to access content like ebooks, thereby providing advertisers with valuable leads or customers.

DIGITAL MARKETING CHANNELS

Website Marketing: It serves as the central hub for all digital marketing seeks. It stands as a strong channel on its own and acts as the primary platform for executing various online marketing initiatives.A well-crafted website should effectively integrated the brand, products, and services, ensuring clear and lasting impressions on visitors. Additionally, it should prioritize speed, mobile compatibility, and user-friendliness to enhance the overall user experience.

Pay-Per-Click (PPC): Advertising presents an opportunity to engage with internet users across multiple digital platforms through paid advertisements. Platforms such as Google, Bing, LinkedIn, Twitter, Pinterest, and Facebook allow for the creation of PPC campaigns, targeting individuals actively searching for relevant products or services. These campaigns can be finely tuned to target specific demographic characteristics (such as age, gender) or user interests and geographical location. Among the most widely utilized PPC platforms are Google Ads and Facebook.

Content Marketing: It revolves around the objective of connecting with potential customers by delivering valuable content. Typically, After being posted on a website, material can be shared via email marketing, social media, search engine optimisation, or PPC advertising. Content marketing uses a variety of tools, such as blogs, eBooks, online courses, infographics, podcasts, and webinars.

Email Marketing: This is still one of the most effective platforms for digital marketing. Email marketing is about interacting with people who are interested in your brand or who are potential clients, despite popular misunderstandings linking it with spam. Using email marketing to create customer acquisition funnels and turn leads into customers, a lot of digital marketers use various digital marketing channels to grow their email lists.

Social Media Marketing: It primarily focuses on enhancing brand awareness and establishing social credibility. However, it can be leveraged to generate leads and serve as a direct sales channel as marketers delve deeper into its capabilities.

Affiliate Marketing: A durable marketing practice re-energize by the internet, involves promoting third-party products and earning commissions for each sale or lead generated. Major companies like Amazon offer affiliate programs that reward websites for driving sales, resulting in significant payouts monthly.

Video Marketing: It has surged in fame, with YouTube ranking as the second most popular search engine. Users often turn to platforms like YouTube for product research, educational content, or entertainment. Various platforms, including Facebook and Instagram, support video marketing campaigns. Successful video marketing strategies often integrate SEO, content marketing, and social media efforts for optimal results.

SMS Messaging:

It serves as a tool employed by political entities to disseminate positive information about their candidates and negative messages regarding opponents. This form of communication allows for direct outreach to constituents, influencing opinions and shaping public perception during political campaigns.

DIGITAL MARKETING CHALLENGES

Digital marketing presents unique challenges for marketers. The rapid increase of digital channels necessitates constant adaptation to understand their functionality, usage patterns by recipients, and effective marketing strategies. Moreover, as consumers are bombarded with an increasing volume of competing advertisements, capturing their attention becomes increasingly challenging.

Additionally, digital marketers encounter difficulties in analyzing the extensive datasets they collect and leveraging this information for innovative marketing initiatives. Effectively utilizing data underscores the necessity for a fresh marketing approach grounded in an updated comprehension of consumer behavior. This may carry analyzing emerging forms of consumer engagement, such as Facebook likes and Twitter tweets, to inform marketing strategies effectively.

REVIEW OF LITERATURE

Janathanan, Chrishankar& Nizar, Naseeth. (2018)

The problems with the based articles are addressed by the research. Additionally, this research creates a far more practical and straightforward method for creating social media marketing that forecasts customer purchasing behaviour.

Tandon, Nidhi & Kaur, Simran. (2018)

Customers can use digital marketing to look at the details of the products the firm offers and compare prices accordingly, giving them the freedom to select and place an order anywhere, at any time, 24 hours a day. Customers are becoming more interconnected every day due to updated technologies and increased internet usage; as a result, consumer behaviour has changed, and businesses need to be aware of this of a customer. The impact of digital marketing on customer purchasing behaviour is examined in this research study. Because digital marketing influences customer purchasing behaviour in a beneficial way, traditional marketing should soon give way to digital marketing.

Teo, Thompson &Yeong, Yon. (2003)

The decision-making process of consumers inside the Singaporean online retail environment is the main topic of this study. A web-based poll was conducted, and 1133 answers were obtained. Our results, which are based on structural equation modelling, demonstrate that customers' propensity to buy online is positively correlated with their overall evaluation of the bargain, whereas their perception of risk has a negative correlation with the latter. Furthermore, the total deal rating and the perceived benefits of search have a favourable correlation. There is a discussion of the significance of the aforementioned findings as well as recommendations for additional research.

Li, Hairong&Kuo, Cheng & Russell, Martha. (1999).

This study examined and presented a model of online consumer purchasing behaviour. According to the model, shopping orientations, perceived channel utilities, channel expertise, and demographics all have an impact on consumers' online purchasing decisions. Before the data were used to test the model, they were cross-validated with data from other comparable national polls. The research company conducted an online survey to gather data from 999 Internet users in the United States. Based on the study's findings, Internet users' online buying status (frequent, occasional, or non-buyer) can be accurately predicted by factors like education, convenience orientation, experience orientation, channel knowledge, perceived distribution utility, and perceived accessibility. Future research directions and their implications were discussed.

OBJECTIVES

- To research young people's purchasing habits in relation to digital marketing.
- To check if it is safe and secure to shop online.
- To examine the elements influencing young people's decisions to make online purchases.
- To examine the marketing strategy that young people find most appealing.
- To make suggestions and recommendations for practical concepts that can advance digital marketing.

HYPOTHESIS

HO: Conventional marketing techniques are not preferred by the majority of individuals. H1: Conventional marketing techniques are preferred by the majority of consumers.

HO: Online deals and promotions don't entice people to make purchases online. H1: Online promotions and deals entice buyers to make purchases online.
HO: When it comes to payments and financial activities, online purchasing is not safe or secure.
H1: When it comes to financial transactions or payments, online purchasing is safe and secure.

HO: Poor quality information is not available while shopping online. H1: Quality information is available while shopping online.

RESEARCH METHODOLOGY DATA COLLECTION

Primary Data: The survey approach is used to collect data from the youth. With the aid of a structured questionnaire, data from 230 respondents was gathered using a random sample technique.
Secondary Data: The sources of this information include research articles, journals, theses and dissertations, among other written works

RESEARCH DESIGN

The current research is both descriptive and analytical in character. It will emphasise how consumer behaviour is influenced by digital marketing, with a focus on young people in particular.

SAMPLING PLAN

1) Sample Unit: Navi Mumbai youths. (Single internet users only)
2) There are 230 samples.
3) Convenience sampling using random selection Methods of Sampling: Non-Probability
4) Structured Questionnaire as a Sampling Tool
5) Chi-Square, percentage, and Likert scale methods are statistical tools for sampling.

The participants in this study are consumers who use the Internet frequently, and it is anticipated that the findings will also apply to other young people in the same age range. It was believed that every response provided by participants was truthful and objective.

LIMITATIONS

The study is limited to young people who live in Navi Mumbai city and are between the ages of 18 and 30.
This study makes use of a number sites, including WhatsApp, Facebook, Instagram, YouTube, and others. The study was conducted for a little time, thus its results may not hold up over time.

DATA ANALYSIS & INTERPRETATION:

1. Number of Internet users (In terms of Gender)

Gender	No of users	%
Male	124	54
Female	106	46

Out of 230 respondents, around 46% of users are Males and 54% of users are Females.

1. Most preferred method of Advertisement

Methods	No. of Respondents	%
Modern Methods (Online/Digital Marketing)	197	86
Traditional Methods (Wall painting, Banners, Free Samples, etc.)	33	14

Just 33 respondents, or 14%, are drawn to the conventional approach of running ads in publications like newspapers and radio. Furthermore, the majority of respondents—197 out of 230, or 86%—are enthralled with contemporary techniques of digital platform advertising.

1. The most frequently used Social networking sites

Social Networking sites	No. Of total users	%
YouTube	154	67
Facebook	83	37
Instagram	145	63
WhatsApp	166	72
Others	26	12

Because WhatsApp, YouTube, and Instagram are the three most popular social media platforms (72%, 67%, and 63%, respectively), their adverts have a higher value than those on any other website. The purpose of Being Online

Purpose	No. of Respondents	%
Shopping	71	31
Mail	67	30

Browsing	123	54
social networking	172	76

The majority of respondents—76% and 54%, respectively—use the Internet for social networking and surfing, which is the primary reason they are online.
Whereas only a few of them are spending time online for shopping and mail.

2. **Useful source/s of getting the quality information**

Sources	No. of respondents	%
Newspaper	52	23
Radio	10	4
Websites/Social networking sites	203	89
SMS/E-mail	43	19

Websites and social networking sites are the most helpful source of high-quality information on the product to be purchased online, accounting for roughly 89% of all sources; newspapers, radio, and SMS are the least helpful, accounting for 23%, 4%, and 19% of all sources.

Factors affecting Purchasing Decision

Factors	No. of Respondents	%
Watching Ads online	104	46
Family/Friends references	140	62
Through salesmen	10	4
By visiting the retail outlets	110	49

This study found that the majority of consumers—62%—prefer to buy a product after hearing about it from friends or family. Customers who watch advertisements online (46%) or in-store (49%), are less likely to do so. Just 4% of customers desire to make purchases through salespeople, which is extremely rare.

2. Factors affecting while purchasing products online

Factors	No. of Respondents	%
Online offers (cash back/vouchers, etc.)	158	69
Availability of instant information	109	48
Could not visit Retail outlets	46	20
Attractive Web design	32	14

The availability of quick information (48%) and online offers or vouchers (69%) are observed to have a significant influence on the decisions made by many customers while making online purchases.

1. Highlights of the factors affecting Convenience of online shopping as compared to retail outlets

FACTORS	Strongly Agree	Agree	Disagree	Strongly Disagree
Online shopping is Convenient and Time Saving	82 (35%)	131 (58%)	15 (6%)	2 (1%)
I can buy the product anytime 24 hours a Day	114 (49%)	94 (41%)	20 (9%)	2 (1%)
I feel safe and secure while shopping online in terms of payment	15 (7%)	125 (54%)	80 (35%)	10 (4%)
I prefer to buy from the websites that provides me the quality Information of the product	68 (30%)	136 (59%)	23 (10%)	3 (1%)
It is easy to choose and make comparison with other Products while shopping Online	88 (38%)	119 (52%)	19 (8%)	4 (2%)

Detailed information is available while shopping online	51 (22%)	144 (62%)	31 (14%)	4 (2%)
I get On-Time delivery while shopping the products online	40 (18%)	139 (60%)	44 (19%)	7 (3%)

Approximately 58% of consumers agree that shopping online is convenient; 49% strongly agree that they should shop online because it is always open; 54% agree that online shopping is safe and secure; 59% agree to shop online from websites that offer high-quality product information; 52% agree that it is simple to select products and compare them with others; 62% agree that comprehensive information is available when shopping online; and 60% agree that they receive their purchases on schedule.

According to this research, the majority of consumers would rather purchase things online since they consider it to be more convenient, simple, and time-saving than shopping from.

2. Customer Opinion/Suggestions regarding digital Marketing

Customers reviewed the product and offered some recommendations and comments. Using digital platforms for online shopping was strongly recommended by several of them due to its convenience, time-saving nature, round-the-clock availability, ease of comparison, etc. A small percentage of them, however, believe that internet shopping is not safe or secure due to concerns with the payment system, data theft, default products, delivery, etc. Finally, a few of them recommended that we always read product reviews before deciding to purchase anything online because doing so will ultimately aid us in making the best purchasing option**.**

HYPOTHESES TESTING

1. HO: Conventional marketing techniques are not preferred by the majority of individuals.
2. H1: Conventional marketing techniques are preferred by the majority of consumers.

Methods	Actual Response	Expected Response	Results
Modern Methods	197	113.5	Calculated Value 2.807
			Table Value

Traditional Methods	33	113.5	3.841
Total	230	230	Level of Significance 5%

At the 5% level of significance, the computed result, 2.807, is smaller than the tabular value, 3.841, following the application of the CHI-SQUARE TEST. The majority of consumers like modern marketing techniques, hence the null hypothesis are accepted as a result.

1. HO: Online promotions and deals don't entice people to purchase products online. H1: Online promotions and deals entice buyers to make purchases online.

With reference to Q.7 159 out of 230 respondents gave a positive reaction when asked about online coupons and deals that entice them to buy things online. It is evident from this statistics that most buyers are drawn to online deals and promotions in order to make purchases online. The null hypothesis is thus disproved.

2. HO: When it comes to payments and financial transactions, online buying is neither safe or secure. H1: When it comes to financial transactions or payments, online purchasing is safe and secure.

Likert Scale Analysis	SA	A	DA	SDA	Total	Calculation
Response of customers towards how safe and secure they feel in terms of payment while shopping online	15	122	80	10	230	596/230 =2.63
Weight Assigned	4	3	2	1	10	
Total Weight(Value)	60	366	160	10	596	
Response of customers towards how safe and	15	122	80	10	230	
secure they feel in terms of payment while						
shopping online						596/230
						=2.63
Weight Assigned	4	3	2	1	10	
Total Weight(Value)	60	366	160	10	596	

The computed mean value, according to the Likert scale analysis, is 2.63, or around point 3, or Agree. This investigation so demonstrates that the majority of consumers feel comfortable and secure making payments when they shop online.

HO: Poor quality information is not available while shopping online. H1: Quality information is available while shopping online.

Likert Scale Analysis	SA	A	DA	SDA	Total	Calculation
Response of customers towards the quality information provided by different websites while shopping online.	68	135	24	3	230	728/230 =3.16
Weight Assigned	4	3	2	1	10	
Total Weight(Value)	272	405	48	3	728	

The computed mean value, according to the Likert scale analysis, is 3.16, or point 3, or Agree. This test so demonstrates that the majority of consumers accept the high-quality information offered by various websites when making purchases online

CONCLUSIONS

strategies such as social networking sites and websites because they believe them to be more time- and convenience-efficient than traditional brick-and-mortar stores. When making payments online, the vast majority of consumers feel safe and secure. One of the key elements offered to clients that entices them to purchase things online is online promotions and deals. Customers are also drawn to online buying by a few other aspects, such as availability around-the-clock, high-quality information, and on-time delivery. As a result, digital marketing is quite important in influencing young people's purchasing decisions in India.

SUGGESTIONS

Before choosing to purchase things online, clients are advised to:

1. Verify that their internet connection is stable before making any purchases or payments.
2. Examine the reviews for the specific item that they are wishing to purchase.
3. It is also advised that they only make purchases from reliable websites.
4. Verify the legitimacy of online promotions and deals offered on various products.
5. Examine the products carefully and pay close attention to details before accepting them.

6. Make every effort to use the CASH-ON-DELIVERY option when making an online transaction. The suggestions for **marketers (companies)** to market their products online:

   a. The most popular social media platforms among young people are Instagram, YouTube, and WhatsApp. As a result, it is advised that businesses advertise on these social networking sites increasingly frequently to promote their goods.
   b. The majority of consumers, or 89%, look for product information on various websites and social media platforms. In order to draw in young people, it is advised that businesses post high- quality content on their websites and social media accounts.
   c. To encourage clients to make an online purchase, businesses are urged to offer better online deals, promotions, coupons, cashback offers, etc.
   d. To ensure that their customers feel safe and secure while using digital payment methods like credit cards and debit cards, businesses should strengthen and safeguard their payment systems.

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REFERENCES JOURNALS

1. Janathanan, Chrishankar& Nizar, Naseeth.(2018). Impact of digital marketing on consumer purchase behaviour; A case study on Dialog Axiata with specific reference to social media marketing.
2. Tandon, Nidhi & Kaur, Simran.(2018). Impact of Digital Market on Consumer Buying Behaviour.
3. Teo, Thompson &Yeong, Yon. (2003). Assessing the consumer decision process in the digital marketplace. Omega. 31. 349-363. 10.1016/S0305-0483(03)00055-0.
4. Li, Hairong&Kuo, Cheng & Russell, Martha. (1999). The Impact of Perceived Channel Utilities, Shopping Orientations, and Demographics on the Consumer's Online Buying Behavior. J. Computer- Mediated Communication. 5. 10.1111/j.1083-6101.1999.tb00336.x.

WEBSITES

1. https://web.archive.org/web/20171129124232/http://lexicon.ft.com/Term?term=digital-marketing
2. https://www.techopedia.com/definition/27110/digital-marketing
3. https://www.investopedia.com/terms/d/digital-marketing.asp
4. https://www.investopedia.com/terms/d/digital-marketing.asp

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EXPLORING THE CUSTOMER JOURNEY: INSIGHTS, STRATEGIES, AND BEST PRACTICES

Pavankumar Siji Maveli

ABSTRACT

Understanding and enhancing the customer experience is crucial for organizational success in the fast-paced commercial world of today. Businesses can explore client interactions across touch points with the use of customer journey mapping, which is a powerful tool. The goal of this study is to thoroughly examine customer journey mapping, including its theoretical underpinnings, real-world implementations, and business ramifications. We outline the essential components of customer journey mapping and illustrate its advantages—such as increased customer satisfaction and chances for innovation—through a study of the literature and empirical research. We address issues such as data accessibility and challenging interpretation and provide useful business advice. Case studies from the real world demonstrate how successful customer journey mapping is across industries. This essay essentially highlights the strategic significance of customer journey mapping in the customer-centric economy of today. Through the utilization of mapping-derived insights, organizations can enhance consumer interaction, cultivate loyalty, and attain a competitive edge.

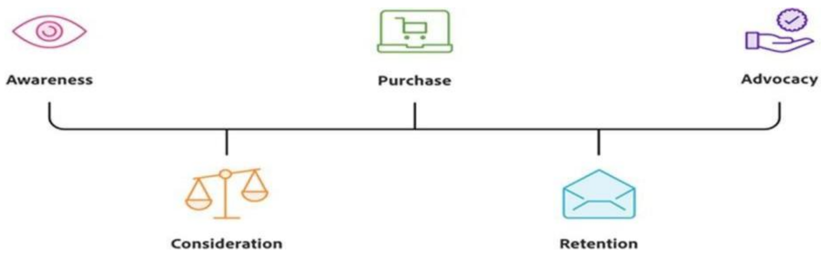
Keywords: Customer Journey, McDonald's, Disney, and Airbnb journey maps, customer journey mapping, stages of the customer journey, elements of the customer journey

INTRODUCTION

Understanding your consumers' requirements, difficulties, and interactions with your brand is made easier with the use of a customer journey map. It becomes a crucial tool for efficient project management when used properly. The map, which is displayed as a timeline, shows each and every interaction a consumer has with your company, from first awareness to recurring business. It offers perception into the experience of the client at every point of contact. A customer journey map, for example, can show that a consumer finds it challenging to assess your goods on your mobile website, finds it tough to locate the information they need online, values the in-store customer service, and ultimately chooses to make a repeat purchase.

Customer journey stages:

Customer journey stages encompass the various steps or phases that a customer goes through when engaging with a brand, product, or service. These stages typically include:



1. **Insights into Customer Behavior:** Analyzing customer actions reveals their motivations, allowing businesses to better tailor products and services to meet their needs.

2. **Targeting Effective Touch points:** Mapping the customer journey helps identify valuable touch points for engaging with customers, optimizing marketing efforts for maximum impact.

3. **Addressing Product Issues:** Recognizing stumbling blocks in the customer journey, such as abandoned purchases, signals potential issues with products or services that need to be resolved promptly.

4. **Enhancing Marketing Strategies:** A documented customer journey provides valuable insights for marketing teams to align efforts with customer expectations, improving overall effectiveness.

5. **Increasing Customer Engagement:** Tailoring the customer experience based on the customer journey leads to higher engagement, satisfaction, and loyalty.

6. **Boosting Conversions:** Personalized marketing strategies resonate better with customers, increasing the likelihood of conversions and driving revenue growth.

7. **Improving ROI:** Investing in understanding and optimizing the customer journey results in a higher return on investment for businesses.

8. **Fostering Customer Satisfaction and Loyalty:** A positive customer experience leads to repeat purchases and long-term loyalty, vital for sustained business success.

Elements of a Customer Journey Map

A comprehensive customer journey map typically includes the following key elements:

1. Persona: Identifying specific customer personas to personalize the map according to their unique needs and behaviors.

2. **Journey Stages**: Dividing the customer journey into distinct stages provides context for customer actions and decisions.
3. **Touch points:** Recognizing interactions customers have with the brand across different channels helps map out the journey comprehensively.
4. **Actions and Emotions:** Highlighting customer actions and emotions at each touch point aids in understanding and addressing their needs effectively.
5. **Moments of Truth:** Identifying critical points in the journey where the customer's perception of the brand is influenced allows for strategic prioritization of efforts.
6. **Opportunities and Pain Points:** Identifying improvement opportunities and customer pain points helps enhance the overall experience.
7. **Channels and Devices:** Considering the various channels and devices customers use ensures a seamless and consistent experience.
8. **Goals and Motivations:** Understanding customer goals and motivations at each stage of the journey enables tailored strategies to meet their needs effectively.

Six steps to creating a customer journey map:

Creating a customer journey map involves the following steps:

1. **Clarify Objectives:** Determine the aspects of the customer journey to analyze and improve.
2. **Develop Customer Persona:** Create a detailed profile of the ideal customer, including demographics and preferences.
3. **Identify Buying Phases:** Map out key stages from awareness to post-purchase engagement.
4. **Plot Touch points:** Document interactions at each stage, both online and offline.
5. **Capture Thoughts and Emotions:** Understand customer mindset and behavior for actionable insights.
6. **Identify Opportunities:** Determine improvement areas based on goals and insights from the map.

Challenges of customer journey mapping:

Despite its benefits, customer journey mapping presents challenges such as:

1. **Data Integration:** Gathering and integrating data sources can be complex and time-consuming.
2. **Complexity of Journeys:** Nonlinear customer journeys require deep understanding and analysis.
3. **Identifying Relevant Touch points:** Prioritizing touch points can be challenging due to varying customer interactions.
4. **Lack of Customer Understanding:** Limited insight into customer behaviors impacts the effectiveness of mapping efforts.
5. **Organizational Silos:** Collaboration across departments is crucial but can be hindered by communication barriers.

6. Privacy and Compliance Concerns: Gathering customer data raises privacy issues and requires compliance with regulations.

7. Measuring Impact: Quantifying the impact of mapping initiatives on business outcomes is essential but complex.

By overcoming these challenges and focusing on understanding and improving the customer experience, businesses can create accurate and actionable customer journey maps to enhance overall customer satisfaction and drive better outcomes.

RESEARCH METHODOLOGY

Objectives of study:

1) Analyze customer interactions and behaviors across various touch points throughout the customer journey.
2) Identify key stages and touch points that influence customer satisfaction and loyalty.
3) Compare customer journey mapping practices across different industries and sectors

HYPOTHESIS:

H0: There is no significant relationship between the implementation of customer journey mapping initiatives and customer satisfaction levels.

H1: There is a significant relationship between the implementation of customer journey mapping initiatives and customer satisfaction levels.

COLLECTION OF DATA:

This research relies on data obtained from secondary sources to analyze the impact of customer journey mapping on customer satisfaction levels.

LIMITATION OF STUDY:

1. Data Quality: The consistency and reliability of secondary data sources may vary, potentially impacting the integrity and strength of the study's outcomes.

2. Data Completeness: Secondary data may lack certain variables or information relevant to the study objectives, limiting the depth and comprehensiveness of the analysis.

3. Data Relevance: Secondary data may not fully align with the specific research questions, leading to potential mismatches between available data and research goals.

LITERATURE REVIEW:

1. John Smith and colleagues' "Customer Journey Mapping: A Comprehensive Review" This study of the literature provides a comprehensive analysis of customer journey mapping, covering its history, methods, and uses across a range of sectors. Smith and colleagues explore the beginnings of customer journey mapping and follow its evolution as a means of comprehending and improving the customer experience. They examine different approaches to charting consumer journeys, from sophisticated data analytics tools to qualitative research methods. The analysis also demonstrates the effectiveness and applicability of customer journey mapping in enhancing customer satisfaction and loyalty by highlighting real-world applications in retail, healthcare, and digital marketing. All things considered, this thorough analysis is an invaluable tool for scholars and professionals who want to learn more.

2. "The Impact of Customer Journey Mapping on Business Performance: A Review of Empirical Evidence" by Anna Wang et

The literature review "The Impact of Customer Journey Mapping on Business Performance: A Review of Empirical Evidence" by Anna Wang et al. Wang et al. focuses on the connection between business performance indicators and customer journey mapping activities. The review examines how much customer journey mapping contributes to key performance measures including customer satisfaction, retention, and profitability, based on actual data from a variety of businesses. The paper highlights the beneficial effects of customer journey mapping on business outcomes by identifying patterns and trends through a methodical analysis of the empirical data. Additionally, it clarifies the ways in which customer journey mapping affects operational efficiency, promoting better customer knowledge, and strengthening strategic decision-making, among other ways. This analysis offers useful insights for companies looking to use customer journey mapping to achieve quantifiable gains in performance and competitive advantage by combining the results of previous studies.

3. Sarah Johnson and colleagues' "Customer Journey Mapping in Service Design: A Review of the Literature"

The literature analysis by Johnson et al. examines how customer journey mapping and service design interact, with a particular emphasis on how combining these two ideas might result in better customer- centric service experiences. The paper looks at the theoretical underpinnings of customer journey mapping and service design, emphasizing how complementary these methods are for comprehending and enhancing the customer experience. Utilizing case studies from diverse service sectors such as lodging, conveyance, and banking, the analysis demonstrates how enterprises have effectively implemented customer journey mapping concepts to guide service design procedures. Furthermore, the analysis highlights typical difficulties and recommended procedures related to incorporating customer journey mapping into service design projects, offering useful advice for businesses looking to improve the services they provide and set themselves apart in crowded markets

4. The literature study "Customer Journey Mapping: A Systematic Review of Methodologies and Tools" by Laura Gracia Garcia et al. offers a methodical examination of the approaches and resources employed in customer journey mapping projects. The authors identify and assess different approaches to mapping consumer journeys through a thorough assessment of the literature. These approaches range from quantitative techniques like data analytics and journey mapping software to qualitative research methods like interviews and observations. The review evaluates each approach's advantages and disadvantages, taking into account aspects like resource requirements, accuracy, and scalability. The analysis delves into the latest developments in customer journey mapping techniques, including the use of artificial intelligence and machine learning algorithms to facilitate personalised customer experiences and predictive modelling.

5. "Digital Marketing's Customer Journey Mapping: An Examination of Best Practices and Case Studies Michael Brown and colleagues, "Exploring the Customer Journey: Insights, Strategies, and BestPractices."

The implementation of customer journey mapping in the context of digital marketing is the main topic of Brown et al.'s literature review. The review looks at case studies and best practices from a range of industries, such as content marketing, social media marketing, and e-commerce, to show how businesses can use customer journey mapping to improve online consumer experiences and optimize their digital marketing strategy. The review highlights important concepts and tactics for efficient customer journey mapping in digital environments, such as the significance of multi-channel integration, personalised messaging, and real-time data, by using examples of successful digital marketing campaigns. In addition, the analysis addresses new developments in digital marketing, such as voice search optimization, mobile marketing, and marketing automation powered by artificial intelligence, and how these affect customer journey mapping. All things considered, this study is a great tool for digital marketers that want to keep on top of trends and provide engaging client experiences in a world that is getting more digital.

6. "Customer Journey Mapping: A Review of Techniques and Applications in Tourism and Hospitality"writtenbyEmmaDavisetal.

The application of customer journey mapping methodologies in the tourism and hospitality sector is examined by Davis et al. They look at the particular difficulties and possibilities in mapping the consumer journeys in this industry, taking into account interactions between various touch points like booking websites, lodging, and attractions. In order to demonstrate practical methods for improving the visitor experience and raising guest satisfaction, the review examines best practices and case studies.

7. "Customer Journey Mapping in Financial Services: A Comprehensive Analysis of Practices and Impacts"writtenbyJameMilleretal.

The application of customer journey mapping in the financial services industry is examined by Miller et al. They examine how customer journey mapping is used by banks, insurance providers, and other financial organizations to improve client relations, expedite workflows, and expand product offerings. In order to show how customer journey mapping works in the financial services sector to promote customer loyalty and corporate growth, the review synthesizes empirical data with case studies from the sector.

 ISBN: 978-81-973714-8-6

8. Rachel White et al.'s "Customer Journey Mapping for Product Development: Integrating User ExperienceDesignPrinciples"

The integration of user experience (UX) design principles with customer journey mapping in product development processes is investigated by White et al. They look at how companies can use customer journey maps to pinpoint the preferences, behaviors, and pain areas of their customers. This helps them build solutions that live up to their expectations and satisfy their needs. In order to show how customer journey mapping improves the UX design process and results in the development of more creative and user- centric products, the paper addresses approaches and case studies.

9. Jessica Robinson et al.'s "Customer Journey Mapping in Healthcare: A Review of Methodologies andApplicationsinPatient-CenteredCare"

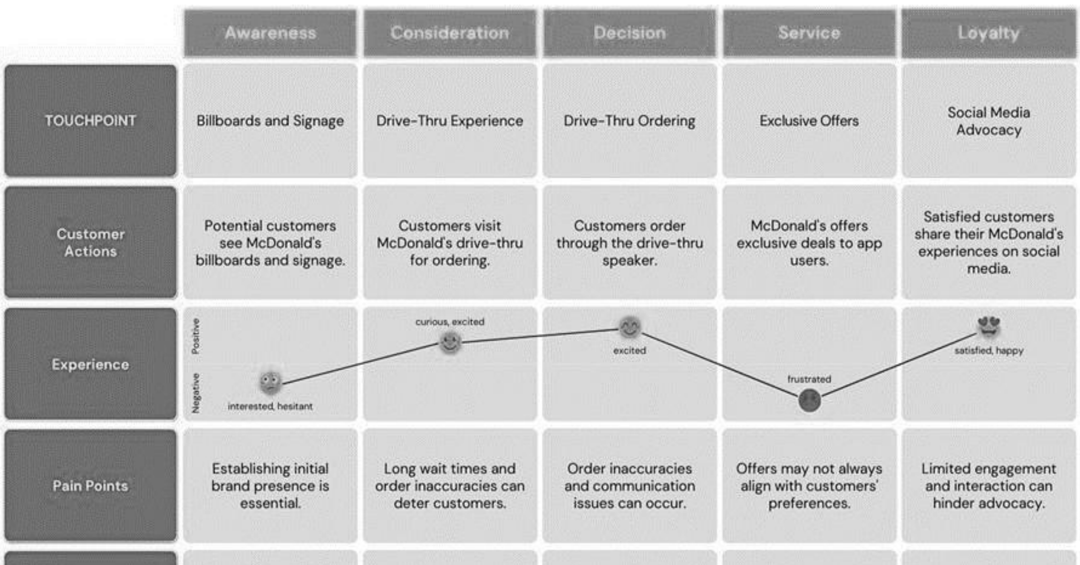
In order to enhance patient-centered care, Robinson et al. concentrate on the use of customer journey mapping in healthcare environments. They assess various approaches, including patient interviews, observation studies, and service blueprinting, that are utilized to map patient journeys. In order to find gaps in the delivery of care, improve communication between patients and providers, and maximize the patient experience throughout the many touch points in the healthcare journey, the evaluation looks at how healthcare organizations use customer journey mapping.

10. Olivia Taylor et al. "Customer Journey Mapping and Social Media: Exploring Strategies for EngagementanBrandAdvocacy"

Taylor and colleagues investigate the convergence of social media marketing with customer path mapping. They examine how companies apply customer journey mapping strategies to comprehend the preferences and social media activities of their intended market. In addition to exploiting customer journey analytics to create compelling and personalised social media ads, the review covers tactics for engaging customers on social media platforms and how to build brand advocacy and loyalty through genuine online customer interactions.

<u>**Examples of Effective Customer Journey Maps**</u>

1. **McDonalds:**



Stage 1: Awareness

Touch point	Activity	Pain point	Solution
Signage and billboards	Prospective consumers observe McDonald's signage and billboards	It is vital to establish an initial brand presence.	In high-traffic regions, strategically place billboards.
Ads on television	TV ads are one way that McDonald's reaches a larger audience.	There is fierce competition in the fast-food sector.	Make unique and imaginative TV ad marketing investments.
Participation on social media	McDonald's interacts with their patrons on social media sites.	It can be challenging at initially to build a strong social media presence.	To establish a connection with users, provide interesting and interactive material.

Stage 2. Consideration:

Touch point	Activity	Pain Points	Solutions
Smartphone application	Customers look through the menu and deals on the McDonald's mobile app.	Navigating through complicated apps can be annoying.	Provide easy-to-use interfaces and navigation for apps.
Drive-Thru experience	Customers order at the McDonald's drive-through.	Inaccurate orders and lengthy wait periods may turn away business.	Boost the accuracy and efficiency of the drive-through.
Reviews on the internet	Reviews regarding McDonald's are reviewed by prospective customers.	Customers may get discouraged by negative ratings.	Highlight the positive reviews and respond to any bad comments.

Stage 3 Conversion

Touch point	Activity	Pain point	Solution
Place orders in-store	Orders are placed by customers at the counter or in-store kiosk.	Difficult menu selections may cause delays.	Simplify the ordering process and make menu suggestions.
Ordering via drive-through	Orders are placed by customers using the drive-through speaker.	Errors in orders and problems with communication can happen.	Improve the communication and order accuracy.
Smartphone application	Customers can place contactless orders via the McDonald's mobile app.	Issues with technology may make ordering on a mobile device difficult.	Make sure the mobile ordering procedure is smooth and error-free.

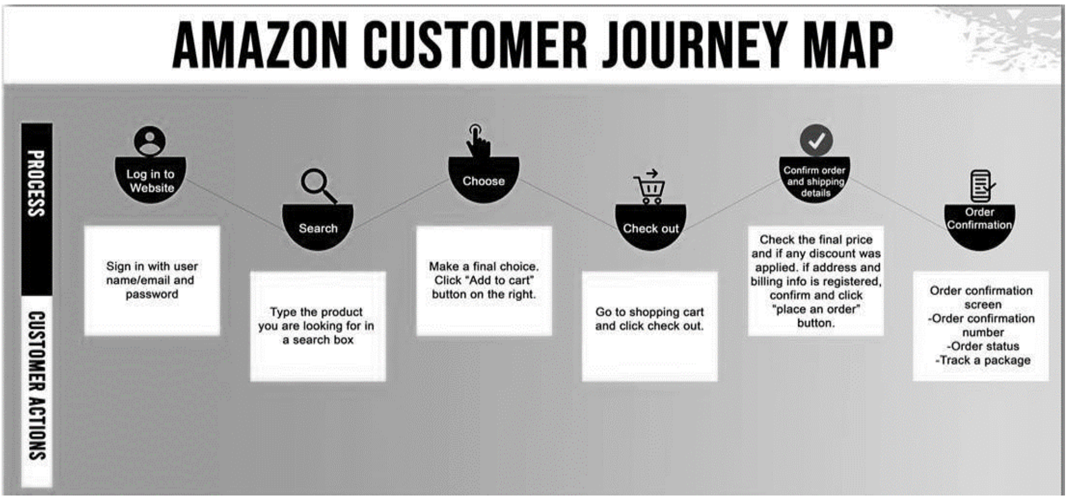
Stage 4: Loyalty

Touch point	Activity	Pain Point	Solutions
App loyalty for McDonald's	The McDonald's app loyalty programme is joined by customers.	Participants may be discouraged by unclear programme incentives and rewards.	Clearly communicate the advantages of the loyalty program.
Special deals and offers	McDonald's gives app users access to special offers.	Offers might not always match what customers want to see.	Customize offers According to customer choices and behavior.
Consumer opinions	To make changes, McDonald's collects consumer feedback through their app.	Unresolved problems may make users unhappy.	Customize offers According to customer choices and behavior.

Stage 5: Advocacy

Touch point	Activity	Pain Points	Solutions
Advocacy on social media	Customers that are happy with McDonald's share their experiences on social media.	Advocates may face challenges from low interaction and participation.	Encourage meaningful and engaged social media conversations.
material created by users	Content regarding McDonald's is created and shared by delighted customers.	Limited content created by users may affect advocacy.	Promote and honor the creation of user-generated content.

Example 2: Amazon



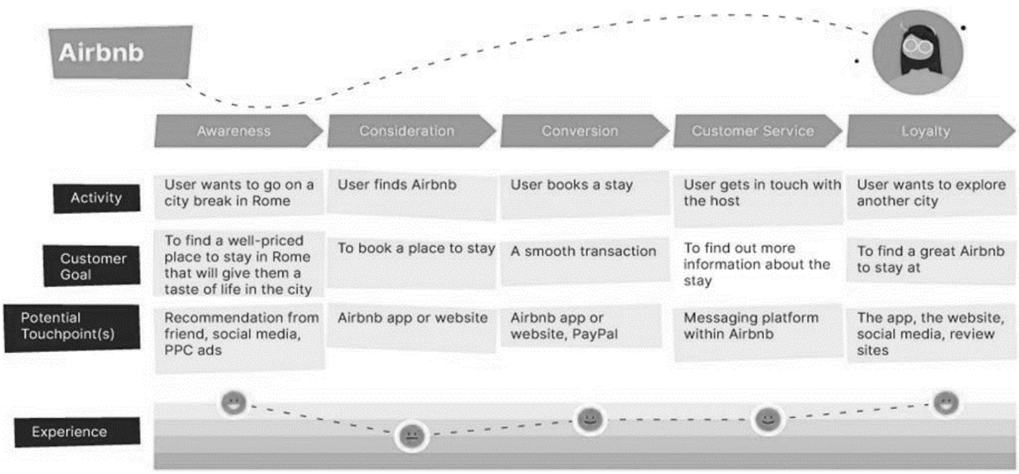
Amazon, as an e-commerce giant, utilizes customer journey mapping to enhance the online shopping experience for its customers. Here's a breakdown of how Amazon uses journey mapping:

User-Friendly Interface: Amazon prioritizes creating a user-friendly interface for both its website and mobile app. This design allows customers to navigate, browse, and make purchases with ease, contributing to a seamless shopping experience.

Recommendation Engine: Amazon's recommendation engine runs on advanced algorithms. Amazon may provide customized product recommendations based on each user's likes and preferences by examining their past browsing and purchase activity.

Effective Fulfilment: Amazon is renowned for providing consumers with reliable and timely product deliveries through its effective logistics and shipping services. Amazon reduces delivery times and offers customers a simple and convenient shopping experience by streamlining its fulfilment procedures.
Because of its commitment to making purchasing easy, Amazon has been known as a reliable and customer- focused leader in e-commerce. Amazon improves its capacity to meet and beyond customer expectations, fostering customer loyalty and satisfaction, by consistently improving its customer journey mapping strategy.
These examples show how businesses in a variety of sectors, including e-commerce, use customer journey mapping to provide their clients with outstanding experiences. By examining these methods, companies can get ideas and modify comparable tactics to meet the needs of their particular clientele and sector.

Example 3: Airbnb



Airbnb makes use of mapping the client journey:

Personalization: Using the user's search history and choices, Airbnb tailors the content on its website. Airbnb may offer customized recommendations and ideas by learning about the interests of each customer, which improves the entire experience and raises the possibility of bookings.

Clear Communication: Through its platform, Airbnb makes it easier for hosts and guests to communicate with one another. For both parties, the booking experience is improved and friction is decreased thanks to this simplified communication procedure. Transparency and trust are promoted by the ease with which hosts and guests can exchange information about reservations, check-in procedures, and other questions.

Post-Stay Engagement: Following their visit, guests are invited by Airbnb to provide ratings and comments regarding their stay. In addition to offering insightful information for upcoming visitors, this post-stay interaction promotes openness and trust among the Airbnb community. Constructive criticism aids Airbnb in its ongoing platform and service improvements, while positive ratings enhance a host's reputation and inspire new bookings.

Through a comprehensive customer journey mapping and touch point optimization, Airbnb has developed a smooth and intuitive platform that puts the needs of its users first, thereby improving the trip experience in its entirety. This focus on the needs of the consumer has helped Airbnb become one of the most popular vacation rental websites in the world.

Future Directions:

Technological developments like artificial intelligence and machine learning, which can offer more in- depth understanding of consumer behavior and preferences, are potential areas for future research in customer journey mapping. Further research into cross-cultural variations in customer journey mapping is also necessary, as is the creation of uniform frameworks and measurements.

HYPOTHESIS TESTING:

Our hypothesis testing aims to determine whether there's a significant relationship between implementing customer journey mapping initiatives and customer satisfaction levels. The null hypothesis (H0) states that no significant relationship exists, while the alternative hypothesis (H1) suggests the presence of such a relationship. Through our research, we understand that H0 is incorrect and H1 is valid.

FINDINGS:

1. Greater Customer Understanding: Through the use of customer path mapping, different touch points' behaviors, preferences, and pain points are better understood.
2. Enhanced Customer Engagement: Companies that map the customer journey well see increases in customer satisfaction and engagement.
3. Identification of Pain Points: Inefficient communication channels or service delays are examples of pain points that can be found in the customer journey that can be identified by customer journey mapping.
4. Opportunities for Improvement: Process optimisation, individualised communications, and customised products can all be found by mapping the client journey.\
5. Cross-Channel Consistency: Companies that successfully map the customer journey guarantee coherence and consistency across all channels, resulting in a flawless customer experience.

RECOMMENDATIONS:

1. Put client-Centricity First: To ensure long-term success, put the client at the centre of company strategy and decision-making procedures.
2. Invest in Data Analytics: To efficiently collect, analyse, and interpret customer data, make use of cutting-edge data analytics tools and methodologies.
3. Promote Cross-Functional Collaboration: To guarantee alignment on customer journey mapping projects, promote cooperation and communication between departments.
4. Constantly Monitor and Iterate: Based on changing consumer behaviours, industry trends, and corporate goals, review and update the customer journey map on a regular basis.
5. Empower Staff: Give staff members the instruments, instruction, and materials required to provide outstanding client experiences at each touch point.
6. Actively Seek client Feedback: To pinpoint areas in need of innovation and development, proactively seek out client feedback at various points during the experience.
8. Remain Agile and Adaptive: Continually adapt and respond to the shifting demands of your customers and the dynamics of the market, modifying your plans and techniques as needed.

CONCLUSION

The study's findings emphasize the critical role that customer journey mapping plays in improving the entire customer experience. Businesses can gain priceless insights into the behaviours, preferences, and emotions of their customers by carefully examining touch points and exchanges throughout the customer journey. For organisations, these insights work as a compass, pointing them in the direction of strategic initiatives and better decision-making that will increase customer pleasure and loyalty. In fact, the effectiveness of customer journey mapping programmes is demonstrated by observable gains in a number of critical measures, such as increased customer happiness, bolstered brand loyalty, and continued business expansion. These results highlight the revolutionary effect that customer-centric policies may have on the competitiveness and performance of organisations.

In the future, the study's suggestions highlight a number of crucial requirements that businesses must meet. First and foremost, the necessity of personalisation is evident. By utilising data-driven insights, firms can precisely customise client interactions, resulting in stronger bonds and increased loyalty. Moreover, a dedication to ongoing enhancement becomes crucial since companies need to be flexible and adaptable to changing consumer demands and market conditions. In order to stay ahead of the curve, this calls for an innovative and adaptive culture within organisations, where people are constantly improving their processes and strategies. Furthermore, integrating state-of-the-art technologies is crucial to improving the effectiveness of customer journey mapping initiatives. Businesses may expedite data gathering and processing and discover actionable insights at scale by utilising automation, artificial intelligence, and predictive analytics.

Essentially, companies who want to build long-lasting relationships with their consumers, promote sustainable growth, and prosper in the complex modern marketplace must prioritise the customer experience and make significant investments in customer journey mapping projects.

REFERENCES:

Journals:

- Customer journeys: a systematic literature review | Request PDF (researchgate.net)
- Moving the stakeholder journey forward | Journal of the Academy of Marketing Science (springer.com) (PDF) Customer Journey: From Practice to Theory (researchgate.net)
- The Digital Customer Journey in the Automobile Industry - A Quick-Check for the Retail Environment - Theseus
- Mapping-The-Customer-Journey.pdf (arataumodular.com)
- 1503-Customer-Experience-in-the-IoT_Altimeter-2015.pdf (jessgroopman.com)

WEBSITES:

- Customer experience - Wikipedia
- Customer Journey Maps: How to Create Really Good Ones [Examples + Template] (hubspot.com) How to Create a Customer Journey Map? Get the template! | Appinio Blog
- Create a Customer Journey Map (Free Templates, Tips) | Canva
- Customer Journey Map: Everything You Need To Know – Forbes Advisor McDonald's Customer Experience: Successful Initiatives (questionpro.com) onlinelibrary.wiley.com/page/journal/23301643/homepage/VirtualIssuesPage.html

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REVITALIZING BUSINESS ETHICS WITH SPIRITUAL QUOTIENT

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ABSTRACT
Ethics is one of the most oft-repeated words in today's context. The subjectivity element in defining ethics only makes its understanding, interpretation and application more complicated. Business Ethics is concerned with the application of ethical principles and practices to the problems that arise in a business environment. Since it is the individuals that make an organization, it is also about the thought processes leading to specific conduct of individuals in these organizations.

Increasing cases of unethical practices making news by established corporate houses as that of Satyam etc compel us to have a reflection into the intricacies involved in practicing good business ethics. These incidents have proved that IQ and EQ have not been successful enough to map and arrest the discrepancies in human intelligence. It is in this context that the role of Spiritual Quotient comes to the fore by attempting to understand that aspect of the human brain which prominently governs and guides an individual's character and actions.

This paper is a secondary study, with an attempt to understand the emerging role of Spiritual Quotient in business ethics and ways and means of revitalizing it through SQ. The study is based on secondary sources of data.

Keywords: *Quotient, Spiritual, Management, Ethics, Business, Leadership*

INTRODUCTION

In the ever-evolving landscape of Indian society, the influence of Western culture has been profound and far-reaching. The traditional joint family structure has gradually made way for nuclear families, reflecting a broader shift towards individualism and personal achievement. This transformation has been paralleled by the liberalization of the Indian economy, which has fostered a competitive business environment ripe with opportunities for growth. However, this pursuit of material success has not been without its challenges.

The relentless drive for prosperity has led to a reevaluation of long-held values, with ethical considerations often taking a backseat to the allure of instant success. The corporate world, in particular, has witnessed a series of ethical lapses, with scandals such as Satyam serving as stark reminders of the consequences of compromised integrity. These incidents underscore the limitations of traditional metrics of intelligence—IQ and EQ—in safeguarding ethical conduct within organizations.

It is against this backdrop that the concept of the Spiritual Quotient (SQ) gains significance. SQ represents an individual's ability to understand and embody ethical principles that transcend the mere pursuit of personal gain. This research paper delves into the role of SQ in revitalizing business ethics, proposing it as a pivotal factor in nurturing a culture of integrity and responsibility. Through a comprehensive secondary study, we explore the potential of SQ to guide individuals and organizations towards ethical practices that are not only sustainable but also conducive to the collective well-being of society.

OBJECTIVES

1. To understand the emerging role of Spiritual Quotient in business ethics in today's times.
2. To study the ways and means of revitalizing business through SQ.

BACKGROUND

Over the last few decades, there has been an unprecedented influx of western culture in the Indian society. The composition of an Indian family has also changed with joint families giving way to nuclear families. The open economy and expanding markets not only created major opportunities for growth of business, but also resulted in intense competition. The paradigm of success underwent a drastic change with the new generation longing for more and more material success.

All these posed a great challenge for the society and the country including education, industry and businesses. People and organizations started exploring innovative and new ways of gaining instant success and material gains. These new ways and means compromised and changed some (or all) of the age old morals and principles and in most cases redefined ethics.

It is in this context that there is an urgent need to revisit the principles of ethics and explore ways and means of arresting any further deterioration.

ETHICS

Ethics is one of the most oft-repeated words in today's context. Very generically put, ethics is about the right's and the wrongs in our day to day life and normal conduct, we perform activities either in a set or pre-defined manner or otherwise. Either way, while conducting ourselves and executing various tasks and activities, we inadvertently follow certain set of rules or protocols. For instance, while interacting with elders, we show respect through our conduct, behavior and communication whereas while playing with a child, we display love & affection. These are largely unwritten rules or code of conduct that form a part of our grooming, upbringing, culture and education. It is these set of rules that form a foundation for ethics in our life.

So Ethics is all about what is right and what is wrong. These are well laid, unwritten rules of conduct, behavior, and communication. It may thus be defined as a set of moral principles or a system of moral principles followed by an individual or a set of individuals. It is also recognized as a branch of philosophy that deals with human values, morals and principles. Ethics generally are not taught in a structured manner in the form of a course but are imbibed through the process of upbringing and personality development. Several important components that play a major role in building a solid ethical base are-

1) The family values, morals and principles
2) Culture of the society to which the individual belongs
3) Beliefs
4) Nature of the family (Joint or nuclear) and family composition
5) Environment (Surroundings) and extent of exposure
6) Education
7) Upbringing

Role of Ethics in Business-

Business Ethics is concerned with the application of ethical principles and practices to the problems that arise in a business environment. Since it is the individuals that make an organization, it is also about the conduct of individuals in these organizations. As they say, “A team is only as good as a leader”!! Individuals working together in an organization collectively contribute to the organizational culture. Business ethics is a part of the larger social ethics and applies to all aspects of conducting a business. In the bygone era, history of business is largely tainted through and by history of slavery, casteism, racism, colonialism, etc.

The need for Business Ethics in the present era started gaining momentum since early 1980’s and the world became more serious about the same since 1990’s particularly in the aftermath of several economic disasters largely due to falling standards of business ethics. Examples like the Bhopal Gas leak, Enron, of the past decades and current examples like Satyam and that of events leading to an economic slowdown are but a few instances of severe gaps and lapses in the prevailing understanding and application of Business ethics. Each of these incidents pin point a never ending thirst to gain easy and instant success largely defined by the money, one earns. This constant and almost compelling urge forces like minded individuals to compromise on basic values, principles and morals. There are also ample evidences of individuals with high morality and character falling prey to or being forced to adopt malpractices.

These tendencies have become more pronounced in the last decade or so leading to several organizations closing down and individuals losing their livelihood. It has also challenged the very framework of individual and business ethics compelling thought leaders to revisit the principles of Ethics and governance. Business ethics not only applies to business as a whole but also to all its components or building blocks. It encompasses every aspect of business starting from the philosophy of an organization to protecting rights of its shareholders and stakeholders. Responsible business decisions and conduct includes the choices and actions of owners, managers, employees, and agents etc that are within their area of operation and authority. Also these actions need to be directed towards organizational goal's sustainability, over a period of time.

Responsible business conduct allows an enterprise to improve its business performance, make profits, and contribute to the economic progress of its community. Among the lessons learned by both business and government is that responsible business conduct can be encouraged by the structures and systems, procedures, and practices of responsible business conduct, often called *good corporate governance* or *best practices*. The challenge is to find the right balance between emerging global norms, values, and standards and local cultures, business practices, and community needs. As long as businesses concentrate their attention and efforts on dealing with everyday challenges rather than striving to rise above them, they may be part of the problem. For example, although paying a small bribe to get a permit or to evade taxes may be "just the way things are done" or something that "everyone does," businesses that do so, may perpetuate business practices and conduct that make the evolution to a market economy more difficult. Thus, the ultimate challenge for responsible Business in an emerging market economy is whether it sees itself as part of the current problem or part of the solution.

The Spiritual Quotient Way

In the above context, it becomes all the more relevant to explore ways and means of rising above the situation and instill basic morals and principles in individuals. These form a foundation to an individual's character.

Organizations have, in the past, adopted IQ (Intelligence Quotient) and EQ (Emotional Quotient) but failed miserably to address the gaps in human behavior and conduct. So while Intelligence Quotient (IQ) is a measure of your ability to solve logical problems, and Emotional Quotient (EQ) refers to your ability to gauge the emotional dynamics of a situation; Spiritual Quotient (SQ) is your depth for perception and intuition. Someone with a high Spiritual Quotient is a person who is in tune with their connection to nature, a person who is fully aware of the diversity, complexity and absolute wonderment of the fascinating world and universe we all inhabit and lives their life from this perception and understanding.

The very fact that newer dimensions to human intelligence is being worked upon is due to the unending quest of humans to seek, to explore those unknown areas of spiritual existence. As is evident, both IQ and EQ fail to address the core building blocks of an individual's ethical framework namely-

1) Values and beliefs
2) Morals and principles
3) Character
4) Empathy & sensitivity
5) Attitude & outlook

Danah Zohar and Ian Marshall who coined the term ``SQ" for ``Spiritual Intelligence" argue that the SQ is the basic foundation for an effective use of EQ and IQ. They also refer to it as the soul's intelligence. *While rational, logical thinking gives one's IQ, and the associated habit-bound, pattern recognizing emotive thinking gives one the EQ, the creative, insightful, rule-making, rule breaking thinking with which we reframe and transform our previous thinking gives one the SQ.* In today's context, it is this insightful "rule making, rule breaking thinking" that needs to be build in individuals and organizations.

Singer's work on the unifying neural oscillation offers the first evidence of SQ. Just as the whole can be greater than the sum of its parts, SQ allows one to add a larger, deeper and richer context to the present. She evolves a model of SQ based on the six petals of the lotus and its centre, corresponding to the seven chakras described by the Hinduism's Kundalini Yoga. The Indian philosophical treatises - the Upanishads - attribute perception to the mind, conception to the intellect and ``illumination" to the Self.

From the above, it is evident that both IQ and EQ fail to build and develop that "insightful thinking" which takes an individual to a higher plane of "Self actualization" rising above the materialistic feelings of greed, hate, selfishness, envy, etc. for it is these feelings that play a significant role in challenging ethical framework of an individual and in effect an organization. What is thus required is to evolve a method of "illuminating" the "self". SQ, surely is the way forward for achieving the same.

Renowned author Deepak Chopra has given a formula of spiritual quotient in terms of Deed (D) and Ego(E). According to Deepak Chopra **S.Q. =D/E**. Now you can ONLY have an SQ = infinity when E =0. If E is little even then SQ is approaching infinity (or one is close to be a "Great Master") but not actually "Pure". It is important to note that both these factors Deed and Ego operate at the "subtle" level of consciousness.

SQ has several facets: Improving on reducing one's ego, spirit of surrender and service to others, showing more compassion and expressing gratitude to others. With increasing competition, business leaders are recognizing the need to harness more of their employees' talents, creativity, and commitment. This requires appealing to a deeper level of motivation than just intellectual or emotional level. Scriptures like the Bhagwat Gita have identified ego as one of the main stumbling blocks in a person's advancement. Ego issues have to be handled with maturity and tact and a person has to learn the act of sublimation. Ego issues, if left uncontrolled can create problems in our personal, social and professional lives. All our scriptures have attributed the cause of most of the problems to this one single factor!

Spiritual Quotient is all about discovering of one’s own inner self. Danah Zohar evolves a model of spiritual quotient (sq) based on the six petals of a lotus and its centre, corresponding to the seven chakras described by the Hinduism’s Kundalini Yoga.
Moreover human beings are different from animals and computers because of SQ. Animals can have EQ and computers can have IQ but they can’t have SQ. Hence, SQ is all about a holistic approach to life: the wholesomeness, self awareness, compassion, creativity, ability to think, ability to reason, etc all this together. SI equips us to look at and solve the problems of meaning and value and then we begin to direct our thoughts, actions and so on, our lives towards wider and meaningful horizons. SI helps us to compare life’s various paths.

There is no co relation between religion and SQ implying that its not necessary that religious people have high SQ or non religious people have low SQ.

“It is not just IQ (intelligence quotient) that Indian business leaders need. They must cultivate EQ (emotional quotient) and SQ (spiritual quotient) to emerge as better leaders, said Mr K.N. Shenoy, Vice- Chairman, Volvo India Private Ltd.

Spiritual Quotient (SQ) is the depth for perception and intuition. Authors **Dana Zohar** and **Ian Marshall** who introduced **Spiritual Quotient** (or **SQ**) claim that it is the ultimate intelligence, an intelligence used to solve problems of meaning and value. **Spiritual intelligence** motivates people to balance their work schedules to spend time with the family. Or an executive with a high **SQ** might look beyond profit margins and devote time for voluntary work with orphans. **Spiritual intelligence** also addresses the need to place one's life in a shared context of value. Spiritual Quotient (SQ), relating to our ability to understand and comprehend the spiritual aspects of life

The **transformative** power of **SQ** distinguishes it from **IQ** and **EQ**. **IQ** primarily solves logical problems. **EQ** allows us to judge the situation we are in and behave appropriately. **SQ** allows us to ask if we want to be in that situation in the first place. It might motivate us to create a new one. **SQ** has little connection to formal religion. We use spiritual intelligence to transform ourselves and others, heal relationship, cope with grief, and move beyond conditioned habits of the past. To develop high **SQ**, each person needs to approach the task according to his/her personality.

Basic Signs of high Spiritual Quotient-

1. Flexibility
2. Self-awareness
3. Patience
4. An ability to face suffering
5. The ability to be inspired by a vision
6. An ability to see connections between diverse things
7. A desire and capacity to cause as little harm as possible
0. A tendency to probe and ask fundamental questions
1. An ability to work against convention

Spiritual Quotient thus may play a very crucial role in addressing the innermost and subtle layers of a human mind. A higher SQ may make an individual more open minded, accommodative, service oriented and more importantly give a completely positive outlook.

Individuals with a high SQ working across various layers of an organizational ladder will greatly influence the culture of the organization and in effect contribute to building an ethical organization.

SOME TECHNIQUES OF IMPROVING SQ-

1. As per the formula given by Deepak Chopra- SQ=D/E (Where D is Deeds and E is Ego) This means that one of the ways of improving spiritual quotient is by lowering the ego and increasing the number of good deeds. Performing good deeds come out of a service oriented and selfless attitude. It comes through sensitivity and empathy towards fellow beings.

2. attitude of gratitude. One of the simplest ways is being a believer in “Doing” the deeds without expecting any awards or recognition for the same. This is very clearly stated in the Bhagwatgeeta- “Karmanye Wadhikaraste, ma phaleshu kadachana…”

3. Ego is a function of material wealth, social status, knowledge, standing in the society, etc. The overriding fact in all these preaching’s is that material possessions are but temporary and a passing phase in one’s life. Thus awareness of one’s ego and attempts to reduce the same is one way of improving one’s SQ.

4. Meditation. The model of SQ proposed by Danah Zohar is based on the six petals of a lotus and its centre, corresponding to the seven chakras described by the Hinduism's Kundalini Yoga. Each of these "Chakras" are primarily energy centres spread across the body. Each of these energy centres could be activated through specific meditation techniques prescribed in the Yoga. Yoga also prescribes certain practices to awaken the "Kundalini".

1. Self actualization through spiritual practices. The purpose of life itself is not to gain material wealth but to realize the self. They say that there is no true knowledge except the knowledge of the "self.
2. Interpreting the simplicity and humility of the life stories of our ancient spiritual masters and saints.
3. Using techniques to build positive attitude through consistent practice and reinforcement.
4. Living in the present.
5. Consciously building emotional detachment.
6. Inculcate SQ amongst children from childhood through-
   a. Parents acting as Role Models
   b. Making SQ a mandatory part of the syllabus in schools and colleges.
   c. Imbibing basic values, morals and consciously building their character
   d. Mentoring them to develop virtues love, compassion and empathy towards fellow beings
   e. Assist in developing a positive attitude in life

ADVANTAGES OF SQ

1. Prevalence of business practices based on sound morals, values, principles and ethics.
2. Employees with higher level of self consciousness, commitment to and synergy with organizational goals.
3. Enhanced Performance & Increased Team Cohesiveness
4. Increased sense of belonging to the Organization
5. Self Motivated Employees with consistent positive outlook.
6. High Self Awareness
7. Improved Self Confidence
8. A Stress Free Life
9. A life free from crime, criminal and violent minds and bad habits
10. Social consensus in business actions
11. Contended social units around us.
12. More Empathetic Outlook
13. A Peaceful Universe

CONCLUSION

Ethics and Ethical behavior is very closely associated with and influenced by the behavior, conduct and thinking of individuals. An individual with high values, character and principles is less likely to indulge in unethical practices compared to an individual with low character, morals and values. Similarly, individuals with high character invariably have higher mental strength and hence do not succumb easily to cheap and fast success.

If such individuals of high moral character and values run an organization, they will follow ethical principles and practices in transacting their business and in turn develop an organizational culture that is highly ethical also impacting the society at large in a positive manner. On the other hand, individuals with low character will do exactly the opposite.

It is thus imperative for an organization to adopt ways and means of building a high moral character amongst its employees across the length and breadth of the organization. This can be effectively done through improving the Spiritual Quotient (SQ), for it is this factor that addresses the innermost subtle level of consciousness and enables transition of an individual towards a higher level of thinking and consciousness.

BIBLIOGRAPHY

- SQ: Spiritual Intelligence, the Ultimate Intelligence (2000; ISBN 0747546762) by Dana Zohar & Ian Marshall
- Spiritual Capital: Wealth We Can Live By (2004; ISBN 1576751384) by Dana Zohar & Ian Marshall
- What is Your Spiritual Quotient? ISBN 0768426758 by Dr. Mark Brewer
- Spiritual intelligence: Developing higher consciousness by Sisk, D.A., & Torrance
- The Seven Spiritual Laws of Success by Deepak Chopra
- Ageless body, timeless mind by Deepak Chopra
- Paper on Spiritual intelligence from the Bhagavad-Gita by Biswajit Satpathy (International Journal of Indian Culture and Business Management)
- Business Ethics: A Stakeholder and Issues Management Approach by Joseph W. Weiss
- Business Ethics: An Indian Perspective by A.C.Fernando
- Commentary on Bhagawat Geeta by Jaya Row

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